

2025 2026 Catalog



**MESA
COMMUNITY COLLEGE**
A MARICOPA COMMUNITY COLLEGE

mesacc.edu

**MARICOPA COUNTY COMMUNITY COLLEGE DISTRICT
2025-2026 ACADEMIC CALENDAR**

Dates are subject to change / The most up to date calendar information can be found at
<https://district.maricopa.edu/regulations/admin-regs/section-2/academic-calendars>*

Colleges may modify start dates in order to meet special needs. Dates listed below which are directly related to instruction refer to the traditional academic year model. Some courses may be offered over time-periods for which these dates are not applicable.

Links to ASU, GCU, NAU, and U of A calendars are incorporated on the last page for reference only and are subject to change without notice.

SUMMER SEMESTER – 2025		Note: Subject to the 2025-2026 Catalog
Mon	May 12	Final Grades Due for Spring 2025 Semester
Mon	May 19	Tuition Due for Summer 2025 Semester
Mon	May 26	Memorial Day (Colleges Closed)
Tue	May 27	Summer Semester Begins
Thu	Jun 19	Juneteenth National Independence Day (Colleges Closed)
Mon-Sat	Jun 30-Jul 5	Summer Break for Clock Hour Programs Only
Thu	Jul 3	Observance of Independence Day (Colleges Closed)
Thu	Jul 31	Summer Semester Ends
Mon	Aug 4	Final Grades Due for Summer 2025 Semester
FALL SEMESTER – 2025		
Wed	Aug 13	Tuition Due for Fall 2025 Semester
Fri	Aug 15	First Day of Faculty Accountability
Sat	Aug 23	Fall Semester Begins
Mon	Sep 1	Labor Day (Colleges Closed)
Mon	Sep 22	Find A Class Opens for Spring 2026 Semester
Mon	Oct 6	Spring 2026 Priority Registration Begins for Currently Enrolled Students
Sat+	Oct 11	Last Day for Withdrawal without Instructor's Signature
Mon++	Oct 13	Student Withdrawal with Instructor's Signature Begins
Mon	Oct 13	Spring 2026 Open Registration Begins
*		Application for December 2025 Graduation
Tue	Nov 11	Veterans Day (Colleges Closed)
Thu-Sun	Nov 27-30	Thanksgiving Holiday (Colleges Closed)
Sun	Dec 14	Last Day of Regular Classes
Mon-Fri**	Dec 15-19	Final Exam Week
Fri	Dec 19	Fall Semester Ends / Last day of Faculty Accountability
Sat	Dec 20	Mid-Year Recess Begins for Students
Mon	Dec 22	Final Grades Due for Fall 2025 Semester
Thu-Thu	Dec 25-Jan 1	Mid-Year Recess (Colleges Closed)
SPRING SEMESTER - 2026		
Fri	Jan 2	Employees Return to Campus
Mon	Jan 5	Clock Hour Student Classes Begin
Wed	Jan 7	Tuition Due for Spring 2026 Semester
Mon	Jan 12	First Day of Faculty Accountability
Sat	Jan 17	Spring Semester Begins
Mon	Jan 19	Martin Luther King Jr. Day (Colleges Closed)
Mon	Feb 16	Presidents' Day (Colleges Closed)
Tue	Feb 17	Summer/Fall 2026 Semesters - Find A Class Opens
Mon	Mar 2	Summer/Fall 2026 Semesters - Priority Registration Begins for Currently Enrolled Students
*		Application for 2026 May Graduation
Sat+	Mar 7	Last Day for Withdrawal without Instructor's Signature
Mon++	Mar 9	Student Withdrawal w/ Instructor's Signature Begins
Mon-Sun	Mar 16-22	Spring Break for Students, Faculty, & Employees (Campus closed)
Mon	Mar 23	2026 Summer/Fall Semesters - Registration Opens
Sun	May 10	Last Day of Regular Classes
Mon-Fri**	May 11-15	Final Exam Week

* For specific information concerning the last day to apply for graduation, individual class start dates, and final exams, consult the college of enrollment.

** Any classes meeting on Friday, Saturday or Sunday will have final examinations during their regular class time.

+ Through the 7th week of 16-week classes, students may initiate an official withdrawal from course(s) without instructor signature (see Administrative Regulation 2.3.6 in [Catalog Common Pages](#)).

++ After the 7th week of 16-week classes, student must initiate an official withdrawal request from instructor and obtain their signature (see Administrative Regulation 2.3.6 in [Catalog Common Pages](#)).

Fri	May 15	Commencement
Fri	May 15	Spring Semester Ends / Last day of Faculty Accountability
Mon	May 18	Final Grades Due for Spring 2026 Semester

SUMMER SEMESTER 2026

Note: Subject to the 2026-2027 Catalog

Mon	May 18	Tuition Due for Summer 2026 Semester
Mon	May 25	Memorial Day (Colleges Closed)
Tue	May 26	Summer Semester Begins
Thu	Jun 18	Observance of Juneteenth National Independence Day (Colleges Closed)
Mon-Sat	Jun 29-Jul 4	Summer Break for Clock Hour Programs Only
Thu	Jul 2	Observance of Independence Day (Colleges Closed)
Thu	Jul 30	Summer Session Ends
Mon	Aug 3	Final Grades Due for Summer 2026 Semester

SUMMER/FALL SEMESTER – 2025

Note: Subject to 2025 – 2026 Catalog

	S	M	T	W	TH	F	S	
M	11	12	13	14	15	16	17	
A	18	19	20	21	22	23	24	May 19 – Tuition Due for Summer 2025 Semester
Y	25	26	27	28	29	30	31	May 26 – Memorial Day (Colleges Closed)
	1	2	3	4	5	6	7	May 27 – Summer Semester Begins
J	8	9	10	11	12	13	14	
U	15	16	17	18	19	20	21	Jun 19 – Juneteenth National Independence Day (Colleges Closed)
N	22	23	24	25	26	27	28	Jun 30-Jul 5 - Summer Break for Clock Hour Programs
	29	30	1	2	3	4	5	Jul 3 – Observance of Independence Day (Colleges Closed)
J	6	<u>7</u>	8	9	10	11	12	
U	13	14	15	16	17	18	19	Jul 31 – Summer Session Ends
L	20	21	22	23	24	25	26	Aug 4 – Final Grades Due for Summer 2025 Semester
	27	28	29	30	31	1	2	Aug 6 – Tuition Due for Fall 2025 Semester
A	3	4	5	6	7	8	9	
U	10	11	12	13	14	15	16	Aug 15 – One (1) Day of Faculty Accountability
G	17	18	19	20	21	22	23	Aug 18-22 – Five (5) Days of Faculty Accountability
	24	25	26	27	28	29	30	Aug 23 – Fall Semester Begins
S	31	1	2	3	4	5	6	Sept 1 - Labor Day (Colleges Closed)
E	7	8	9	10	11	12	13	
P	14	15	16	17	18	19	20	
	21	22	23	24	25	26	27	
O	28	29	30	1	2	3	4	
C	5	<u>6</u>	7	8	9	10	11	Oct 6 – 45th Day
T	12	13	14	15	16	17	18	
	19	20	21	22	23	24	25	
	26	27	28	29	30	31	1	
N	2	3	4	5	6	7	8	
O	9	10	11	12	13	14	15	Nov 11 – Veterans Day (Colleges Closed)
V	16	17	18	19	20	21	22	
	23	24	25	26	27	28	29	Nov 27-30 – Thanksgiving Holiday (Colleges Closed)
D	30	1	2	3	4	5	6	
E	7	8	9	10	11	12	13	Dec 14 – Last Day of Regular Classes
C	14	15	16	17	18	19	20	Dec 15-19 – Final Exam Week **
	21	22	23	24	25	26	27	Dec 19 – Fall Semester Ends / Last day of Faculty Accountability
	28	29	30	31				Dec 20 – Mid-Year Recess Begins Students
								Dec 22 – Final Grades Due for Fall 2025 Semester
								Dec 25 - Jan 1 Mid-Year Recess (Colleges Closed)

* For specific information concerning the last day to apply for graduation, individual class start dates, and final exams, consult the college of enrollment.

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SPRING SEMESTER – 2026
Note: Subject to 2025 – 2026 Catalog

	S	M	T	W	TH	F	S	
J					1	2	3	Jan 1 – New Year's Day (Colleges Closed)
A	4	5	6	7	8	9	10	Jan 2 – Employees Return to Campus
N	11	12	13	14	15	16	17	Jan 5 – Clock Hour Student Classes Begin
	18	19	20	21	22	23	24	Jan 7 – Tuition Due for Spring 2026 Semester
F	25	26	27	28	29	30	31	Jan 12 – First Day of Faculty Accountability
E	1	2	3	4	5	6	7	Jan 17 – Spring Semester Begins
B	8	9	10	11	12	13	14	Jan 19 – Martin Luther King Jr. Day (Colleges Closed)
	15	16	17	18	19	20	21	Feb 16 – Presidents' Day (Colleges Closed)
	22	23	24	25	26	27	28	Mar 2 – 45th Day
M	1	2	3	4	5	6	7	
A	8	9	10	11	12	13	14	
R	15	16	17	18	19	20	21	Mar 16-22 – Spring Break for Students, Faculty, & Staff (Colleges Closed)
)	22	23	24	25	26	27	28	
A	29	30	31	1	2	3	4	
P	5	6	7	8	9	10	11	
R	12	13	14	15	16	17	18	May 10 – Last Day of Regular Classes
	19	20	21	22	23	24	25	May 11-15 – Final Exam Week **
M	26	27	28	29	30	1	2	May 15 – Commencement
A	3	4	5	6	7	8	9	May 15 – Spring Semester Ends / Last day of Faculty Accountability
Y	10	11	12	13	14	15	16	May 18 – Final Grades due for Spring 2026 Semester

SUMMER SEMESTER – 2026
Note: Subject to 2026 – 2027 Catalog

	S	M	T	W	TH	F	S	
M	10	11	12	13	14	15	16	
A	17	18	19	20	21	22	23	May 18 – Tuition Due for Summer 2026 Semester
Y	24	25	26	27	28	29	30	May 25 – Memorial Day (Colleges Closed)
	31	1	2	3	4	5	6	May 26 – 2026 Summer Session - Classes Begin
J	7	8	9	10	11	12	13	
U	14	15	16	17	18	19	20	Jun 18 – Observance of Juneteenth National Independence Day (Colleges Closed)
N	21	22	23	24	25	26	27	
	28	29	30	1	2	3	4	Jun 29 – Jul 4 - Summer Break for Clock Hour Programs
J	5	6	7	8	9	10	11	Jul 2 – Observance of Independence Day (Colleges Closed)
U	12	13	14	15	16	17	18	
L	19	20	21	22	23	24	25	Jul 30 – Summer Semester Ends
	26	27	28	29	30	31	1	Aug 3 – Final Grades Due for Summer 2026 Semester
A	2	3	4	5	6	7	8	Aug 12 – Tuition Due for Fall 2026 Semester
U	9	10	11	12	13	14	15	Aug 14 – One (1) Day Faculty Accountability
G	16	17	18	19	20	21	22	Aug 17-21 – Five (5) Days of Faculty Accountability
	23	24	25	26	27	28	29	Aug 22 – Fall Semester Begins
	30	31						

Instructional Days		Proposed Class Start		
		Dates	MCCCD	ASU
	Fall	Fall 2025	Sat, Aug 23	Thu, Aug 21
	Spring	Spring 2026	Sat, Jan 17	Mon, Jan 12
M	15			
T	15			
W	16			
TH	15			
F	15			
	76			
	73			
		= 149 Total		

Calendar for less than 12-month employees

9-month employees:	Aug 11, 2025 – May 8, 2026
9.5-month employees:	Aug 4, 2025 – May 15, 2026
10-month employees:	Jul 28, 2025 – May 22, 2026

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2025-2026

	S	M	T	W	TH	F	S
						1	2
A	3	4	5	6	7	8	9
U	10	11	12	13	14	15	16
G	17	18	19	20	21	22	23
	24	25	26	27	28	29	30
S	31	1	2	3	4	5	6
E	7	8	9	10	11	12	13
P	14	15	16	17	18	19	20
	21	22	23	24	25	26	27
	28	29	30	1	2	3	4
O	5	6	7	8	9	10	11
C	12	13	14	15	16	17	18
T	19	20	21	22	23	24	25
	26	27	28	29	30	31	1
N	2	3	4	5	6	7	8
O	9	10	11	12	13	14	15
V	16	17	18	19	20	21	22
	23	24	25	26	27	28	29
D	30	1	2	3	4	5	6
E	7	8	9	10	11	12	13
C	14	15	16	17	18	19	20
	21	22	23	24	25	26	27
	28	29	30	31	1	2	3
J	4	5	6	7	8	9	10
A	11	12	13	14	15	16	17
N	18	19	20	21	22	23	24
	25	26	27	28	29	30	31
F	1	2	3	4	5	6	7
E	8	9	10	11	12	13	14
B	15	16	17	18	19	20	21
	22	23	24	25	26	27	28
M	1	2	3	4	5	6	7
A	8	9	10	11	12	13	14
R	15	16	17	18	19	20	21
	22	23	24	25	26	27	28
A	29	30	31	1	2	3	4
P	5	6	7	8	9	10	11
R	12	13	14	15	16	17	18
	19	20	21	22	23	24	25
M	26	27	28	29	30	1	2
A	3	4	5	6	7	8	9
Y	10	11	12	13	14	15	16

Faculty Days Calendar

Instructional	Accountability	Contract
0	0	0
0	1	1
5	5	5
5	5	5
4	4	5
5	5	5
5	5	5
5	5	5
5	5	5
5	5	5
5	5	5
5	5	5
5	5	5
4	4	5
5	5	5
3	3	5
5	5	5
5	5	5
0	5	5
0	0	5
0	0	5
0	0	5
0	5	5
4	4	5
5	5	5
5	5	5
5	5	5
4	4	5
5	5	5
5	5	5
5	5	5
0	0	5
5	5	5
5	5	5
5	5	5
5	5	5
5	5	5
0	5	5
5	5	5
5	5	5
5	5	5
5	5	5
5	5	5
0	5	5
154	170	196

Contract Year – 2025-2026

Contract Days – 196 (39 weeks)

Accountability Days – 170

Instructional Days – 154

Arizona State University (ASU)

Northern Arizona University (NAU)

Grand Canyon University (GCU)

University of Arizona (UA)

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About MCC

Accreditation

Mesa Community College is accredited by The Higher Learning Commission and is a member of the North Central Association: www.ncahigherlearningcommission.org 800-621-7440 or 312-263-0456.

The Automotive Service program is accredited through ASE Education Foundation (ASEEF) 101 Blue Seal Drive, SE, Suite 101 Leesburg, VA 20175 <https://www.aseeducationfoundation.org>.

The Dental Hygiene program has accreditation through the American Dental Association's Commission on Dental Accreditation (CODA), 211 E. Chicago Ave., Suite 1900, Chicago, IL 60611 <https://coda.ada.org/>.

The Associate in Applied Science (AAS) program in Early Childhood Education is accredited by the National Association for Education of Young Children (NAEYC) www.naeyc.org through May 2029

Accreditation Commission for Education in Nursing (ACEN) at 3390 Peachtree Road NE, Suite 1400. Atlanta, GA 30326 <https://www.acenursing.org/>. State approval for the Nursing Programs is provided by the Arizona State Board of Nursing (AZBN) at 1740 W Adams Streets, Suite 2000 Phoenix, AZ 85007

MCC is approved as a Paramedic Education Program under the Commission on Accreditation of Allied Health Education Programs / Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions LoR Program and certified by the Arizona Department of Health Services Bureau of Trauma and Emergency Medical Services ALS Training Program.

The Associate in Applied Science (AAS) degree program in Veterinary Technology at MCC has Full Accreditation from the American Veterinary Medical Association's Committee on Veterinary Technician Education and Activities. 1931 North Meacham Road, Suite 100, Schaumburg, IL 60173-4360: www.avma.org.

Assessment of Student Learning Outcomes

Mesa Community College (MCC) upholds its Mission, Vision, and Values by consistently evaluating student learning at the course, program, and institutional levels in practical and meaningful ways. Continuous improvement—one of MCC’s Core Values—is supported by a strong culture of assessment that engages all stakeholders in enhancing the quality of educational experiences. Faculty members across the Maricopa County Community Colleges District (MCCCD) have defined the intended learning outcomes of college programs and courses competencies and have developed measures to assess them. Assessment of student learning outcomes plays a central role in academic planning and program review. It strengthens MCC’s ability to support student success—whether through degree or certificate completion, career advancement, or further education—while ensuring alignment with the college’s broader mission and goals. Assessment of Student Learning Outcomes (SLO) is the systematic process of gathering, analyzing, and interpreting evidence to determine how well students achieve specific learning objectives. This process supports continuous improvement in teaching, learning, and program quality. The results guide decisions to enhance the learning environment—whether to strengthen areas of success or improve areas with growth potential.

AC4 Complaints

Distance Education students outside of Arizona, after completion of the institution’s internal complaint process, may appeal SARA-related complaints to the [Arizona Community College Coordinating Council](#) (AC4).

Arizona SARA Council Complaints

Mesa Community College is a State Authorization Reciprocity Agreement (SARA) participating institution. The Arizona SARA Council has jurisdiction over Arizona SARA participating institutions in relation to non-instructional complaints for out-of-state distance education students. Instructional complaints, such as grade grievances, are not reviewed by the Council and should not be submitted for review. Upon completion of the institution’s and AC4’s complaint process, a student may register a complaint with the [Arizona SARA Council](#).

Maricopa County Community College District (MCCCD)
2025-2026 Associate In General Studies (AGS) Degree and General Education
Requirements

Description

The Maricopa County Community College District Associate in General Studies degree requires 60-64 semester credits in courses numbered 100 and above. The degree includes the following components:

I. Required Courses (1-3 credits)

First Year Experience (all courses completed with a grade of “C” or better)

II. General Education (minimum of 35 credits)

Core Areas (all courses completed with a grade of “C” or better)

- First-Year Composition
- Mathematics
- Computer Usage
- Oral Communication
- Critical Reading

Distribution Areas (all courses completed with a grade of “D” or better):

- Humanities, Arts and Design
- Social-Behavioral Sciences
- Natural Sciences
- Literacy and Critical Inquiry

III. General Electives (enough additional courses numbered 100 or above, completed with a grade of “D” or better, to bring total credits to at least 60)

Purpose of the Degree

The Associate in General Studies (AGS) degree is recommended for students whose educational goals require flexibility. The degree allows students to apply any course numbered 100 or above, including some that are not transferable to the Arizona public universities and may not be transferable to other universities, toward the credits required for the degree. Therefore, for students who intend to transfer to another college or university to pursue a bachelor’s degree, this degree may be less appropriate than other associate degrees offered by the Maricopa Community Colleges: Associate in Arts (AA); Associate in Arts, Elementary Education (AAEE); Associate in Arts, Fine Arts (AAFA); Associate in Business-General Requirements (ABUS-GR); Associate in Business-Special Requirements (ABUS-SR); Associate in Science (AS); and all emphases of these degrees

Academic Policies that Govern the Associate in General Studies Degree:

- The graduation policies within the general catalog must be satisfied. Students must complete FYE 101 (1) or FYE 103 (3) ([see General Graduation Requirements Administrative Regulation 2.3.9](#)).
- A single course can simultaneously count toward a Core Area and a Distribution Area requirement. Courses that meet this criterion are **bold print** and underscored in the Core areas and Distribution areas (on the course list at the conclusion of this document). For example, CRE101 may be used to satisfy both the Literacy and Critical Inquiry requirement of the Distribution area and the Core curriculum’s Critical Reading area. While multiple requirements can be met with a single course, the credits are only counted one time toward the required minimum for the degree. A course cannot satisfy more than one Core area, even if it is approved for more than one Core area. A course cannot satisfy more than one Distribution area, even if it is approved for more than one Distribution area.
- Credits transferred from outside of MCCCD must be completed with a grade of “C” (2.0 on a 4.0 scale) or better. Transfer credit graded pass/fail or pass/no credit may be transferred if documentation collected by the community college indicates that this was the only grading option available to the student and that the Pass grade (“P”) is equivalent to a “C” or better.
- Courses with different credit systems (quarter hours, trimester, units) are converted to semester credit hours. The recovery of a deficiency in a requirement (Prerequisites, Required Courses, Restricted Electives, or General Education) category due to a quarter-hour or other credit system application will be determined by the college.
- Completion of the AGS with a minimum Grade Point Average (on a 4.0 scale) of at least 2.0 for Arizona residents and 2.50 for non-residents meets Arizona public university general admission requirements. However, meeting all AGS minimums does not ensure admission to specific university majors or programs with selective admission processes and/or limited enrollment. Furthermore, because the AGS is not designed to align with the requirements for bachelor’s degrees, not all credits may be transferable and students may have deficiencies in lower division (100- and 200-level) courses for a particular major.

Summary of Degree Requirements:

Details on how to identify courses approved for each of the categories is described following the outline.

- I. **Required Courses**..... 1-3
FYE101 Introduction to College, Career and Personal Success OR
FYE103 Exploration of College, Career and Personal Success
- II. **MCCCD General Education** 35-48*
Core Areas..... 13-19
 1. First-Year Composition..... 6*
ENG101 OR ENG107 AND
ENG102 OR ENG108
 2. Mathematics 3-6
 3. Computer Usage 1
 4. Oral Communication 3
COM100 Introduction to Human Communication OR
COM110 Interpersonal Communication OR
COM225 Public Speaking OR
COM230 Small Group Communication (3 credits) OR
COM100AA & COM100AB & COM100AC (3 credits) OR
COM110AA & COM110AB & COM110AC (3 credits)
 5. Critical Reading 0-3
Students may demonstrate proficiency through assessment.
CRE101 Critical Reading OR equivalent as indicated by assessment**Distribution Areas**..... 22-29
 1. Humanities, Arts and Design 9
Students are encouraged to choose course work from more than one discipline.
 2. Social-Behavioral Sciences..... 6-9
Students are encouraged to choose course work from more than one discipline. If COM100, COM110, or COM230 is shared between the AGS' Core and Distribution areas, the Social-Behavioral Sciences requirements for the degree may be met with just 6 additional credits in this area (see Academic Policies section on prior page). The credits for the shared COM course are only counted once, but they may be applied to meet both Oral Communication and Social-Behavioral Science requirements.
 3. Natural Sciences.....7-8
Two lecture courses and one corresponding laboratory course are to be selected. Credits for lecture and lab components may be combined or each may carry separate credit. For appropriate course selection students should consult with an academic advisor.
 4. Literacy and Critical Inquiry 0-3
The Literacy and Critical Inquiry requirement may be met by CRE101 (which also satisfies Critical Reading) or COM225 (which also satisfies Oral Communication) with a grade of "C" or better. The credits for shared courses are only counted once, but may be applied to meet both a Core (see course list above) and a Distribution Area requirement.

Alternatively, the Literacy and Critical Inquiry requirement may be met with a grade of "D" or better by selecting an additional 3 credits from the list of approved options.
- III. **General Electives**..... 13-26
Select additional courses 100-level or higher to complete a minimum of 60 semester credits but no more than a total of 64 semester credits. Industry-recognized credentials can be counted as general electives.

Associate in General Studies Total Credits..... 60-64

*First-Year Composition may be met with fewer than 6 credits if a student has transfer credit from ASU, NAU or UAZ for a single course that meets FYC in full.

All courses listed meet AGS requirements as specified.

Courses in *Purple Italic Underline* also meet Arizona General Education Curriculum (AGEC) requirements.

AGEC designations are subject to change. See AGEC matrix at aztransfer.com/tools/ for each course's value(s) in the semester it is taken.

Courses in **bold print and underscored** simultaneously count towards a Core Area and a Distribution requirement.

AGS GENERAL EDUCATION CORE

(16 credits - grade of "C" or better)*

First-Year Composition (6 credits)*

ENG English [101, 107 & 102, 108](#)

Oral Communication (3 credits)

COM Communication [100, 100AA & 100AB & 100AC, 110, 110AA & 110AB & 110AC, 225, 230](#)

Critical Reading (0-3 credits)

CRE Critical Reading [101](#) or Equivalent as indicated by assessment

Mathematics (3-6 credits)

MAT Mathematics 112, 114, 115, 120, 121, 122, 126, [140, 141, 142, 145, 146, 150, 150&182, 151, 151&182, 152, 152&182, 155, 155&182, 156, 156&182, 172, 187, 188, 206, 212, 213, 217, 218, 220, 221, 225, 227, 230, 231, 240, 241, 256, 257, 276, 277,](#)

Equivalent course/ Satisfactory completion of a higher level Mathematics course.

Computer Usage (1 credit)

Computer-related course or demonstration of comparable computer skills. Additional courses may be approved by individual colleges. Students should contact their advisor for college-specific courses satisfying the requirement.

ACC Accounting 115

ABS Applied Biological Sciences [283](#)

AJS Administration of Justice Studies 205

ARC Architecture 243, 244, 245

AVC Art and Visual Communication 100, 169, 170, 173, 175, 177, 179, any 180++ course, 183, 283, 289

BPC Business-Personal Computers Any BPC Course(s), including [110](#)

CIS Computer Information Systems Any CIS Course(s), including [105, 162AB, 162AD, 163AA](#) (and except 159, 217AM, 259)

CSC Computer Science Any CSC Course(s), including [100AA, 100AB, 110, 110AA, 110AB, 120, 150, 150AA, 180 180AA, 180AB, 181, 181AA, 181AB, 182, 182AA, 205, 205AA, 205AB, 205AC, 205AD](#) (and except 200, 200AA, 200AB 210, 210AA, 210AB)

CTR Court Reporting 101, 102

DFT Drafting Technology [105AA**](#), 254AA

[**Must be taken with CSC100AA or AB to meet AGEC value](#)

EDU Education [115](#)

(Continued in next column)

(Computer Usage Continued)

EED Early Education [115](#)

EEE Electrical Engineering [120](#)

ELE Electronic 131, 181, 241, 243, 245

ELT Electronic Technology 131, 243

ENG English 100AE

FON Food & Nutrition 100

GBS General Business [221](#)

GIS Geographic Information Science [205, 211](#)

JRN Journalism 133

LAS Paralegal Studies 229

MAT Mathematics [206](#)

MTC Music Theory/Composition [180](#)

MUC Music: Commercial/Business 180, 191

NET Networking Technology 181

OAS Office Automation Systems 111AA

PSY Psychology [230, 230WL](#)

SWU Social Work [225](#)

AGS GENERAL EDUCATION DISTRIBUTION AREAS

(28-29 credits – grade of "D" or better)

Humanities, Arts and Design (9 credits)

Students are encouraged to choose courses from more than one discipline.

AFR African American Studies [203](#)

AHU Arabic Humanities [245](#)

AIS American Indian Studies [213](#)

AJS Administration of Justice Studies [123](#)

ARH Art Humanities Any ARH Course(s), including [100, 101, 102, 109, 110, 112, 115, 118, 145, 201, 202, 203, 204, 217, 216, 240, 250](#)

ART Art [131](#)

ASB Anthropology [211, 214, 220, 222, 223, 253](#)

AVC Art and Visual Communication [150](#)

CCS Chicana and Chicano Studies [101](#)

COM Communication [150, 241](#)

CON Construction [101](#)

DAH Dance Humanities [100, 201, 250, 255](#)

ECE Engineering Science [150](#)

EDU Education [230, 291, 292, 294](#)

EED Early Education [225](#)

ENG English [200, 213, 218](#)

ENH English Humanities Any ENH Course(s), including [110, 111, 112, 113, 114, 117, 130, 140AA, 190, 201, 202, 204, 206, 214, 220, 221, 222, 230, 231, 232, 235, 241, 242, 245, 251, 253, 254, 255, 256, 259, 260, 275, 277, 277AE, 277AG, 277AA-AK, 280, 284, 285, 291, 294, 295](#)

FMT Film, Media, and Theatre [107](#)

FRE French [265](#)

GST Game Studies [202](#)

HCR Health Care Related [210](#)

HIS History [101, 102, 103, 108, 110, 111, 113, 114, 203, 212, 251, 252](#)

HON Honors [190](#)

HUM Humanities Any HUM course(s), including 100, [101, 107, 108, 190AA, 190AB, 190AC, 190AD, 190AE, 190AF, 190AG, 190AH, 190AI, 201, 202, 205, 206, 209, 210, 211AA, 211AE, 212, 213, 214, 215, 216, 220, 235, 245, 250, 251, 260, 261, 292, 295](#) (and except 120, 225)

INT Interior Design [115, 120](#)

JPH Japanese Humanities [245](#)

LAT Latin [201, 202](#)

MHL Music: History/Literature [140, 143, 145, 146, 153, 155, 194, 204, 241, 242, 295](#)

(Continued on next page)

(Humanities, Arts, and Design Continued)

PHI	Philosophy Any PHI Course(s), including 101 , 103 , 104 , 105 , 201 , 212 , 213 , 214 , 216 , 218 , 224 , 234 , 244 , 245 , 251
QST	Queer Studies 200 , 210
REL	Religious Studies Any REL Course(s), 100 , 101 , 151 , 200 , 201 , 202 , 203 , 205 , 206 , 207 , 210 , 211 , 212 , 213 , 214 , 218 , 223 , 225 , 230 , 240 , 244 , 245 , 248 , 250 , 251 , 270 , 271 , 277 , 294 , 295 , 282AA-AC , 290 , 291
SLC	Studies in Language & Culture 201 , 202
SPA	Spanish 241 , 242 , 265 , 266
SPH	Spanish Humanities 241 , 245
SSH	Sustainability/Social Sciences and Humanities 111
STO	Storytelling 292 , 294 , 295
SWU	Social Work 183
TEC	Textiles and Clothing 105 , 125
THE	Theater 111 , 220
THF	Theatre and Film 205 , 206 , 210
THP	Theater/Performance/Production 217 , 241
WST	Women's Studies 209 , 284 , 285 , 290

Social-Behavioral Sciences (6-9 credits)

Students are encouraged to choose courses from more than one discipline. Social-Behavioral Sciences requirements may be met with 6 credits only if COM100, COM110, or COM230 is shared between Core and Distribution (see Academic Policies section). The credits are only counted once, but may be applied to meet Oral Communication and Social-Behavioral Science requirements.

AFR	African American Studies 202 , 203 , 204
AIS	American Indian Studies 101 , 140 , 141 , 160
AJS	Administration of Justice Studies 101 , 119 , 200 , 225 , 258 , 270
ASB	Anthropology 100 , 102 , 202 , 211 , 222 , 223 , 226 , 230 , 235 , 252
ASM	Anthropology 104 , 275
BHS	Behavioral Health Services Technology 150 , 155 , 175 , 210
CAP	Counseling and Applied Psychology 120
CCS	Chicana and Chicano Studies 202
CFS	Child/Family Studies 112 , 157 , 159 , 176 , 205 , 235 , 259
COM	Communication 100 , 100AA&100AB&100AC , 110 , 110AA&110AB&110AC , 163 , 230 , 250 , 263
CPD	Counseling and Personal Development 102AH , 180
ECH	Early Childhood Education 176
ECN	Economics 160 , 211 , 212 , 213 , 250
EDU	Education 221 , 222
EED	Early Education 205 , 222
EMT	Emergency Medical Technology 258
ENG	English 213
FSC	Fire Science Technology 258
GCU	Cultural Geography 102 , 113 , 121WG , 141 , 221
HES	Health Science 100 , 120
HIS	History any HIS Course(s), including 100 , 101 , 102 , 103 , 104 , 105 , 106 , 108 , 1095 , 113 , 114 , 140 , 145 , 190 , 201 , 203 , 204 , 209 , 240 , 241 , 242 , 273 , 277 (and except 111 , 170 , 173 , 251 , 252)
HON	Honors 201
HUM	Humanities 235
IBS	International Business 109
IFS	Information Studies 201 , 210 , 213
MCO	Mass Communications 120
MGT	Management 229 , 230
PAD	Public Administration 200

(Continued in next column)

(Social-Behavioral Sciences Continued)

POS	Political Science Any POS course(s), including 100 , 101 , 110 , 113 , 114 , 115 , 120 , 125 , 130 , 140 , 180 , 210 , 221 , 222 , 223 , 281AB , 282AA-AC , 285
PSY	Psychology 101 , 123 , 132 , 156 , 157 , 215 , 218 , 225 , 235 , 240 , 241 , 243 , 250 , 260 , 262 , 266 , 277 , 280 , 292
QST	Queer Studies 200 , 210
REC	Recreation 120
SBU	Society and Business 200
SLC	Studies in Language & Culture 201
SOC	Sociology Any SOC course(s), including 101 , 110 , 130 , 141 , 157 , 180 , 212 , 220 , 241 , 251 , 266 , 270 (and except 143 , 245 , 253 , 265)
SSH	Sustainability/Social Sciences and Humanities 111
SUS	Sustainability/Natural Sciences 110
SWU	Social Work 171 , 182 , 250 , 258 , 295
TEC	Textiles and Clothing 105
WST	Women's Studies 100 , 161
YAQ	Yaqui Indian History and Culture 100

Natural Sciences (7-8 credits)

Two lecture courses and one corresponding laboratory course are to be selected. The lecture and corresponding laboratory course(s) may carry separate credit. For appropriate course selection students should consult with an advisor.

AGS	Agricultural Science 164 , 260
ASB	Anthropology 231
ASM	Anthropology 104 , 265 , 275
AST	Astronomy 101 , 106 , 111 , 112
BIO	Biology 100 , 101 , 102 , 105 , 107 , 108 , 109 , 111 , 116 , 145 , 149AK , 149AL , 149AM , 149AN , 156 , 156XT , 160 , 181 , 181XT , 182 , 182XT , 201 , 201XT , 202 , 205
CHM	Chemistry 107&107LL , 130&130LL , 130AA , 140AA , 150&151LL , 150AA , 151&151LL , 151AA , 152&152LL , 152AA , 230AA , 230&230LL
CON	Construction 106
ENV	Environmental Sciences 101
FON	Food and Nutrition 241&241LL
FOR	Forensic Science 105 , 106
GLG	Geology 101&103 , 101IN , 102&104 , 102IN , 105 , 106 , 110&111 , 110IN , 121 , 140 , 229AB-AC , 230AA-AC , 231AA-AD , 280 , 281 , 282AA
GPH	Physical Geography 111&112 , 113 , 211 , 212&214 , 213&215
PHS	Physical Science 110 , 115 , 120
PHY	Physics 101 , 111 , 112 , 121 , 131
PSY	Psychology 275 , 290AB , 290AC

Literacy and Critical Inquiry (0-3 credits)

Literacy requirements may be met with 0 credits only if CRE101 or COM225 is shared between Core and Distribution (see Academic Policies section). The credits are only counted once, but may be applied to meet [Critical Reading and Literacy and Critical Inquiry] or [Oral Communication and Literacy and Critical Inquiry] requirements.

AIS	American Indian Studies 203 , 213
CAP	Counseling and Applied Psychology 260
COM	Communication 222 , 225 , 241

(Continued on next page)

(Literacy and Critical Inquiry Continued)
CPD Counseling and Personal Development [160](#)
CRE Critical Reading [101](#), [201](#)
CUL Culinary Arts [223](#)
DAH Dance Humanities [255](#)
EDU Education [220](#), [282AC](#)
ENG English [111](#), [200](#), [215](#), [216](#), [217](#), [218](#)
ENH English Humanities [241](#), [253](#), [254](#), [255](#), [277AE](#), [277AG](#)
EXS Exercise Science [290](#)
FON Food and Nutrition [225](#)
GBS General Business [233](#)
GPH Physical Geography [267](#)
HUM Humanities [212](#), [225](#), [235](#), [250](#), [251](#)
IFS Information Studies [201](#)
JRN Journalism [201](#), [234](#)
MCO Mass Communications [220](#)
MHL Music: History/Literature [204](#)
PHI Philosophy [103](#), [214](#), [218](#), [224](#)
POS Political Science [115](#)
PSY Psychology [290AB](#), [290AC](#)
REL Religious Studies [203](#), [205](#), [207](#)
SLC Studies in Language & Culture [202](#)
TEC Textiles and Clothing [105](#)
THE Theatre [220](#)
THP Theatre Performance/Production [241](#)

Elective Courses (15-22 credits) May select courses from prefixes already chosen for General Education Distribution requirements in order to develop depth in one or more subject areas.

*First-Year Composition may be met with fewer than 6 credits if student has transfer credit from ASU, NAU or UAZ for a single course that meets FYC in full.

**Maricopa County Community College District (MCCCD)
2025-2026 Associate in Arts, Fine Arts (AAFA) Degree**

Description

The Maricopa County Community College District Associate in Arts, Fine Arts (AAFA) degree requires a minimum of 60 semester credits for the program of study; however, minimum total credits for the AAFA vary by specific emphasis. Students must select one of the emphasis areas: [Art](#), [Dance](#), [Music](#), [Musical Theatre](#), or [Theatre](#). If an emphasis area is not selected, this program is not eligible for Title IV Federal Financial Aid. Refer to curriculum.maricopa.edu (click on Current Programs) to search for the corresponding area of emphasis for specific courses required and credit minimums for each emphasis. A minimum grade point average of 2.0 (4.0 scale) and grades of “C” or better are required in all courses to earn the degree. The AAFA degree is governed by the MCCCD General Academic Policies for associate degrees designed for university transfer.

The Associate in Arts, Fine Arts degree includes the following components:

- I. Program Prerequisites (as specified by emphasis area)
- II. Required Courses (as specified by area of emphasis)
- III. Restricted Electives (as specified by area of emphasis)
- IV. Arizona General Education Curriculum for Arts (AGEC-A)
- V. MCCCD Additional Requirements (Oral Communication and Critical Reading)
- VI. General Electives (if needed to reach minimum credits for degree)

Purpose of the Degree

The Associate in Arts, Fine Arts (AAFA) degree is designed for students planning to transfer to four-year colleges and universities. In general, the components of the degree meet requirements for majors in the Fine Arts. The degree is designed to prepare students to meet selective admission criteria for programs such as the Bachelor of Fine Arts; program admission may have an additional emphasis-specific portfolio or performance requirements.

In most cases, courses used to satisfy the MCCCD Associate in Arts, Fine Arts (AAFA) will apply to general university graduation requirements of the majors that align with AAFA degree; however, students need to pay attention to any specific requirements of their intended focus at the university to be sure they select courses that will meet them. Information regarding the articulation of the AAFA degree with majors at the Arizona public universities can be accessed via the following website: aztransfer.com/tools

Degree Requirements

The requirements for the Associate in Arts, Fine Arts (AAFA) follow. The Associate in Arts, Fine Arts degree requires at least 60 credits; however, minimum total credits for the AAFA vary by specific emphasis (Art, Dance, Music, Musical Theatre, or Theatre). Refer to curriculum.maricopa.edu (click on Current Programs) to search for the corresponding area of emphasis for specific courses required and credit minimums; review course sequence at maricopa.edu/degrees-certificates. The following websites identify the courses that apply to the different General Education Core and Awareness Areas: [AGEC-A](#) and the [AGEC matrix](#). Courses available for both Areas during a current or upcoming semester can also be found using the “[Find a Class](#)” tool on maricopa.edu and on each MCCCD college’s website. Industry-recognized credentials can be counted as general electives.

I. Required Courses.....	Number varies

Students must complete FYE101 or FYE103 ([see General Graduation Requirements Administrative Regulation 2.3.9](#)) and the required (major-specific) courses listed in the Associate in Arts Fine Arts degree Required Courses area for the specific emphasis (Art, Dance, Music, Musical Theatre, or Theatre).

Refer to curriculum.maricopa.edu (click on Current Programs) to search for the corresponding area of emphasis for specific courses required and credit minimums for each emphasis.

II. Restricted Electives.....	Number varies

Restricted electives for the Associate in Arts, Fine Arts degree vary by specific emphasis: (Art, Dance, Music, Musical Theatre, or Theatre). Refer to curriculum.maricopa.edu (click on Current Programs) to search for the corresponding area of emphasis for specific courses required and credit minimums for each emphasis.

III. Arizona General Education Curriculum--Arts (AGEC-A)..... up to 44

The AGECA requires a minimum of 35 credits (32 if FYC is met by single transfer course)*. However, depending on courses selected, it may take as many as 44 credits to satisfy all the General Education criteria. Any required/restricted elective courses that also have one or more AGECA designation(s) may be applied toward both requirements. Credits for such shared courses are only counted once toward the total credits for the degree.

AGEC designations are subject to change. See [AGEC matrix](#) for each course's value(s) in the semester it is taken. Some of the courses may have been approved for more than one designation. Notes below will show how such courses may be used to meet multiple degree requirements.

A. First-Year Composition [FYC].....	6*
ENG101 OR ENG107.....	(3)*
AND ENG102 OR ENG108.....	(3)*
B. Literacy and Critical Inquiry [L].....	3
C. Mathematical Applications [MA].....	3-6
Requires a course in college mathematics (MAT140, MAT141, MAT142, MAT145, MAT146) or college algebra (MAT150, MAT151, MAT152, MAT155, MAT156) or higher [MA]-approved general education course.	
The minimum math requirement for graduation defaults to the lowest base-level math, as identified above. Some emphasis may require higher-level math; refer to curriculum.maricopa.edu (click on Current Programs) to search for specific emphasis math requirements.	
D. Computer/Statistics/Quantitative Applications [CS].....	3
E. Humanities, Arts and Design [HU].....	6
F. Social-Behavioral Sciences [SB].....	6
Students are encouraged to choose course work from more than one discipline.	
G. Natural Sciences [SQ/SG].....	8
The lecture courses selected for Natural Sciences must include or be accompanied by the corresponding laboratory courses for a total of four credits each. Credits for lecture and lab components may be combined or each may carry separate credit. At least four credits must be designated as SQ-Science Quantitative. Eight credits of SG-Science General will not satisfy this requirement.	
H. Awareness Areas.....	0-6
The same course(s) may be used to satisfy one or more Awareness Area(s) as well as other AGECA requirements. (See AGEC matrix at https://aztransmac2.asu.edu/cgi-bin/WebObjects/agec.woa/3/wa/agecMatrixReport?inst=001075 for current course values). Credits for such shared courses may only be counted once.	
1. Cultural Diversity in the United States [C].....	(0-3)
2. Global Awareness [G] OR Historical Awareness [H].....	(0-3)
May be met by [HU] and/or [SB] course(s) depending on specific courses selected. (AGEC designations are subject to change. See AGEC matrix for each course's value(s) in the semester it is taken.)	

IV. MCCCCD Additional Requirements..... 0-6

As noted below, courses in this area may also be applied toward AGECA requirements.

A. Oral Communication.....	(0-3)
<i>Refer to emphasis area (Art, Dance, Music, Musical Theatre, or Theatre) for specific COM course to select from the following list:</i>	
COM100 [SB] Introduction to Human Communication OR	
COM110 [SB] Interpersonal Communication OR	
COM225 [L] Public Speaking OR	
COM230 [SB] Small Group Communication (3 credits) OR	
COM100AA & COM100AB & COM100AC [SB] (3 credits) OR	
COM110AA & COM110AB & COM110AC [SB] (3 credits)	

B. Critical Reading.....	(0-3)
CRE101 [L] Critical Reading OR equivalent as indicated by assessment	

V. General Electives.....	0-25

Select courses 100-level or higher if needed to complete a minimum of 60 semester credits but no more than a total of 64 semester credits, which is the maximum number of credits accepted toward most degree programs at Arizona's public universities. Ideally, students should select courses that meet requirements for their major/area of interest and transfer institution. See General Associate Degree Academic Policies for further details, limitations, and guidelines. MCCC has established recommended courses and sequencing to align with the Fine Arts Emphasis Areas. See maricopa.edu/degrees-certificates for links to these transfer pathways.

Maricopa courses and external courses evaluated as Maricopa equivalents, departmental electives (e.g., HISELC for a history elective), or general electives (GENELC) that are numbered 100 level or higher, and completed with a grade of "C" or higher, may be applied in the elective area, regardless of potential transferability to other institutions. It is recommended, however, that students planning to transfer to a baccalaureate-granting institution meet these general elective requirements with courses that are transferable and applicable to their intended university degree. Transfer and major guides are accessible on the following websites: aztransfer.com/tools, curriculum.maricopa.edu, as well as those of individual universities. For appropriate course selection, students should consult with an academic advisor.

*FYC may be met with fewer than 6 credits if student has transfer credit from ASU, NAU or UAZ for a single course that meets FYC in full.

**64 semester credits is the maximum accepted toward most degree programs at Arizona's public universities. Some exceptions apply; consult with an academic advisor for additional transfer information.

**Maricopa County Community College District (MCCCD)
2025-2026 Associate in Arts, Elementary Education (AA-EE) Degree**

Description

The Maricopa County Community College District Associate in Arts, Elementary Education (AAEE) degree requires a minimum of 60 semester credits for the program of study. A minimum grade point average of 2.0 (4.0 scale) and grades of “C” or better in all courses are required to earn the degree. The AAEE degree is governed by the MCCCD General Academic Policies for Transfer Degrees. Refer to curriculum.maricopa.edu (click on Current Programs) to search for the corresponding 8101 AAEE. A minimum grade point average of 2.0 (4.0 scale) and grades of “C” or better are required in all courses to earn the degree. The AA degree is governed by the MCCCD General Academic Policies for Degrees Designed for University Transfer.

The Associate in Arts, Elementary Education degree includes the following components:

- I. Required Courses
- II. Restricted Electives
- III. Arizona General Education Curriculum for Arts (AGEC-A)
- IV. MCCCD Additional Requirements (Oral Communication and Critical Reading)

Purpose of the Degree

The Associate in Arts, Elementary Education (AAEE) degree is designed for the student who plans to transfer to an Elementary Education, Early Childhood, Multicultural/Multilingual, or Special Education program at an Arizona public higher education institution and/or who plans to become a classroom instructional aide. Generally, the degree transfers as a block without loss of credit to Arizona's public universities, and in most cases, its required courses apply to graduation requirements for these Education majors. The AAEE is also embedded within the Bachelor of Arts, Elementary Education and Special Education (BAEE/SPED) offered by the Maricopa Community Colleges.

Degree Requirements

The requirements for the Associate in Arts in Elementary Education follow. The following websites identify the courses that apply to the different General Education Core and Awareness Areas: [AGEC](#) and the [AGEC matrix](#) report at aztransmac2.asu.edu/cgi-bin/WebObjects/agec. Courses available for both Areas during a current or upcoming semester can also be found using the “[Find a Class](#)” tool on maricopa.edu and on each MCCCD college’s website. Course sequence is available at maricopa.edu/degrees-certificates#programs.

Requirements

	<u>Credits</u>
I. Required Courses.....	14-20
EDU221 Introduction to Education.....	(3)
EDU222 Introduction to the Exceptional Learner.....	(3)
EDU230 Cultural Diversity in Education.....	(3)
FYE101 or FYE103 Introduction/Exploration To College, Career and Personal Success.....	(1-3)
MAT256 Investigating Quantity: Number, Operations, and Numeration Systems.....	(4)
MAT257 Investigating Geometry, Probability, and Statistics.....	(0-4)

II. Restricted Electives..... 8

A total of eight (8) semester credits is required to satisfy the Arizona Professional Teacher Standards: three (3) credits in an additional Education (EDU) course and five (5) credits in Content Area Electives.

Courses must transfer to all public Arizona universities as elective credit, departmental elective, or equivalent to a university course as indicated in the [Arizona Course Equivalency Guide](https://aztransfer.com/tools/) (https://aztransfer.com/tools/) in effect when the course is taken. Courses identified as non-transferable in the Arizona Course Equivalency Guide cannot be used to satisfy this requirement.

Select one (1) additional EDU course (other than EDU221, EDU222, EDU230 or EDU250)..... (3)
Recommended:

- EDU110 Education in Film
- EDU220 Introduction to Serving English Language Learners (ELL)
- EDU236 Classroom Relationships
- EDU/HUM/STO292 The Art of Storytelling

Choose any combination from the following list of courses and prefixes to total five (5) credits of additional coursework. Course(s) selected must be different from those used to fulfill a requirement of the AGEC-A and/or those used to fulfill Required Courses.

Content Area Electives: Select a total of five (5) credits from the following options (5)

- ARH+++ Any ARH Art Humanities course(s)
- ART+++ Any ART Art course(s)
- BPC+++ Any BPC Business-Personal Computers course(s)
- CFS/ECH176 Child Development
- CFS205 Human Development
- CIS+++ Any CIS Computer Information Systems course(s)
- ECN+++ Any ECN Economics course(s)
- EDU+++ Any EDU Education course(s) (except EDU221, EDU222, EDU230, and EDU250)
- EED215 Early Learning: Health, Safety, Nutrition and Fitness **OR**
- CFS123 Health and Nutrition in Early Childhood Settings **AND**
- CFS125 Safety in Early Childhood Settings

- ENG+++ Any ENG English course(s)
- ENH+++ Any ENH English Humanities course(s)
- GCU+++ Any GCU Cultural Geography course(s)
- GPH+++ Any GPH Physical Geography course(s)
- HIS+++ Any HIS History course(s)
- MAT+++ Any MAT Mathematics course(s) 140 or higher (except MAT256 and MAT257)
- MHL+++ Any MHL Music: History/Literature course(s)
- MTC+++ Any MTC Music: Theory/Composition course(s)
- POS+++ Any POS Political Science course(s)
- THE+++ Any THE Theatre course(s)
- THF+++ Any THF Theatre and Film course(s)
- THP+++ Any THP Theatre Performance/Production course(s)
- Any Foreign Language course(s)
- Any Natural Science course(s)

III. Arizona General Education Curriculum--Arts (AGEC-A)..... 35-44*

The AGEC-A requires a minimum of 35 credits (32 if FYC is met by single transfer course)*;

AGEC designations are subject to change. See AGEC matrix for each course's value(s) in the semester it is taken. Some of the courses have been approved for more than one designation. Notes below will show how such courses may be used to meet multiple degree requirements.

- A. First-Year Composition [FYC]..... 6*
- ENG101 OR ENG107..... (3)*

AND ENG102 OR ENG108.....	(3)*
B. Literacy and Critical Inquiry [L] - COM225 Public Speaking.....	3
C. Mathematical Applications [MA].....	3-6
Requires a course in college mathematics (MAT140, MAT141, MAT142, MAT145, MAT146) or college algebra (MAT150, MAT151, MAT152, MAT155, MAT156) or precalculus (MAT187, MAT188) or higher approved general education course in the Mathematical Applications [MA] area for which MAT15+ is a prerequisite. (Note that MAT182, MAT206, MAT256, MAT257 do NOT meet this requirement).	
The minimum math requirement for graduation defaults to the lowest base-level math, as identified above. Some emphasis may require higher-level math; refer to curriculum.maricopa.edu (click on Current Programs) to search for specific emphasis math requirements.	
D. Computer/Statistics/Quantitative Applications [CS].....	3
BPC110 Computer Usage and Applications OR CIS105 Survey of Computer Information Systems OR EDU/EED115 Digital Literacy for Teaching and Learning in Education EDU/EED115 recommended.	
E. Humanities, Arts and Design [HU].....	6
Note that some of these courses also have Awareness Areas designations and can be used to satisfy [G] and/or [H] requirement as well as [HU]. (AGEC designations are subject to change. See AGEC matrix for each course's value(s) in the semester it is taken.)	
1) Select one of the following ARH, DAH, MHL or THE courses:.....	(3)
ARH100 Introduction to Art OR ARH101 Prehistoric through Gothic Art OR ARH102 Renaissance through Contemporary Art OR DAH100 Introduction to Dance OR DAH201 World Dance Studies OR DAH250 Dance in Popular Culture OR MHL140 Survey of Music History OR MHL145 American Jazz and Popular Music OR MHL146 Survey of Broadway Musicals OR MHL153 Rock Music and Culture OR THE111 Introduction to Theatre OR THE220 Modern Drama	
AND	
2) Select one of the following EDU, ENH or HUM courses:.....	(3)
EDU/ENH291 Children's Literature (Recommended) OR ENH110 Introduction to Literature OR ENH241 American Literature Before 1860 OR ENH242 American Literature After 1860 OR HUM250 Ideas and Values in the Humanities: Early Civilizations to the Renaissance OR HUM251 Ideas and Values in the Humanities: Renaissance to the Contemporary World	
F. Social-Behavioral Sciences [SB].....	6
Note that some of these courses also have Awareness Areas designations and can be used to satisfy [G] and/or [H] requirement as well as [SB]. (AGEC designations are subject to change. See AGEC matrix for each course's value(s) in the semester it is taken.)	
1) Select one of the following US History/Government courses**.....	(3)
These courses satisfy the United States Constitution requirement for state teacher certification. GCU/POS113 United States and Arizona Social Studies OR	

HIS103 United States History to 1865 OR
 POS110 American National Government
 AND

- 2) Select one of the following CFS, ECH, GCU, ECN, HIS or PSY courses..... (3)
- CFS205 Human Development OR
 - CFS/ECH176 Child Development OR
 - ECN211 Macroeconomic Principles OR
 - ECN212 Microeconomic Principles OR
 - GCU121WG World Geography: People, Places, and Culture OR
 - HIS104 United States History 1865 to Present OR
 - PSY101 Introduction to Psychology
- (CFS/ECH176 recommended)

G. Natural Sciences [SQ/SG]..... 8

The lecture course(s) selected for Natural Sciences must include or be accompanied by the corresponding laboratory course for a total of four (4) credits each. At least four (4) credits must be designated as [SQ]. Eight (8) credits of [SG] will not satisfy this requirement.

- 1) Life Sciences: Select four (4) credits of SQ or SG in Biology (BIO)..... (4)
- AND
- 2) Physical Sciences or Earth/Space Sciences: Select four (4) credits of SQ or SG from one of the following prefixes:..... (4)
- AGS, ASM, AST, CHM, GPH, GLG, PHS, or PHY

Note: Students are advised to check with the university they plan to attend as specific requirements for lab sciences may vary.

H. Awareness Areas..... 0-3

- 1) Cultural Diversity in the United States [C]..... (0)
- Met by EDU222 and EDU230 in Required Courses.
- 2) Global Awareness [G] OR Historical Awareness [H]..... (0-3)
- May be met by [HU] and/or [SB] course(s) depending on specific courses selected. (AGEC designations are subject to change. See [AGEC matrix](#) for each course's value(s) in the semester it is taken.)

IV. MCCC Additional Requirements..... 0-3

- A. Oral Communication..... (0)
- Met by COM225 that is required to satisfy AGEC-A Literacy and Critical Inquiry [L]
- B. Critical Reading..... (0-3)
- CRE101 [L] Critical Reading OR equivalent as indicated by assessment

TOTAL..... **60-64*****

*FYC may be met with fewer than 6 credits if a student has transfer credit from ASU, NAU or UAZ for a single course that meets FYC in full.

**State certification requirements include courses on the constitutions of the U.S. and Arizona. Taking GCU/POS113 for [SB] fulfills this requirement completely. Students who instead take HIS103 or POS110 for [SB] should consider taking POS221 as a Content Area Elective so they have completed study of both constitutions. POS220 meets state certification requirements for both constitutions but does not meet [SB].

***64 semester credits is the maximum accepted toward most degree programs at Arizona's public universities. Some exceptions apply; consult with an academic advisor for additional transfer pathways.

**Maricopa County Community College District (MCCCD)
2025-2026 Arizona General Education Curriculum (AGEC) – A, B, S**

Description

The Maricopa County Community College District Arizona General Education Curriculum (MCCCD AGEC) is a general education certificate that fulfills lower-division general education requirements for students planning to transfer to any Arizona public community college or university. Generally, the MCCCD AGEC transfers as a block without loss of credit. In most cases, all courses used to satisfy the MCCCD AGEC will apply to graduation requirements of the university major for which the AGEC was designed.

As described below, the AGECS are a component of most MCCCD associate degrees and comparable degrees at other Arizona public community colleges. The AGEC-A defines the general education requirements in the Associate in Arts (AA), Associate in Arts, Elementary Education (AAEE), and the Associate in Arts, Fine Arts (AAFA) degrees. The AGEC-B defines the general education requirements in the Associate in Business-General Requirements (ABUS-GR) and Associate in Business-Special Requirements (ABUS-SR) degrees. The AGEC-S defines the general education requirements in the Associate in Science (AS) degree.

As described in more detail below, all AGECS require designated courses in First Year Composition [FYC], Literacy and Critical Inquiry [L], Mathematical Studies [MA], Social-Behavioral Sciences [SB], Humanities, Design and Fine Arts [HU], and Natural Science [SQ/SG]. Students must satisfy two Awareness areas as well: Cultural Diversity in the U.S. and either Global Awareness or Historical Awareness. In addition, the AGEC-A and AGEC-B require a Computer/Statistics/Quantitative Applications course [CS] that is not required for students pursuing the AGEC-S.

Purpose of the AGECS

AGECS were designed to articulate with different academic majors at the state universities, and their particular requirements vary accordingly. In some major-specific pathways, students are allowed to choose from a broad list of courses to satisfy the AGEC requirements, and for others the courses are more restricted or even specified. Additional information on academic majors at the Arizona public universities can be accessed via the following website: aztransfer.com/tools

1. The **AGEC-A** is designed to satisfy General Education requirements in many liberal arts majors as well as other majors that articulate with an Associate in Arts degree (e.g., social sciences, fine arts, humanities, elementary education). AGEC-A requires a minimum of college mathematics or college algebra to satisfy the Mathematics [MA] requirement.
2. The **AGEC-B** is designed to satisfy requirements in business majors that articulate with the Associate in Business (ABUS-GR, ABUS-SR). AGEC-B requires a minimum of brief calculus to satisfy the Mathematics [MA] requirement.
3. The **AGEC-S** is designed to satisfy requirements in majors with more prescriptive mathematics and mathematics-based science requirements such as many in the sciences, technology, engineering and mathematics. AGEC-S requires a minimum of the first course in a calculus sequence to satisfy the Mathematics [MA] requirement, and a minimum of eight (8) credits of either university chemistry, university physics, general biology for majors, or physical and historical geology to satisfy the Natural Sciences [SQ/SG] requirement. In addition, students must select six (6)- to ten (10) additional credits of Subject Options composed of math and/or science appropriate to their major.

Academic Policies that Govern the AGEC A, B, S

- Requires completion of at least 35 credit hours* (for AGEC-A and AGEC-B) and 36 credit hours* (for AGEC-S) in courses numbered 100 and above that have been approved for one or more AGEC designations; a minimum of 12 of those credits must be completed at one or any combination of the MCCCD colleges. See First Year Composition [FYC] notes in the following AGEC descriptions and footer for credit minimum exceptions.*
- All MCCCD courses applied to the AGEC must be completed with a grade of “C” or better.
- All MCCCD courses applied to the AGEC must be accepted for transfer credit as a direct equivalent, departmental elective, or general elective credit at ASU, NAU, and UAZ according to the [Course Equivalency Guide](#) for the academic year in which the course was taken. Courses approved for transfer exclusively toward the Bachelor of Applied Science are ineligible for inclusion in the AGEC.

- A single course can simultaneously count toward one or more Awareness Areas and other AGEC requirements. For example, an approved course in world geography may be used to satisfy [SB] and [G] requirements. While multiple requirements can be met with a single course, the credits for that course are only counted one time toward the required minimum total for the AGEC. Except as detailed below for the AGEC-S, a single course cannot be used to satisfy more than one AGEC requirement, with the exception of Awareness Areas. While multiple requirements can be met with a single course, the credits are only counted one time toward the required minimum for the degree. Except as detailed below for the AGEC-S, a single course cannot be used to satisfy more than one AGEC core requirement other than Awareness Areas. For example, for AGEC-A and AGEC-B, a single course cannot be used to satisfy both [HU] and [SB], but it could be used to meet [HU] and [C], [G] and/or [H].
- Awareness Areas and MCCCDC's Additional Requirements may also be shared with other AGEC Requirements. Optimizing credits in this way is often recommended because some programs and universities limit transferable credits at 64.

Transfer Credit from Institutions Outside of MCCCDC

- Credits transferred from outside of MCCCDC must be completed with a grade of "C" (2.0 on a 4.0 scale) or better. Transfer credit graded pass/fail or pass/no credit may be used to satisfy AGEC requirements if documentation collected by the community college indicates that this was the only grading option available and that the Pass grade ("P") is equivalent to a "C" or better.
- The AGEC (Arizona General Education Curriculum) designations of courses completed at other Arizona public colleges or universities will be applied as listed on [AZTransfer's Course Equivalency Guide](https://aztransfer.com/tools/) (CEG) at aztransfer.com/tools/ for the semester(s) in which the course(s) were completed. If a transcript evaluation determines there is no MCCCDC direct equivalency to a course from another Arizona public college or university, applicability to AGEC and/or associate degree requirements will be based on the source institution's AGEC designation for the semester in which the course was completed.
- Courses from private, out-of-state, and/or online institutions (i.e., outside of the Arizona Transfer System composed of Arizona's public community colleges, tribal colleges and universities) will be applied toward AGEC and/or associate degree requirements based on the courses' evaluated MCCCDC equivalence. If courses are not directly equivalent, the credit may be articulated as a departmental elective, and if deemed appropriate, may have a general education designation applied to the course.
- Courses with different credit systems (quarter hours, trimester, units) are converted to semester credit hours. A deficiency in an AGEC category due to quarter-hour or other credit system application must be recovered by additional credits to a total of 35 AGEC credits overall (or 32 credits overall if a student transfers in a single course from an Arizona public university that fulfills the First Year Composition requirement).
- Credit awarded at a Maricopa Community College through prior learning assessment in a non-traditional setting is transferable to other colleges in the MCCCDC district but is not necessarily transferable to other colleges and universities outside of the MCCCDC system. No more than 20 such assessed semester credit hours may be applied toward AGEC.

Completion and Transfer

- Completion of the AGEC with a minimum grade point average of 2.0 for Arizona residents and 2.50 for non-residents (on a 4.0 scale) meets Arizona public university general admission requirements. It does not ensure admission to specific university majors or programs with selective admission processes and/or limited enrollment.

Students planning to transfer to another college or university are urged to refer to university requirements and academic advisors from both institutions to be certain that all their selected coursework is applicable to the requirements of their intended transfer degree. For some majors, the statewide Common Course matrix, AZTransfer Pathway Guides and/or University Transfer Guides posted on the [AZTransfer website](https://aztransfer.com/tools/) on aztransfer.com/tools/ can also provide some guidance. For appropriate course selection, students should consult with an academic advisor.

AGEC Requirements

Descriptions and definitions of the requirements for each of the three AGECs follow. The following website identifies the courses that apply to the different requirements within each AGEC for a given academic year: [AGEC matrix](#). AGEC designations are subject to change. It is important to verify a course's AGEC value in the semester it is taken. For

convenience, this information is provided for the current and upcoming semester in the “[Find a Class](#)” tool on [maricopa.edu](#) and on each MCCC college’s website as well as in the AGECEC matrix provided by [AZTransfer](#) at [aztransfer.com/tools/](#). Note that for students pursuing an associate degree with a specific emphasis (for example: Associate in Arts, Emphasis in History; Associate in Arts, Fine Arts, Emphasis in Theatre; Associate in Science, Emphasis in Physics), the AGECEC course requirements are usually more prescriptive. Students pursuing a major-specific pathway should consult the Program (Degree) Search at [curriculum.maricopa.edu](#) (click on Current Programs) for specific degree and AGECEC requirements. Consultation with an academic advisor about course selection is always recommended.

Credits

Arizona General Education Curriculum--Arts (AGECEC-A)..... 35 (min.)*

The AGECEC-A requires a minimum of 35 credits (32 if [FYC] is met by single transfer course)*; courses applied to meet AGECEC-A requirements vary by emphasis.

Refer to the program (Degree) Search at [curriculum.maricopa.edu](#) (click on Current Programs) for specific course requirements. The Required Courses and/or Restricted Electives for some areas of Emphasis may also have AGECEC designations including one or more of the Awareness Areas ([C], [G] and/or [H]). A single course may meet more than one requirement but its credits are only counted once toward the total for the degree. AGECEC designations are subject to change.

See [AGECEC matrix](#) for each course's value(s) in the semester it is taken.

A. First-Year Composition [FYC].....	6*
ENG101 OR ENG107.....	(3)*
AND ENG102 OR ENG108.....	(3)*
B. Literacy and Critical Inquiry [L].....	3
C. Mathematical Applications [MA].....	3-6
Requires a course in college mathematics (MAT140, MAT141, MAT142, MAT145, MAT146) or college algebra (MAT150, MAT151, MAT152, MAT155, MAT156) or pre-calculus (MAT187, MAT188) or higher [MA]-approved general education course.	
The minimum math requirement for graduation defaults to the lowest base-level math, as identified above. Some emphasis may require higher-level math; refer to curriculum.maricopa.edu (click on Current Programs) to search for specific emphasis math requirements.	
D. Computer/Statistics/Quantitative Applications [CS].....	3
E. Humanities, Arts and Design [HU].....	6
Students are encouraged to choose course work from more than one discipline.	
F. Social-Behavioral Sciences [SB].....	6
Students are encouraged to choose course work from more than one discipline.	
G. Natural Sciences [SQ/SG].....	8
The lecture courses selected for Natural Sciences must include or be accompanied by the corresponding laboratory courses for a total of four credits each. Credits for lecture and lab components may be combined or each may carry separate credits. At least four (4) credits must be designated as SQ-Science Quantitative. Eight (8) credits of SG-Science General will not satisfy this requirement.	
H. Awareness Areas.....	0-6
The same course(s) may be used to satisfy one or more Awareness Area(s) as well as other AGECEC requirements. (See AGECEC matrix at aztransmac2.asu.edu/cgi-bin/WebObjects/agece for current course values). Credits for such shared courses may only be counted once.	
1. Cultural Diversity in the United States [C].....	(0-3)
2. Global Awareness [G] OR Historical Awareness [H].....	(0-3)

*FYC may be met with fewer than 6 credits if student has transfer credit from ASU, NAU or UAZ for a single course that meets FYC in full.

Credits
35 (min.)*

Arizona General Education Curriculum - Business (AGEC-B).....

The AGECE-B requires a minimum of 35 credits (32 if FYC is met by single transfer course)*,

The Required Courses and/or Restricted Electives for corresponding Associate's degree may also have AGECE designations including one or more of the Awareness Areas ([C], [G] and/or [H]). A single course may meet more than one requirement but its credits are only counted once toward the total for the degree.

A. First-Year Composition [FYC].....	6*
ENG101 OR ENG107 AND.....	(3)*
ENG102 OR ENG108.....	(3)*
B. Literacy and Critical Inquiry [L].....	3
C. Mathematical Applications [MA].....	3-5
MAT212 Brief Calculus OR.....	(3)
MAT213 Brief Calculus OR.....	(4)
Higher [MA] designated course.....	(3-5)

The minimum math requirement for graduation defaults to the lowest base-level math, as identified above. Some emphasis may require higher-level math; refer to curriculum.maricopa.edu (click on Current Programs) to search for specific emphasis math requirements.

D. Computer/Statistics/Quantitative Applications [CS].....	3
CIS105 Survey of Computer Information Systems	
E. Humanities, Arts and Design [HU].....	6
Students are encouraged to choose course work from more than one discipline.	
F. Social-Behavioral Sciences [SB].....	6
ECN211 Macroeconomics AND ECN212 Microeconomics	
G. Natural Sciences [SQ/SG].....	8
The lecture courses selected for Natural Sciences must include or be accompanied by the corresponding laboratory courses for a total of four (4) credits. Credits for lecture and lab components may be combined or each may carry separate credit. At least four (4) credits must be designated as SQ-Science Quantitative. Eight (8) credits of SG-Science General will not satisfy this requirement.	
H. Awareness Areas.....	0-6
The same course(s) may be used to satisfy one or more Awareness Area(s) as well as other AGECE requirements. (See AGECE matrix at aztransmac2.asu.edu/cgi-bin/WebObjects/agece for current course values). Credits for such shared courses may only be counted once.	
1. Cultural Diversity in the United States [C].....	(0-3)
2. Global Awareness [G] OR Historical Awareness [H].....	(0-3)

*FYC may be met with fewer than 6 credits if student has transfer credit from ASU, NAU or UAZ for a single course that meets FYC in full.

Credits

Arizona General Education Curriculum--Science (AGEC-S)..... 36 (min.)*

The AGEC-S requires a minimum of 36 credits (33 if FYC is met by single transfer course)*; courses applied to meet AGEC-S requirements vary by emphasis.

Refer to the program (Degree) Search at curriculum.maricopa.edu (click on Current Programs) for specific course requirements. The Required Courses and/or Restricted Electives for some areas of Emphasis may also have AGEC designations including one or more of the Awareness Areas ([C], [G] and/or [H]). A single course may meet more than one requirement but its credits are only counted once toward the total for the degree.

Some courses have been approved for more than one AGEC designation (see AGEC matrix). For the AGEC-S only, a single course with an [L] designation may be used to satisfy a second AGEC requirement (as well as any approved Awareness Areas). Only courses with [L] designations may be shared in this way.

- A. First-Year Composition [FYC]..... 6*
 - ENG101 OR ENG107..... (3)*
 - AND ENG102 OR ENG108..... (3)*
- B. Literacy and Critical Inquiry [L]..... 0-3**

Students pursuing AGEC-S and/or AS degree are strongly encouraged to choose an [L] course that also has [HU] or [SB] designation or to use CRE101 or COM225 from the Maricopa Additional Requirements Area to satisfy the [L] requirement. The [L] course selected may also have been approved to satisfy one or more Awareness Areas ([C], [G], [H]). Thus, a single [L] course could potentially meet another AGEC requirement as well as one or more Awareness areas.
- C. Mathematical Applications [MA]..... 4-5

Requires the first semester of calculus courses designed for scientists and engineers (MAT220 or MAT221) or any other [MA] designated course for which Calculus I is a prerequisite.

The minimum math requirement for graduation defaults to the lowest base-level math, as identified above. Some emphasis may require higher-level math; refer to curriculum.maricopa.edu (click on Current Programs) to search for specific emphasis math requirements.
- D. Humanities, Arts and Design [HU]..... 6

A single course approved for both [L] and [HU] designations may be used to satisfy both requirements. This policy is unique to AGEC-S and to [L] courses. A course approved for both [HU] and [SB] can be counted for one or the other designation, not both. AGEC designations are subject to change. See [AGEC matrix](#) for each course's value(s) in the semester it is taken. Physical Geology: Dynamic Earth Lab
- E. Social-Behavioral Sciences [SB]..... 6

A single course approved for both [L] and [SB] designations may be used to satisfy both requirements. This policy is unique to AGEC-S and to [L] courses. A course approved for both [SB] and [HU] can be counted for one or the other designation, not both. AGEC designations are subject to change. See [AGEC matrix](#) for each course's value(s) in the semester it is taken.
- F. Natural Sciences [SQ/SG]..... 8-10

Students must complete eight (8) credits of General Chemistry, University Physics, General Biology for Majors, or Physical and Historical Geology. Consult specific requirements of university transfer major or associate degree with corresponding emphasis. for guidance.

[(CHM150 or CHM151) & CHM151LL] or
CHM150AA or CHM151AA General Chemistry I
AND
[CHM152 & CHM152LL] or CHM152AA General Chemistry II
OR

PHY121 University Physics I : Mechanics
AND
PHY131 University Physics II: Electricity and Magnetism

OR

BIO181 or BIO181XT General Biology (Majors) I
AND
BIO182 or BIO182XT General Biology (Majors) II

OR

GLG101IN Physical Geology: Dynamic Earth or
GLG101 Physical Geology: Dynamic Earth Lecture and
GLG103 Physical Geology: Dynamic Earth Lab
AND
GLG102IN Historical Geology: Primordial to Present or
GLG102 Historical Geology: Primordial to Present Lecture and
GLG104 Historical Geology: Primordial to Present Lab

G. Subject Options - Math/Science..... **6-10**

Students should refer to transfer resources, including academic advisement, transfer guides and/or requirements for associate degree with corresponding area of emphasis, to select six (6)-ten (10) additional math and/or science credits that meet requirements for selected major.

This Math/Science requirement can be met by selecting Mathematics course(s) [MAT] that require Calculus I as a prerequisite and/or Computer Science course(s) [CSC] and/or additional Science courses from the following disciplines: Astronomy, Biology, Botany, Chemistry, Engineering, Environmental Science, Geology, Physical Geography, Physics, Zoology (MCCCD prefixes AST, BIO CHM, ECE, EEE, ENV, GLG, GPH, and/or PHY)

H. Awareness Areas..... **0-6**

The same courses may be used to satisfy one or more Awareness Area(s) as well as other AGEC requirements (see [AGEC matrix](#) for current course values).

1. Cultural Diversity in the United States [C]..... (0-3)
2. Global Awareness [G] OR Historical Awareness [H]..... (0-3)

*FYC may be met with fewer than 6 credits if student has transfer credit from ASU, NAU or UAZ for a single course that meets FYC in full.

**0 only if shared with HU or SB]

Description of AGECE Designations

First-Year Composition (FYC)

First-Year Composition courses emphasize skills necessary for college-level expository writing, including correct grammar and punctuation, logical organization of ideas, and identification of supporting documentation.

Literacy and Critical Inquiry [L]

In the [L] course, students typically at the sophomore level, express their findings in writing or speech. This course includes a series of graded written or spoken formal assignments.

Literacy is defined broadly as communicative competence in written and oral discourse; critical inquiry is defined as the gathering, interpreting, and evaluating of evidence. Building on the proficiency attained in traditional First-Year Composition courses, the Literacy and Critical Inquiry [L] requirement sustains and extends students' ability to thoughtfully use and critically analyze written and/or spoken language.

Mathematical Applications [MA]

The Mathematical Studies requirement is intended to ensure that students have requisite skill in mathematics appropriate for their discipline and can apply mathematical analysis in their chosen fields.

Computer/Statistics/Quantitative Applications [CS]

AGEC-A and AGECE-B require a course that emphasizes the use of statistics, other mathematical methods, computer programming languages and/or software in the interpretation of data and in describing and analyzing quantitative relationships.

Humanities, Arts and Design [HU]

The study of the humanities and the disciplines of art and design deepen awareness of the complexities of the human condition and its diverse histories and cultures. Courses in the humanities are devoted to the production of human thought and imagination, particularly in philosophical, historical, religious and artistic traditions. Courses with an emphasis in fine arts and design are devoted to the study of aesthetic experiences and the processes of artistic creation. They may also feature a design emphasis in which material culture is studied as a product of human thought and imagination.

Social-Behavioral Sciences [SB]

Social-Behavioral Sciences provide scientific methods of inquiry and empirical knowledge about human behavior, both within society and within individuals. This area of emphasis may include study of such disciplines as anthropology, economics, history, political science, psychology, or sociology. The courses in this area address the challenge of understanding the diverse natures of individuals and cultural groups who live together in a complex and evolving world.

Natural Sciences [SQ/SG] In addition to an understanding of basic scientific principles and concepts, courses in the Natural Sciences are designed to help students appreciate, from firsthand laboratory and/or field research experience, the nature of science as a process that embraces curiosity, inquiry, testing, and communication to better understand natural phenomena. At least one of the two natural science courses must include an introduction to the fundamental behavior of matter and energy in physical or biological systems.

AWARENESS AREAS

Students must satisfy two Awareness areas: Cultural Diversity in the U.S. and either Global Awareness or Historical Awareness. Courses can satisfy other AGECE requirements and one or two Awareness areas simultaneously. Therefore, no additional semester credits are required to satisfy the two Awareness areas provided courses selected are approved for those designations (see [AGECE matrix](#)).

Cultural Diversity in the United States [C]

The contemporary "culture" of the United States involves the complex interplay of many different cultures that exist side by side in various states of harmony and conflict. U.S. history involves the experiences of European immigrants and their descendants, American Indians, Hispanic Americans, African Americans and Asian Americans--all of whom played significant roles in the development of contemporary culture and together shape the future of the United States. At the same time, the recognition that gender, class, and religious differences cut across all distinctions of race and ethnicity offers an even richer variety of perspectives from which to view one. Awareness of cultural diversity and its multiple sources can illuminate the collective past, present, and future and can help to foster greater mutual understanding and respect.

The objective of the Cultural Diversity area requirement is to promote awareness of and appreciation for cultural diversity within the contemporary United States. This is accomplished through the study of the cultural, social, or scientific contributions of women and minority groups, examination of their experiences in the United States, or exploration of successful or unsuccessful interactions between and among cultural groups.

Global Awareness [G]

Human organizations and relationships have evolved from being family and village centered to the modern global interdependence that is apparent in many disciplines--for example, contemporary art, business, engineering, music, and the natural and social sciences. Many serious local and national problems are world issues that require solutions which exhibit mutuality and reciprocity. These problems occur in a wide variety of activities, such as food supply, ecology, health care delivery, language planning, information exchange, economic and social developments, law, technology transfer, and even philosophy and the arts. The Global Awareness Area recognizes the need for an understanding of the values, elements, and social processes of cultures other than the culture of the United States. The Global Awareness Area includes courses that recognize the nature of other contemporary cultures and the relationship of the American cultural system to generic human goals and welfare.

Courses that satisfy the global awareness option in the requirements are of one or more of the following types:

1. Area studies that are concerned with an examination of culture-specific elements of a region of the world
2. The study of a non-English language
3. Studies of international relationships, particularly those in which cultural change is facilitated by such factors as social and economic development, education, and the transfer of technology
4. Studies of cultural interrelationships of global scope such as the global interdependence produced by problems of world ecology.

Historical Awareness [H]

The Historical Awareness Area option in the requirements aims to develop a knowledge of the past that can be useful in shaping the present and future. Because historical forces and traditions have created modern life and lie just beneath its surface, historical awareness is an aid in the analysis of present-day problems. Also, because the historical past is a source of social and national identity, historical study can produce intercultural understanding by tracing cultural differences to their origins. Even the remote past may have instructive analogies for the present.

The Historical Awareness Area consists of courses that are historical in method and content. In this area, the term "history" designates a sequence of past events or a narrative whose intent or effect is to represent such a sequence.

The requirement presumes that these are human events and that history includes all that has been felt, thought, imagined, said, and done by human beings. History is present in the languages, art, music, literature, philosophy, religion, natural sciences, as well as in the social science traditionally called history.

Maricopa County Community College District (MCCCD)
2025-2026 Associate In Applied Science (AAS) Degree and General Education Requirements

Description

The Associate in Applied Science (AAS) degree requires at least 60 credits in its program of study.

The exact number of credits for a specific degree is identified as part of the presentation of its requirements at curriculum.maricopa.edu click on Current Programs or search in the offering college(s)' catalog.

Purpose of the Degree

The Maricopa County Community College District Associate in Applied Science (AAS) degree is recommended for students who wish to gain a depth of technical expertise in a particular workforce-related area of study. The AAS degree options vary at the different MCCCD colleges and can be searched [alphabetically](#) (click on Current Programs) or by [field of interest](#). Requirements for each degree can be found on the linked web pages and in the corresponding college(s)'s catalog.

Academic Policies that Govern the AAS degree:

- * Degree requires 60 or more credits numbered 100 or above and includes credits or the equivalent in the General Education Core areas and credits in the Distribution areas. AAS degree requirements follow with the use of a diagonal character or comma (/ or ,) between course numbers to signify options. An asterisk (*) following the course number defines requirements with an effective begin term of spring;
- * All courses must be completed with a grade of C or higher; any additional requirements such as grades of B or higher or minimum grade point average requirements are listed on individual degrees and certificates
- * The graduation policies within the general catalog must be satisfied. ([see General Graduation Requirements Administrative Regulation 2.3.9](#)). First Year Experience is required (FYE 101 or FYE 103).
- * Some courses also have equivalent combinations of modular variants; all options are listed and completion of either the course or its modular equivalents will satisfy the AAS requirements.
- * Requires completion of General Education courses as indicated in the General Education Requirements for the Associate in Applied Science degree from the Maricopa County Community College District, or completion of a curriculum as stated in the catalog.
- * Industry-recognized credentials can be counted as general electives.
- * Courses with different credit systems (quarter hours, trimester, units) are converted to semester credit hours. The recovery of a deficiency in a requirement (Prerequisites, Required Courses, Restricted Electives, or General Education) category due to a quarter-hour or other credit system application will be determined by the college.
- * Any course that is cross referenced with that of another discipline/subject (for example EDU/ENH291, Children's Literature) covers identical contents. A course under either subject (for example, EDU291 or ENH291) will count only once toward degree requirements.

AAS GENERAL EDUCATION CORE

(12-15 credits)*

Demonstrate college-level skills in the following areas:

First-Year Composition (6 credits)*

ENG English [101/107] & [102/108/111]

Oral Communication (3 credits)

COM Communication 100/100AA & 100AB
& 100AC/110/110AA & 110AB & 110AC/225/230

Critical Reading (3 credits)

CRE Critical Reading 101 or Equivalent as indicated
by assessment

Mathematics (3 credits)

MAT Mathematics 112,114,115,120,121,122,126
140,141,142,145,146,150,150&182,151,MAT151&182,
152,152&182,155,155&182,156,156&182,172,187,188,
206,212,213,217,218,220,221,225,227,230,231,240,
241,256,257,276,277,
equivalent course/Satisfactory completion of a higher
level mathematics course

AAS GENERAL EDUCATION DISTRIBUTION AREAS (9-10 credits)

Humanities, Arts and Design (2-3 credits)

AFR African American Studies 203
AHU Arabic Humanities 245
AIS American Indian Studies 213
AJS Administration of Justice Studies 123
ARH Art Humanities Any ARH Course(s)
ART Art 131
ASB Anthropology 211/214/220/222/223/253
AVC Art and Visual Communication 150
CCS Chicana and Chicano Studies 101
COM Communication 150, 241
CON Construction 101
DAH Dance Humanities 100/201/250/255
ECE Engineering Science 150
EDU Education 230/291/292/294
EED Early Education 225
ENG English 200/213/218
ENH English Humanities Any ENH Course(s)
FMT Film, Media, and Theatre 107
FRE French 265
GST Game Studies 202
HCR Health Care Related 210
HIS History 101/102/103/108/110/111/113/114/203/212/251/252
HON Honors 190
HUM Humanities Any HUM course(s) (except 120, 225)
INT Interior Design 115/120
JPH Japanese Humanities 245
LAT Latin 201/202
MHL Music: History/Literature 140/143/145/146/153/155/194/
204/241/242/295
PHI Philosophy Any PHI Course(s)
QST Queer Studies 200, 210
REL Religious Studies Any REL Course(s)
SLC Studies in Language & Culture 201/202
SPA Spanish 241/242/265/266
SPH Spanish Humanities 241, 245
SSH Sustainability/Social Sciences and Humanities 111
STO Storytelling 292/294, 295
SWU Social Work 183
TEC Textiles and Clothing 105, 125
THE Theatre 111/220
THF Theatre and Film 205/206/210
THP Theatre Performance/Production 217, 241
WST Women's Studies 209/284/285/290

Social-Behavioral Sciences (3 credits)

AFR African American Studies 202/203/204
AIS American Indian Studies 101/140/141/160
AJS Administration of Justice Studies 101/200/225/258/270
ASB Anthropology 100/102/202/211/222/223/
226/230/235/252
ASM Anthropology 104/275

(Social-Behavioral Sciences Continued)

BHS Behavioral Health Services Technology 150, 155, 175, 210
CAP Counseling and Applied Psychology 120
CCS Chicana and Chicano Studies 202
CFS Child/Family Studies 112/157/159/176/205/235/259
COM Communications 100/100AA&100AB&100AC/
110/110AA&110AB & 110AC/ 163/230/250/263
CPD Counseling and Personal Development 102AH, 180
ECH Early Childhood Education 176
ECN Economics Any ECN course(s)
EDU Education 221/222
EED Early Education 205/222
EMT Emergency Medical Technology 258
ENG English 213
FSC Fire Science Technology 258
GCU Cultural Geography 102/113/121WG/141/221
HES Health Science 100, 120
HIS History Any HIS course(s) (except 111,170, 173, 251, 252)
HON Honors 201
HUM Humanities 235
IBS International Business 109
IFS Information Studies 201, 210, 213
MCO Mass Communications 120
MGT Management 229/230
PAD Public Administration 200
POS Political Science Any POS course(s)
PSY Psychology 101/123/132/156/157/215/218/225/235/240/241/
243/250/260/262/266/277/280/292
QST Queer Studies 200, 210
REC Recreation 120
SBU Society and Business 200
SLC Studies in Language & Culture 201
SOC Sociology Any SOC course(s) (except 143, 245, 253, 265)
SSH Sustainability/Social Sciences and Humanities 111
SUS Sustainability/Natural Sciences 110
SWU Social Work 171/182/250/258/295
TEC Textiles and Clothing 105
WST Women's Studies 100/161
YAQ Yaqui Indian History and Culture 100

Natural Sciences (4 credits)

The lecture course(s) selected for Natural Sciences must include or
be accompanied by the corresponding laboratory course. The
lecture and corresponding laboratory course(s) may carry separate
credit. Students should consult with an advisor for appropriate
course selection.

AGS Agricultural Science 164, 260
ASB Anthropology (Soc/Behv. Science) 231
ASM Anthropology (Science/Math) 104/265/275
AST Astronomy 101/106/111/112
BIO Biology
100/101/102/105/107/108/109/111/116/145/
149AN/156/156XT/160/181/181XT/182/182XT/
201/201XT/202/205
CHM Chemistry 107&107LL/130&130LL/130AA, 140AA
150AA/150&151LL/151AA/151&151LL/152AA/
152&152LL/230AA/230&230LL
CON Construction 106
ENV Environmental Sciences 101
FON Food and Nutrition 241&241LL
FOR Forensic Science 105/106
GLG Geology Any combination of GLG course(s) meeting the
minimums described above
GPH Physical Geography 111&112/113/211/212&214/
213&215
PHS Physical Science 110/115/120
PHY Physics 101/111/112/121/131
PSY Psychology 275/290AB/290AC

* FYC may be met with fewer than 6 credits if student has
transfer credit from ASU, NAU or UAZ for a single course
that meets FYC in full.

**Maricopa County Community College District (MCCCD)
2025-2026 Associate in Arts (AA) Degree**

Description

The Maricopa County Community College District Associate in Arts (AA) degree requires a minimum of 60 semester credits for the program of study; minimum total credits vary by specific emphasis (for example, Associate in Arts, Emphasis in Psychology). Refer to curriculum.maricopa.edu (click on Current Programs) to search for the corresponding area of emphasis for credit minimums. A minimum grade point average of 2.0 (4.0 scale) and grades of “C” or better are required in all courses to earn the degree. The AA degree is governed by the MCCCD General Academic Policies for Degrees Designed for University Transfer.

The Associate in Arts degree includes the following components:

- I. Program Prerequisites (as specified by emphasis area)
- II. Required Courses
- III. Restricted Electives (as specified by area of emphasis)
- IV. Arizona General Education Curriculum for Arts (AGEC-A)
- V. MCCCD Additional Requirements (Oral Communication and Critical Reading)
- VI. General Electives (if needed to reach minimum credits for degree)

Purpose of the Degree

The Associate in Arts (AA) degree is designed for students planning to transfer to four-year colleges and universities. In general, the components of the degree meet requirements for majors in the Liberal Arts or programs of study other than business or science. Generally, the degree will transfer as a block without loss of credit to Arizona’s public universities and other institutions with district-wide articulation agreements.

In most cases, courses used to satisfy the MCCCD Associate in Arts (AA) will apply to general university graduation requirements of the majors that align with the AA degree; however, students need to be aware of any specific requirements of their intended major at the university to be sure they select courses that will meet them. Information regarding the articulation of the AA with majors at the Arizona public universities can be accessed via the following website: aztransfer.com/tools

Degree Requirements

The requirements for the Associate in Arts (AA) follow. The AA degree requires at least 60 credits; however, minimum credits for the AA vary for a specific area of emphasis. Refer to curriculum.maricopa.edu and click on Current Programs to search for the corresponding area of emphasis and credit minimums; review course sequence at maricopa.edu/degrees-certificates#programs. The following websites identify the courses that apply to the different General Education Core and Awareness Areas: [AGEC-A](#) and the [AGEC matrix](#). Industry-recognized credentials can be counted as general electives.

Requirements

Credits

I. Program Prerequisites.....	Number varies
Program prerequisites for the AA degree vary by specific emphasis, and are neither required for all emphases nor for the AA degree without a specific emphasis Refer to curriculum.maricopa.edu (click on Current Programs) to search for the corresponding area of emphasis and credit minimums.	
II. Required Courses.....	Number varies
Students must complete FYE 101 (1) or FYE 103 (3) (see General Graduation Requirements Administrative Regulation 2.3.9)	

and select the required courses for the specific AA degree emphasis. Refer to curriculum.maricopa.edu (click on Current Programs) to search for the corresponding area of emphasis for specific courses required and credit minimums.

III. Restricted Electives	Number varies
Restricted electives for the AA degree vary by specific emphasis and are not required for the general AA degree without a specific emphasis. Refer to curriculum.maricopa.edu (click on Current Programs) to search for the corresponding area of emphasis for specific courses required and credit minimums.	

IV. Arizona General Education Curriculum--Arts (AGEC-A)	up to 44
The AGECE-A requires a minimum of 35 credits (32 if FYC is met by single transfer course)*. Courses applied to meet AGECE-A requirements vary by emphasis. Refer to curriculum.maricopa.edu (click on Current Programs) to search for the corresponding area of emphasis and credit minimums.	

Any prerequisite/required/restricted elective courses that also have one or more AGECE designation(s) may be applied toward both requirements. Credits for such shared courses are only counted once toward the total credits for the degree.

AGECE designations are subject to change. See [AGECE matrix](#) for each course's value(s) in the semester it is taken. Some of the courses have been approved for more than one designation. Notes below will show how such courses may be used to meet multiple degree requirements.

A. First-Year Composition [FYC].....	6*
ENG101 OR ENG107.....	(3)*
AND ENG102 OR ENG108.....	(3)*
B. Literacy and Critical Inquiry [L].....	3
C. Mathematical Applications [MA].....	3-6
Requires a course in college mathematics (MAT140, MAT141, MAT142, MAT145, MAT146) or college algebra (MAT150, MAT151, MAT152, MAT155, MAT156) or precalculus (MAT187,-MAT188) or higher [MA]-approved general education course	
The minimum math requirement for graduation defaults to the lowest base-level math, as identified above. Some emphasis may require higher-level math; refer to curriculum.maricopa.edu (click on Current Programs) to search for specific emphasis math requirements.	
D. Computer/Statistics/Quantitative Applications [CS].....	3
E. Humanities, Arts and Design [HU].....	6
Students are encouraged to choose course work from more than one discipline.	
F. Social-Behavioral Sciences [SB].....	6
Students are encouraged to choose course work from more than one discipline.	
G. Natural Sciences [SQ/SG].....	8
The lecture courses selected for Natural Sciences must include or be accompanied by the corresponding laboratory courses for a total of four (4) credits each. Credits for lecture and lab components may be combined or each may carry separate credits. At least four (4) credits must be designated as SQ-Science Quantitative. Eight (8) credits of SG-Science General will not satisfy this requirement.	
H. Awareness Areas.....	0-6

The same course(s) may be used to satisfy one or more Awareness Area(s) as well as other AGECE requirements. (See [AGECE matrix](#) for current course values). Credits for such shared courses may only be counted once.

1. Cultural Diversity in the United States [C]..... (0-3)
2. Global Awareness [G] OR Historical Awareness [H]..... (0-3)

May be met by [HU] and/or [SB] course depending on specific course(s) selected. (AGECE designations are subject to change. See [AGECE matrix](#) for each course's value(s) in the semester it is taken.)

V. MCCCCD Additional Requirements..... 0-6

As noted below, courses in this area may also be applied toward AGECE-A requirements.

- A. Oral Communication (0-3)
 COM100 [SB] Introduction to Human Communication OR
 COM110 [SB] Interpersonal Communication OR
 COM225 [L] Public Speaking OR
 COM230 [SB] Small Group Communication (3 credits)
- B. Critical Reading..... (0-3)
 CRE101 [L] Critical Reading OR equivalent as indicated by assessment

VI. General Electives..... 0-28

Select courses 100-level or higher if needed to complete a minimum of 60 semester credits but no more than a total of 64 semester credits, which is the maximum number of credits accepted toward most degree programs at Arizona's public universities. Ideally, students should select courses that meet requirements for their major/area of interest and transfer institution. See General Associate Degree Academic Policies for further details, limitations, and guidelines. MCCCCD has established recommended courses and sequencing to align with various "Emphasis Areas" in one of nine different "Fields of Interest." See maricopa.edu/degrees-certificates for links to these transfer pathways.

Maricopa courses and external courses evaluated as Maricopa equivalents, departmental electives (e.g., HISELC for a history elective), or general electives (GENELC) that are numbered 100 level or higher, and completed with a grade of "C" or higher may be applied in the elective area, regardless of potential transferability to other institutions. It is recommended, however, that students planning to transfer to a baccalaureate-granting institution meet these general elective requirements with courses that are transferable and applicable to their intended university degree. Transfer and major guides are accessible on the following websites: aztransfer.com/tools, maricopa.edu/degrees-certificates/university-transfer/partners as well as those of individual universities. For appropriate course selection, students should consult with an academic advisor.

TOTAL..... 60-64**

*FYC may be met with fewer than 6 credits if student has transfer credit from ASU, NAU or UAZ for a single course that meets FYC in full.

**64 semester credits is the maximum accepted toward most degree programs at Arizona's public universities. Some exceptions apply; consult with an academic advisor for additional transfer information

**Maricopa County Community College District (MCCCD)
2025-2026 Associate in Business, Special Requirements (ABUS-SR) Degree**

Description

The Maricopa County Community College District Associate in Business, Special Requirements (ABUS-SR) degree requires a minimum of 62 semester credits for the program of study. A minimum grade point average of 2.0 (4.0 scale) and grades of “C” or better are required in all courses to earn the degree. The Associate in Business-Special Requirements degree is governed by the MCCCD General Academic Policies for Transfer Degrees.

This degree provides the first two years of a four-year curriculum for students who wish to pursue Computer Information Systems majors at Arizona’s public universities. With a bachelor’s degree, students may pursue a number of careers, including but not limited to accountancy, business administration, business data analytics, computer information systems, economics, entrepreneurship, finance, marketing, management, retail management, and supply chain management.

The Associate in Business-Special Requirements degree includes the following components:

- I. Required Courses
- II. Arizona General Education Curriculum for Business (AGEC-B)
- III. General Electives (if needed to reach minimum credits for degree)

Purpose of the Degree

The Associate in Business Special Requirements (ABUS-SR) degree is designed for students who plan to transfer to four-year colleges and universities. In general, the components of this degree meet requirements for Computer Information Systems majors at Arizona’s public universities. Other Business majors should follow the Associate in Business General Requirements (ABUS-GR) pathway instead. Generally, the ABUS-SR degree transfers as a block without loss of credit to Arizona's public universities and other institutions with district-wide articulation agreements. It does not, however, guarantee acceptance into particular university majors/programs with a limited number of students. Students should consult with their transfer institution for any specific admission requirements (e.g., GPA, letters of reference, work experience).

Special Academic Policies that Govern the ABUS-SR Degree

- The ABUS-SR does not include any MCCCD Special Requirements for Oral Communication and/or Critical Reading like the other associate degrees. (However, some university programs have a speech requirement; consult your academic advisor or transfer guide to verify the specifics for your program.)

Degree Requirements

The courses required for the Associate in Business Special Requirements follow. The following websites identify the courses that apply to the different General Education Core and Awareness Areas:

[AGEC-B](#) and the [AGEC Matrix](#). Courses available for both Areas during a current or upcoming semester can also be found using the [Find A Class](#) tool on maricopa.edu or on each MCCCD college’s website.

<u>Requirements</u>	<u>Credits</u>
I. Required Courses	28-34
Accounting.....	(6-9)
ACC111 Accounting Principles AND	
ACC230 Uses of Accounting Information I AND	
ACC240 Uses of Accounting Information II	
OR	
ACC211 Financial Accounting AND	
ACC212 Managerial Accounting	
OR	
ACC111 Accounting Principles I AND	
ACC112 Accounting Principles II AND	
ACC212 Managerial Accounting	

Some of the following courses can be used to satisfy both this requirement and an AGECE-B requirement. AGECE designations are subject to change. See [AGECE matrix](#) for each course's value(s) in the semester it is taken.

ECN211 [SB] Macroeconomic Principles.....	(3)
ECN212 [SB] Microeconomic Principles.....	(3)
FYE101 OR FYE103 Introduction To College, Career And Personal Success.....	(1-3)
GBS205 Legal, Ethical, and Regulatory Issues in Business.....	(3)
GBS221 Business Statistics.....	(3)
CIS162AD C#: Level 1.....	(3)
CIS250 Management of Information Systems.....	(3)
Quantitative Methods.....	(3-4)

GBS220 Quantitative Methods in Business **OR**

MAT217 or MAT218 Mathematical Analysis for Business

Note: Students planning to transfer to ASU's W.P. Carey School of Business BS program should take MAT217 or MAT218.

Students planning to transfer to ASU's W.P. Carey School of Business BA program may take GBS220, MAT217, or MAT218.

Students planning to transfer to the University of Arizona should take GBS220.

II. Arizona General Education Curriculum- Business (AGECE-B)..... 29-37*

The AGECE-B requires a minimum of 35 credits (32 if FYC is met by single transfer course)* Any Required and Restricted elective course(s) that also have one or more AGECE designation(s) may be used to meet AGECE-B requirements. Credits for such shared courses only count once toward the total for the degree.

Some courses may be met by Required Courses or Restricted electives. Some of these courses also have Awareness Areas designations and can be used to satisfy [C], [G] and/or [H] requirement(s) as well as other AGECE requirements or Required Course(s). Courses may meet more than one requirement but are only counted once toward the total credits for the degree. AGECE designations are subject to change. See [AGECE matrix](#) for each course's value(s) in the semester it is taken.

A. First-Year Composition [FYC].....	6*
ENG101 OR ENG107 AND.....	(3)*
ENG102 OR ENG108.....	(3)*
B. Literacy and Critical Inquiry [L].....	3
C. Mathematical Applications [MA].....	3-5
MAT212 Brief Calculus OR	(3)
MAT213 Brief Calculus OR	(4)
Higher General Education Courses in the Mathematical Applications [MA] Area.....	(3-5)

The minimum math requirement for graduation defaults to the lowest base-level math, as identified above. Some emphasis may require higher-level math; refer to curriculum.maricopa.edu (click on Current Programs) to search for specific emphasis math requirements.

D. Computer/Statistics/Quantitative Applications [CS].....	3
CIS105 Survey of Computer Information Systems	
E. Humanities, Arts and Design [HU].....	6
Students are encouraged to choose course work from more than one discipline.	
F. Social-Behavioral Sciences [SB].....	0
Met by ECN211 AND ECN212 in Required Courses	
G. Natural Sciences [SQ/SG].....	8
The lecture courses selected for Natural Sciences must include or be accompanied by the corresponding laboratory courses for a total of four (4) credits each. Credits for lecture and lab components may be combined or each may carry separate credit. At least four (4) credits must be designated as	

SQ-Science Quantitative. Eight (8) credits of SG-Science General will not satisfy this requirement.

H. Awareness Areas.....	0-6
The same course(s) may be used to satisfy one or more Awareness Area(s) as well as other AGECE requirements. (See AGECE matrix for current course values). Credits for such shared courses may only be counted once	
1. Cultural Diversity in the United States [C].....	(0-3)
2. Global Awareness [G] OR Historical Awareness [H].....	(0-3)

Students transferring to ASU to major in business should complete courses from the following list (up to the 64 credit transfer maximum) to meet W.P. Carey School of Business requirements. If students do not take these prior to transfer, they may need to take additional credits to meet ASU graduation requirements:

- Any course that transfers to ASU in the SOC prefix and carries the [SB] designation
 - Any course that transfers to ASU in the PSY prefix and carries the [SB] designation
 - One of the following courses in Oral Communication (COM)
 - COM100 Introduction to Human Communication (3) OR
 - COM225 Public Speaking (3) OR
 - COM230 Small Group Communication (3) OR
 - COM259 Communication in Business and Professions (3)
- Note: COM requirements vary by business major. Check ASU's [MyPath2ASU](#) or major map for acceptable options.

III. General Electives

Select courses 100-level or higher if needed to complete a minimum of 62 semester credits no more than a total of 64 semester credits, which is the maximum number of credits accepted toward most degree programs at Arizona's public universities. Ideally, students should select courses that meet requirements for their major/area of interest and transfer institution. See General Associate Degree Academic Policies for further details, limitations, and guidelines MCCC has established recommended courses and sequencing for the various associate's degrees. See maricopa.edu/degrees-certificates/business-entrepreneurialism-management/associate-business-special-requirements-8800-abus-sr for ABUS-SR course sequence.

Maricopa courses and external courses evaluated as Maricopa equivalents, departmental electives (e.g., HISELC for a history elective), or general electives (GENELC) that are numbered 100 level or higher, and completed with a grade of "C" or better, may be applied in the elective area, regardless of potential transferability to other institutions. It is recommended, however, that students planning to transfer to a baccalaureate-granting institution meet these general elective requirements with courses that are transferable and applicable to their intended university degree.

Transfer advisement information is accessible on the following websites: aztransfer.com/tools, curriculum.maricopa.edu, as well as those of individual universities. For appropriate course selection, students should consult with an academic advisor.

TOTAL..... 62**

*FYC may be met with fewer than 6 credits if student has transfer credit from ASU, NAU or UAZ for a single course that meets FYC in full.

**64 semester credits is the maximum accepted toward most degree programs at Arizona's public universities. Some exceptions apply; consult with an academic advisor for additional transfer information.

Maricopa County Community College District (MCCCD)
2025-2026 Associate in Business, General Requirements (ABUS-GR) Degree

Description

The Maricopa County Community College District Associate in Business General Requirements (ABUS-GR) degree requires a minimum of 62 semester credits for the program of study. A minimum grade point average of 2.0 (4.0 scale) and grades of C or better are required in all courses to earn the degree. The Associate in Business-General Requirements degree is governed by the MCCCD General Academic Policies for Transfer Degrees.

This degree provides the first two years of a four-year curriculum for students who wish to transfer to a university and pursue a bachelor's degree in business. For a comprehensive list of bachelor's degrees at Arizona's public universities, refer to the [AZTransfer Business Matrix](#). With a bachelor's degree, students may pursue a number of careers, including but not limited to accountancy, business administration, business data analytics, economics, entrepreneurship, finance, marketing, management, retail management, and supply chain management.

The Associate in Business-General Requirements degree includes the following components:

- I. Required Courses
- II. Restricted Electives
- III. Arizona General Education Curriculum for Business (AGEC-B)
- IV. General Electives (if needed to reach minimum credits for degree)

Purpose of the Degree

The Associate in Business General Requirements (ABUS-GR) degree is designed for students who plan to transfer to four-year colleges and universities. In general, the components of this degree meet requirements for the various business majors (except Computer Information Systems) at Arizona's public universities. Computer Information Systems majors should follow the Associate in Business Special Requirements (ABUS-SR) pathway instead. Generally, the ABUS-GR degree transfers as a block without loss of credit to Arizona's public universities and other institutions with district-wide articulation agreements. It does not, however, guarantee acceptance into particular university majors/programs with a limited number of students. Students should consult with their transfer institution for any specific admission requirements (e.g., GPA, letters of reference, work experience)

Special Academic Policies that Govern the ABUS-GR Degree

- The ABUS-GR does not include any MCCCD Special Requirements for Oral Communication and/or Critical Reading like the other associate degrees. (However, some university programs have a speech requirement; consult your academic advisor or transfer guide to verify the specifics for your program.)

Degree Requirements

The courses required for the Associate in Business General Requirements follow. The following websites identify the courses that apply to the different General Education Areas: [AGEC-B](#) and the [AGEC Matrix](#). Courses available for both Areas during a current or upcoming semester can also be found using the ["Find A Class"](#) tool on maricopa.edu or on each MCCCD college's website.

Requirements**Credits****I. Required Courses..... 22-28**

Accounting..... (6-9)

ACC111 Accounting Principles **AND**ACC230 Uses of Accounting Information I **AND**

ACC240 Uses of Accounting Information II

ORACC211 Financial Accounting **AND**

ACC212 Managerial Accounting

ORACC111 Accounting Principles I **AND**ACC112 Accounting Principles II **AND**

ACC212 Managerial Accounting

Some of the following courses can be used to satisfy both this requirement and an AGEC-B requirement. AGEC designations are subject to change. See [AGEC matrix](#) for each course's value(s) in the semester it is taken.

ECN211 [SB] Macroeconomic Principles..... (3)

ECN212 [SB] Microeconomic Principles..... (3)

FYE101 **OR** FYE103 Introduction To College, Career And Personal Success..... (1-3)

GBS205 Legal, Ethical, and Regulatory Issues in Business..... (3)

GBS221 Business Statistics..... (3)

Quantitative Methods..... (3-4)

GBS220 Quantitative Methods in Business **OR**

MAT217 or MAT218 Mathematical Analysis for Business

Note: Students planning to transfer to ASU's W.P. Carey School of Business BS program should take MAT217 or MAT218.

Students planning to transfer to ASU's W.P. Carey School of Business BA program may take GBS220, MAT217, or MAT218.

Students planning to transfer to the University of Arizona should take GBS220.

II. Restricted Electives..... 0-6

Complete six (6) credits from the following options. Some courses may be used to satisfy both Restricted Elective and Arizona General Education Curriculum (AGEC) requirements simultaneously. AGEC designations are subject to change. See [AGEC matrix](#) for each course's value(s) in the semester it is taken.

CIS114DE Excel Spreadsheet..... (3)

CIS133DA Internet/Web Development Level I..... (3)

CIS162AD C#: Level I..... (3)

GBS110 Human Relations in Business and Industry **OR**

MGT251 Human Relations in Business..... (3)

GBS151 Introduction to Business (Recommended)..... (3)

GBS220 Quantitative Methods in Business (3)

GBS233 Business Communication..... (3)

IBS101 Introduction to International Business..... (3)

MGT253 Owning and Operating a Small Business..... (3)

MKT271 Principles of Marketing..... (3)

PAD100 21st Century Public Policy and Service..... (3)

REA179 Real Estate Principles I..... (3)

REA180 Real Estate Principles II..... (3)

REA201 Real Estate Principles I and II..... (6)

SBU200 Society and Business..... (3)

III. Arizona General Education Curriculum- Business (AGEC-B)..... 29-37*

The AGEC-B requires a minimum of 35 credits (32 if FYC is met by a single transfer course). * Any Required and Restricted elective course(s) that also have one or more AGEC designation(s) may be used to meet AGEC-B requirements. Credits for such shared courses only count once toward the total for the degree.

Some courses may be met by Required Courses or Restricted electives. Some of these courses also have Awareness Areas designations and can be used to satisfy [C], [G] and/or [H] requirement(s) as well as other AGECE requirements, Required Course(s), or Restricted Elective(s). Courses may meet more than one requirement but are only counted once toward the total credits for the degree. AGECE designations are subject to change. See [AGECE matrix](http://aztransmac2.asu.edu/cgi-bin/WebObjects/agece) at aztransmac2.asu.edu/cgi-bin/WebObjects/agece for each course's value(s) in the semester it is taken.

A. First-Year Composition [FYC].....	6*
ENG101 OR ENG107 AND.....	(3)*
ENG102 OR ENG108.....	(3)*
B. Literacy and Critical Inquiry [L].....	(0-3)
May Be Met By GBS 233 in the Restricted Electives Area.	
C. Mathematical Applications [MA].....	(3-5)
MAT212 Brief Calculus OR	(3)
MAT213 Brief Calculus OR	(4)
Higher General Education Courses in the Mathematical Applications [MA] Area	(3-5)
The minimum math requirement for graduation defaults to the lowest base-level math, as identified above. Some emphasis may require higher-level math; refer to curriculum.maricopa.edu (click on Current Programs) to search for specific emphasis math requirements.	
D. Computer/Statistics/Quantitative Applications [CS].....	3
CIS105 Survey of Computer Information Systems	
E. Humanities, Arts and Design [HU].....	6
Students are encouraged to choose course work from more than one discipline.	
F. Social-Behavioral Sciences [SB].....	0
Met by ECN211 AND ECN212 in Required Courses	
G. Natural Sciences [SQ/SG].....	8
The lecture courses selected for Natural Sciences must include or be accompanied by the corresponding laboratory courses for a total of four (4) credits each. Credits for lecture and lab components may be combined or each may carry separate credit. At least four (4) credits must be designated as SQ-Science Quantitative. Eight (8) credits of SG-Science General will not satisfy this requirement.	
H. Awareness Areas.....	0-6
The same course(s) may be used to satisfy one or more Awareness Area(s) as well as other AGECE requirements. (See AGECE matrix at aztransmac2.asu.edu/cgi-bin/WebObjects/agece for current course values).	
Credits for such shared courses may only be counted once.	
1. Cultural Diversity in the United States [C].....	(0-3)
2. Global Awareness [G] OR Historical Awareness [H].....	(0-3)

Students transferring to ASU to major in business should complete courses from the following list (up to the 64 credit transfer maximum) to meet W.P. Carey School of Business requirements. If students do not take these prior to transfer, they may need to take additional credits to meet ASU graduation requirements:

- Any course that transfers to ASU in the SOC prefix and carries the [SB] designation
- Any course that transfers to ASU in the PSY prefix and carries the [SB] designation
- One of the following courses in Oral Communication (COM)
 - COM100 Introduction to Human Communication (3) OR
 - COM225 Public Speaking (3) OR
 - COM230 Small Group Communication (3) OR
 - COM259 Communication in Business and Professions (3)

Note: COM requirements vary by business major. Check ASU's [MyPath2ASU](#) or major map for acceptable options.

IV. General Electives.

Select courses 100-level or higher if needed to complete a minimum of 62 semester credits but no more than a total of 64 semester credits, which is the maximum number of credits accepted toward most degree programs at Arizona's public universities. Ideally, students should select courses that meet requirements for their major/area of interest and transfer institution. See General Associate Degree Academic Policies for further details, limitations, and guidelines. MCCC has established recommended courses and sequencing for the various associate's degrees.

Maricopa courses and external courses evaluated as Maricopa equivalents, departmental electives (e.g., HIS ELC for a history elective), or general electives (GEN ELC) that are numbered 100 level or higher, and completed with a grade of "C" or better, may be applied in the elective area, regardless of potential transferability to other institutions. It is recommended, however, that students planning to transfer to a baccalaureate-granting institution meet these general elective requirements with courses that are transferable and applicable to their intended university degree.

Transfer advisement information is accessible on the following websites: aztransfer.com/tools, curriculum.maricopa.edu, as well as those of individual universities. For appropriate course selection, students should consult with an academic advisor.

TOTAL..... 62**

*FYC may be met with fewer than 6 credits if student has transfer credit from ASU, NAU or UAZ for a single course that meets FYC in full.

**64 semester credits is the maximum accepted toward most degree programs at Arizona's public universities. Some exceptions apply; consult with an academic advisor for additional transfer information.

Maricopa County Community College District MCCCCD)
2025-2026 Associate In Science (AS) Degree

Description

The Maricopa County Community College District Associate in Science (AS) degree requires a minimum of 60 semester credits for the program of study; minimum total credits vary by specific emphasis (for example, Associate in Science, Emphasis in Physics). Refer to curriculum.maricopa.edu and click on Current Programs to search for the corresponding area of emphasis for credit minimums. A minimum grade point average of 2.0 (4.0 scale) and grades of “C” or better are required in all courses to earn the degree. The AS degree is governed by the MCCCCD General Academic Policies for Degrees Designed for University Transfer.

The Associate in Science degree includes the following components:

- I. Program Prerequisites (as specified by emphasis area)
- II. Required Courses
- III. Restricted Electives (as specified by emphasis area)
- IV. Arizona General Education Curriculum for Science (AGEC-S)
- V. MCCCCD Additional Requirements (Oral Communication and Critical Reading)
- VI. General Electives (if needed to reach minimum credits for degree)

Purpose of the Degree

The Associate in Science (AS) degree is designed for students planning to transfer to four-year colleges and universities. In general, the components of the degree meet requirements for majors with more stringent mathematics and mathematics-based science requirements. Generally, the degree will transfer as a block without loss of credit to Arizona’s public universities and other institutions with district-wide articulation agreements.

It does not, however, guarantee acceptance into particular university majors/programs with a limited number of students. Students should consult with their transfer institution for any specific admission requirements (e.g., GPA, letters of reference, work experience).

In most cases, courses used to satisfy the MCCCCD Associate in Science (AS) will apply to general university graduation requirements of the majors that align with the AS degree; however, students need to be aware of any specific requirements of their intended major at the university to be sure they select courses that will meet them. Information regarding the articulation of the AS with majors at the Arizona public universities can be accessed via the following website: aztransfer.com/tools

It is recommended that students select courses that meet more than one general education and/or awareness area requirement. Doing so will maximize the number of math and science electives the student can take as part of the Associate in Science degree.

Special Academic Policies that Govern the Associate in Science Degree

- The AGECS does not require a course with [CS] Computer/Statistics designation.
- Unlike the AGECA and AGECS, the same course is allowed to satisfy the ([L] and [HU]) or ([L] and [SB]) areas for the AGECS. The credits for such a “shared” course are only counted once toward the required minimum for the degree.

Degree Requirements

The requirements for the Associate in Science (AS) follow. The AS degree requires at least 60 credits; however, minimum credits for the AS may vary for a specific area of emphasis. Refer to curriculum.maricopa.edu and click on Current Programs to search for the corresponding area of emphasis and credit minimums. The following websites identify the courses that apply to the different General Education Core and Awareness Areas: AGECS and the [AGEC Matrix](http://aztransmac2.asu.edu/cgi-bin/WebObjects/agec) at [https://aztransmac2.asu.edu/cgi-bin/WebObjects/agec](http://aztransmac2.asu.edu/cgi-bin/WebObjects/agec). Industry-recognized credentials can be counted as general electives.

Requirements

Credits

I. Program Prerequisites	Number varies
Program prerequisites for the AS degree vary by specific emphasis, and are neither required for all emphases nor for the general AS degree without a specific emphasis. Refer to curriculum.maricopa.edu and click on Current Programs to search for the corresponding area of emphasis for specific courses required and credit minimums.	
II. Required Courses	Number varies
Students must complete FYE 101 (1) or FYE 103 (3) (see General Graduation Requirements Administrative Regulation 2.3.9) and select the required courses for the specific AS degree emphasis. Refer to curriculum.maricopa.edu and click on Current Programs to search for the corresponding area of emphasis for specific courses required and credit minimums.	
III. Restricted Electives	Number varies
Restricted electives for the AS degree vary by specific emphasis and are not required for the general AS degree without a specific emphasis. Refer to curriculum.maricopa.edu and click on Current Programs to search for the corresponding area of emphasis for specific courses required and credit minimums.	
IV. Arizona General Education Curriculum—Science (AGEC-S)	up to 56
The AGEC-S requires a minimum of 36 credits (33 if FYC is met by single transfer course)*. Courses applied to meet AGEC-A requirements vary by emphasis. Refer to curriculum.maricopa.edu and click on Current Programs to search for the corresponding area of emphasis for specific courses required and credit minimums.	
Any prerequisite/required/restricted elective courses that also have one or more AGEC designation(s) may be applied toward both requirements. Credits for such shared courses are only counted once toward the total credits for the degree.	
AGEC designations are subject to change. See AGEC matrix at aztransmac2.asu.edu/cgi-bin/WebObjects/agec for each course's value(s) in the semester it is taken. Some of the courses have been approved for more than one designation. Notes below will show how such courses may be used to meet multiple degree requirements.	
A. First-Year Composition [FYC].....	6*
ENG101 OR ENG107.....	(3)*
AND ENG102 OR ENG108.....	(3)*
B. Literacy and Critical Inquiry [L].....	0-3**
Students are strongly encouraged to choose an [L] course that also has [HU] or [SB] designation or to use CRE101 or COM225 from the Maricopa Additional Requirements Area to satisfy the [L] requirement. It may also have been approved to satisfy one or more Awareness Areas ([C], [G], [H]). (AGEC designations are subject to change. See AGEC matrix at aztransmac2.asu.edu/cgi-bin/WebObjects/agec for each course's value(s) in the semester it is taken.)	
C. Mathematical Applications [MA].....	4-5
The AGEC-S requires the first semester of a calculus sequence designed for scientists and engineers (MAT220 or MAT221) or any other [MA] designated course for which Calculus I is a prerequisite.	
The minimum math requirement for graduation defaults to the lowest base-level math, as identified above. Some emphasis may require higher-level math; refer to curriculum.maricopa.edu (click on Current Programs) to search for specific emphasis math requirements.	

- D. Humanities, Arts and Design [HU]..... **6**
 For the AGECS, a single course with both [HU] and [L] designations may satisfy both Areas. Note that some [HU] courses also have Awareness Areas designations and can be used to satisfy [C], [G] and/or [H] requirement(s) as well as their respective Core Area(s). (AGEC designations are subject to change. See [AGEC matrix](http://aztransmac2.asu.edu/cgi-bin/WebObjects/agec) at aztransmac2.asu.edu/cgi-bin/WebObjects/agec for each course's value(s) in the semester it is taken.
- E. Social-Behavioral Sciences [SB]..... **6**
 For the AGECS, a single course with both [SB] and [L] designations may satisfy both Areas. Note that some [SB] courses also have Awareness Areas designations and can be used to satisfy [C], [G] and/or [H] requirement(s) as well as their respective Core Area(s). (AGEC designations are subject to change. See [AGEC matrix](http://aztransmac2.asu.edu/cgi-bin/WebObjects/agec) at aztransmac2.asu.edu/cgi-bin/WebObjects/agec for each course's value(s) in the semester it is taken.)
- F. Natural Sciences [SQ/SG]..... **8-10**
 Students must complete eight (8) to ten (10) credits of General Chemistry, University Physics, General Biology for Majors, or Physical and Historical Geology. Consult specific requirements of university transfer major for guidance or refer to curriculum.maricopa.edu and click on Current Programs to search for the corresponding area of emphasis.
- [(CHM150 or CHM151) & CHM151LL] or
 CHM150AA or CHM151AA General Chemistry I
 AND
 [CHM152 & CHM152LL] or CHM152AA General Chemistry II
 OR
- PHY121 University Physics I
 AND
 PHY131 University Physics II
 OR
- BIO181 or BIO181XT General Biology (Majors) I
 AND
 BIO182 or BIO182XT General Biology (Majors) II
 OR
- GLG101IN Physical Geology: Dynamic Earth or
 GLG101 Physical Geology: Dynamic Earth Lecture and
 GLG103 Physical Geology: Dynamic Earth Lab
 AND
 GLG102IN Historical Geology: Primordial to Present or
 GLG102 Historical Geology: Primordial to Present Lecture and
 GLG104 Historical Geology: Primordial to Present Lab
- G. Subject Options - Math/Science **6-10**
 Students should refer to transfer resources, including academic advisement and transfer guides, to select six (6)- ten (10) additional math and/or science credits that meet requirements for the selected major.
- This Math/Science requirement can be met by selecting Mathematics course(s) (MAT) that require Calculus I as a prerequisite and/or Computer Science course(s) (CSC) and/or additional Science courses from the following disciplines: Astronomy, Biology, Botany, Chemistry, Engineering, Environmental Science, Geology, Physical Geography, Physics, Zoology (MCCCD prefixes AST, BIO, CHM, ECE, EEE, ENV, GLG, GPH, and/or PHY)

H. Awareness Areas.....	0-6
The same course(s) may be used to satisfy one or more Awareness Area(s) as well as other AGECE requirements. (See AGECE matrix at aztransmac2.asu.edu/cgi-bin/WebObjects/agece for current course values). Credits for such shared courses may only be counted once.	
1. Cultural Diversity in the United States [C].....	(0-3)
2. Global Awareness [G] OR Historical Awareness [H].....	(0-3)
V. MCCC Additional Requirements.....	0-6
Some courses in this area have [SB] and [L] designations and may also be applied to the corresponding AGECE requirements. See the AGECE matrix at aztransmac2.asu.edu/cgi-bin/WebObjects/agece for course designations.	
A. Oral Communication.....	(0-3)
COM100 [SB] Introduction to Human Communication OR COM110 [SB] Interpersonal Communication OR COM225 [L] Public Speaking OR COM230 [SB] Small Group Communication (3 credits) OR COM100AA & COM100AB & COM100AC [SB] (3 credits) OR COM110AA & COM110AB & COM110AC [SB] (3 credits)	
B. Critical Reading.....	(0-3)
CRE101 [L] Critical Reading OR equivalent as indicated by assessment	
VI. General Electives.....	0-28
Select courses 100-level or higher if needed to complete a minimum of 60 semester credits but no more than a total of 64 semester credits, which is the maximum number of credits accepted toward most degree programs at Arizona's public universities. Ideally, students should select courses that meet requirements for their major/area of interest and transfer institution. MCCC has established recommended courses and sequencing to align with various "Emphasis Areas" in one of nine different "Fields of Interest." See maricopa.edu/degrees-certificates for links to these transfer pathways.	
Maricopa courses and external courses evaluated as Maricopa equivalents, departmental electives (e.g., HISELC for a history elective), or general electives (GENELC) that are numbered 100 level or higher, and completed with a grade of "C" or higher, may be applied in the elective area, regardless of potential transferability to other institutions. It is recommended, however, that students planning to transfer to a baccalaureate-granting institution meet these general elective requirements with courses that are transferable and applicable to their intended university degree. Transfer and major guides are accessible on the following websites: aztransfer.com/tools , maricopa.edu/degrees-certificates/university-transfer/partners as well as those of individual universities. For appropriate course selection, students should consult with an academic advisor.	
TOTAL.....	60-64***

*FYC may be met with fewer than 6 credits if student has transfer credit from ASU, NAU or UAZ for a single course that meets FYC in full.

**(0 only if shared with HU or SB)

* 64 semester credits is the maximum accepted toward most degree programs at Arizona's public universities. Some exceptions apply; consult with an academic advisor for additional transfer information.

Maricopa County Community College District (MCCCD)
2025-2026 Academic Certificate (AC)

Purpose of the Academic Certificate

The Maricopa County Community College District Academic Certificate (AC) is a defined and coherent program of study that is recommended for students who wish to gain additional expertise in a specific area of emphasis in an academic discipline. While this program of study can result in proficiency in the specified skills and competencies, as well as mastery of a body of knowledge, it is not designed to prepare someone for employment in a specific occupation. The coursework for an Academic Certificate may be from a variety of disciplines or it can be discipline specific. There is no required general studies component to an Academic Certificate; however, the program may include some courses that have specific general education (AGEC) designations such as Humanities, Arts and Design [HU], Social-Behavioral Sciences [SB], Literacy and Critical Inquiry [L], or Cultural Awareness [C]. (See [AGEC matrix](#) for current course values.)

Academic Policies that Govern the Academic Certificate:

- * Although the program of study for an Academic Certificate (AC) does not have a mandated minimum number of credit hours, most ACs require approximately 12-39 credit hours in courses numbered 100 and above; students must have earned a minimum of 6 credits toward the certificate at the institution awarding the certificate. For certificates with less than 6 credit hours, all credits must be completed at the college granting the award.
- * Students must earn a grade of C or better in each course in the program.
- * Follows the graduation policies listed in the college's general catalog for the appropriate catalog year.
- * Any course cross-referenced under another prefix(es) (for example ENH291/EDU291-Children's Literature) covers identical content and its credits can only be counted once toward certificate requirements.
- * Although ACs may include a subset of coursework required in particular transfer degrees, the intent of an AC is not to align with any specific university major. There is no presumption of block transfer to another college or university.
- * May have admission criteria established by the college if and when appropriate.
- * Generally offered at a limited number of colleges. For a listing of all ACs available in the district and their affiliated college(s) see the [CCTA web site](#) at curriculum.maricopa.edu

- [\(MCCCD\) 2025-2026 Bachelor of Arts \(BA\) Degree](#)
- [\(MCCCD\) 2025-2026 Bachelor of Science \(BS\) Degree](#)
- [\(MCCCD\) 2025-2026 Bachelor of Applied Science \(BAS\)](#)
- [\(MCCCD\) 2025-2026 Bachelor of Science in Nursing \(RN to BSN\)](#)
- [\(MCCCD\) 2025-2026 Bachelor of Business Administration \(BBA\) Degree](#)

Maricopa County Community College District
(MCCCD) 2025-2026 Bachelor of Arts (BA) Degree

Description

The Maricopa County Community College District Bachelor of Arts (BA) degree requires a minimum of 120 semester credits for the program of study; minimum total credits vary by specific major. Refer to the Program (Degree) Search at curriculum.maricopa.edu for credit minimums for individual degree programs. A minimum grade point average of 2.0 and course grades of C or higher are required to earn the degree.

The Bachelor of Arts degree includes the following components:

- I. Program Prerequisites (if applicable)
- II. Required Courses
- III. Restricted Electives
- IV. Arizona General Education Curriculum for Arts (AGEC-A)
- V. MCCCD Additional Requirements (Oral Communication)
- VI. General Electives (if needed to reach minimum credits for degree)

Purpose of the Degree

The Bachelor of Arts (BA) degree is an undergraduate college degree that requires students to complete a core of general education courses and then focus remaining coursework on a core and electives in a major such as fine arts and humanities, business, or education. The Bachelor of Arts degree prepares students to continue their education at the graduate level, complete requirements for disciplinary certification, and/or pursue a wide variety of careers.

Degree Requirements

The requirements for the Bachelor of Arts (BA) follow. No versions of the Bachelor of Arts require fewer than a minimum of 120 credits; however, minimum credits for a BA may vary by specific major. Additionally, a minimum of 30 credits of coursework must be completed at the upper-division (300/400 level). Refer to the Program (Degree) Search at curriculum.maricopa.edu for credit minimums by major. Industry-recognized credentials can be counted as general electives.

The following websites identify the courses that apply to the different General Education Core and Awareness Areas: [AGEC-A](#) and the [AGEC matrix](#) at aztransmac2.asu.edu/cgi-bin/WebObjects/agec. Courses available for both Areas during a current or upcoming semester can also be found using the “[Find a Class](#)” tool on maricopa.edu and on each MCCCD college’s website.

Requirements

Credits

I. Program Prerequisites.....	Number varies
Program prerequisites for the Bachelor of Arts degree vary by major. Refer to the Program (Degree) Search at curriculum.maricopa.edu for specific courses and credit minimums by major.	

II. Required Courses..... Number varies

All new to Maricopa students who declare a degree, or intend to transfer to a college/university, will be required to successfully complete a first-year experience course (FYE101 or FYE103) within the first two semesters at a MCCCDC college.

Students who have enrolled at MCCCDC but have not earned any credits are considered new students. This category includes those who have only completed a Prior Learning Assessment (refer to A.R. 2.2.4 Transfer Credit and Prior Learning Assessment), participated in Dual Enrollment, or withdrawn from all courses previously attempted at MCCCDC. When selecting courses, please choose those that are required for your specific major. For detailed information on specific courses and the minimum credit requirements for each major, refer to the Program (Degree) Search available at curriculum.maricopa.edu.

III. Restricted Electives..... Number varies

Restricted electives for the Bachelor of Arts degree vary by specific major. Refer to the Program (Degree) Search at curriculum.maricopa.edu for specific courses and credit minimums by major.

IV. Arizona General Education Curriculum--Arts (AGEC-A)..... up to 44

The AGEC-A requires a minimum of 35 credits (32 if FYC is met by single transfer course)*. However, prerequisite/required/restricted elective courses may also meet AGEC-A requirements but are only counted once toward the total credits for the degree. Therefore, the AGEC-A may be met with fewer than 35 credits (fewer than 32 if FYC is met by single transfer course)* as long as all requirements listed in this section (IV) are completed.

Courses applied to meet AGEC-A requirements vary by major. Refer to the Program (Degree) Search at curriculum.maricopa.edu for specific course requirements. Some courses may be met by Required Courses or Restricted Electives. Some of these courses also have Awareness Areas designations and can be used to satisfy [C], [G] and/or [H] requirement(s) as well other AGEC requirements, Required Course(s) or Restricted Elective(s). Courses may meet more than one requirement but are only counted once toward the total credits for the degree. AGEC designations are subject to change.

See [AGEC matrix](#) for each course's value(s) in the semester it is taken.

A. First-Year Composition [FYC].....	6*
ENG101 OR ENG107.....	(3)*
AND ENG102 OR ENG108.....	(3)*
B. Literacy and Critical Inquiry [L].....	3
May be met by CRE101 among other courses	
C. Mathematical Applications [MA].....	3-6
Requires a course in college mathematics (MAT140, MAT141, MAT142, MAT145, MAT146) or college algebra (MAT150, MAT151, MAT152, MAT155, MAT156) or precalculus (MAT187, MAT188) or higher [MA]-approved general education course.	
D. Computer/Statistics/Quantitative Applications [CS].....	3
E. Humanities, Arts and Design [HU].....	6
Students are encouraged to choose course work from more than one discipline.	
F. Social-Behavioral Sciences [SB].....	6
Students are encouraged to choose course work from more than one discipline.	
G. Natural Sciences [SQ/SG].....	8
The lecture courses selected for Natural Sciences must include or be accompanied by the corresponding laboratory courses for a total of four credits each. Credits for lecture and lab components may be combined or each may carry separate credit. At least four credits must be designated as SQ-Science Quantitative. Eight credits of SG-Science General will not satisfy this requirement.	
H. Awareness Areas.....	0-6
Courses may be used to satisfy other AGEC requirements and one or more Awareness Area(s). (See AGEC matrix for current course values.)	
1. Cultural Diversity in the United States [C].....	(0-3)
2. Global Awareness [G] OR Historical Awareness [H].....	(0-3)

V. MCCC Additional Requirements..... 0-3

As noted below, courses in this area may also be applied toward AGEC-A requirements.

A. Oral Communication	(0-3)
COM100 [SB] Introduction to Human Communication OR	
COM110 [SB] Interpersonal Communication OR	
COM225 [L] Public Speaking OR	
COM230 [SB] Small Group Communication (3 credits) OR	
COM100AA & COM100AB & COM100AC [SB] (3 credits) OR	
COM110AA & COM110AB & COM110AC [SB] (3 credits) OR	
COM263 [SB], [C], [G] Elements of Intercultural Communication (3 credits)	

VI. General Electives.....	Number varies
Select courses 100-level or higher if needed to complete a minimum of 120 semester credits. Ideally, students should select courses that meet requirements for their major/area of interest and graduate-level transfer institution.	

Maricopa courses and external courses evaluated as Maricopa equivalents, departmental electives (e.g., HISELC for a history elective), or general electives (GENELC). For appropriate course selection, students should consult with an academic advisor.

TOTAL.....	120**
*FYC may be met with fewer than 6 credits if a student has transfer credit from ASU, NAU or UAZ for a single course that meets FYC in full.	

. **The minimum requirement is 120 semester credits; however, the specific number of credits needed for a BA degree may vary by specific major. Refer to the Program (Degree) Search at curriculum.maricopa.edu for credit minimums by major.

**Maricopa County Community College District
(MCCCD) 2025-2026 Bachelor of Science (BS) Degree**

Description

The Maricopa County Community College District Bachelor of Science (BS) degree requires a minimum of 120 semester credits for the program of study; minimum total credits vary by specific major. Refer to the Program (Degree) Search at curriculum.maricopa.edu for credit minimums for individual degree programs. A minimum grade point average of 2.0 and course grades of C or higher are required to earn the degree.

The Bachelor of Science degree includes the following components:

- I. Program Prerequisites (if applicable)
- II. Required Courses
- III. Restricted Electives
- IV. Arizona General Education Curriculum for Arts (AGEC-A) OR Arizona General Education Curriculum for Science (AGEC-S) (refer to the Program (Degree) Search at curriculum.maricopa.edu for the specific AGEC requirements by major)
- V. MCCCD Additional Requirements (Oral Communication)
- VI. General Electives (if needed to reach minimum credits for degree)

Purpose of the Degree

A Bachelor of Science (BS) is an undergraduate college degree that requires students to complete a core of general education courses and then includes remaining coursework on requirements and electives that have an emphasis on math and science. The Bachelor of Science prepares students to continue their education in pursuit of a graduate degree, complete requirements for disciplinary certification, and/or pursue careers in a variety of fields.

Degree Requirements

The requirements for the Bachelor of Science (BS) follow. No versions of the Bachelor of Science require fewer than a minimum of 120 credits; however, minimum credits for a BS may vary by specific major. Additionally, a minimum of 30 credits of coursework must be completed at the upper-division (300/400 level). Refer to the Program (Degree) Search at curriculum.maricopa.edu for credit minimums by major. Industry-recognized credentials can be counted as general electives.

It is recommended that students select courses that meet more than one general education and/or awareness area requirement. Doing so will maximize the number of math and science electives the student can take as part of the student's Bachelor of Science degree.

The following websites identify the courses that apply to the different General Education Core and Awareness Areas: [AGEC-A](#), [AGEC-S](#), and the [AGEC matrix](#).

Courses available for both Areas during a current or upcoming semester can also be found using the "[Find a Class](#)" tool on maricopa.edu and on each MCCCD college's website.

<u>Requirements</u>	<u>Credits</u>
I. Program Prerequisites	Number varies
Program prerequisites for the Bachelor of Science degree vary by major. Refer to the Program (Degree) Search at curriculum.maricopa.edu for specific courses and credit minimums by major.	
II. Required Courses	Number varies

All new to Maricopa students who declare a degree, or intend to transfer to a college/university, will be required to successfully complete a first-year experience course (FYE101 or FYE103) within the first two semesters at a MCCCD college.

Students who have enrolled at MCCCDC but have not earned any credits are considered new students. This category includes those who have only completed a Prior Learning Assessment (refer to A.R. 2.2.4 Transfer Credit and Prior Learning Assessment), participated in Dual Enrollment, or withdrawn from all courses previously attempted at MCCCDC. When selecting courses, please choose those that are required for your specific major. For detailed information on specific courses and the minimum credit requirements for each major, refer to the Program (Degree) Search available at curriculum.maricopa.edu.

III. Restricted Electives	Number varies
Restricted electives for the Bachelor of Science degree vary by specific major. Refer to the Program (Degree) Search at curriculum.maricopa.edu for specific courses and credit minimums by major.	

IV. Arizona General Education Curriculum--Arts (AGEC-A)..... up to 44

The AGEC-A requires a minimum of 35 credits (32 if FYC is met by single transfer course)*. However, prerequisite/required/restricted elective courses may also meet AGEC-A requirements but are only counted once toward the total credits for the degree. Therefore, the AGEC-A may be met with fewer than 35 credits (fewer than 32 if FYC is met by single transfer course)* as long as all requirements listed in this section (IV) are completed.

Courses applied to meet AGEC-A requirements vary by major. Refer to the Program (Degree) Search at curriculum.maricopa.edu for specific course requirements. Some courses may be met by Required Courses or Restricted Electives. Some of these courses also have Awareness Areas designations and can be used to satisfy [C], [G] and/or [H] requirement(s) as well other AGEC requirements, Required Course(s) or Restricted Elective(s). Courses may meet more than one requirement but are only counted once toward the total credits for the degree. AGEC designations are subject to change.

See [AGEC matrix](#) for each course's value(s) in the semester it is taken.

A. First-Year Composition [FYC].....	6*
ENG101 OR ENG107.....	(3)*
AND ENG102 OR ENG108.....	(3)*
B. Literacy and Critical Inquiry [L].....	3
Students are strongly encouraged to choose an [L] course that also has [HU] or [SB] designation or to use COM225 from the Maricopa Additional Requirements Area to satisfy the [L] requirement. It may also have been approved to satisfy one or more Awareness Areas ([C], [G], [H]). (AGEC designations are subject to change. See AGEC matrix for each course's value(s) in the semester it is taken.)	
C. Mathematical Applications [MA].....	3-6
Requires a course in college mathematics (MAT140, MAT141, MAT142, MAT145, MAT146) or college algebra (MAT150, MAT151, MAT152, MAT155, MAT156) or precalculus (MAT187, MAT188) or higher [MA]-approved general education course.	
D. Computer/Statistics/Quantitative Applications [CS].....	3
E. Humanities, Arts and Design [HU].....	6
Students are encouraged to choose course work from more than one discipline.	
F. Social-Behavioral Sciences [SB].....	6
Students are encouraged to choose course work from more than one discipline.	
G. Natural Sciences [SQ/SG].....	8
The lecture courses selected for Natural Sciences must include or be accompanied by the corresponding laboratory courses for a total of four credits each. Credits for lecture and lab components may be combined or each may carry separate credit. At least four credits must be designated as SQ-Science Quantitative. Eight credits of SG-Science General will not satisfy this requirement.	
H. Awareness Areas.....	0-6
Courses may be used to satisfy other AGEC requirements and one or more Awareness Area(s). (See AGEC matrix for current course values.)	
1. Cultural Diversity in the United States [C].....	(0-3)
2. Global Awareness [G] OR Historical Awareness [H].....	(0-3)

OR

IV. Arizona General Education Curriculum--Science (AGEC-S)..... up to 56

The AGEC-S requires a minimum of 36 credits (33 if FYC is met by single transfer course)*. However, prerequisite/required/restricted elective courses may also meet AGEC-S requirements and credits count once toward the total for the degree. Therefore, the AGEC-S may be met with fewer than 36 credits (33 if FYC is met by single transfer course)* as long as all requirements listed in this section (IV) are completed.

Courses applied to meet AGEC-S requirements vary by major. Refer to the Program (Degree) Search at curriculum.maricopa.edu for specific course requirements. Some courses may be met by Required Courses or Restricted Electives. Some of these courses also have Awareness Areas designations and can be used to satisfy [C], [G] and/or [H] requirement(s) as well as other AGEC requirements, Required Course(s) or Restricted Elective(s). Courses may meet more than one requirement but are only counted once toward the total credits for the degree. AGEC designations are subject to change.

Special Academic Policies that Govern the AGEC-S

- The AGEC-S does not require a course with [CS] Computer/Statistics designation.
- Unlike the AGEC-A and AGEC-B, the same course is allowed to satisfy the ([L] and [HU]) or ([L] and [SB]) areas of the AGEC-S's Core Area. The credits for such a "shared" course are only counted one time toward the required minimum for the degree.

See AGEC matrix for each course's value(s) in the semester it is taken.

A. First-Year Composition [FYC].....	6*
ENG101 OR ENG107.....	(3)*
AND ENG102 OR ENG108.....	(3)*
B. Literacy and Critical Inquiry [L].....	0-3**
Students are strongly encouraged to choose an [L] course that also has [HU] or [SB] designation or to use COM225 from the Maricopa Additional Requirements Area to satisfy the [L] requirement. It may also have been approved to satisfy one or more Awareness Areas ([C], [G], [H]). (AGEC designations are subject to change. See <u>AGEC matrix</u> for each course's value(s) in the semester it is taken.)	
C. Mathematical Applications [MA].....	4-5
Requires the first semester of calculus courses designed for scientists and engineers (MAT220 or MAT221) or any other [MA] designated course for which Calculus I is a prerequisite.	
D. Humanities, Arts and Design [HU].....	6
For the AGEC-S, a single course with both [HU] and [L] designations may satisfy both Areas. Note that some of these courses also have Awareness Areas designations and can be used to satisfy [C], [G] and/or [H] requirement(s) as well as their respective Core Area(s). (AGEC designations are subject to change. See <u>AGEC matrix</u> for each course's value(s) in the semester it is taken.)	
E. Social-Behavioral Sciences [SB].....	6
For the AGEC-S, a single course with both [SB] and [L] designations may satisfy both Areas. Note that some of these courses also have Awareness Areas designations and can be used to satisfy [C], [G] and/or [H] requirement(s) as well as their respective Core Area(s). (AGEC designations are subject to change. See <u>AGEC matrix</u> for each course's value(s) in the semester it is taken.)	
F. Natural Sciences [SQ/SG].....	8
Students must complete eight (8) to ten (10) credits of General Chemistry, University Physics, General Biology for Majors, or Physical and Historical Geology. Consult with an academic advisor for specific requirements of university transfer majors for guidance. [(CHM150 OR CHM151) & CHM151LL] OR CHM150AA OR CHM151AA General Chemistry, I AND	

[CHM152 AND CHM152LL] OR CHM152AA General Chemistry II OR
 PHY121 University Physics I AND
 PHY131 University Physics II
 OR
 BIO181 OR BIO181XT General Biology (Majors) I AND
 BIO182 OR BIO182XT General Biology (Majors) II OR
 GLG101IN Physical Geology: Dynamic Earth OR
 GLG101 Physical Geology: Dynamic Earth Lecture AND
 GLG103 Physical Geology: Dynamic Earth Lab

AND
 GLG102IN Historical Geology: Primordial to Present OR
 GLG102 Historical Geology: Primordial to Present Lecture AND
 GLG104 Historical Geology: Primordial to Present Lab

- G. Subject Options - Math/Science **8-10**
 Select six (6) - ten (10) additional math and/or science credits that meet requirements
 for the selected major.

Select Mathematics course(s) (MAT) above Calculus I and/or Computer Science course(s)
 (CSC) and/or Science courses from the following disciplines: Astronomy, Biology, Botany,
 Chemistry, Engineering, Environmental Science, Geology, Physical Geography, Physics,
 Zoology (MCCCD prefixes AST, BIO, CHM, ECE, EEE, ENV, GLG, GPH, and/or PHY)

- H. Awareness Areas..... **6-10**
 Courses may be used to satisfy other AGEC requirements and one or more Awareness
 Area(s). (See [AGEC matrix](#) for current course values.)
 1. Cultural Diversity in the United States [C]..... **0-6**
 2. Global Awareness [G] OR Historical Awareness [H]..... (0-3)

V. MCCCD Additional Requirements.....,.....,..... **0-3**

As noted below, courses in this area may also be applied toward AGEC-A requirements.

- A. Oral Communication (0-3)
 COM100 [SB] Introduction to Human Communication OR
 COM110 [SB] Interpersonal Communication OR
 COM225 [L] Public Speaking OR
 COM230 [SB] Small Group Communication (3 credits) OR
 COM100AA & COM100AB & COM100AC [SB] (3 credits) OR
 COM110AA & COM110AB & COM110AC [SB] (3 credits) OR
 COM263 [SB], [C], [G] Elements of Intercultural Communication (3 credits)

VI. General Electives..... **Number varies**

Select courses 100-level or higher if needed to complete a minimum of 120 semester credits. Ideally, students should select
 courses that meet requirements for their major/area of interest and graduate-level transfer institution.

Maricopa courses and external courses evaluated as Maricopa equivalents, departmental electives (e.g., HISELC for a history
 elective), or general electives (GENELC). For appropriate course selection, students should consult with an academic advisor.

TOTAL.....

120**

*FYC may be met with fewer than 6 credits if a student has transfer credit from ASU, NAU or UAZ for a single course that meets FYC in full.

** (0 only if shared with HU or SB)

**The minimum requirement is 120 semester credits; however, the specific number of credits needed for a BS degree may vary by specific major. Refer to the Program (Degree) Search at curriculum.maricopa.edu for credit minimums by major.

**Maricopa County Community College District
(MCCCD) 2025-2026 Bachelor of Applied Science (BAS)**

Description

The Maricopa County Community College District Bachelor of Applied Science (BAS) degree requires a minimum of 120 semester credits for the program of study; minimum total credits vary by specific major. Refer to the Program (Degree) Search at curriculum.maricopa.edu for credit minimums for individual degree programs. A minimum grade point average of 2.0 and course grades of C or higher are required to earn the degree.

The Bachelor of Applied Science degree includes the following components:

- I. Program Prerequisites (if applicable)
- II. Required Courses
- III. Restricted Electives
- IV. Arizona General Education Curriculum for Arts (AGEC-A)
- V. MCCCD Additional Requirements (Oral Communication)
- VI. General Electives (if needed to reach minimum credits for degree)

Purpose of the Degree

A Bachelor of Applied Science is an undergraduate college degree that focuses on providing hands-on experiences and incorporating job-related skills into the classroom. It is designed to be flexible in order to accommodate and meet the unique demands of industry in specific workforce sectors. Bachelor of Applied Science degrees typically build on the curriculum requirements for an Associate of Applied Science (AAS) degree, meaning that all of the requirements for the AAS degree are either included in, or receive full recognition and credit within, the BAS program requirements. Students in the BAS take a majority of their courses in the applied sciences, specializing in a specific area and the degree is designed to prepare students for employment and career advancement, as well as can provide the foundation for graduate school.

Degree Requirements

The requirements for the Bachelor of Applied Science (BAS) follow. No versions of the Bachelor of Applied Science require fewer than a minimum of 120 credits; however, minimum credits for a BAS may vary by specific major. Additionally, a minimum of 30 credits of coursework must be completed at the upper-division (300/400 level). Refer to the Program (Degree) Search at curriculum.maricopa.edu for credit minimums by major. Industry-recognized credentials can be counted as general electives.

The following websites identify the courses that apply to the different General Education Core and Awareness Areas:

[AGEC-A](#) and the [AGEC matrix](#) at

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/agec.woa/3/wa/agecMatrixReport?inst=001075>. Courses available for both Areas during a current or upcoming semester can also be found using the “[Find a Class](#)” tool on maricopa.edu and on each MCCCD college’s website.

Requirements

Credits

I. Program Prerequisites.....	Number varies
Program prerequisites for the Bachelor of Applied Science degree vary by major. Refer to the Program (Degree) Search at curriculum.maricopa.edu for specific courses and credit minimums by major.	

II. Required Courses.....	Number varies

All new to Maricopa students who declare a degree, or intend to transfer to a college/university, will be required to successfully complete a first-year experience course (FYE101 or FYE103) within the first two semesters at a MCCCD college.

Students who have enrolled at MCCCDC but have not earned any credits are considered new students. This category includes those who have only completed a Prior Learning Assessment (refer to A.R. 2.2.4 Transfer Credit and Prior Learning Assessment), participated in Dual Enrollment, or withdrawn from all courses previously attempted at MCCCDC. When selecting courses, please choose those that are required for your specific major. For detailed information on specific courses and the minimum credit requirements for each major, refer to the Program (Degree) Search available at curriculum.maricopa.edu.

III. Restricted Electives.....

Number varies

Restricted electives for the Bachelor of Applied Science degree vary by specific major. Refer to the Program (Degree) Search at curriculum.maricopa.edu for specific courses and credit minimums by major.

IV. Arizona General Education Curriculum--Arts (AGEC-A)..... up to 44

The AGEC-A requires a minimum of 35 credits (32 if FYC is met by single transfer course)*. However, prerequisite/required/restricted elective courses may also meet AGEC-A requirements but are only counted once toward the total credits for the degree. Therefore, the AGEC-A may be met with fewer than 35 credits (fewer than 32 if FYC is met by single transfer course)* as long as all requirements listed in this section (IV) are completed.

Courses applied to meet AGEC-A requirements vary by major. Refer to the Program (Degree) Search at curriculum.maricopa.edu for specific course requirements. Some courses may be met by Required Courses or Restricted Electives. Some of these courses also have Awareness Areas designations and can be used to satisfy [C], [G] and/or [H] requirement(s) as well other AGEC requirements, Required Course(s) or Restricted Elective(s). Courses may meet more than one requirement but are only counted once toward the total credits for the degree. AGEC designations are subject to change.

See [AGEC matrix](#) for each course's value(s) in the semester it is taken.

A. First-Year Composition [FYC].....	6*
ENG101 OR ENG107.....	(3)*
AND ENG102 OR ENG108.....	(3)*
B. Literacy and Critical Inquiry [L].....	3
May be met by CRE101 among other courses	
C. Mathematical Applications [MA].....	3-6
Requires a course in college mathematics (MAT140, MAT141, MAT142, MAT145, MAT146) or college algebra (MAT150, MAT151, MAT152, MAT155, MAT156) or precalculus(MAT187, MAT188) or higher [MA]-approved general education course.	
D. Computer/Statistics/Quantitative Applications [CS].....	3
E. Humanities, Arts and Design [HU].....	6
Students are encouraged to choose course work from more than one discipline.	
F. Social-Behavioral Sciences [SB].....	6
Students are encouraged to choose course work from more than one discipline.	
G. Natural Sciences [SQ/SG].....	8
The lecture courses selected for Natural Sciences must include or be accompanied by the corresponding laboratory courses for a total of four credits each. Credits for lecture and lab components may be combined or each may carry separate credit. At least four credits must be designated as SQ-Science Quantitative. Eight credits of SG-Science General will not satisfy this requirement.	
H. Awareness Areas.....	0-6
Courses may be used to satisfy other AGEC requirements and one or more Awareness Area(s). (See AGEC matrix for current course values.)	
1. Cultural Diversity in the United States [C].....	(0-3)
2. Global Awareness [G] OR Historical Awareness [H].....	(0-3)

V. MCCC Additional Requirements..... 0-3

As noted below, courses in this area may also be applied toward AGEC-A requirements.

A. Oral Communication	(0-3)
COM100 [SB] Introduction to Human Communication OR	
COM110 [SB] Interpersonal Communication OR	
COM225 [L] Public Speaking OR	
COM230 [SB] Small Group Communication (3 credits) OR	
COM100AA & COM100AB & COM100AC [SB] (3 credits) OR	
COM110AA & COM110AB & COM110AC [SB] (3 credits) OR	
COM263 [SB], [C], [G] Elements of Intercultural Communication (3 credits)	

VI. General Electives.....	Number varies

Select courses 100-level or higher if needed to complete a minimum of 120 semester credits.
Ideally, students should select courses that meet requirements for their major/area of interest and graduate-level transfer institution.

Maricopa courses and external courses evaluated as Maricopa equivalents, departmental electives (e.g., HISELC for a history elective), or general electives (GENELC) and completed with a grade of C or higher, may be applied in the elective area, regardless of potential transferability to other institutions. For appropriate course selection, students should consult with an academic advisor.

TOTAL.....	120**

*FYC may be met with fewer than 6 credits if a student has transfer credit from ASU, NAU or UAZ for a single course that meets FYC in full.

**The minimum requirement is 120 semester credits; however, the specific number of credits needed for a BAS degree may vary by specific major. Refer to the Program (Degree) Search at curriculum.maricopa.edu for credit minimums by major.

Maricopa County Community College District
(MCCCD) 2025-2026 Registered Nurse (RN) to the Bachelor of Science in Nursing (BSN)

Description

The Maricopa County Community College District Registered Nurse (RN) to the Bachelor of Science in Nursing (BSN) degree requires a minimum of 120 semester credits for the program of study. Refer to the Program (Degree) Search at curriculum.maricopa.edu for credit minimums for individual degree programs. A minimum grade point average of 2.0 and course grades of C or higher are required to earn the degree.

The Bachelor of Nursing degree includes the following components:

- I. Program Prerequisites
- II. Required Courses
- III. Arizona General Education Curriculum for Arts (AGEC-A)
- IV. General Electives (if needed to reach minimum credits for degree)

Purpose of the Degree

The Registered Nurse (RN) to the Bachelor of Science in Nursing (BSN) degree is a post-licensure program that allows nurses with the Associate in Applied Science (AAS) in Nursing or the Diploma in Nursing to advance their credentials or prepare for graduate nursing study. Focus on leadership, evidence-based practice, health promotion, public health issues, patient safety and risk reduction, ethical issues, and healthcare needs of diverse populations.

Degree Requirements

The requirements for the Registered Nurse (RN) to the Bachelor of Science in Nursing (BSN) follow. No versions of the BSN require fewer than a minimum of 120 credits. Additionally, a minimum of 30 credits of coursework must be completed at the upper-division (300/400 level). Refer to the Program (Degree) Search at curriculum.maricopa.edu for information on how credit minimums are met for the RN to BSN degree.

The following websites identify the courses that apply to the different General Education Core and Awareness Areas: [AGEC-A](#) and the [AGEC matrix](#).

Courses available for both Areas during a current or upcoming semester can also be found using the “[Find a Class](#)” tool on maricopa.edu and on each MCCCD college’s website.

Requirements

Credits

I. Program Prerequisites.....63-73

Refer to the Program (Degree) Search at curriculum.maricopa.edu for information on how program prerequisites are met for the RN to BSN degree.

II. Required Courses.....37

Refer to the Program (Degree) Search at curriculum.maricopa.edu for specific courses and credit minimums.

III. Arizona General Education Curriculum--Arts (AGEC-A)..... up to 44

The AGEC-A requires a minimum of 35 credits (32 if FYC is met by single transfer course)*. However, prerequisite/required/restricted elective courses may also meet AGEC-A requirements but are only counted once toward the total credits for the degree. Therefore, the AGEC-A may be met with fewer than 35 credits (fewer than 32 if FYC is met by single transfer course)* as long as all requirements listed in this section (IV) are completed.

Courses applied to meet AGEC-A requirements vary by major. Refer to the Program (Degree) Search at curriculum.maricopa.edu for specific course requirements. Some courses may be met by Required Courses or Restricted Electives. Some of these courses also have Awareness Areas designations and can be used to satisfy [C], [G] and/or [H] requirement(s) as well other AGEC requirements, Required Course(s) or Restricted Elective(s). Courses may meet more than one requirement but are only counted once toward the total credits for the degree. AGEC designations are subject to change.

See [AGEC matrix](#) for each course's value(s) in the semester it is taken.

A. First-Year Composition [FYC].....	6*
ENG101 OR ENG107.....	(3)*
AND ENG102 OR ENG108.....	(3)*
B. Literacy and Critical Inquiry [L].....	3
May be met by CRE101 among other courses	
C. Mathematical Applications [MA].....	3-6
Requires a course in college mathematics (MAT140, MAT141, MAT142, MAT145, MAT146) or college algebra (MAT150, MAT151, MAT152, MAT155, MAT156) or precalculus (MAT187, MAT188) or higher [MA]- approved general education course.	
D. Computer/Statistics/Quantitative Applications [CS].....	3
E. Humanities, Arts and Design [HU].....	6
Students are encouraged to choose course work from more than one discipline.	
F. Social-Behavioral Sciences [SB].....	6
PSY 101 AND	
Any approved general education courses in the Social Behavioral Sciences [SB] area. PSY240 recommended	
G. Natural Sciences [SQ/SG].....	8
The lecture courses selected for Natural Sciences must include or be accompanied by the corresponding laboratory courses for a total of four credits each. Credits for lecture and lab components may be combined or each may carry separate credit.	
Natural Sciences requirements met by Natural Sciences [SQ/SG] in Program Prerequisites.	
Note: Eight (8) credits of SG-Natural Science General will satisfy the requirements for the BSN but will not satisfy the requirement for an AGEC-A certificate. If seeking an AGEC-A, view the AGEC-A Academic Policies.	
H. Awareness Areas.....	0-6
Courses may be used to satisfy other AGEC requirements and one or more Awareness Area(s). (See AGEC matrix for current course values.)	
1. Cultural Diversity in the United States [C].....	(0-3)
2. Global Awareness [G] OR Historical Awareness [H].....	(0-3)

IV. General Electives..... 0-12

Select courses 100-level or higher if needed to complete a minimum of 120 semester credits. Ideally, students should select courses that meet requirements for their major/area of interest and graduate-level transfer institution.

Maricopa courses and external courses evaluated as Maricopa equivalents, departmental electives (e.g., HISELC for a history elective), or general electives (GENELC) and completed with a grade of C or higher, may be applied in the elective area, regardless of potential transferability to other institutions. For appropriate course selection, students should consult with an academic advisor.

TOTAL..... 120**

*FYC may be met with fewer than 6 credits if a student has transfer credit from ASU, NAU or UAZ for a single course that meets FYC in full.

**The minimum requirement for the Registered Nurse (RN) to Bachelor of Science in Nursing (BSN) is 120 semester credits. Refer to the Program (Degree) Search at curriculum.maricopa.edu for information on how credit minimums are met for the RN to BSN degree.

**Maricopa County Community College District
(MCCCD) 2025-2026 Bachelor of Business Administration (BBA) Degree**

Description

The Maricopa County Community College District Bachelor of Business Administration (BBA) degree requires a minimum of 120 semester credits for the program of study; minimum total credits vary by specific major. Refer to the Program (Degree) Search at curriculum.maricopa.edu for credit minimums for individual degree programs. A minimum grade point average of 2.0 and course grades of C or higher are required to earn the degree. Specific majors may have a higher minimum grade point average. Search at curriculum.maricopa.edu for specific grade point average and other graduation requirements by major.

The Bachelor of Business Administration degree includes the following components:

- I. Program Prerequisites (if applicable)
- II. Required Courses
- III. Restricted Electives
- IV. Arizona General Education Curriculum for Arts (AGEC-A)
- V. MCCCD Additional Requirements (Oral Communication)
- VI. General Electives (if needed to reach minimum credits for degree)

Purpose of the Degree

The Bachelor of Business (BBA) degree is an undergraduate college degree that requires students to complete a core of general education courses and then focus remaining coursework on a core and electives in a major such as management, accounting, or another business field. The Bachelor of Business Administration degree prepares students to continue their education at the graduate level, complete requirements for disciplinary certification, and/or pursue a wide variety of careers.

Degree Requirements

The requirements for the Bachelor of Business Administration (BBA) follow. No versions of the Bachelor of Business Administration require fewer than a minimum of 120 credits; however, minimum credits for a BBA may vary by specific major. Additionally, a minimum of 30 credits of coursework must be completed at the upper-division (300/400 level). Refer to the Program (Degree) Search at curriculum.maricopa.edu for credit minimums by major. Industry-recognized credentials can be counted as general elective credits. Industry-recognized credentials can be counted as general electives.

The following websites identify the courses that apply to the different General Education Core and Awareness Areas: [AGEC-A](#) and the [AGEC matrix](#) at aztransmac2.asu.edu/cgi-bin/WebObjects/agec. Courses available for both Areas during a current or upcoming semester can also be found using the “Find a Class” tool on maricopa.edu and on each MCCCD college’s website.

Requirements

Credits

I. Program Prerequisites.....	Number varies
Program prerequisites for the Bachelor of Business Administration degree vary by major. Refer to the Program (Degree) Search at curriculum.maricopa.edu for specific courses and credit minimums by major.	
II. Required Courses.....	Number varies
All new to Maricopa students who declare a degree, or intend to transfer to a college/university, will be required to successfully complete a first-year experience course (FYE101 or FYE103) within the first two semesters at a MCCCD college.	

Students who have enrolled at MCCCDC but have not earned any credits are considered new students. This category includes those who have only completed a Prior Learning Assessment (refer to A.R. 2.2.4 Transfer Credit and Prior Learning Assessment), participated in Dual

Enrollment, or withdrawn from all courses previously attempted at MCCCDC. When selecting courses, please choose those that are required for your specific major. For detailed information on specific courses and the minimum credit requirements for each major, refer to the Program (Degree) Search available at curriculum.maricopa.edu.

III. Restricted Electives..... **Number varies**
 Restricted electives for the Bachelor of Business Administration degree vary by specific major. Refer to the Program (Degree) Search at curriculum.maricopa.edu for specific courses and credit minimums by major.

IV. Arizona General Education Curriculum--Arts (AGEC-A)..... **up to 44**

The AGECA requires a minimum of 35 credits (32 if FYC is met by single transfer course)*. However, prerequisite/required/restricted elective courses may also meet AGECA requirements but are only counted once toward the total credits for the degree. Therefore, the AGECA may be met with fewer than 35 credits (fewer than 32 if FYC is met by single transfer course)* as long as all requirements listed in this section (IV) are completed.

Courses applied to meet AGECA requirements vary by major. Refer to the Program (Degree) Search at curriculum.maricopa.edu for specific course requirements. Some courses may be met by Required Courses or Restricted Electives. Some of these courses also have Awareness Areas designations and can be used to satisfy [C], [G] and/or [H] requirement(s) as well other AGECA requirements, Required Course(s) or Restricted Elective(s). Courses may meet more than one requirement but are only counted once toward the total credits for the degree. AGECA designations are subject to change.

See AGEC matrix for each course's value(s) in the semester it is taken.

A. First-Year Composition [FYC].....	6*
ENG101 OR ENG107.....	(3)*
AND ENG102 OR ENG108.....	(3)*
B. Literacy and Critical Inquiry [L].....	3
May be met by CRE101 among other courses	
C. Mathematical Applications [MA].....	3-6
Requires a course in college mathematics (MAT140, MAT141, MAT142, MAT145, MAT146) or college algebra (MAT150, MAT151, MAT152, MAT155, MAT156) or precalculus (MAT187, MAT188) or higher [MA]-approved general education course.	
D. Computer/Statistics/Quantitative Applications [CS].....	3
E. Humanities, Arts and Design [HU].....	6
Students are encouraged to choose course work from more than one discipline.	
F. Social-Behavioral Sciences [SB].....	6
Students are encouraged to choose course work from more than one discipline.	
G. Natural Sciences [SQ/SG].....	8
The lecture courses selected for Natural Sciences must include or be accompanied by the corresponding laboratory courses for a total of four credits each. Credits for lecture and lab components may be combined or each may carry separate credit. At least four credits must be designated as SQ-Science Quantitative. Eight credits of SG-Science General will not satisfy this requirement.	
H. Awareness Areas.....	0-6
Courses may be used to satisfy other AGECA requirements and one or more Awareness Area(s). (See <u>AGEC matrix</u> for current course values.)	
1. Cultural Diversity in the United States [C].....	(0-3)

2. Global Awareness [G] OR Historical Awareness [H]..... (0-3)

V. MCCC Additional Requirements..... 0-3

As noted below, courses in this area may also be applied toward AGEC-A requirements.

A. Oral Communication (0-3)

COM100 [SB] Introduction to Human Communication OR

COM110 [SB] Interpersonal Communication OR

COM225 [L] Public Speaking OR

COM230 [SB] Small Group Communication (3 credits) OR

COM263 [SB], [C], [G] Elements of Intercultural Communication (3 credits)

VI. General Electives..... Number varies

Select courses 100-level or higher if needed to complete a minimum of 120 semester credits. Ideally, students should select courses that meet requirements for their major/area of interest and graduate-level transfer institution.

Maricopa courses and external courses evaluated as Maricopa equivalents, departmental electives (e.g., HISELC for a history elective), or general electives (GENELC). For appropriate course selection, students should consult with an academic advisor.

TOTAL..... 120**

*FYC may be met with fewer than 6 credits if a student has transfer credit from ASU, NAU or UAZ for a single course that meets FYC in full.

**The minimum is 120 semester credits; however, the specific number of credits needed for a BBA degree may vary by specific major. Refer to the Program (Degree) Search at curriculum.maricopa.edu for credit minimums by major.

Catalog Common Pages 2025-2026

MARICOPA COUNTY COMMUNITY COLLEGE DISTRICT

2.2.1 Admission Policy AMENDED through the Administrative Regulation Approval Process, May 12, 2025;
2.2.2 Admission Information AMENDED through the Administrative Regulation Approval Process, May 12, 2025;
2.2.8 Registration AMENDED through the Administrative Regulation Approval Process, May 12, 2025;
2.2.9 Tuition and Fees AMENDED through the Administrative Regulation Approval Process, May 12, 2025;
2.2.10 Refund Policy AMENDED through the Administrative Regulation Approval Process, May 12, 2025;
2.3.9 General Graduation Requirements AMENDED through the Administrative Regulation Approval Process, May 12, 2025;
2.3.13 Course Substitutions and Waivers AMENDED through the Administrative Regulation Approval Process, May 12, 2025;
2.5.2 Student Conduct Code AMENDED through the Administrative Regulation Approval Process, May 12, 2025;
2.5.3 Student Records AMENDED through the Administrative Regulation Approval Process, May 12, 2025;
S-5 Student Financial Assistance AMENDED through the Administrative Regulation Approval Process, May 12, 2025;
S-6 Instructional and Final Grade Grievance Process AMENDED through the Administrative Regulation Approval Process, May 12, 2025;

The following are a portion of the Administrative Regulations used in managing the day-to-day operations of the Maricopa County Community College District (MCCCD) and are subject to change. Administrative Regulations are amended, adopted, or deleted as necessary and are subject to a formal approval process. Administrative Regulations are referenced by number, which corresponds with the regulations on the MCCCD web site:

<https://district.maricopa.edu/regulations>

Some regulations include reference to Arizona Revised Statutes from the State of Arizona and are noted as “ARS” followed by a reference number.

2.4.1 General Statement

The Maricopa Community Colleges are dedicated to providing a healthy, comfortable and educationally productive environment for students, employees and visitors.

2.4.2 Nondiscrimination (see [5.1.1 Maricopa EEO Policy](#))

It is the policy of the Maricopa County Community College District (MCCCD), (consisting of Chandler-Gilbert Community College, the District Office, Estrella Mountain Community College, GateWay Community College, GateWay Community College - Central City, Glendale Community College, Mesa Community College, Paradise Valley Community College, Phoenix College, Rio Salado Community College, Scottsdale Community College, South Mountain Community College, and all affiliated locations) to:

1. Recruit, hire, and promote in all job groups, and to ensure that all Human Resources (HR) employment selection and decision practices do not discriminate, nor tolerate discrimination in employment against any applicant or employee, on the basis of race, color, religion, sex, sexual orientation, gender identity, national origin, citizenship status (including document abuse), age, disability, pregnancy, veteran status or genetic information.
2. Administer all HR employment selection and decision practices pertaining to advertising, benefits, compensation, discipline (including probation, suspension, and/or involuntary termination for cause or layoff), employee facilities, performance evaluation, recruitment, social/recreational programs, and training will be administered without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, citizenship status (including document abuse), age, disability, pregnancy, veteran status or genetic information.
3. Hold each level of management responsible for ensuring that all employment policies, procedures, and activities are in full compliance with all applicable federal, state, and local EEO statutes, rules, and regulations.
4. Maintain an educational environment that does not discriminate or tolerate discrimination on the basis of race, color, religion, sex, sexual orientation, gender identity, national origin, citizenship status (including document abuse), age, disability, pregnancy, or veteran status in federally funded programs, activities and MCCCD sponsored events.

5. Hold each level of academic and student life management responsible for ensuring that all academic environments and activities are in full compliance with all applicable federal, state, and local non-discrimination laws.

AMENDED by Direct Approval from the Chancellor Approval, April 8, 2020

AMENDED through the Administrative Regulations Approval Process, January 2, 2020

2.4.3 Equal Opportunity Statement (see [5.1.3 EEO Policy Statement](#))

It is the policy of the Maricopa County Community College District (MCCCD) to promote equal employment opportunities through a positive continuing program. This means that Maricopa will not discriminate, nor tolerate discrimination in employment or education, against any applicant, employee, or student because of race, color, religion, sex, sexual orientation, gender identity, national origin, citizenship status (including document abuse), age, disability, pregnancy, veteran status or genetic information. Additionally, it is the policy of Maricopa to provide an environment for each Maricopa job applicant and employee that is free from sexual harassment, as well as harassment and intimidation on account of an individual's race, color, religion, sex, sexual orientation, gender identity, national origin, citizenship status (including document abuse), age, disability, pregnancy, veteran status or genetic information.

In addition, lack of English language skills is not a barrier to admission into Career and Technical Education (CTE) programs or skill centers.

AMENDED by Direct Approval from the Chancellor, April 8, 2020

AMENDED through the Administrative Regulations Approval Process, January 2, 2020

AFFIRMATIVE ACTION STATEMENTS

Affirmative Action Policy Statement for Individuals with Disabilities

In conformance with the provisions of Section 503 of the Rehabilitation Act of 1973, as amended, and the implementing regulations, 41 CFR 60-741.5 (a), as amended, Maricopa County Community College District (MCCCD) will not discriminate, nor tolerate discrimination in employment or education, against any applicant, employee, or student because of physical or mental disability in regard to any position for which the known applicant or employee is qualified. MCCCD agrees to take affirmative action to employ, advance in employment, and otherwise treat known qualified individuals with disabilities without regard to their physical or mental disability in all human resources selection and decision practices, such as the following: advertising, benefits, compensation, discipline (including probation, suspension, and/or termination for cause or layoff), employee facilities, performance evaluation, recruitment, social/recreational programs, and training. MCCCD will also continue to administer these practices without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, citizenship status (including document abuse), age, disability, veteran status or genetic information. Additionally, all applicants and employees are protected from coercion, intimidation, interference, or discrimination for filing a complaint or assisting in an investigation under the Act.

Affirmative Action Policy Statement for Other Eligible Veterans, Special Disabled Veterans, and Vietnam Era Veterans

In conformance with the Vietnam Era Veterans Readjustment Assistance Act of 1974, the Veterans Employment Opportunities Act of 1998, and the implementing regulations, 41 CFR 60-250 (k), Maricopa County Community College District (MCCCD) will not discriminate, nor tolerate discrimination in employment or education, against any applicant, employee, or student because they are a special disabled veteran or Vietnam era veteran in regard to any position for which the known applicant or employee is qualified. MCCCD agrees to take affirmative action to employ, advance in employment, and otherwise treat known qualified special disabled veterans and Vietnam era veterans without discrimination based upon their disabled or veteran status in all human resources selection and decision practices, such as the following: advertising, benefits, compensation, discipline (including probation, suspension, and/or termination for cause or layoff), employee facilities, performance evaluation, recruitment, social/recreational programs, and training. MCCCD will continue to administer these practices without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, citizenship status (including document abuse), age, disability, veteran status or genetic information. Additionally, MCCCD agrees to post all suitable job openings at the local office of the State employment service where the job opening occurs. This includes full-time, temporary greater than 3 days' duration, and part-time

employment. Finally, all applicants and employees are protected from coercion, intimidation, interference, or discrimination for filing a complaint or assisting in an investigation under the Act.

Notice of Americans with Disabilities Act (ADA)/ Section 504 of the Rehabilitation Act/Title IX Coordinator (see [5.1.7 Notice of Americans with Disabilities Act \(ADA\)/Section 5004 of the Rehabilitation Act/Title IX Coordinator](#))

Under the ADA and Section 504, the Maricopa County Community College District (MCCCD) recognizes the obligation to provide overall program accessibility throughout its locations for qualified disabled individuals. Students and employees can raise concerns or make complaints, without retaliation, about matters made unlawful under the ADA.

EMPLOYEES

The District Office and each College must post the address and telephone number for the individual responsible for coordinating services and/or activities relating to the Americans with Disabilities Act (42 U.S.C. Chapter 126), Section 504 of the Rehabilitation Act (29 U.S.C. §794(d)), and all other applicable law. The Notice will specify how employees can request reasonable accommodations.

College ADA Coordinators (Credentials are needed to enter secure site.)

STUDENTS

The District Office and each MCCCD location must post the address and telephone number for the individual responsible for coordinating services and/or activities relating to the Americans with Disabilities Act (42 U.S.C. Chapter 126), Section 504 of the Rehabilitation Act (29 U.S.C. §794(d)), and Title IX of the Education Amendments of 1972 (20 U.S.C. §1681), using the format below:

- ADA/504/Title IX Coordinator
- Address
- Phone #
- Email address

Additionally, each college/center must publish electronically or in print the above information in student handbooks and catalogs.

The designated ADA/504/Title IX Coordinator at each college/center will provide information as to the existence and location of services, activities, and facilities that are accessible to and usable by individuals with disabilities. Likewise, under Title IX, there is an obligation to provide services and program accessibility in a gender-neutral manner.

Title IX Coordinators

ADA/504 Managers

AMENDED through the Administrative Regulations Approval Process, January 2, 2020

Governing Values (Board Policy 4.1)

Our Vision: A Community of Colleges—Colleges for the Community—working collectively and responsibly to meet the life-long learning needs of our diverse students and communities.

Our Mission: The Maricopa Community Colleges provide access to higher education for diverse students and communities. We focus on learning through:

University Transfer Education
General Education
Developmental Education
Workforce Development
Student Development Services
Continuing Education
Community Education
Civic Responsibility
Global Engagement

Our Institutional Values: The Maricopa Community Colleges are committed to:

Community

We value all people—our students, our employees, their families, and the communities in which they live and work. We value our global community of which we are an integral part.

Excellence

We value excellence and encourage our internal and external communities to strive for their academic, professional and personal best.

Honesty and Integrity

We value academic and personal honesty and integrity and believe these elements are essential in our learning environment. We strive to treat each other with respect, civility and fairness.

Inclusiveness

We value inclusiveness and respect for one another. We believe that team work is critical, that each team member is important; and we depend on each other to accomplish our mission.

Innovation

We value and embrace an innovative and risk-taking approach so that we remain at the forefront of global educational excellence.

Learning

We value lifelong learning opportunities that respond to the needs of our communities and are accessible, affordable, and of the highest quality. We encourage dialogue and the freedom to have an open exchange of ideas for the common good.

Responsibility

We value responsibility and believe that we are each accountable for our personal and professional actions. We are responsible for making our learning experiences significant and meaningful.

Stewardship

We value stewardship and honor the trust placed in us by the community. We are accountable to our communities for the efficient and effective use of resources as we prepare our students for their role as productive world citizens.

ADMISSION, REGISTRATION AND ENROLLMENT

2.1 General Regulation

1. General Statement

Compliance with Policies, Rules and Regulations

Every student is expected to know and comply with all current published policies, rules and regulations as stated in the college catalog, class schedule, and/or student handbook. Documents are available on each college's website.

Policies, courses, programs, fees and requirements may be suspended, deleted, restricted, supplemented or changed through action of the Governing Board of the Maricopa Community Colleges.

The Maricopa Community Colleges reserve the right to change, without notice, any materials, information, curriculum, requirements and regulations.

Note: The regulations that comprise the student section contain language that appears in various sources such as the Catalog Common Pages and the Student Handbook. All areas became Administrative Regulations with the 1996 adoption of the Governance Model. Changes are made annually either through the Administrative Regulations approval process, or by Board approval for those items that fall under its statutory duty, such as Tuition and Fees. In an effort to prevent duplication, topics in this section may be incorporated by reference, as they are featured in other areas of the manual and are noted accordingly.

The Maricopa County Community College District Vision, Mission and Values that are featured in the Common Pages are a part of approved Governing Board policy and are located in the policy section of the manual. As such, the following statement related to Outcomes Assessment that appears in the Common Pages is presented here as a general statement.

2. Outcomes Assessment

The mission of the Maricopa Community Colleges is "to create and continuously improve affordable, accessible, and effective learning environments for the lifelong educational needs of the diverse communities we serve." In order to evaluate how successfully the Maricopa County Community College District accomplishes this mission, student outcomes will be assessed as part of the continuous improvement process.

Students may be asked to participate in a variety of assessment activities at each college. Assessment results will be used to improve educational programs, services and student learning.

2.2.1 Admission Policy

Persons meeting the admissions criteria may attend any Maricopa Community College of their choice. Falsification of any admission materials or official college records may be cause for denial or cancellation of admission. Exceptions to the admissions policies may be requested through the Admissions and Standards Committee. Admission is determined in accordance with state law (ARS §§15-1805.01 and 15-1821) and regulations of the Maricopa Community Colleges Governing Board.

Admission Classifications

1. Admission of Regular Students

Admission to the community college in Arizona may be granted to any person who meets at least one of the following criteria:

- A. Is a graduate of a high school, which is accredited by a regional accrediting association as defined by the United States Office of Education or approved by a State Department of Education or other appropriate state educational agency.
- B. Has a high school certificate of equivalency.
- C. Is at least 18 years of age and demonstrates evidence of potential success in the community college.
- D. Is a transfer student in good standing from another college or university.

2. Admission of Students Under 18 Years of Age

- A. In accordance with ARS15-1805.01 AND ARS15-1821 the colleges have adopted an admission process for students under the age of 18. These students have the same rights and responsibilities as any other college student. Admission to the college does not guarantee admission to a specific certificate or degree program, or to all courses offered by the college. See 2.2.8 for more information regarding the registration/enrollment process.
- B. A community college in this state shall grant admission to any student who is under eighteen years of age and who achieves at least one of the following:
 - i. A composite score of 720 or more on the Preliminary Scholastic Aptitude Test (PSAT).
 - ii. A composite score of 720 or more on the Scholastic Aptitude Test (SAT).
 - iii. A composite score of twelve or more on the American College Test (ACT).
 - iv. A passing score on the relevant portions of the statewide assessment.
 - v. The completion of a college placement method designated by the community college district that indicates the student is at the appropriate college level for the course.
 - vi. Is a graduate of a private or public high school or has a high school certificate of equivalency.
- C. Home schooled students are exempt from this sub-section (per state law). Students will be required to take the EdReady reading assessment to determine college readiness for admissions and will be required to meet one of the college course placement options for enrolling into specific classes.

3. Specialized Vocational / Training Program

Students who enroll in vocational courses may be admitted on an individual basis with the approval of college officials if the students meet the established requirements of the courses for which the student enrolls and the college officials determine that the student's admission is in the best interest of the student.

4. Western Undergraduate Exchange Program

The Western Undergraduate Exchange (WUE) program is a student exchange program coordinated by the Western Interstate Commission for Higher Education (WICHE) and administered by the Arizona Board of Regents. Through WUE, students who reside in western states (Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, North Dakota, Oregon, South Dakota, Utah, Washington, and Wyoming), Guam and the Commonwealth of the Northern Mariana Islands (CNMI) and who meet the eligibility requirements, pay 150 percent of the regular resident tuition plus fees. Students must mark prominently on the Student Information Form that they seek admission as WUE students. Students may not apply as out-of-state students and expect to receive the WUE tuition rate after admitted. Once admitted as WUE students, students may not petition for in-state residency. Further information may be obtained from the Admissions and Records Office/Office of Student Enrollment Services.

5. Admission of F-1 Nonimmigrant Students

Prospective students should contact the Admissions and Records Office/Office of Student Enrollment Services or designated office for the international student application form(s) or apply online at www.maricopa.edu/become-a-student/international-admissions. When completed, the form(s) should be submitted to the Admissions and Records Office/Office of Student Enrollment Services or the International Education office with all requested supporting documents. After the file has been reviewed, a notice will be sent to the applicant indicating either acceptance or denial of admission.

To be guaranteed consideration for admission, all application materials must be received by July 1 for the fall semester and November 1 for the spring semester.

Prospective students seeking admission based on F-1 nonimmigrant status must provide proof of secondary school completion with documentation comparable to a United States high school diploma or higher degree. It is recommended that F-1 nonimmigrant students have graduated in the upper 50% of their secondary school (high school or equivalent) in order to ensure success in academic classes at this college. Applicants for admission to the college must have high school and college (if applicable) transcripts sent directly from the high school or college to the Admissions and Records Office/Office of Student Enrollment Services or designated office. In addition, it is the applicant's responsibility to have all transcripts translated into English and evaluated by a foreign credential evaluation service if necessary.

A. Admission to Academic Programs

Applicants who wish to enroll in an academic program at the college must present evidence of English language proficiency. Some colleges may have a higher minimum score requirement for admission to specific academic programs. Students should contact their respective college for its English language proficiency requirements.

1. If the Test Of English As A Foreign Language (TOEFL iBT) is used to satisfy this requirement, a minimum score of 70 is required.
2. If the languagecert academic test is used to satisfy this requirement, a minimum score of B2+ is required.
3. If Duolingo is used to satisfy this requirement, a minimum score of 100 is required.
4. If the International Language Testing System (IELTS) is used to satisfy this requirement, a minimum IELTS overall Band Score of 6.0 is required.
5. The Dean or Director of the Admissions and Records Office/Office of Student Enrollment Services or designee of the college may accept other proof of English language proficiency for admission purposes; including, but not limited to, the ACCUPLACER, ASSET, COMPASS and CELSA TESTS.

B. Admission to an Intensive English Program

Applicants for admission to an Intensive English Program are advised to check with individual colleges for their respective admission requirements. Applicants must provide evidence of at least an intermediate command of English by way of one or more of the following criteria:

1. At least six years of English language instruction as shown by the applicant's school transcript(s);
2. A minimum TOEFL iBT SCORE OF 20.
3. A minimum Languagecert Academic Test Score of A1.
4. A minimum Duolingo Score of 15.
5. A minimum IELTS Score of 2.0.

6. An original letter of recommendation from a teacher, school principal or headmaster/ headmistress, or the director of an English language institute attesting to the applicant's proficiency at the intermediate level;
7. Other credentials, test scores, interview results, or evidence accepted by the coordinator of an intensive English program or the college's responsible designee. Students admitted to an Intensive English Program will not be allowed to enroll in courses outside those officially designated as part of the program unless and until they have met all of the prerequisites or other course requirements.
8. Foreign students under certain types of visas may need special permission to enroll and should contact the appropriate college official.

C. Financial Support

Evidence of financial support will be required prior to issuance of the I-20 form. The colleges have no scholarship or financial aid provisions for foreign students; therefore, students must be fully prepared to meet the necessary financial obligations for the full time they will be in the United States. The colleges estimate a student's average expenses for 10 months to be:

Tuition and Fees	\$9, 115 (1)
Living Expenses	\$17, 200 (2)
Books	\$1,104 (3)
Health Insurance	\$2,800 (4)
Total	\$30, 219 (5)

D. Dependent Financial Guarantee

Evidence of financial support for dependents of F-1 and M-1 students (spouse and dependent children) is also required: \$5,000 for the first dependent and \$2,500 for each additional dependent.

E. Health Insurance

All F-1 and M-1 students who have an I-20 issued by one of the Maricopa Community Colleges are required to purchase the Maricopa Community Colleges' international student health insurance plan. Health insurance coverage for dependents of F-1 and M-1 students is highly recommended. The Maricopa Community Colleges contracts with an insurance provider annually to offer a health insurance plan for F-1 and M-1 students. For more information contact the college Admissions and Records Office/Office of Student Enrollment Services or designated international student office.

Footnotes:

- (1) Based on 2023-2024 tuition and fee schedule.
- (2) Based on estimated living expenses for two (2) semesters (10 months).
- (3) Based on average new and used textbook prices and Rental Rates. Assumes books are sold at the end of the semester.
- (4) Based on the estimated 2023-2024 insurance premiums for the mandatory Maricopa Community Colleges' International Student Health Plan.
- (5) Applicants must provide evidence of this minimum amount of financial support before an I-20 is issued.

AMENDED through the Administrative Regulations Approval Process, May 12, 2024

AMENDED through the Administrative Regulations Approval Process, June 12, 2023

AMENDED through the Administrative Regulation Approval Process, May 24, 2022

AMENDED by Direct Approval from the Chancellor, June 4, 2019

AMENDED through the Administrative Regulations Approval Process, June 5, 2017

2.2.2 Admission Information

Students must file a Student Information Form, online or in-person, with the Admissions and Records Office/Office of Student Enrollment Services at the college of attendance. There is no charge for this service.

1. Student Classifications

Some financial aid programs have specific criteria based on the student's classification (grade level). A student's classification does not necessarily correspond to the number of semesters or credits required to complete all degree

requirements, as some degree programs require more than the standard 60 for associate's or 120 for bachelor's degrees. Classification includes MCCC and accepted transfer credit.

Freshman	You are classified as a Freshman if you have completed less than 30 college-level credits toward a degree.
Sophomore	You are classified as a Sophomore if you have completed at least 30 college-level credits toward a degree.
Junior	You are classified as a Junior if you have completed at least 60 college-level credits and have declared a bachelor's degree program in the Student Information System (SIS).
Senior	You are classified as a Senior if you have completed at least 90 college-level credits and have declared a bachelor's degree program in the Student Information System (SIS).

2. Student Identification Number

Disclosure of the social security number is voluntary (ARS §15-1823). However, students must use social security numbers for reporting information pertaining to potential educational tax credits and for processing federal financial aid applications and Veterans Administration benefits.

3. Residency for Tuition Purposes (See [Appendix S-1](#))

All students are classified for tuition purposes under one of the following residency classifications:

- A. Maricopa County resident
- B. Out-of-County resident
- C. Out-of-State resident (including F-1 non-immigrant students and students on other non-immigrant visas)

4. Residency Determination

Residency for tuition purposes is determined in accordance with state law (ARS §15-1801 et seq. and ARS§ 15-1803) and regulations of the Maricopa Community Colleges Governing Board. All of the Maricopa Community Colleges are subject to the above statutes and regulations. Students who have questions about their residency should contact the Admissions and Records Office/Office of Student Enrollment Services for clarification.

A. Implementation

- i. An applicant must be eligible to attend post-secondary education in the United States prior to being eligible to register for classes and pay fees.
- ii. Domicile status must be established before the student registers and pays fees. It is the student's responsibility to register under the correct domicile status.
- iii. Enforcement of domicile requirements shall be the responsibility of the Chancellor of the Maricopa Community Colleges. The Chancellor has charged the Director of Admissions and Records or other designee at each college to make the initial domicile classification. In determining a student's classification, the college may consider all evidence, written or oral, presented by the student and any other information received from any source which is relevant to determining classification. The college may request written sworn statements or sworn testimony of the student.
- iv. A request for review of the initial classification may be made to a district review committee. The request must be in writing, signed by the student and accompanied by a sworn statement of all facts relevant to the

matter. The request must be filed with the admissions officer of the college within ten (10) days of receipt of notification of classification as a non-resident. Failure to properly file a request for review within the prescribed time limit constitutes a waiver of review for the current enrollment period. The decision of the review committee shall be final.

B. Definitions

- i. "Armed forces of the United States" means the Army, the Navy, the Air Force, the Marine Corps, the Coast Guard, the commissioned corps of the United States Public Health Services, the National Oceanographic and Atmospheric Administration, the National Guard, or any military reserve unit of any branch of the armed forces of the United States.
- ii. "Continuous attendance" means enrollment at one of Maricopa Community Colleges as a full-time or part-time student for a normal academic year since the beginning of the period for which continuous attendance is claimed. Students need not attend summer sessions or other such intersession beyond the normal academic year in order to maintain continuous attendance.
- iii. "Maricopa County resident" means an individual who lives in Maricopa County and has lived in the state of Arizona for at least one year prior (365 days) to the first day of the semester (as published in the approved MCCC Academic Calendar posted online at ACADEMIC CALENDARS) and who is a United States citizen or in a lawful status. In-state residency must be established prior to county residency for those moving from other states. Refer to Section C for guidelines.
- iv. "Domicile" means a person's true, fixed, and permanent home and place of habitation. It is the place where he or she intends to remain and to which he or she expects to return when he or she leaves without intending to establish a new domicile elsewhere. Visa status must confer the ability to establish domicile in the United States in order to be classified as an in-state student.
- v. "Emancipated person" means a person who is neither under a legal duty of service to his parent nor entitled to the support of such parent under the laws of this state.
- vi. "Full-time student" means one who registers for at least twelve (12) credit hours per semester.
- vii. "Part-time student" means one who registers for fewer than twelve (12) credit hours per semester.
- viii. "Parent" means a person's father, or mother, or if one parent has custody, that parent, or if there is no surviving parent or the whereabouts of the parents are unknown, then a guardian of an unemancipated person if there are not circumstances indicating that such guardianship was created primarily for the purpose of conferring the status of an in-state student on such unemancipated person.

C. Criteria for Determining Residency

- i. In-State Student Status
 1. Except as otherwise provided in this article, no person having a domicile elsewhere than in this state is eligible for classification as an in-state student for tuition purposes. (Applicants applying for in-state tuition status may be required to provide supporting documentation for identification and residency classification.)
 2. A person is not entitled to classification as an in-state student until the person is domiciled in this state for one year preceding the official starting day of the semester, except that a person whose domicile is in this state is entitled to classification as a Maricopa County resident if the person meets one of the following requirements:
 - a. The person's parent's domicile is in this state and the parent is allowed to claim the person as an exemption for state and federal tax purposes.
 - b. The person is an employee of an employer which transferred the person to this state for employment purposes or the person is the spouse of such an employee.
 - c. The person is an employee of a school District in this state and is under contract to teach on a full-time basis, or is employed as a full-time non-certified classroom aide, at a school within that school District. For purposes of this paragraph, the person is eligible for classification as an in-state student only for courses necessary to complete the requirements for certification by the state board of education to teach in a school District in this state. No member of the person's family is eligible for classification as an in-state student if the person is eligible for classification as an in-state student pursuant to this paragraph, unless the family member is otherwise eligible for classification as an in-state student pursuant to this section. Eligibility for in-state tuition is subject to verification of

intent to domicile in this state. Determination of residency is made by the admissions and records office/office of enrollment services.

- d. The person's spouse (spouse must be in an eligible status to qualify for in-state residency) has established domicile in this state for at least one year and has demonstrated intent and financial independence and is entitled to claim the student as an exemption for state and federal tax purposes or the person's spouse was temporarily out of state for educational purposes, but maintained a domicile in this state. If the person is a non-citizen, the person must be in an eligible visa status pursuant to federal law to classify as an in-state student for tuition purposes.
3. The domicile of an unemancipated person is that of such person's parent.
4. An unemancipated person who remains in this state when such person's parent, who had been domiciled in this state, removes from this state is entitled to classification as an in-state student until attainment of the degree for which currently enrolled, as long as such person maintains continuous attendance.
5. A person who is a member of the armed forces of the United States and who is stationed in this state pursuant to military orders or who is the spouse or a dependent child of a person who is a member of the armed forces of the United States and who is stationed in this state pursuant to military orders is entitled to classification as an in-state student. The student does not lose in-state student classification while in continuous attendance toward the degree for which he or she is currently enrolled.
6. A person who is a member of the armed forces of the United States or the spouse or a dependent of a member of the armed forces of the United States is entitled to classification as an in-state student if the member of the armed forces has claimed this state as the person's state of home record for at least twelve consecutive months before the member of the armed forces, spouse or dependent enrolls in a university under the jurisdiction of the Arizona Board of Regents or a community college under jurisdiction of a community college district governing board. For purposes of this subsection, the requirement that a person be domiciled in this state for one year before enrollment to qualify for in-state student classification does not apply.
7. Immediate classification as an in-state student shall be granted to a veteran who meets the provisions of Arizona statute HB 2091, paragraph G, which reads:
A person holding an honorable discharge from the uniformed services of the United States from either active duty or reserve or national guard status, or who has retired from active duty or reserve or national guard status, shall be granted immediate classification as an in-state student and, while continuously enrolled, does not lose in-state student classification if the person has demonstrated objective evidence of intent to be a resident of Arizona that, for the purposes of this section, includes at least one of the following:
 1. Registration to vote in this state.
 2. An Arizona driver license.
 3. Arizona motor vehicle registration.
 4. Employment history in Arizona.
 5. Transfer of major banking services to Arizona.
 6. Change of permanent address on all pertinent records.
 7. Other materials of whatever kind or source relevant to domicile or residency status.
8. A student using Chapter 30, 33, or 35 benefits who does not otherwise qualify under item 7 above (paragraph G of PL 2091), or a veteran's dependent or spouse who is using transferred Post-9/11 GI Bill® (Chapter 33) benefits or the Marine Gunnery Sergeant John David Fry Scholarship, will be eligible for immediate classification as an in-state student if they provide the institution a current certificate of eligibility or ebenefits statement showing the student is eligible for Chapter 30, 33, or 35 Veteran Affairs (VA), education benefits and documentation showing the student is residing within the state.
Students are required to submit the following:

1. Certificate of eligibility letter or ebenefits statement from the Veteran Affairs (VA) awarding Chapter 30, 33 or 35 benefits or the Fry Scholarship, or the Dept. of Defense document approving the transfer of CH. 33 benefits.
2. Students must also provide at least one of the following to show presence within the state:
 - A. Registration to vote in this state.
 - B. An Arizona driver license.
 - C. Arizona motor vehicle registration.
 - D. Employment history in Arizona.
 - E. Transfer of major banking services in Arizona.
 - F. Change of permanent address on all pertinent records.
 - G. Other materials of whatever kind or source relevant to domicile or residency status.

GI Bill® is a registered trademark of the U.S. Department of Veterans Affairs (VA). More information about education benefits offered by VA is available at the official U.S. government Web site at <https://www.benefits.va.gov/gibill>.

9. Per Arizona state law, a person who is honorably discharged from the armed forces of the United States on either Active Duty or Reserve or National Guard Status, or who has retired from Active Duty or Reserve or National Guard Status, shall be granted immediate classification as an in-state student on honorable discharge from the armed forces and, while in continuous attendance toward the degree for which currently enrolled, does not lose in-state student classification if the person has met the following requirements:

A. Registered to vote in this state.

- B. Demonstrated objective evidence of intent to be a resident of Arizona which, for the purposes of this section, include at least one of the following:

1. An Arizona driver license
2. Arizona motor vehicle registration
3. Employment history in Arizona
4. Transfer of major banking services to Arizona
5. Change of permanent address on all pertinent records
6. Other materials of whatever kind or source relevant to domicile or residency status

10. A student using any VA educational benefits who does not otherwise qualify under items above shall be granted immediate classification as an in-state student, and while continuously enrolled does not lose in-state student classification if the person has demonstrated objective evidence of intent to be a resident of Arizona that for the purposes of this section, includes at least one of the following:

1. Registration to vote in this state
2. An Arizona driver license

3. Arizona motor vehicle registration
4. Employment history in Arizona
5. Transfer of major banking services to Arizona.
6. Change of permanent address on all pertinent records
7. Other material of whatever kind or source relevant to domicile or residency status.

11. A person who is a member of an Indian Tribe recognized by the United States Department of the Interior whose reservation land lies in the state and extends into another state and who is a resident of the reservation is entitled to classification as an in-state student.

ii. Alien In-State Student Status

1. An alien is entitled to classification as an in-state refugee student if such person has been granted refugee status in accordance with all applicable laws of the United States and has met all other requirements for domicile.
2. Notwithstanding any other law, a student, other than a nonimmigrant alien as described in 8 United States Code section 1101(A)(15), who meets both of the following requirements is eligible for in-state tuition at any community college as defined in ARS 15- 1401:

Attended any public or private high school option or homeschool equivalent pursuant to ARS 15-802 while physically present in this state for at least two years.

Graduated from any public or private high school option or homeschool equivalent pursuant to ARS 15-802 while physically present in this state or obtained a high school equivalency diploma in this state.

3. Persons without lawful immigration status are eligible for in-state tuition pursuant to subsection 2 of this section.
4. A student will be assessed out-of-state tuition until such time that documentation of status is received in the Office of Admissions and Records/Enrollment Services and (eligibility for) residency is confirmed. Documentation must be provided prior to the end of the term in which residency classification is being requested. Documentation received after the end of term will be used for residency determination in subsequent terms.
5. In establishing domicile, the alien must not hold a visa that prohibits establishing domicile in the United States and this state. After meeting other domicile requirements, students holding valid, unexpired visas in the following categories may be classified as in-state students (See Appendix S-1A).
6. A student must verify U.S. citizenship, permanent residency, or other lawful immigration status. Lawful immigration status means they have legal authority to be in the United States and also have the authority to go to school while in the United States.
7. Students who hold a current or expired visa and have applied for a change of status will retain their immigration status based on their prior visa status and not the status or visa for which they are applying. Students will need to submit a copy of the new visa card with the updated status. The timeline for establishing domicile begins with the issue date on the current visa that allows for the establishment of residency .
8. Please note: two requirements must be met to qualify for instate tuition.
 1. A student must meet the domicile residency requirement of residing in the State of Arizona for one year preceding the official start of the semester.
 2. The student must have an immigration status that allows for the establishment of residency for one (1) year.

9. (Applicants applying for in-state tuition status will be required to provide supporting documentation for identification and residency classification.) All applicants for in-state tuition may be required to provide a combination of the following documents:

- An Arizona Driver's license issued after 1996 or an Arizona non-operating identification license or an Arizona Instruction Permit
- A birth certificate or delayed birth certificate issued in any state, territory, or possession of the United States (A hospital record/certificate IS not acceptable. A certified abstract of birth with the official state seal and/or watermark is acceptable).
- A United States certificate of birth abroad.
- A United States Passport.
- A Foreign Passport with a United States Visa.
- An I-94 Form with a Photograph.
- An appropriately designated United States Citizenship and Immigration Services Employment Authorization (Work Permit) or Refugee Travel Document [as listed on the Employee Authorization Document Chart]. (Additional documents may be required with an employee authorization card.)
- A United States Permanent Resident Card
- A United States Certificate of Naturalization.
- A United States Certification of Citizenship.
- A Tribal Certificate of Indian Blood.
- A Tribal or Bureau of Indian Affairs Affidavit of Birth.

Tribal Members, the Elderly and "Persons with Disabilities or incapacity of the mind or body," may submit certain types of documents under Section 1903 of the Federal Social Security Act (42 UNITED STATES CODE 1396B, As Amended By Section 6036 Of The Federal Deficit Reduction Act of 2005)**

* A document issued by a federally recognized Indian tribe evidencing membership or enrollment in, or affiliation with, such tribe.

iii. Presumptions Relating to Student Status

Unless there is evidence to the contrary, the registering authority of the community college or university at which a student is registering will presume that:

1. No emancipated person has established a domicile in this state while attending any educational institution in this state as a full-time student, as such status is defined by the community college district governing board or the Arizona Board of Regents, in the absence of a clear demonstration to the contrary.
2. Once established, a domicile is not lost by mere absence unaccompanied by intention to establish a new domicile.
3. A person who has been domiciled in this state immediately before becoming a member of the armed forces of the United States shall not lose in-state status by reason of such person's presence in any other state or country while a member of the armed forces of the United States.

iv. Proof of Residency

When a student's residency is questioned, the following proof will be required.

1. Establishing Domicile

- a. An affidavit signed by the student must be filed with the person responsible for verifying residency.
- b. A combination of the following may be used in determining a student's domicile in Arizona:
 1. Arizona income tax return
 2. Arizona Voter registration

3. Arizona Motor Vehicle registration
 4. Arizona Driver's license
 5. Employment history in Arizona
 6. Place of graduation from high school
 7. Source of financial support
 8. Dependency as indicated on federal income tax return
 9. Ownership of real property
 10. Notarized statement of landlord and/or employer
 11. Transfer of major banking services to Arizona
 12. Change of permanent address on all pertinent records
 13. Arizona Department of Children Services documents related to foster care placement
 14. Other relevant information
2. County Residency
- A combination of the following may be used to determine a student's county residency:
1. Notarized statements of landlord and/or employer
 2. Source of financial support
 3. Place of graduation from high school
 4. Ownership of real property
 5. Bank accounts
 6. Arizona income tax return
 7. Dependency as indicated on a Federal income tax return
 8. Other relevant information
- D. Concurrent Enrollment in Arizona Public Institutions of Higher Education (ARS §15-1807) (See [Appendix S-3](#))
- Under Arizona Revised Statutes §15-1807, it is unlawful for any non-resident student to register concurrently in two or more public institutions of higher education in this state including any university, college or community college for a combined student credit hour enrollment of more than six (6) credit hours without payment of non-resident tuition at one of such institutions. Any non-resident student desiring to enroll concurrently in two or more public institutions of higher education in this state including any university or community college for a combined total of more than six (6) credit hours who is not subject to non-resident tuition at any of such institutions shall pay the non-resident tuition at the institution of his choice in an amount equivalent to non-resident tuition at such institution for the combined total of credit hours for which the non-resident student is concurrently enrolled.

AMENDED through the Administrative Regulations Approval Process, May 12, 2025

HOUSEKEEPING CHANGE, July 10, 2023

AMENDED through the Administrative Regulations Approval Process, June 12, 2023

AMENDED through the Administrative Regulation Approval Process, May 24, 2022

AMENDED through the Administrative Regulation Approval Process, June 24, 2021

AMENDED through the Administrative Regulations Approval Process, June 30, 2020

AMENDED through the Administrative Regulations Approval Process, November 5, 2019

AMENDED by Direct Approval from the Chancellor, September 17, 2018

AMENDED by Direct Approval from the Chancellor, August 30, 2017

AMENDED by Direct Approval from the Chancellor, August 30, 2015

AMENDED by Direct Approval from the Chancellor, May 20, 2015

2.2.3 Other Admission Information

1. Veterans

By Arizona statute, any failing grades from any Arizona university or community college that were received prior to military service will not be used to determine admission to the community college for the honorably discharged veterans with two years' service in the armed forces of the United States. Students admitted or readmitted to the community college under this statute are subject to progression, retention, graduation and other academic regulations and standards. (See [Administrative Regulation 2.3.6 Withdrawal](#))

2. Ability to Benefit

- A. Federal guidelines require that students who are applying for financial aid demonstrate the ability to benefit. Under federal law, a student who enrolls after June 30, 2012, must be a high school graduate, have a GED certificate, or have completed a secondary school education in a home school setting that is treated as a home school or private school under state law, be admitted as a regular student, and be pursuing an eligible degree or certificate to qualify for federal financial assistance under Title IV of the Higher Education Act.
- B. For students enrolled prior to July 1, 2012, an evaluation during the admission process resulted in the student being admitted to the college with the status of Regular, Regular with Provisional Requirements or Special.
 - i. "Regular" status, for the purpose of 2.2.3.2, is granted to an individual admitted to the college who is a high school graduate, has a GED certificate, or has completed a secondary school education in a home school setting that is treated as a home school or private school under state law. A student without a high school diploma or GED certification and beyond the age of compulsory high school attendance may be a regular status student if the student has been assessed to benefit from college instruction by receiving qualifying scores on approved assessment instruments. All regular status students must be pursuing a degree/certificate in an eligible program.
 - ii. "Regular with Provisional Requirements" status, for the purpose of 2.2.3.2, is granted to a student admitted to the college who is not a high school graduate, does not have a GED certificate, is beyond the age of compulsory high school attendance, or has completed a secondary school education in a home school setting that is treated as a home school or private school under state law, but has been assessed to benefit from college instruction and is pursuing a degree/certificate in an eligible program.
 - iii. "Special" status, for the purpose of 2.2.3.2, is granted to a student admitted to the college for concurrent enrollment or pursuing one or more courses of special interest and who meets all the requirements for admission.

3. Transcripts

The Maricopa Community Colleges reserve the right to require an official transcript for admission to specific programs, for verification of course requisites and for determination of academic standing. The official transcript must be sent directly from the source institution to the college Admissions and Records Office/Office of Student Enrollment Services. The official transcripts may be sent via a secured website. Please contact the Admissions Office of The Maricopa College you plan to attend to verify which secure websites may be valid.

It is the student's responsibility to ensure that official transcripts have been received and are complete.

Students entering as high school graduates may be required to submit high school transcripts. Please contact the Admissions Office of the Maricopa College you plan to attend for more information on preparing a home-schooled official transcript. Students entering as GED recipients may be required to present a copy of the high school equivalency certificate or official report of qualifying GED scores.

4. Educational Assessment

All students are encouraged to undergo an educational assessment to determine course placement. Prospective students who do not possess a high school diploma or GED equivalence certificate are required to complete an educational assessment to determine their ability to benefit from college instruction. See Student Course Placement Process (AR 2.2.7)

5. High Pressure Recruitment Tactics

The Maricopa County Community College District prohibits its employees from engaging in high-pressure recruitment tactics or in providing to any person or entity engaged in student recruitment, admission activity, or in making decisions regarding the award of Title IV, HEA funds, any commissions, bonuses, or other incentive payments based, in any part, directly or indirectly upon successfully securing enrollments or the awarding of financial aid.(34 CFR 668.14(A)(22)(I)).

6. Programs Leading To Licensure

The Maricopa Community Colleges provides disclosures of whether a program meets the academic requirements for professional licensure within Arizona.

7. Determining Student Location

A determination of a student's location is made and documented in the student information system at the time of application on review of the completed student application for admission. A student's initial location at the time of enrollment is defined as where a student is physically located while engaged in their academic program. Students who are not located in a state in which an individual Maricopa Community College(s) is authorized to enroll students or otherwise exempt from authorization may not be enrolled.

Students are required to notify the Maricopa Community College(s) they attend of a change in location. Students may also update their local address at any time in self-service within the student information system. Should college personnel be notified in writing by a student that the physical location where the student will be engaged in their academic program has changed, this is considered a formal receipt of information, and the student will be guided to document the change in self-service within the student information system.

Initial and continued enrollment in an online program may be subject to where the student is physically located while taking the course(s). Students who relocate to a state where the college is not authorized or otherwise exempt, may have their enrollment negatively affected. Students who are pursuing a program leading to licensure or certification should contact the Admissions and Records office at their college to review any potential impacts from a change in location.

AMENDED through Direct Approval by the Chancellor, June 17, 2024

TECHNICAL CHANGE, July 11, 2023F

AMENDED through the Administrative Regulations Approval Process, October 23, 2019

AMENDED through the Administrative Regulations Approval Process, June 5, 2017

2.2.4 Transfer Credit and Prior Learning Assessment

TRANSFER CREDIT

A student enrolling at one of the Maricopa Community Colleges after having attended other post-secondary institutions can have coursework evaluated for transfer credit. To be eligible for evaluation, coursework must appear on official transcripts from the source institutions. The official transcripts must be mailed or sent through an approved electronic transfer method directly from the source institutions to the Admissions and Records/Enrollment Services Office of the receiving institutions. Exceptions may be made for students who are identified as part of a special reverse transfer cohort (e.g. reverse transfer), who have transcript exchange as a cohort condition. Other exceptions may be made on a case by case basis. Hand-carried and emailed transcripts cannot be accepted for an official evaluation. Students should allow approximately 10 days before confirming with your Maricopa Community College that the transcript(s) was received. The Admissions and Records/Enrollment Services office at the receiving institutions will complete course-by-course evaluations for all submitted transcripts upon student request. The award of transfer credit shall not express or imply that all transfer credit will be fully accepted or applied toward all Maricopa degree and certificate requirements.

The Maricopa Community Colleges will evaluate coursework from institutions listed in the *Database of Accredited Postsecondary Institutions and Programs* accredited by recognized U.S. accrediting organizations at the time the coursework was taken. To be "recognized" means that the accreditors in the database have been reviewed by the Council for Higher Education Accreditation (CHEA) or by the U.S. Department of Education (USDE) or both and meet the quality standards of the respective organizations.

College-level courses completed outside the United States and recorded on official transcripts will be evaluated for transfer credit, provided that the institution where the courses were taken is accredited by the Ministry of Education in that country. It is the student's responsibility to submit all foreign and international transcripts to an approved international credential evaluation service to be translated into English (when applicable), evaluated on a course-by-course-basis, and sent directly to the receiving colleges. Contact your College Admissions and Records/Enrollment Services Office to obtain a list of recommended evaluation services.

CONDITIONS OF TRANSFER CREDIT:

- Credits transferred from outside of MCCCDC graded on a plus/minus system are converted to a letter grade associated with MCCCDC's grading scale. The conversion of that plus/minus grade will be determined by the grade point value of each grade, as indicated on the grading scale of the transferring institution. Please refer to [AR 2.3.3 Grading](#). Only courses with a grade equal to 2.0 or better (on a 4.0 scale) are transferable.
- Developmental coursework is accepted for the purpose of fulfilling course prerequisites. However, the credit does not apply toward a degree or certificate, and it does not transfer to another postsecondary institution. It does, however, get added to the Transfer Credit Report as part of the evaluation. Course credit below 100 level, earned at a MCCCDC institution prior to August 2020 or at a sending institution, cannot be used to calculate grade level.
- Courses with different credit systems (quarter hours, trimester, units) are converted to semester hours of credit. The semester conversion of quarter credits is at a rate of .67 semester credits for each quarter credit. For example, 4 quarter credits will convert to 2.68 semester credits. Trimester credits will be determined by the credit definition of the transferring institution, and converted, as needed, to semester credits.
- The age of credit may be considered in applying credit toward degrees and certificate programs as outlined in [A.R. 2.2.5 Catalog Under Which a Student Graduates](#).
- Courses accepted as equivalent do not necessarily apply toward the requirements for the student's declared degree or certificate at MCCCDC.

Please refer to 2.3.9 General Graduation Requirements regarding MCCCDC residency requirements to graduate.

PRIOR LEARNING ASSESSMENT (PLA)

The Maricopa Community Colleges are committed to the idea that people deserve credit for verifiable college-level learning, no matter how it was acquired. Many people have developed learning outside of the traditional classroom. This evaluation of credit is referred to as Prior Learning Assessment, or PLA. Prior learning can be identified and assessed in a variety of ways to determine if college credit should be awarded. Credit is awarded only to certificate or degree seeking students who:

1. plan to enroll, and
2. are admitted and matriculated within the college awarding the credit. Exceptions can be made for contractual agreements.

Exceptions can be made for contractual agreements. One such exception includes evaluation of journeymen cards for apprentices from current or former apprenticeship partners, or other registered apprenticeship sponsors and intermediaries. Credits awarded for journeymen have a specific PLA evaluation process and separate fee policies.

PLA credit may be applied toward a degree program, certificate, general education requirements, required courses, restricted electives, and general electives that count toward the student's elected pathway. Some restrictions may apply depending on the specific program of study. PLA credit may also be used to satisfy prerequisite requirements.

Students seeking an associate degree may be awarded no more than 45 credit hours through Prior Learning Assessment, unless required by a specific program of study within the Maricopa Community Colleges. Up to 60 credits earned through PLA can be applied to a bachelor's degree. Evaluated credit from post-secondary institutions and military credit as indicated on Joint Service transcripts, Community College of the Air Force, and Air University are not included in this credit limitation. Evaluated credit and credit awarded for prior learning does not count as hours in residence for graduation requirements. Please refer to [2.3.9 General Graduation Requirements](#). Exceptions to this institutional regulation must have prior written approval of the Program Director, Faculty Chair, or designee and documentation of rationale and approval included as part of the admission process and/or application to graduate. No more than 20 credit hours may be applied to the Arizona General Education Curriculum (AGEC). Please direct questions about Prior Learning Assessment at the Maricopa Community Colleges to the Admissions and Records/Enrollment Services Office.

PRIOR LEARNING ASSESSMENT FEE SCHEDULE

Transfer credit from accredited and recognized institutions, international coursework that has been officially evaluated by a foreign evaluator service that is a member of the National Association of Credential Evaluation Services (NACES), standardized college-level exams (such as CLEP, AP, IB, DSST, CIE), GED exams, Military Transcripts, ACE (American Council On Education) transcripts, credit received through organizations and companies that offer nationally recognized credit evaluated by ACE, NCCRS, etc. (Straighterline, NOCTI, Study.com, etc.), industry recognized credentials, industry/corporate training, Skill Center and clock hour transcripts.	No fees assessed
Departmental Challenge Exam	\$40 Administrative fee per Exam Request
Individualized Portfolio or other individualized assessments	\$150 Administrative fee per Portfolio Evaluation Request
Journeymen Cards	\$500 Administrative fee per Journeymen Card Evaluation

NATIONAL STANDARDIZED EXAMS

ACE (American Council On Education) has published credit recommendations for a number of national standardized examinations such as the ones listed below in the *Ace National Guide*. The Maricopa Community Colleges use these recommendations as guidelines to award credit for equivalent coursework as well as elective credit. The number of credits listed in the *Ace National Guide* are recommendations only. A college is not required to grant a student the number of credits recommended.

Scores must be sent directly to the Admissions and Records/Enrollment Services Office from the specific testing companies before credit is awarded; equivalencies are subject to review and change. Credit received through Prior Learning Assessment is transferable within the Maricopa Community Colleges but is not necessarily transferable to other colleges and universities. Therefore, students are strongly advised to research the Prior Learning Assessment policies at any college or university outside of the Maricopa Community Colleges to which they plan to transfer. Credit for national standardized exams is awarded based on equivalencies in effect at the time of evaluation. Changes to exams and scores are determined by the respective Maricopa Instructional Councils (ICS) and/or Statewide Articulation Task Forces (ATFS).

Maricopa recognizes the following examinations:

- Advanced Placement (AP)
- American College Testing Proficiency Examination Program (ACT-PEP)
- Cambridge International Exams (CIE), A and AS LEVEL
- College-Level Examination Program (CLEP)
- Defense Activity For Non-Traditional Education Support [DANTES] Subject Standardized Tests (DSST)
- GED, College Ready + Scores
- International Baccalaureate (IB) Diploma/Certificate

Fees for standardized exams are the responsibility of the student.

[Current list of exams and scores](#)

ADVANCED PLACEMENT (AP) CREDIT

Students who have taken an advanced placement course of the College Entrance Examination Board (CEEB) in their secondary school and who have taken an advanced placement examination of the CEEB may receive course credit. Scores must be received directly from CEEB to Admissions and Records/Enrollment Services before credit is awarded.

AMERICAN COLLEGE TESTING PROFICIENCY EXAMINATION PROGRAM

The Maricopa Community Colleges may award credit for the American College Testing Proficiency Examination Program (ACT-PEP) based on the scores earned to Admissions and Records/Enrollment Services.

CAMBRIDGE INTERNATIONAL EXAMINATIONS (CIE) A AND AS LEVEL

Students who have taken a Cambridge International Examination may receive college credit. Scores must be received directly from CIE to Admissions and Records/Enrollment Services before credit is awarded.

COLLEGE LEVEL EXAMINATION PROGRAM (CLEP)

Students who have taken a college level examination of the College Entrance Examination Board (CEEB) may receive college credit. Scores must be received directly to Admissions and Records/Enrollment Services from CEEB before credit is awarded.

Estrella Mountain Community College, Glendale Community College, South Mountain Community College, Rio Salado College, Paradise Valley Community College, and Mesa Community College are CLEP test sites. For more information on registering for the CLEP examinations, contact the Testing Centers at these colleges.

DSST (Formerly DEFENSE ACTIVITY FOR NON-TRADITIONAL EDUCATION SUPPORT or DANTES)

The Maricopa Community Colleges may award credit for DSST Examination Program to individuals who meet or exceed the ACE recommended scores for awarding credit on the DSST exams. The Maricopa Community Colleges do not award credit for ENG 102 through DSST examination. Credit received through DSST is transferable within the Maricopa Community Colleges, but is not necessarily transferable to other colleges and universities.

Currently, DSST proctoring is available at Rio Salado College testing centers. For additional information on registering for DSST examinations, call (480) 517-8560.

Students who have taken a DSST examination may receive college credit. Scores must be received directly from DSST before credit is awarded.

GED EXAMS

The Maricopa Community Colleges may award credit for GED subject area scores designated as College Ready + in accordance with the ACE recommended scores. The transcript needs to be sent directly by the Department of Education to the Admissions and Records Office /Enrollment Services in order to be awarded credit. Disclaimer: test scores are continually reviewed and may be updated at any time.

INTERNATIONAL BACCALAUREATE (IB) DIPLOMA/CERTIFICATE

Students who present an international baccalaureate diploma/certificate may qualify for college credit. Maricopa grants credit for college-level courses only. Scores must be received directly from the institution where the exams were administered before credit is awarded.

ACE (AMERICAN COUNCIL ON EDUCATION) RECOMMENDED CREDIT

EDUCATIONAL EXPERIENCES IN THE ARMED SERVICES

The Maricopa Community Colleges may award credit for military experiences based on the ACE Military Guide. A student may receive college credit if:

- training parallels a discipline area offered through the maricopa community colleges, and
- credit meets a program requirement or is used as elective credit.

Upon request, individuals who have successfully completed basic training, four (4) credit hours in physical education will be awarded as indicated in the ACE Guide and the Community College of the Air Force Catalog. Official documentation of military training is required.

ORGANIZATIONS PARTNERED WITH ACE

ACE evaluates training programs offered by business, industry, and government and publishes its credit recommendations in the *ACE National Guide*. If a student has received training that appears in the guide, they may receive college credit if:

- Training parallels a discipline area offered through the Maricopa Community Colleges, and
- Credit meets a program requirement or is used as elective credit.

CREDIT BY EVALUATION

INDUSTRY RECOGNIZED CREDENTIALS, INDUSTRY/CORPORATE TRAINING, and NON-CREDIT COURSEWORK

A variety of professional certifications and industry credentials can be evaluated for college credit through a Credit by Evaluation process. Students may apply for a Credit by Evaluation in certain courses by obtaining the appropriate form in the Admissions and Records /Enrollment Services Office. The credit awarded is based on competencies demonstrated through the successful attainment of the credential or certification, and the training must be verifiable through a third party that has the authority to issue the credential or certification.

INDIVIDUALIZED PORTFOLIO ASSESSMENTS

Portfolios consist of documentation and corresponding narrative submitted for credit that demonstrates comprehensive proficiency of course competencies. Individual portfolios are assessed using current MCCC standards. If an approved standardized or challenge exam exists, MCCC may choose not to offer a portfolio option.

Some academic departments may have additional requirements that must be met before credit may be granted through Credit by Evaluation. When credit is granted, a notation of "Other Credits" and the type of training, number of credits, and a grade of Pass "P" will appear on the student's transcript. These credits are not used in computing the grade point average. Credit by Evaluation is transferable within the Maricopa Community Colleges, but is not necessarily transferable to other colleges and universities. Students may not request:

- To challenge a course a second time;
- To challenge a course while currently enrolled in the course;
- To establish credit in a previously completed course; and
- To establish credit for a lower level of a course in which credit has been received.

DEPARTMENTAL CREDIT BY EXAMINATIONS

Departmental exams may be available for particular courses. If a student is pursuing this option for an approved course, they may apply by obtaining the appropriate form in the Admissions and Records/Enrollment Services Department, paying the required fee, and completing the examination and other requirements of the college. Please refer to Appendix S-4 (Tuition and Fee Schedule) for appropriate fees. Students may not request:

- To challenge a course while currently enrolled in the course;
- To establish credit in a previously completed course; and
- To establish credit for a lower level of a course in which credit has been received.

Additionally:

- Exceptions may be granted at some of the maricopa community colleges for their unique programs of study. specialized programs may allow courses to be repeated due to the student needing to have recent knowledge of the content in order to progress in the program.
- Academic departments may have additional requirements that must be met before credit may be granted through departmental credit by examination.
- Only grades of a, b, c, d or p earned as a result of this examination will be recorded on the student's transcript. fees are not refundable after the examination has been administered, regardless of results.
- When credit is granted as outlined above, a notation of "Credit by Exam," a grade and the number of credits will appear on the student's transcript.

PLA AND TRANSFER DISCLAIMER

If pursuing a transfer degree (AA, ABUS, AS, AAEE, AAFA, or Articulated Academic Degree Program), transfer credit and PLA will be granted for the purpose of satisfying Maricopa graduation requirements. Because credits may not transfer to all colleges or universities, contact your transferring institution to determine their transfer credit and PLA requirements and policies.

AMENDED through the Administrative Regulations Approval Process, June 4, 2024

TECHNICAL CHANGE made on November 9, 2023

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AMENDED through the Administrative Regulations Approval Process, June 24, 2021

AMENDED through the Administrative Regulations Approval Process, June 30, 2020

AMENDED through the Administrative Regulations Approval Process, November 5, 2019

AMENDED by Direct Approval from the Chancellor, August 10, 2018

AMENDED by Direct Approval from the Provost, May 8, 2018

AMENDED by Direct Approval from the Chancellor, June 28, 2017

AMENDED through the Administrative Regulations Approval Process, June 5, 2017

AMENDED by Direct Approval from the Chancellor, January 4, 2017

2.2.6 Academic Advising and New Student Orientation

1. Academic Advising

Students who will be attending college for the first time, and intend to earn a degree or to transfer to a college/university, will be required to meet with an academic advisor within the first two semesters at a MCCCC college.

i. Recent high school students who received MCCCC credits through Dual/Concurrent Enrollment, ACE, Hoop of Learning, or any MCCCC Early Outreach Program are considered first time to college.

2. New Student Orientation

Students who will be attending college for the first time, and intend to earn a degree or to transfer to college/university, will be encouraged to attend New Student Orientation within the first two semesters at a MCCCC college.

i. Recent High School students who received MCCCC credits through Dual/Concurrent Enrollment, ACE, Hoop of Learning, or any MCCCC Early Outreach Program are considered first time to college.

AMENDED through the Administrative Regulations Approval Process, June 12, 2023

AMENDED through the Administrative Regulation Approval Process, May 24, 2022

AMENDED by Direct Approval from the Chancellor, April 16, 2020

AMENDED through the Administrative Regulations Approval Process, June 4, 2019

2.2.7 Student Assessment and Course Placement

1. Course Placement

- A. Course placement assesses students' skill levels in English, reading, and math to help determine which courses students should take first to be successful. Students who plan to register in English, reading, or math will be advised to enroll into courses based on valid District-approved placement methods.
- B. Students who place into course(s) that are below college-level (i.e., below 100-level) will be advised to enroll into the course(s) within the first two semesters.
- C. A department/division chair or designee may grant a course placement waiver under special circumstances. The signed waiver will be noted on the student's electronic record. The process may also be done electronically without a signature if supported by the attending college.
- D. Course placement will be determined utilizing the district placement options under any one of the following conditions:
 - i. The student is taking his or her first college credit English, reading or math course, or any college course for which English, reading or math is a prerequisite.
 - ii. The student is pursuing a degree or transfer pathway and does not have current valid District-approved course placement on file or does not have previous college credit in English, reading and math.
 - iii. The student for whom English is not the primary language and who is taking his or her first English as a Second Language class is required to take a test of English proficiency.
- E. Students will be exempt from the course placement process if at least one of the following conditions apply:
 - i. The student has earned an associate or higher degree from an accredited college.
 - ii. The student has earned college credits from an accredited college in English, reading, and math with a grade of C or higher.
 - iii. The student has currently valid District-approved course placement scores on file.
 - iv. The student who is exempt from the course placement process must still fulfill the minimum graduation requirements.

2. Determining Course Placement

The Maricopa Community Colleges use multiple placement options. In cases, when a course placement test is given, scores will be valid for two years. Other placement methods will also have limited time validity. For additional information, go to [PLACEMENT](#).

- A. Reading placement test scores that indicate "exempt from CRE101" do not expire.
- B. Students will be permitted one re-test in English, reading, or by math level after at least a 24-hour waiting period. One additional re-test is permitted no sooner than three months from the oldest valid score date at any course placement testing site.
- C. The Vice President of Student Affairs or designee may approve re-testing for students with special needs or circumstances. The re-test date will then serve as the date of record.

3. Implementation of Policy

To ensure consistency of the course placement process within the Maricopa Community Colleges:

- A. All colleges shall accept the same approved course placement methods.
- B. All colleges shall adhere to the same approved placement scores.
- C. All colleges shall adhere to the approved limited time validity for each course placement method. for more information, go to: [PLACEMENT](#).
- D. Reading Placement Scores that Indicated "Exempt from CRE101" Do Not Expire.

4. Evaluation

The Maricopa Community Colleges will provide an ongoing evaluation of the course placement process. An annual report shall be submitted to the Governing Board to indicate the policy's effectiveness noting the number of students assessed, their placement scores and their success in courses. Every three years a thorough review of the

policy and procedures shall be implemented, including recommendations from the English, Reading and Math Instructional Councils regarding cut-off scores, course placement assessment tools and procedures.

AMENDED through the Administrative Regulations Approval Process, June 4, 2024

AMENDED through the Administrative Regulations Approval Process, June 4, 2019

2.2.8 Registration

Students must register for classes according to the dates indicated, and in the manner described in the college class schedule. To be eligible for registration, students must have completed the appropriate steps listed under the Admissions section. The college may allow early or priority registration. Tuition and fees must be paid or payment arrangements made by the due date to secure class enrollment. Students may not attend a class for which they are not registered.

The colleges reserve the right to enroll students in courses. The colleges have established a process for registration in classes for students under the age of 18 who have not graduated from high school or have a high school equivalency. The final decision for registration into any class for students admitted under section 2 of AR 2.2.1 will be determined by the designated college administrator in consultation with the Faculty Chair and/or faculty.

1. Each student under the age of 18 and their parent/guardian are required to complete a separate registration form accepting responsibility for the decision to register in classes. This form must be completed and approved by the designated college administrator in consultation with the faculty each semester.
2. The college may limit the registration/enrollment to not more than six (6) credit hours.
3. Students who enroll in vocational courses may be admitted on an individual basis with the approval of college officials if the student meets the established requirements of the courses for which the student enrolls and the college official determines that the student's admission is in the best interest of the student.
4. Students in Dual Enrollment, Achieving a College Education, and Hoop of Learning programs or other college-sponsored educational partnerships will follow their specific program enrollment guidelines.

Class Registration Deadlines:

1. For classes with published start dates and meeting times, registration in the class must be completed before the first official class meeting date and time. Students may not register for a class once it has started. Self-Service registration for a class through www.maricopa.edu/students will end at 11:59 PM on the day before the class starts. Registration for a class on the date it starts must be done in person or on the phone, and must be completed before the class start time.
2. For classes without published meeting times (for example, online classes, special projects), registration in the class must be completed by 11:59 PM on the day before the class starts.
3. Exceptions
 - a. Exceptions to class registration deadlines require permission of appropriate instructor(s) and approval of the appropriate department/division chair or designee.
 - b. Exceptions are limited to
 - i. Courses requiring permission of instructor
 - ii. Courses requiring auditions or try-outs
 - iii. Courses for Special Populations or Cohorts
 - iv. Enrollment in an alternative section of a course taught by the same instructor
 - v. Enrollment in an alternative section of a course taught by a different instructor
 - vi. Course level changes
 - vii. Students dropped for non-payment during the 100% refund period may be reinstated if they attended since the first class meeting.
 - viii. Students dropped due to Human or system errors may be reinstated if they attended the first class meeting.
 - ix. Other exceptions may be granted after faculty consultation with the student.

2.2.9 Tuition and Fees

Tuition and fees are public monies within the jurisdiction and responsibility of the Maricopa Community Colleges Governing Board under the laws and regulations of the State of Arizona and must be administered by the Governing Board. The Governing Board reserves the right to change tuition and fee charges when necessary without notice. All students are classified for tuition purposes under one of the following residency classifications:

1. Maricopa County resident
2. Out-of-County resident
3. Out-of-State resident (including F-1 non-immigrant students)

Residency for tuition purposes is determined in accordance with state law (ARS §§15-1801 et seq.) and regulations of the Maricopa Community Colleges Governing Board. All of the Maricopa Community Colleges are subject to the above statutes and regulations. Students who have questions about their residency should contact the Admissions and Records Office/Office of Student Enrollment Services for clarification.

Students attending more than one Maricopa Community College will be assessed tuition and fees for their enrollment at each of the Maricopa Community Colleges/centers. (Students who are considered to be out-of-state residents for tuition and fees purposes should refer to Appendix S-3, Concurrent Enrollment in Arizona Public Institutions of Higher Education.)

With Maricopa Community Colleges Governing Board approval, colleges may assess course fees to offset unique course costs that exceed the expenses of normal instruction that are covered by tuition. These fees are used on course-specific expenses that directly benefit the fee-paying student, such as equipment, consumables, and services. Fees vary by course and by discipline. Course fees are subject to change. Because course fees are often fully expended on materials before a class starts, they will be refunded only if the student qualifies for a 100% refund. Refer to AR 2.2.10 (Refund Policy).

1. Time of Payment

All tuition, fees, assessments and deposits must be paid at the time of registration or by the specified deadline date and in accordance with the tuition and fee schedule approved by the Maricopa Community Colleges Governing Board.

2. Tuition and Fees Schedule

Current information can be found at <https://district.maricopa.edu/regulations/admin-regs/appendices/students/s-4>

The following is a tuition and fees schedule and is provided for reference. **These tuition and fees are subject to change.** Consult the college's Admissions and Records Office/Office of Student Enrollment Services for course fees in effect during the semester/term in which you intend to register. See [Appendix S-4](#).

Appendix S-4: Tuition & Fee Schedule

A. Determine Student Residency Status

Refer to admissions information ([AR 2.2.2](#)) of the college catalog for residency information and to review the requirements for classification as a Maricopa county resident. Contact the Admissions and Records Office/Office of Student Enrollment Services if you have questions about residency requirements.

B. Use the Chart to Locate Tuition Charges

Determine the correct column based on your residency status and then select the number of credit hours. The general tuition chart is provided for reference only.

C. Add Any Additional Fees

A one-time, per semester \$15 registration fee is due by the official start of the term (semester) or by the specified due date or at time of registration.

- D. There may also be additional course fees for classes, please refer to the college schedule for course fees.
- E. If you choose to audit a class, add an additional fee of \$25 per credit hour.
- F. Additional course fees may apply for specific courses. Check with the college's Admissions and Records Office/Office of Student Enrollment Services for a current listing of course fees.
- G. Pay Your Fees
Payment of fees may be made by cash, check, money order, VISA, MasterCard, Discover or American Express. Payment Plan options are also available.

NOTE: If you do not pay your tuition and fees at the time of registration or by the specified due date, you may be dropped from your classes and may be responsible for the tuition and fees based on the refund schedule which outlines the refund deadlines for each course.

Skill Center Tuition Rates

Regular	\$5.00 per clock hour
Nursing Assistant	\$6.00 per clock hour
Practical Nursing	\$6.00 per clock hour

Credit by Examination & Credit by Evaluation (excludes Allied Health courses)

Regular Rate	\$85.00 per credit hour
Contract Rate	\$42.50 per credit hour

Amended through the Administrative Regulations Approval Process, May 5, 2017

3. Outstanding Debts

Any debt or returned check may revoke a student's current enrollment and the student's right to register in subsequent semesters at all Maricopa Community Colleges. Delinquent debts may require penalties, late charges, collection costs, and/or legal fees to be paid before good standing is restored to the student.

The following procedure will be used for the collection of returned checks and other outstanding debts:

- A. The designated college official or fiscal officer is responsible for:
 - i. Verifying the student's district wide debt,
 - ii. Attempting to notify the student of the debt and
 - iii. Attempting to collect the debt.
- B. Maricopa Community College services may be withheld pending payment of debt (at designated college office) with cash, certified check or money order or online with debit or credit card or in person with credit card. Student may be withdrawn from classes.
- C. If other collection attempts fail, the Maricopa Community Colleges District Office will either collect or use other means available, including:
 - i. Collection agency, requiring payment of collection fees by the student;
 - ii. The Tax Refund Setoff Programs as stated in ARS §42-1122;
 - iii. Litigation, requiring payment of court costs and legal fees by the student.
- D. Debt Holds may be lifted only in limited instances by the appropriate College or District business services designee for the extension of services provided that at least one of the following conditions are met:
 - i. MCCCCD staff verify that full payment has been made to another College;
 - ii. The College can deduct payment from a financial aid award made to the student (referring to student authorization guidelines for regulations on applying federal financial aid to debt balances);
 - iii. A third party not related to the student, such as an employer or state agency, makes a verified payment directly to the College;

- iv. It is determined and verified with the appropriate MCCCCD office that the hold resulted from a system error and the error is due to an activity that requires correction by the appropriate College or District personnel.
- E. Debt Incurred as a Minor Student
- i. When a student under the age of 18 enrolls in a course as a minor, a parent/legal guardian or representative is required to accept financial responsibility for all tuition, fees, and fines that may be incurred related to the minor student's enrollment in the Maricopa Community Colleges until the student turns 18 years of age.
 - ii. Failure to resolve past due balances may result in an impact of services, including holds on the minor student's account, restricting future registration, other services, and forwarding of any unpaid past due balances to collection agencies.
 - iii. Any outstanding balances that remain unresolved when the student turns 18 will become the student's responsibility.

Admission Criteria to Attend a College within the Maricopa Community College District (MCCCCD) is determined in accordance with state law (ARS §§15-1805.01 AND 15-1821) and regulations of the Maricopa Community Colleges Governing Board and the Chancellor. As such, participants enrolled in courses as part of third party agreements are also subject to the same admissions criteria. This includes the participants resolving any current enrollment or administrative holds that are unrelated to the Third party in an existing student account, but that otherwise impact his/her eligibility to enroll in courses or participate in programs delivered by MCCCCD faculty or staff.

4. Discounted Fees and Waivers

- A. Citizens 62 years of age and older shall be issued ID cards that allow them the privilege of attending events at no cost and that allow them to use the library facilities.
- B. Employees, Dependents and Mandated Groups
The Maricopa Community College District waives tuition for credit-hour courses for employees and their dependents, and tuition and fees as specified for legislatively mandated groups. Special, registration, course fees and fees for Non-credit/Special Interest Community Services courses are not waived.
- C. Tuition and Registration Fee Waiver for Members of the Pima-Maricopa Indian Community
Tuition and fee waivers shall be funded through Auxiliary Fund Monies for college credit courses for the enrolled members of the Pima-Maricopa community who live on the Pima-Maricopa Reservation.

5. All other guidelines and procedures established for the purpose of administering waivers, affidavits and exemptions are outlined in the Maricopa County Community College District tuition waiver manual.

AMENDED through the Administrative Regulations Approval Process, May 12, 2025

AMENDED through the Administrative Regulations Approval Process, June 4, 2024

AMENDED by Direct Approval from the Chancellor, November 21, 2018

2.2.10 Refund Policy

1. Refund Policy for Credit/Clock Classes

Students who officially withdraw from credit/clock classes (in fall, spring, or summer) within the refund deadlines listed below will receive a 100% refund for tuition, course and registration fees. Students should refer to the Student Information System (SIS), Student Center, Account Summary for specific refund dates. Deadlines that fall on a weekend or a college holiday will advance to the next college workday except for classes fewer than 10 calendar days in length or as specified by the college. Calendar days include weekdays and weekends. Refer to individual colleges for withdrawal and refund processes. Never attending is not an allowable refund exemption or an excuse of the debt incurred through registration.

CREDIT AND CLOCK CLASSES	OFFICIAL DROP DEADLINES FOR 100% REFUND
LENGTH OF CLASS	

70+ calendar days	7 calendar days including the class start date
60-69 calendar days	6 calendar days including the class start date
50-59 calendar days	5 calendar days including the class start date
40-49 calendar days	4 calendar days including the class start date
30-39 calendar days	3 calendar days including the class start date
20-29 calendar days	2 calendar days including the class start date
10-19 calendar days	1 calendar day including the class start date
1-9 calendar days	prior to the class start date

Because course fees are often fully expended on materials before a class starts, they will be refunded only if the student qualifies for a 100% refund. Debts owed to any of the Maricopa Community Colleges must be satisfied before any refunds are paid to the student. Refunds for students receiving federal financial assistance are subject to federal guidelines. Appeals to the refund policy, including course fees outside of the 100% refund period, must be filed at the Maricopa Community College where the student attended the class within one year from the semester in which the class was taken.

DEFINITIONS:

DROP - WITHIN THE REFUND PERIOD, NO TUITION AND FEES ASSESSED; CLASS AND GRADE WILL NOT APPEAR ON ACADEMIC TRANSCRIPT

WITHDRAWAL - W OR Y GRADE APPEARS ON THE ACADEMIC TRANSCRIPT WHEN A STUDENT IS WITHDRAWN PAST THE REFUND DEADLINE; TUITION AND FEES ARE ASSESSED FOR THE CLASS

2. Refund Policy for Non-Credit Classes

Unless otherwise specified, students who officially withdraw from non-credit classes prior to the class start date are eligible for a 100% refund, including any course fees. Debts owed to any of the Maricopa Community Colleges must be satisfied before any refunds are paid to the student. Appeals to the refund policy, including course fees outside of the 100% refund period, must be filed at the Maricopa Community College where the student attended the class within one year from the semester in which the class was taken.

3. Canceled Classes

When a class is canceled by the college, a 100% refund will be made for tuition, course fees, and registration fees.

4. Refund Appeals

Students withdrawing from a college or from classes for one of the following reasons must submit an appeal for a refund to the Admissions and Records Office/Office of Student Enrollment Services or designated college official at the college of enrollment within one year from the semester in which the class was taken:

- A. A student with a serious illness, verifiable by a doctor's written statement that the illness prevents the student from attending all classes for the semester. The doctor's statement must be on file with the college before a refund can be given.
- B. Serious illness or death of an immediate family member that prevents the student from attending all classes for the semester. Immediate family members include spouse/partner, father, mother, grandfather, grandmother, child, foster child, grandchild, stepchild, sibling, stepsibling, stepfather, stepmother, or spouse's/partner's father, mother, grandfather, grandmother, or in-laws in any one incident. Appropriate documentation must be provided before a refund can be given.
- C. Death of a student. Appropriate documentation must be provided before a refund can be given.
- D. A student in the armed forces or the Arizona National Guard who is called to active duty and assigned to a duty station, verifiable by a copy of the orders, will be allowed to withdraw and receive a 100% refund of tuition, provided classes have not been completed.

5. Requests for a total withdrawal from a college or classes for one of the above reasons may result in a partial prorated refund of tuition, provided classes have not been completed. All decisions made by the college are final.

Limitation: Never attending is not an allowable refund exception or an excuse of the debt incurred through registration.

6. Refund Policy for Department of Defense Tuition Assistance Funds

Students who receive Tuition Assistance (TA) funds for a class or classes from the Department of Defense (DOD) may have a refund processed and returned to the student's DOD branch of service in the following situations. Refer to individual colleges for withdrawal and refund processes.

- A. Per refund appeals D, a student who is called to active duty and assigned to a duty station, verifiable by a copy of the orders, will be allowed to withdraw, provided classes have not been completed. A 100% refund of TA funds will be issued to the student's DOD branch of service.
- B. A student who withdraws for reasons other than those outlined above within the first 60% of the period for which funds were received will have the proportional amount of unearned TA funds returned to the student's DOD branch of service. Refer to individual colleges and DOD branch of service for potential student financial responsibility as a result of withdrawal.

Requests for refund should be referred directly to the Admissions And Records Office/Office of Student Enrollment Services or designated college official at the college of enrollment.

AMENDED through the Administrative Regulations Approval Process, May 12, 2025

AMENDED through the Administrative Regulations Approval Process, June 4, 2024

AMENDED through the Administrative Regulations Approval Process, June 12, 2023

AMENDED by Direct Approval from the Chancellor, January 13, 2020.

AMENDED through the Administrative Regulations Approval Process, May 5, 2017

2.2.11 Student Financial Assistance

The Maricopa Community Colleges provide students financial assistance to enable access to higher education. Student financial assistance shall be awarded on the basis of demonstrated financial need except where funds are specified for recognition of special talents and achievements. Additional procedural information on financial assistance is available in [Appendix S-5](#).

Appendix S-5: Student Financial Assistance

Additional Information about Financial Aid may be found at www.maricopa.edu/students website.*

The Maricopa Community Colleges provide students financial assistance to enable access to higher education. Student financial assistance shall be awarded on the basis of demonstrated financial need except where funds are specified for recognition of special talents and achievements. Only those with a lawful presence in the United States may qualify for federal financial aid. Under Arizona state law, undocumented students may qualify for Maricopa County Community College District (MCCCD) scholarships if they meet the terms outlined under Proposition 308.

The office of financial aid may request to have the validity of a student's high school completion evaluated if either the college or the United States Department of Education has reason to believe that the high school diploma is not valid or was not obtained from an entity that provides secondary school education. An evaluation may be conducted on the basis of any of the following:

- Alerts, bulletins, or similar communications provided by any state, federal, or other governmental agency, another institution, a professional or similar organization, or any other resource that might provide information helpful to the evaluation;
- A transcript or other record received from another institution the student may have attended;

- The contents of the student's Free Application for Federal Student Aid, student information form, or any other information the student provides to the college;
- The independent professional judgment by any official of the office of student financial aid.

How to Apply for Federal Financial Aid

New students must complete the Free Application for Federal Student Aid (FAFSA) or FAFSA on the web at <https://studentaid.gov/h/apply-for-aid/fafsa>. Each academic year, continuing students must reapply by completing a FAFSA, Renewal FAFSA, or FAFSA on the web. Scholarships require separate applications. Specific information regarding financial assistance, including application deadlines or priority dates, may be obtained from the college Office of Student Financial Aid.

Types of Aid

Grants, loans, student employment, and scholarship funds may be available from federal, state, and/or private sources.

The Maricopa Community Colleges Foundation offers a variety of scholarship opportunities **available to all Maricopa students**. For more information, visit the scholarship application [page](#), or email foundation.scholarships@domail.maricopa.edu.

Distribution of Aid

Criteria by which aid is distributed among eligible financial aid applicants are available on request at the college Office of Student Financial Aid.

Rights and Responsibilities

Students should read all information provided in the process of applying for federal financial aid in order to gain a greater knowledge of all the rights as well as responsibilities involved in receiving that assistance.

Satisfactory Academic Progress

Specific requirements for academic progress for financial aid recipients are applied differently than scholastic standards. In addition to scholastic standards which are explained elsewhere in this catalog, financial aid recipients are also subject to the following [Standards of Satisfactory Academic Progress](#). Specific information is available at the college Office of Student Financial Aid.

Refunds and Repayments

In accordance with federal regulations (CFR 668.22), a student may be required to repay federal financial aid funds if they completely withdraw, are withdrawn, or fail to earn a passing grade from all classes during a semester. Further information is available at the college Office of Student Financial Aid. This could affect a student's ability to receive Financial Aid in the future at any school. For a student receiving Financial Aid, also see [Administrative Regulation 2.3.6 Withdrawal](#) for Withdrawal procedures.

Verification of Information

1. A Free Application for Federal Student Aid (FAFSA) or a change to that FAFSA may be selected for verification. If a student's FAFSA is selected for verification, the student will be notified via the Student Center in www.maricopa.edu/students. In most cases, the student will be required to submit documentation as part of the verification process. The earlier the Financial Aid Office receives the required documentation, the earlier the student's eligibility for financial aid can be determined. The verification process must be completed no later than 120 days after the last date of enrollment or August 31, whichever comes first. In addition, the Financial Aid Office must receive a final and valid electronic SAR by the student's last day of enrollment or June 30 of the award year, whichever comes first. The verification process must be completed before the Financial Aid Office can award any federal aid.
2. If an award has already been made and a FAFSA is selected for verification, the student must provide required documentation within thirty days after it has been requested of the student or on June 30, whichever comes first. If documentation is not received within this deadline, the student's award may be adjusted or canceled.

3. The required forms and documents a student submits for verification will be compared to the information reported on the student's FAFSA. If the information provided does not match what is shown on the FAFSA, the Financial Aid Office will submit changes to the US Department of Education FAFSA processor. After all changes are made to the FAFSA data, the student's eligibility for financial aid will be reviewed. If there are any changes to the student's financial aid eligibility as a result of verification, the student will be notified by means of the Student Center in www.maricopa.edu/students. If, following verification, the institution discovers evidence of student aid fraud (including identity theft), waste or abuse of US Department of Education funds, such evidence may be referred to the Office of Inspector General of the US Department of Education.

Course Applicability and Level of Enrollment

A student's award amount is based on their enrollment status for the upcoming semester. Enrollment status is determined by the number of credit hours a student is taking at the college where they are receiving federal aid. However, [federal regulations](#) stipulate that a student can only use federal funds for those courses required for their current program of study. Students who enroll in a class that does not apply towards their degree, certificate, or other recognized credential, cannot use it to determine their enrollment status, unless it is an eligible remedial course. Students who choose to enroll in a course that is not applicable to their program of study, may be responsible for all charges related to that course.

A reduction in course load after financial aid has been awarded may result in an adjusted financial aid award. Federal student aid recipients are advised to register at the same time for all classes they intend to take during a semester to maximize award. Some federal aid may not be awarded for classes added at a later date. Contact the college Office of Student Financial Aid for more information.

Repeated Coursework and Financial Aid Enrollment Status

Federal regulations regarding repeated coursework may impact your financial aid eligibility and awards. Federal regulations specify that students may receive federal financial aid funding for one repetition of a previously passed course. A passed course is defined as one in which a grade of A, B, C, D, or P is received. If you enroll in a course in which you have previously received passing grades twice, the course will not be counted towards your enrollment level for financial aid purposes. You may repeat a failed course until it is passed. Your enrollment for financial aid purposes will be calculated accordingly.

Maricopa Community Colleges Standards of Satisfactory Academic Progress (SAP) for Financial Aid Eligibility

Federal regulations (CFR 668.32(f) and 668.34) require a student to move toward the completion of a degree or certificate within an eligible program when receiving financial aid. Specific requirements for academic progress for financial aid recipients are applied differently than Scholastic Standards. Federal regulations state that Academic Progress Standards must include a review of all periods of enrollment, regardless of whether or not aid was received. Students will be evaluated using the standards described below. Failure to meet any of these minimum standards will result in loss of Title IV, HEA program (federal financial aid) eligibility.

To remain eligible for federal and state aid programs, students must meet ALL of MCCC'D's Satisfactory Academic Progress (SAP) standards regardless of whether a student has received financial aid in the past or not. These standards apply to a student's entire academic records at any MCCC'D college, including transfer credit hours accepted by the college.

1. Definitions and Terminology Pertaining to this Policy

1. Summer: Enrollment in the summer semester includes all courses scheduled within the summer enrollment period with all coursework counted in the SAP evaluation.
2. Non-Standard Session / Clock Hour: Sessions that do not follow the traditional start and end dates for the semester.
3. Attempted Credit: Any credit for which a grade of A, B, C, D, F, I, IP, N, P, W, Y, or Z is received and courses not yet graded.

4. CGPA [Cumulative Grade Point Average]: The MCCCDC grading policy is published in the administrative regulations at 2.3.3. The CGPA does not include credits accepted in transfer.
5. Financial Aid Warning: status assigned to an eligible payment period for the next enrolled semester after failing SAP GPA (2.0) and/or Completion Pace ($\frac{2}{3}$). Students not meeting maximum timeframe evaluation are not eligible for a warning period.
6. Appeal: A process by which a student who is not meeting the institution's satisfactory academic progress standards is eligible to appeal the institution for reconsideration of the student's eligibility for Title IV, HEA program assistance based on extenuating circumstances.
7. Extenuating Circumstance: A one-time (not on-going) circumstance that is beyond the reasonable control of the student. Examples of extenuating circumstances may include, but not limited to:
 - a. Documented medical condition or serious illness that prevented you from performing certain life tasks
 - b. Documented illness of a family member that required your presence for a significant amount of time
 - c. Death of immediate family member which impacted you significantly enough to affect participation in your courses
 - d. Involuntary call to active military duty
 - e. Documented involuntary change in employment conditions that prevented you from attending classes
 - f. Any other extraordinary/emergency circumstances, such as a natural disaster
8. Financial Aid Probation: A status assigned by an institution to a student who fails to make satisfactory academic progress and who has appealed and has had eligibility for aid reinstated. A student in this status may not receive Title IV, HEA program funds for the subsequent payment period unless the student makes satisfactory academic progress or the institution determines that the student met the requirements specified by the institution in the academic plan for the student.
9. Academic Plan – A plan developed through the SAP Appeal Process which will lead a student to qualify for further Title IV, HEA program funds and complete the program within 150% of published program length.
10. Financial Aid Suspension – The status assigned upon failing to meet the minimum SAP standards or the terms of probationary status. Students in this status are not eligible to receive Title IV, HEA assistance.

2. Federal regulations (CFR 668.32(f) and 668.34) require institutions of higher education to evaluate Satisfactory Academic Progress (SAP) using qualitative (GPA) and quantitative (pace of progression) standards.

3. Qualitative and quantitative measures of SAP are required to ensure students receiving Federal Student Aid are progressing towards the completion of a degree or certificate within an eligible program.

4. Specific requirements for academic progress for Federal Student Aid recipients are applied differently than Scholastic Standards. Federal regulations state that SAP Standards must include a review of all periods of enrollment, regardless of whether or not aid was received. Standards are applicable for all enrolled payment periods, including all levels of enrollment (full-time or part-time enrollment). Students will be evaluated using the standards described below.

5. Failure to meet any of the minimum standards outlined below will result in a student's loss of HEA, Title IV Federal Student Aid.

Evaluation Period

1. Standards of Satisfactory Academic Progress (SAP) will be evaluated at the end of each payment period. For credit hour programs, a payment period is a semester (Fall, Spring, and Summer). For clock hour programs, a payment period / evaluation will depend on the hours required in the program.

2. Standards of Satisfactory Academic Progress (SAP) are evaluated based on qualitative (GPA), quantitative (pace of progression), and maximum timeframe. Failure to meet any of these standards may result in the loss of eligibility for financial aid. Grades of F, I, N, W, Y, Z, and courses not yet graded are considered attempted, but not completed in evaluating SAP. Late grades will be recalculated and may change eligibility.

1. **Grade Point Average Qualitative Measurement:** Students must maintain a 2.0 cumulative Grade Point Average in order to meet SAP GPA requirements.
2. **Pace of Progression Quantitative Measurement:** Students must successfully complete 2/3 (66.67%) of all attempted course work. For clock hour programs, please refer to program attendance requirements.
3. **Maximum Time Frame Measurement:** Students must be able to complete their program within 150% of the published program length. Once students have attempted 150% of the published program length, they are no longer eligible for Federal Student Aid. For example, a 16 credit certificate program will allow up to 24 credit hours to complete the program. A 60 credit Associate's degree will allow up to 90 credit hours to complete the program. A 120 credit bachelor's degree will allow up to 180 credit hours to complete the program.

3. Courses included in SAP evaluation:

- a. All attempted coursework, regardless of enrollment status
- b. Courses funded through a Consortium Agreement
- c. All attempted remedial credits, including English as a Second Language (ESL) courses.
- d. Repeated course work
- e. All transferred coursework
- f. Grades attempted, but not completed (F, I, N, W, Y, Z)

4. Course work included in the Maximum Time Frame evaluation:

- a. All of those included in the Pace of Progression evaluation
- b. Any Bachelor's degree (or higher) earned will be considered to have exhausted maximum timeframe eligibility for students pursuing an Associates Degree or certificate
- c. Any graduate degree (or higher) earned will be considered to have exhausted maximum timeframe eligibility for students pursuing a Bachelor's Degree.
- d. All coursework forgiven through the Academic Renewal Process

5. Course work not included in SAP evaluation:

- a. Audited courses
- b. Non-credit courses
- c. Credit by examination
- d. Credit for prior learning option (as outlined in the college general catalog)

Notification

Students who have applied for Federal Student Aid, but are not meeting Satisfactory Academic Progress requirements, will be notified via email of their FA Warning or ineligibility for financial aid. The notification will direct students to information regarding available college resources during the Warning Period and the appeal process in cases of extenuating circumstances.

Financial Aid Warning

Students are allowed a warning period upon failing Qualitative and/or Quantitative SAP standards. The warning period allows one (1) payment period (semester) of Federal Student Aid eligibility upon failing SAP. The warning period will follow the semester for which SAP was not met, meaning the next semester for which the student registers for classes. In order to receive the Warning period, students must be meeting Maximum Timeframe requirements.

SAP Appeal

Any student who has lost federal student aid eligibility due to a resolved, one-time extenuating circumstance may appeal to have their financial aid reinstated by completing a Satisfactory Academic Progress Appeal Form. The form must address:

1. what caused the student's work to fall below acceptable standards--specific explanations must be provided, including any supporting documentation,
2. each incomplete/failed course,
3. how the extenuating circumstance has been resolved, and
4. how the student will maintain good academic standards and progress toward the degree if the appeal is granted.

The outcome of the appeal will depend upon:

1. the nature of the extenuating circumstances (if the stated circumstance qualifies as such),
2. the quality of the documentation provided, and
3. how well the student has demonstrated the ability to progress towards degree completion within a reasonable time period.

All documentation submitted is confidential. All decisions are final and cannot be appealed. For assistance in completing the SAP appeal paperwork, including examples of supporting documentation, visit your college Financial Aid Office.

Students will be notified of the results of their appeal within fourteen business (14) days of filing the appeal. Notification will include any restrictions or conditions pertaining to their appeal. The outcome of an appeal may include a probationary period. Appeals granted longer than one (1) payment period must include an academic plan, which must be followed. Failure to follow an approved academic plan will result in immediate suspension of Federal Student Aid. Students are responsible for any and all debt incurred as a result of this adjustment to financial aid.

Failure to successfully complete all conditions during the probationary period (as defined in the academic plan) will result in loss of future financial aid eligibility.

Regaining Eligibility

A student who has lost financial aid eligibility may only regain eligibility by meeting the minimum SAP standards. Transfer coursework taken at other colleges will be considered for reinstatement purposes.

If you are receiving federal financial aid it is important to read the information below prior to making a decision to withdraw.

Treatment of Title IV Aid When a Student Withdraws POLICY SUMMARY STATEMENT

To provide guidance on the treatment of federal student aid (Title IV) funds when a student withdraws from a Maricopa College.

DEFINITIONS

Date Of Determination – The date of determination is the date in which the school determines that a student ceased attendance or completely withdrew from school. This may be the date that the institution becomes aware that the student ceased attendance, or the date that the student begins the official withdrawal process at the school.

Earned Aid Calculation – A formula used to determine the amount of Title IV aid the student earned for the payment period. To calculate the amount of Title IV aid earned by the student multiply the percentage of Title IV aid earned by the student, by the total amount of Title IV aid disbursed (including that which could have been disbursed to the student or on behalf of the student), for the payment period as of the student's withdrawal date.

Official Withdrawal - The process by which a student begins the school's official withdrawal process or provides official notification to the school of his or her intent to withdraw. The student's approach to his or her withdrawal directly impacts the school's date of determination for which the student ceased attendance, and is used in the return of Title IV funds calculation.

To officially withdraw, the student will need to notify a designated office; this office for most MCCCCD colleges is the Admissions and Records department. The designated office staff will assist the student to complete the withdrawal process. Schools will utilize a change in student status or comparable form to record a student's withdrawal, official or unofficial (see "unofficial withdrawal" definition). The School Registrar will determine the last date of attendance based on federal and institutional policy and the school's date of determination. The date of determination is either the date that the student began the prescribed withdrawal process, or the date that the student provided the school with an official notification of his or her intent to withdraw, whichever is later. If the student is present, the student will sign and date the change in status or comparable form. Designated office staff will also sign and date the form, and retain it in the student's file at the school.

Order of Return of Title IV Funds - A federally prescribed order for returning Title IV funds required as a result of a return of Title IV funds calculation. Unearned funds, returned by either the institution or the student, are credited to the programs from which the student received the aid from during the payment period, up to the net amount disbursed from each program. Funds will be returned based on the following order:

1. Unsubsidized Federal Direct Stafford Loans
2. Subsidized Federal Direct Stafford Loans
3. Federal Direct Plus Loans
4. Federal Pell Grants
5. Iraq and Afghanistan Service Grants
6. FSEOG
7. Teach Grants

Percentage of Title IV Aid Earned – definitions for term, and modular programs below, in accordance with ED regulations:

Title IV Credit Balance - A Title IV credit balance occurs whenever the amount of Title IV funds credited to a student's account for a payment period exceeds the allowable charges associated with the semester (payment period). All Title IV federal student aid credit balances are disbursed directly to the student and refunded to the method selected in the student center. Refunds are generally processed within 3 business days but no later than 14 days of when credit balance occurred.

STANDARD TERM PROGRAMS

Upon the withdrawal, the District Office Student Financial Services (DOSFS) will calculate the percentage and amount of awarded federal student aid funds that the student has earned in the payment period. In some cases and depending upon the withdrawal date and percentage of completion, the student may earn 100 percent of the fsa funds, the calculation will still be completed as required and the amount earned will be based on the percentage of the term or payment period that was completed in days up to and including the last date of attendance or eligible academic activity, with scheduled attendance locked at census / pell recalculation. To calculate the amount earned, DOFA will determine the percentage by dividing the number of calendar days completed in the term/payment period up to and including the last date of attendance by the total number of calendar days in the term/payment period. The number of days a student is scheduled to attend during a payment period is determined based on the start and end date of the scheduled term / payment period. All scheduled breaks during the term / payment period are excluded from the calculation.

MODULES

A program that is offered in modules is a program that consists of course(s) in the program that do not span the entire length of the payment period or period of enrollment. ***Regulatory change effective JULY 1, 2021: a program is offered in modules if the program uses a standard-term or non-standard term academic calendar, is not a subscription-based program, and a course or courses in the program do not span the entire length of the payment period or period of enrollment.*** The DOSFS will calculate the percentage and amount of awarded federal student aid that the student earned within the payment period. If the student has completed more than 49 percent of the payment period, *or* has completed all of the degree requirements from his/her program before completing the days/hours in the period that he/she was scheduled to complete, *or* if the student completes coursework equal to or greater than the coursework required for the institution's definition of a half-time student for the payment period, *or* the school receives written notification that the student will attend a module that begins in the same payment period or period of enrollment, the student is not considered to have withdrawn, and a Return of Title IV Funds (R2T4) is not required and will not be calculated.

When a student withdraws from the payment period before completing 49 percent of the payment period, the amount of federal student aid the student earned is determined based on a specific formula. The number of days a student is scheduled to attend during a payment period is determined based on the start and end date of the scheduled term / payment period, with scheduled attendance locked at census / Pell recalculation. Scheduled breaks are excluded from the calculation. The amount of assistance the student earned is determined on a rate-of-progression basis.

POST-WITHDRAWAL DISBURSEMENT - If, as of the date of the institution's determination that the student withdrew the amount of Title IV aid that the student earned is more than the amount of Title IV aid disbursed to the student or on behalf of the student, the difference between these amounts is considered earned aid, and must therefore be applied to outstanding charges on the student's account and/or directly disbursed to the student.

RETURN OF TITLE IV FUNDS (R2T4) - When a recipient of Title IV aid withdraws from an institution during a payment period or period of enrollment in which the recipient began attendance, the school must calculate the amount of earned and unearned Title IV aid and compare this to the amount of aid disbursed at the date of determination, to determine how to proceed.

If it is determined that the amount of Title IV aid disbursed exceeds the amount of Title IV aid earned, a return of Title IV funds is due, and both the school and the student may have a responsibility for returning the unearned portion of the funds. The school must return the unearned portion of Title IV aid for which the school is responsible for and notify the student of the unearned portion of Title IV aid that the student is responsible for and therefore must return.

If it is determined that the amount of earned Title IV aid exceeds the amount of Title IV aid disbursed, the student may be eligible for the amount of aid not yet disbursed, in the form of a post-withdrawal disbursement. A post-withdrawal disbursement must be made within 180 days of the date the institution determined that the student withdrew. The amount of a post-withdrawal disbursement is determined by following the requirements for calculating earned Title IV aid and has no relationship to incurred educational costs. All Title IV federal student aid credit balances are disbursed directly to the student and refunded to the method selected in the student center. Refunds are generally processed within 3 business days but no later than 14 days of when credit balance occurred.

TITLE IV LOANS

For unearned funds calculated to be returned by the school:

It is policy, as part of the R2T4 process, to provide notification to the student indicating the loan type(s) and amount(s) calculated as needing to be returned and, thus, the date returned by the school. The school must return the lesser of the

amount of Title IV funds not earned, or the amount of institutional charges that the student incurred for the payment period multiplied by the percent of funds not earned.

For unearned Title IV funds calculated to be returned by the student:

If there is a remaining balance of unearned Title IV aid which needs to be returned, after the school has returned its portion of unearned Title IV aid, the student (or the parent for Plus loan) is responsible for returning this amount. While the student must return or repay any unearned Title IV loan amount in accordance with the terms of the loan, the student must repay any unearned Title IV grant funds as an overpayment of the grant. The student's portion is calculated by subtracting the amount of unearned Title IV aid that the institution is required to return from the total amount of unearned Title IV aid required to be returned. If it is calculated that unearned loan(s) need to be returned by the student, the center will notify the lender or servicer of the student's last date of attendance; the student will not need to repay the loan(s) immediately, but will repay the loans based on the terms of the promissory note. The lender or servicer will notify the student or parent, per the terms of the promissory note.

TITLE IV GRANTS

For unearned funds calculated to be returned by the school or student:

It is policy, as part of the R2T4 process, to provide notification to the student indicating the grant type(s) and amount(s) calculated as needing to be returned and, thus, the date returned by the school.

RETURN OF UNEARNED AID - If, as of the date of the institution's determination that the student withdrew the amount of Title IV aid that the student earned is less than the amount of Title IV aid disbursed to the student or on behalf of the student, the difference between these amounts is considered unearned aid, and must therefore be returned to the Title IV program in a specified order, by either the school, the student, or both.

UNOFFICIAL WITHDRAWAL (also known as an "administrative" withdrawal) - A student who did not begin the official withdrawal process or provide notification of his or her intent to withdraw; the date of the school's determination that the student withdrew would be the date that the school becomes aware that the student ceased attendance. See "official withdrawal" definition above.

A student who does not notify the school that s/he is withdrawing but ceases attending, is administratively withdrawn by the school within 14 days of non attendance; this is otherwise known as an unofficial withdrawal. A student is administratively withdrawn from school when the student violates the school's published attendance policy, which adheres to state licensing and accreditation requirements. Please see the school's catalog for its current attendance policy.

WITHDRAWAL DATE (also known as the "last date of attendance") - The date that the student begins the school's withdrawal process or the date that the student provides official notification of intent to withdraw, whichever comes earlier. If the student does not provide any official notification of intent to withdraw, the withdrawal date will be determined by the school, and depend upon the student's circumstances.

FEDERAL TITLE IV REFUND POLICY

If a recipient of Title IV grant or loan funds withdraws from a school after beginning attendance, the school must perform a Return of Title IV Funds (R2T4) calculation to determine the amount of Title IV federal student aid funds earned by the student. If the calculation determines that the amount of Title IV aid disbursed to the student is greater than the amount the student earned, the unearned Title IV funds must be returned to the program. If it is determined that the amount of

Title IV aid disbursed to the student is less than the amount the student earned (and for which the student is otherwise eligible for), the student may be eligible for a post-withdrawal disbursement for the earned Title IV funds not yet disbursed to the student.

The R2T4 calculation is required if a student receiving Title IV federal student aid ceases attendance or completely withdraws from all courses without completing the semester (payment period).

The school must determine the amount of Title IV aid earned by the student, as of the withdrawal date. Once the earned portion is calculated, the unearned portion is calculated to determine if funds must be returned to the program or a post-withdrawal disbursement is necessary. Federal policy is followed to determine the amount of Title IV aid earned on a case by case basis. The R2T4 calculation is always required when a student fully withdraws or ceases attendance prior to the scheduled end of the semester, the calculation may determine that the student earned 100% of Title IV funds and will not be required to return funds. A Return of Title IV Funds worksheet is calculated when a student ceases attendance in all courses within the scheduled semester (payment period), i.e. withdrawal.

WITHDRAWAL PROCEDURE OVERVIEW:

POLICY DISCLAIMER

This policy serves as a guideline for the refund of Title IV and tuition procedure with the understanding that it does not cover every possible scenario. As a result, complex areas may arise where certain refund procedures may need to be addressed on a case-by-case basis.

PARTY(IES) RESPONSIBLE FOR POLICY TRAINING

MCCCD District Office of Financial Aid Compliance and Operations / Office of General Council. District Director Of Financial Aid Operations and Compliance. The policy owner is responsible to determine the method, means and frequency of training on this policy.

EXCEPTIONS

Requests for an exception to this policy should be addressed to the policy owner as outlined in the procedure for requesting a policy exception.

POLICY REVIEW/UPDATE AND AUDIT

This policy will be reviewed annually. Compliance with this policy is audited on a random basis by Internal Audit.

AMENDED through the Administrative Regulation Approval Process, May 12, 2025

TECHNICAL CHANGE, July 11, 2023

AMENDED through the Administrative Regulation Approval Process, June 12, 2023

AMENDED through the Administrative Regulation Approval Process, May 24, 2022

TECHNICAL CHANGE by Legal Counsel, May 6, 2020

AMENDED by Direct Approval from the Chancellor, May 5, 2020

AMENDED through the Administrative Regulations Approval Process, June 5, 2017

2.2.12 Vaccinations (As Required By 20 USC §1092(a)(1)(V)):

The Maricopa County Community Colleges District does not require that students receive vaccinations prior to enrollment. Certain professional or occupational programs do require particular vaccinations for participation in those programs. More information about these programs can be found on college websites.

2.2.13 UNIVERSITY TRANSFER

UNIVERSITY TRANSFER

The Maricopa Community Colleges have developed formal agreements to facilitate the transfer of credit to other bachelor degree awarding [colleges and universities](#). This is accomplished through the development of course and

program articulation agreements. The Maricopa Community Colleges articulate with accredited private, public, and international baccalaureate granting institutions. Maricopa transfer agreements are on behalf of the district as a whole and not with individual colleges within the District. Courses taken at any of the Maricopa Community Colleges are equally transferable by institutions wishing to articulate. Students planning to transfer to a university may be required to submit official transcripts.

Articulated transfer programs and pathways between the Maricopa Community Colleges and other institutions [such as the MYPATH2ASU™, the UA Bridge Program, 2NAU and 90/30 Transfer Agreements] are official, recognized programs of study that fulfill degree requirements at both institutions. These articulated programs and pathways are designed to aid in a smooth transition for a student planning to transfer to a college or university by identifying the required, transferable, and applicable coursework for that student's specific program of study. A complete list of MYPATH2ASU™ requirements by major and catalog year is maintained on ASU'S website, at [Transfer](#).

ARIZONA PUBLIC COMMUNITY COLLEGES AND UNIVERSITIES

Maricopa is a participant in the Arizona statewide transfer system. [AZTRANSFER.COM](#) is the official source of information for the statewide articulation agreements between the Arizona public community colleges and universities (Arizona State University, Northern Arizona University, and University of Arizona). Included on [AZTRANSFER.COM](#) is the Course Equivalency Guide (CEG), which shows transfer course equivalencies between Arizona's public community colleges and tribal institutions to Arizona State University, Northern Arizona University, and the University Of Arizona. The transferability of a course does not indicate directly how the course will apply to meet requirements for specific programs of study. [AZ Transfer Course Equivalency Guide](#)

TRANSFER CREDIT DISCLAIMER

There may be limitations on the transfer of credit (e.g. age of the credit, remedial courses, credit earned through prior learning assessment). Students are encouraged to work with their intended transfer institution to maximize the acceptability and application of credits towards specific university requirements.

(U.S.) AND INTERNATIONAL INSTITUTIONS

The Maricopa Community Colleges have transfer agreements with accredited U.S. universities and colleges as well as international institutions that have been approved by the Ministry of Education. These partnerships are formalized through District-Wide memorandums of understanding and articulation agreements, and are designed to help students maximize the applicability of transfer credit at the transfer institution. To access a list of institutions with which Maricopa has established articulation agreements, visit: [Maricopa University Partner List](#)

TIME LIMIT FOR TRANSFER COURSEWORK

Students should be aware other colleges and universities may have age of credit limits on certain coursework to be used in transfer. Students should refer to the policy of their intended transfer institution regarding time limits for transfer coursework.

SHARED UNIQUE NUMBERING (SUN) SYSTEM COURSE INFORMATION

Senate Bill 1186, which passed into law in 2010, mandated the creation of a shared numbering system for public college and university courses in Arizona to identify courses that transfer from community colleges to universities toward a baccalaureate degree. The Shared Unique Number (SUN) system is a college course numbering system designed to help students locate and enroll in courses that have direct equivalents for transfer among Arizona's public community colleges and three state universities. However, even if a course at the Maricopa Community Colleges is not designated as a SUN course, it may still transfer to other Arizona public institutions with a direct equivalent as per the Course Equivalency Guide on [AZTRANSFER.COM](#). The SUN system does not address the applicability of courses. students are encouraged to work with an academic advisor on course selections. To access a list of SUN courses, visit [SUN](#)

AMENDED through the Administrative Regulation Approval Process, June 4, 2024

AMENDED through the Administrative Regulation Approval Process, June 12, 2023

ADOPTED through the Administrative Regulations Approval Process, June 4, 2019

2.9 Veterans Services

The Maricopa Community Colleges' Veterans' Services offices act as liaisons with the Department of Veterans Affairs (VA) and the state approving agency. Each program must be approved by the state approving agency. Students may be eligible to receive educational benefits if they are registered in courses that apply to the student's approved programs. Application forms, counseling, advisement, tutoring, and priority enrollment are available for students who are eligible for veteran's educational benefits. Students applying for veteran's educational benefits should allow eight to ten weeks before receiving benefits. The amount of benefits awarded is determined by the Department of Veterans Affairs, and is based on the number of credit hours or clock hours for which a student is enrolled and the length of the enrollment period for each course.

Prior to enrolling, eligible service members receiving tuition assistance must speak with an Education Services Officer (ESO) or counselor within their military service branch/ organization.

Veteran's benefits available:

- Chapter 30 - Montgomery GI Bill®
- Chapter 31 – Veteran Readiness and Employment (VR&E)
- Chapter 32 - VEAP Program
- Chapter 33 - Post 9/11 GI Bill® & Transfer of Eligibility to Dependents (TOE)
- Chapter 35 - Survivors and dependents of deceased/100% disabled veterans
- Chapter 1606 - Montgomery GI Bill®, Selected Reserve

GI Bill® is a registered trademark of the U.S. Department of Veterans Affairs (VA). More information about education benefits offered by VA is available at the official U.S. government Web site at <https://www.benefits.va.gov/gibill>.

Covered individuals (as defined in 38 U.S.C. § 3679) utilizing Chapter 33, Chapter 30, Chapter 31, Chapter 32, Chapter 35, or Chapter 1606 VA education benefits may attend or participate in a program of study during the period beginning on the date the individual provides the educational institution a Certificate of Eligibility (COE), a Statement of Benefits obtained from eBenefits, or a purchase order for Chapter 31, and ending on the earlier of the following dates:

1. The date upon which payment from the VA is made to the institution;
2. 90 days after the date the institution certified tuition and fees following the receipt of the Certificate of Eligibility.

No penalty, including the assessment of late fees, and/or the denial of access to classes or other institutional facilities will be imposed on the individual due to the delayed disbursement funding from VA under Chapter 33, 30, 31, 32, 35, or 1606.

It is the student's responsibility to notify the office that serves veterans at their campus regarding any change in enrollment, address, program of study, enrollment at another institution, or any other change that may impact their veteran's educational benefits.

Those students receiving benefits must follow the VA academic progress policy to continue to receive benefits.

Department of Veterans Affairs regulations require that all persons using any type of veteran educational assistance program make satisfactory academic progress toward achievement of their educational objective (program of study). A student who does not meet the minimum standards of 2.0 upon completion of 12 or more credit hours will be placed on probation, at which point the student will have no more than two semesters in which to improve academic standing to acceptable. At this point, if satisfactory academic progress has not been demonstrated, veteran educational benefits will be terminated. Benefits may be resumed when the student raises the cumulative grade point average to the required minimum standards or demonstrates the ability to meet these standards through the approval of a written appeal. For appeal procedures, contact the office that serves veterans at your campus.

For additional details and information regarding veteran's educational benefits, contact the office that serves veterans at your campus.

Distance Learning:

The course content and competencies for distance learning classes are the same as courses offered in-person or in a hybrid format. The courses offered in this format lead to completion of MCCC degrees and/or certificates of completion.

Colleges use Learning Management Systems (LMS) like Canvas and RioLearn for online offerings. These portals are used for both hybrid and online classes. Students must use their Maricopa Enterprise ID and password to access the portal. The link to the portal is provided on the college home page and on www.maricopa.edu/students, the district's website for student access to Maricopa tools. Maricopa-assigned student email addresses are used for communicating with students within the tools. Students are also able to communicate with the instructor through the LMS, via Maricopa e-mail or by phone.

Externship Programs:

The Maricopa Community College's official District course descriptions for credited experiential learning opportunities (Internships, Externships, Practicums, and Clinicals) state the amount of hours required in order for a student to receive college credit. The descriptions also indicate if a maximum amount of credit is allowable for any given experiential learning opportunity. Each course that includes an experiential learning opportunity is assigned a Maricopa Instructor of Record who is responsible for ensuring that the student completes the required hours and assignments in order to receive credit. Additionally, the instructor works extensively with a site supervisor to ensure that the student is making satisfactory progress and meeting the time requirements. The experiential credit process for the student includes the specific course details and learning outcomes, how hours will be tracked, and what is required for grading and course completion. The instructor submits the final grade for the experience. Maricopa's experiential learning process is in compliance with CFR 38 21.4265

A complete list of internship courses, along with course objectives, can be found on the Maricopa Community College's District – [Center for Curriculum and Transfer Articulation](http://www.maricopa.edu/center-for-curriculum-and-transfer-articulation) website, located at: <https://curriculum.maricopa.edu/transfer-and-articulation>

Prior Credit Evaluation:

Department of Veterans Affairs requires that all persons using any type of veteran's educational assistance must have all prior education and training evaluated. Students will be required to request transcripts from all prior institutions, including military training. Without all prior institutions and military training, veteran educational assistance may not be certified. Transcripts will be evaluated and credit will be granted, as appropriate.

AMENDED through the Administrative Regulation Approval Process, June 4, 2024

TECHNICAL CHANGE made to align with Administrative Regulation 2.9, April 11, 2022. Original Direct Chancellor Approval, April 17, 2018

AMENDED through Direct Approval by the Chancellor, April 14, 2021

AMENDED through Direct Approval by the Chancellor, October 21, 2020

AMENDED through Direct Approval by the Chancellor, March 6, 2019

AMENDED through Direct Approval by the Chancellor, September 17, 2018

AMENDED through Direct Approval by the Chancellor, April 17, 2018

AMENDED through the Administrative Regulations Approval Process, June 5, 2017

AMENDED through the Administrative Regulations Approval Process, May 16, 2016

SCHOLASTIC STANDARDS

2.3.1 Academic Load

A credit hour is defined as an amount of work represented in course competencies and verified by evidence of student achievement that reasonably approximates not less than one hour of classroom or direct faculty instruction and a minimum of two hours of out-of-class student work each week for approximately fifteen weeks for one semester hour of credit, or the equivalent amount of work over a different amount of time, or at least an equivalent amount of work for other academic activities, including laboratory work, internships, practica, studio work, and other academic work leading to the award of credit hours. In accordance with common practice in higher education, instruction representing a credit hour is typically delivered in a 50 minute class period.

Students carrying at least twelve (12) credit hours will be considered full-time students for the fall and spring semesters. Three-quarter-time is 9 - 11.9 credit hours. Half-time is 6 - 8.9 credit hours. Fewer than six (6) credit hours is considered less than half-time. Academic load for summer and special terms may be defined differently. Contact the Admissions and Records Office/Office of Student Enrollment Services for clarification. As provided in the Reduced Course Load administrative regulation, a student may be deemed a full-time student carrying fewer than twelve credit hours pursuant to an accommodation of a disability.

Courses may vary in length, and begin and end throughout the year. A credit hour indicates the value of an academic credit. Standards for the awarding of credit hours may be time based or competency based. To obtain credit, a student must be properly registered and must pay fees for the course. The fall and spring semesters are typically sixteen (16) weeks in length. Summer sessions are typically five or eight weeks in length.

Students desiring to take more than eighteen (18) credit hours must obtain approval from the designated college official. Ordinarily, only students with a grade point average of 3.0 or higher for the preceding semester or first semester students who were in the upper quarter of their high school graduating class are permitted to carry more than eighteen (18) credit hours.

Students participating in extra-curricular or co-curricular activities or receiving financial assistance may be required to maintain a specified minimum academic load.

Students who are working, have considerable extra-curricular or co-curricular activities, or have been reinstated from academic suspension/probation should plan their academic load accordingly.

Schedule Changes

Students may change their schedule by following the designated procedures at their college of enrollment. It is the student's responsibility to notify the college if he/she will no longer be attending the class (see [Administrative Regulation 2.3.6 Withdrawal](#) for Withdrawal Procedures).

TECHNICAL CHANGE, July 11, 2023

2.3.2 Attendance

- Only persons who are registered for a class at any of the Maricopa Community Colleges may attend that class. Attendance requirements are determined by the course instructor. Students who do not meet the attendance requirement as determined by the course instructor may be withdrawn.
- Students who fail to attend the first scheduled class meeting, or to contact the instructor regarding absence before the first scheduled class meeting may, at the option of the instructor, be withdrawn.
- At the beginning of each course, each faculty member will provide students with written attendance requirements. It is the student's responsibility to consult with the instructor regarding official or unofficial absences. Absences begin to accumulate with the first scheduled class meeting.
- Students bear the responsibility of notifying the Admissions and Records Office/Office of Student Enrollment Services when they discontinue studies in a course or at the college. Please refer to [Administrative Regulation 2.3.6 Withdrawal](#) for Withdrawal Procedures.

1. Official Absences

- A. Official absences are those that occur when students are involved in an official activity of the college, i.e., field trips, tournaments, athletic events, and present an official absence excuse form. Absences for such events shall not count against the number of absences allowed by an instructor or department. Students who must miss a class for an official reason must obtain an official absence verification card from the appropriate vice president or designee and present it to the appropriate instructor(s) before the absence. Prior arrangements must be made with each instructor for make-up work. If prior arrangements have been made, the student will not be penalized.
- B. Other official absences include jury duty and subpoenas. Appropriate documentation will be required. Prior arrangements must be made with each instructor for makeup work. If prior arrangements have been made, the student will not be penalized.
- C. In the event of military commitments. Absences for periods of up to one week will not be counted against the number of absences allowed by an instructor or department. The student is required to provide appropriate documentation of the specific orders, length of assignment and location. Prior notification must be initiated with each instructor to discuss make-up work. If the length of the absence will be longer than one week, the instructor and the student will determine whether there is sufficient opportunity for the student to make up the work. If it is determined that the length of absence for the military commitment provides an undue hardship on the student's ability to make up the assignments, he or she will be provided an opportunity to request an incomplete grade or drop the class or, in the case of open-entry classes, the opportunity to request an extension.
- D. In the event of the death of an immediate family member, absences for periods of up to one week will not be counted against the number of absences allowed by an instructor or department. Students should contact instructor(s) as soon as possible to arrange for make-up work. Appropriate documentation will be required (for example, a copy of the obituary or funeral program). In specialized programs that require clinical rotations, this regulation may not apply.

2. Religious Holidays

Students shall have the right to observe major religious holidays without penalty or reprisal by any administrator, faculty member or employee of the Maricopa Community Colleges. Absences for such holidays shall not count against the number of absences allowed by an instructor or department, provided the student has utilized the Religious Accommodation Procedure outlined in ND-4 of the Administrative Regulations Appendices. The Procedure and Religious Accommodation form may be found at [ND-4](#). As outlined in the ND-4 Religious Accommodation Procedure, to the extent possible, requests must be made at least two (2) weeks before the requested absence from class due to religious holiday or day of observance by providing the faculty member with the [Religious Accommodation Request Form](#). Once a religious accommodation is granted, the student must make arrangements with each instructor for make-up work.

3. Excused Military Absences

A member of the National Guard of this state or any other state or of the United States Armed Forces Reserves who is a student at an institution of higher education in this state and who is ordered to either state or federal reserve component duty or a person who is the spouse of a member of the National Guard of this state or any other state or the United States Armed Forces Reserves, who is a student at an institution of higher education in this state and whose spouse is ordered to either state or federal reserve component duty, whether the member or spouse is attending class in person or online and whether the member is stationed in or outside of this state, may do any of the following:

- A. Withdraw from one or more courses for which tuition and fees have been paid. the tuition and fees must be credited to the student's account at the institution. Any refunds are subject to the requirements of the state or federal financial aid programs of origin. The student may not receive credit for the courses and may not receive a failing grade, an incomplete or another negative annotation on the student's record and the student's grade point average may not be altered or affected in any manner because of the student's withdrawal under this subsection.
- B. Depending on when the member is ordered to either state or federal reserve component duty and depending on the individual student's needs, receive a grade of incomplete and be allowed to complete the course if the course is being offered at the time to other students on release from reserve component duty under the institution's standard practice for completion of incompletes.

C. In accordance with any academic unit or institution of higher education requirements or in compliance with accreditation or certification standards, when applicable, continue and complete the course for full credit. Class sessions the student misses due to state or federal reserve component duty must be counted as excused absences and may not be used in any way to adversely impact the student's grade or standing in the class. Any student who selects this option is not automatically excused from completing assignments due during the period the student or student's spouse is performing state or federal reserve component duty. A letter grade or a grade of pass may be awarded only if the faculty member teaching the course determines that the student has completed a sufficient amount of work and has demonstrated sufficient progress toward meeting course requirements to justify the grade.

D. Withdraw and be readmitted with the same academic status and enrolled as a student at the institution, without penalty or redetermination of admission eligibility, within one year after the release of the student or student's spouse from state or federal reserve component duty.

1. A member of the National Guard of this state or any other state or of the United States Armed Forces Reserves who is a student at an institution of higher education in this state, who is ordered to either state or federal reserve component duty and as a result of that service or follow-up medical treatment for an injury incurred during that service, misses any test, examination, laboratory, presentation or class day on which a written or oral assignment is due or other event on which a course grade or evaluation is based may make up the test, examination, laboratory, presentation, class or event without prejudice to the final course grade or evaluation. The makeup activity must be scheduled after the student's return from reserve component duty and after a reasonable amount of time for the student to prepare for the test, examination, laboratory, presentation, class or event.

2. For class sessions a student described in subsection a of this section misses due to state or federal reserve component duty, the institution of higher education shall excuse the student's absences and not use these excused absences in any way to adversely impact the student's grade or standing in class.

3. If the faculty member teaching the course determines that the student has completed a sufficient amount of work and has demonstrated sufficient progress toward meeting course requirements to justify the grade without making up the test, examination, laboratory, presentation, class or event, a grade may be awarded without the makeup activity and the missed test, examination, laboratory, presentation, class or event may not be used in any way to adversely impact the student's grade or standing in the class.

4. The protections in this section may be invoked as follows:

a. If the state or federal reserve component duty is known in advance, the student must submit evidence documenting the state or federal reserve component duty to the faculty member teaching the course early in the semester or as soon as practicable before the missed class, assignment or examination.

b. If the state or federal reserve component duty is not known in advance, the student is responsible for providing evidence of the state or federal reserve component duty to the faculty member teaching the course as soon as practicable after the missed class, assignment or examination.

c. The student or an appropriate officer from the military organization in which the student or student's spouse will be serving must give written notice that the student or student's spouse is being or has been ordered to reserve component duty as prescribed in this section.

d. On written request from the institution of higher education, the student shall provide written verification of service.

5. To readmit a person with the same academic status means that the institution admits the student to the same program to which the student was last admitted by the institution or, if that exact program is no longer offered, the program that is most similar to that program, unless the student requests or agrees to admission to a different program, per CFR 34 668.18 (a)(2)(iii)(A).

TECHNICAL CHANGE, June 27, 2023

AMENDED by Direct Chancellor Approval, September 14, 2022

AMENDED through the Administrative Regulations Approval Process, November 5, 2019

2.3.3 Grading

1. Policy

It is the policy of the Maricopa Community Colleges that a grade will be assigned at the conclusion of the course. Official grades are available on designated college web sites.

Grade Key

Grade	Value	Grades Calculated In Gpa	Considered An Attempt	May Be Repeated
A	4.0 - Excellent	Yes	Yes	No
B	3.0 - Above Average	Yes	Yes	Yes
C	2.0 - Average	Yes	Yes	Yes
D	1.0 - Below Average	Yes	Yes	Yes
F	0.0 - Failing	Yes	Yes	Yes
I	Incomplete	No	No	N/A
IP	Course In Progress	No	No	N/A
N	Audit	No	No	N/A
W	Withdrawn, Passing	No	No	N/A
Y	Withdrawn, Failing	Yes	Yes	Yes
P*	Credit	No	Yes	Yes
Z	No Credit	No	Yes	Yes

*A "P" is judged to be equivalent to a grade of "C" OR HIGHER.

Attempt definition: a student is enrolled in a class and receives a grade of A,B,C,D,F, Y, P, or Z.

Students who wish to attempt a course after the fourth time will need assistance from the Admissions & Records/Enrollment Services Office to enroll.

If a student has been awarded financial aid, veterans benefits, or other military tuition assistance programs, scholarships, or grants they should check with those offices about repeating classes.

The student is responsible for any tuition and fees associated with each attempt.

NOTE: Grading errors discovered after the sixty (60) day expiration date can be corrected if they have been researched by the Director of A&R/Enrollment Services and the Instructor of Record or the Department/Division Chair.

2. Incomplete Grade

- A. Students who are doing acceptable work may request an incomplete grade "I" if they are unable to complete the course requirements by the end of the term because of illness or other extenuating circumstances. If the request is approved by the instructor, they shall define, in a written/electronic contract, how the course will be completed.
- B. Students must complete the requirements within the time period agreed to--maximum time allowed is seven (7) months from the last date of class in which the grade of incomplete was assigned. Students who do not complete the requirements within the approved time period will have their grade recorded in accordance with the written contract. Students should NOT reregister for the course to complete the contract nor will they be allowed to attend or otherwise participate in a current class in order to make up the missed work.
- C. A student's eligibility for financial aid may be jeopardized by an incomplete grade. Refer to the Standards of Satisfactory Academic Progress for details.

3. Repeating a Course/Improving a Grade

Students who wish to improve their GPA may repeat a course within the Maricopa Community Colleges up to three times after the initial attempt. (A "W" is not considered an attempt.) Students planning to repeat a course should seek advisement prior to enrolling. The lower grade(s) and credit for repeated courses taken at the same college will automatically be excluded from the grade point calculation.

However, if the course(s) were taken at a different Maricopa Community College, the student must submit a request for the lower-graded course to be excluded from the GPA. The request can be submitted to the Admissions and Records Office at any of the Maricopa Community Colleges that the student attended.

Students receiving federal financial assistance and/or benefits should follow up with the Office of Financial Aid and/or Veterans' Services regarding their policies for repeated courses. An official student transcript is a permanent academic record issued by the college registrar. It displays all courses taken for credit within the Maricopa Community Colleges District and includes all grades received. Unlike an unofficial transcript, it is signed and dated by the college registrar and displays the college seal of the Maricopa College issuing the official transcript.

Check individual courses and programs for exceptions.

4. Credit/No Credit Courses (P/Z)

- A. Some courses may be taken under a credit/no credit grading system. These courses carry grades of P (credit, equivalent to a grade of C or higher) or Z (no credit) and are not computed in the student's grade point average. Credits earned with a grade of P may be counted toward graduation with the exception of AGECEC (Arizona General Education Curriculum).
- B. The prescribed time limits are for full-semester classes. Time limits for classes which meet fewer than sixteen (16) weeks are adjusted accordingly. See "Important Deadlines for Students".
- C. In courses with credit/no credit (P/Z) grading, the student may request standard grading (A, B, C, D, F), within fourteen (14) days including the date of the first class meeting. The instructor must immediately notify the Admissions and Records Office/Office of Student Enrollment Services.
- D. In courses with standard grading (A, B, C, D, F), the instructor determines if the credit/no credit option is available. If the option is available, the student must obtain the permission of the instructor. The instructor must notify the Admissions and Records Office/Office of Student Enrollment Services within fourteen (14) days including the day of the first class meeting.
- E. It is the student's responsibility to verify the transferability of credit/no credit courses. Some universities place a limitation on the number of credit/no credit courses that can be transferred.

Advisory note: Some institutions outside the Maricopa Community Colleges may translate the Z grade as failing.

5. Audit Courses

- A. Auditors are those who enroll in a course for the sole purpose of obtaining information; they receive no credit, grades, homework, or tests. If an auditor wishes to earn credit, he or she must change from audit status to credit status within the first week. If a student wishes to audit a course for which he or she is enrolled for credit, the change must be made within the first five (5) weeks of a semester. Auditors are subject to the same attendance policies as other students and must meet the same prerequisite requirements or obtain approval of the instructor. See the fee schedule for charges. Financial aid is not available for audited courses.
- B. The prescribed time limits are for full-semester classes. Time limits for classes which meet fewer than sixteen (16) weeks are adjusted accordingly and appear in the "Important Deadlines for Students."

6. GPA CALCULATION

There are three types of GPAS: Semester, Overall cumulative, and Graduation.

TYPE	CALCULATION	LOCATED
Semester GPA	Calculated using the courses taken in the semester at a single Maricopa Community College	Unofficial and Official Transcript Enrollment Verification
Overall Cumulative GPA*	Calculated using all courses taken at a single Maricopa Community College	Unofficial and Official Transcript Enrollment Verification
Graduation GPA	Calculated using all the courses applied toward graduation with a specific degree or certificate, including courses taken at the award-granting Maricopa Community College as well as transfer credit evaluated as equivalent from other Maricopa Community Colleges or other institutions.	Degree Progress Report

The grade point average (GPA) of a student will be calculated by multiplying the number of course credits/semester hours for each course by the grade point values associated with the grade received in that course, adding those totals together, and dividing that sum by the total number of course credits/semester hours. MCCC has a 4.0 scale and does not use a weighted gpa calculation for honors or advanced placement courses.

For a semester GPA, as well as the cumulative GPA, use all regularly graded courses in the GPA calculation.* Refer to the grade key to identify which course grades count toward the GPA calculation. The cumulative GPA is calculated based on individual courses rather than as an average of semester GPAs. All GPAs are truncated to three decimal points.

*The lower grade of courses repeated for credit (Refer to Repeating a Course/Improving a Grade) and academic renewal courses ([AR 2.3.7 Academic Renewal](#)) are not calculated in the GPA.

EXAMPLE:

COURSE	GRADE	NUMERICAL GRADE POINT EQUIVALENT	COURSE CREDITS	GRADE POINT VALUE (QUALITY POINTS = GRADE POINT x CREDITS)
ENG101	A	4.000	3.00	12.000
PSY101	C	2.000	3.00	6.000
FYE101	B	3.000	1.00	3.000
MAT140	B	3.000	5.00	15.000
PED115	P	0.000	2.00**	0.000**
TOTAL			14.00	36.000
36.000 GRADE POINT VALUE / 12.00** COURSE CREDITS = 3.000 GPA				
** THE P GRADE IS NOT CALCULATED INTO THE GPA PER THE GRADE SCALE				

7. [Important Deadlines for Students](#) (See [Appendix S-12](#))

Class Length	Deadline for Students to Withdraw with Guaranteed Grade of W	Deadline for Students to Withdraw from a Course (Instructor Signature Required)	Deadline for Students to Request Complete Withdrawal	Deadline to Change Type of Grading (A-F to P/Z, or P/Z to A-F)	Deadline to Change From Audit Grade to Credit Grade	Deadline to Change from Credit Grade to Audit Grade
One Week or Less (1 to 7 days)	1 st Day of Class	1 st Day of Class or Prior to the Last Day of Class	1 st Day of Class or Prior to the Last Day of Class	1 st Day of Class	1 st Day of Class	1 st Day of Class
Two Weeks (8 to 14 days)	3 rd Calendar Day	6 th Calendar Day	6 th Calendar Day	1 st Day of Class	1 st Day of Class	3 rd Calendar Day
Three Weeks (15 to 21 days)	6 th Calendar Day	12 th Calendar Day	12 th Calendar Day	2 nd Calendar Day	1 st Day of Class	5 th Calendar Day
Four Weeks (22 to 28 days)	9 th Calendar Day	17 th Calendar Day	17 th Calendar Day	3 rd Calendar Day	2 nd Calendar Day	7 th Calendar Day
Five Weeks (29 to 35 days)	12 th Calendar Day	23 rd Calendar Day	23 rd Calendar Day	4 th Calendar Day	2 nd Calendar Day	9 th Calendar Day
Six Weeks (36 to 42 days)	14 th Calendar Day	29 th Calendar Day	29 th Calendar Day	5 th Calendar Day	3 rd Calendar Day	11 th Calendar Day
Seven Weeks (43 to 49 days)	17 th Calendar Day	35 th Calendar Day	35 th Calendar Day	5 th Calendar Day	3 rd Calendar Day	12 th Calendar Day
Eight Weeks (50 to 56 days)	20 th Calendar Day	41 st Calendar Day	41 st Calendar Day	6 th Calendar Day	3 rd Calendar Day	15 th Calendar Day

Nine Weeks (57 to 63 days)	23 rd Calendar Day	46 th Calendar Day	46 th Calendar Day	7 th Calendar Day	4 th Calendar Day	17 th Calendar Day
Ten Weeks (64 to 70 days)	26 th Calendar Day	52 nd Calendar Day	52 nd Calendar Day	8 th Calendar Day	4 th Calendar Day	19 th Calendar Day
Eleven Weeks (71 to 77 days)	29 th Calendar Day	58 th Calendar Day	58 th Calendar Day	9 th Calendar Day	5 th Calendar Day	21 st Calendar Day
Twelve Weeks (78 to 84 days)	32 nd Calendar Day	63 rd Calendar Day	63 rd Calendar Day	10 th Calendar Day	5 th Calendar Day	23 rd Calendar Day
Thirteen Weeks (85 to 91 days)	35 th Calendar Day	70 th Calendar Day	70 th Calendar Day	10 th Calendar Day	5 th Calendar Day	25 th Calendar Day
Fourteen Weeks (92 to 98 days)	38 th Calendar Day	76 th Calendar Day	76 th Calendar Day	11 th Calendar Day	6 th Calendar Day	27 th Calendar Day
Fifteen Weeks (99 to 105 days)	41 st Calendar Day	82 nd Calendar Day	82 nd Calendar Day	12 th Calendar Day	6 th Calendar Day	28 th Calendar Day
Sixteen Weeks or more (106 or more days)	End of the 7 th week	Two weeks before the last class period	Two weeks before the last class period	Within 14 days including the first class period	Within first week of class	Within first five weeks of class
<i>Deadlines are based on calendar day and begin with the first day of class.</i>						

AMENDED through the Administrative Regulations Approval Process, June 4, 2024

AMENDED through the Administrative Regulations Approval Process, June 12, 2023

AMENDED through the Administrative Regulation Approval Process, May 24, 2022

AMENDED through the Administrative Regulations Approval Process, June 30, 2020

AMENDED through the Administrative Regulations Approval Process, June 4, 2018

AMENDED through the Administrative Regulations Approval Process, June 5, 2017

2.3.4 Academic Standing, Warning, and Probation

Academic standing is defined by the student's GPA. The GPA is calculated by dividing the number of grade points earned in courses that assign letter grades by the number of credits attempted.

The purpose for the academic standing, warning and probation policies is to establish a formal process through which the faculty, staff, and administration at the Maricopa Community Colleges may identify and provide support to students who experience academic difficulty and fall below a cumulative grade point average (GPA) of 2.0. The combined cumulative GPA includes computation of grades for both Maricopa and posted transfer courses. It is not intended to discourage or penalize students. Rather, this process reflects the commitment of the college's faculty, staff, and administration to provide students with assistance and support to ensure success in achieving their educational goals.

Academic Good Standing

Students in academic good standing have a GPA of 2.0 or higher.

Academic Warning

Students who do not achieve a minimum cumulative GPA of 2.0 after completion of up to eleven (11) or fewer credit hours are placed on academic warning. If a student does not achieve the minimum cumulative GPA of 2.0 after completion of twelve (12) credit hours, the student will be placed on academic probation for at least one additional term.

Academic Probation

A student will be placed on academic probation if, after completion of a total of twelve (12) or more credit hours at the college, the student's cumulative grade point average is less than 2.0. Students on academic probation may take no more than twelve (12) credit hours per semester unless a written appeal is filed by the student and reviewed by counseling faculty for academic support guidance (e.g., time management, test taking techniques, study skills, etc.) and the designated Academic or Student Affairs Dean or designee as determined by the college.

A student on academic probation who fails to raise the cumulative grade point average to 2.0 will be placed on continued probation and may be limited to taking six (6) credit hours unless reviewed by a counseling faculty for academic support (e.g., time management, test taking techniques, study skills, etc.) and the designated Academic or Student Affairs Dean or designee as determined by the college.

Students who receive an academic warning or who are placed on academic probation may be required to meet with an Academic Advisor or other designated intervention team members or engage in other intervention strategies prior to enrolling in courses to discuss an academic improvement plan which may include referrals to academic support, tutoring, and/or student support services to help them achieve good standing. Students using federal financial aid, VA education benefits, or active duty tuition assistance should contact their Financial Aid office and Veterans Services office to review possible impacts to their funding. See [S-5 Student Financial Assistance](#).

Also See:

[2.3.11 Academic Misconduct](#)

AMENDED through the Administrative Regulations Approval Process, June 4, 2024

AMENDED through the Administrative Regulations Approval Process, June 12, 2023

2.3.5 Instructional Grievance Process

A student who feels that he or she has been treated unfairly or unjustly by a faculty member with regard to an academic process such as grading, testing, or assignments, has the right to appeal according to the approved procedures.

The appeal process for grades must be initiated no later than sixty (60) calendar days from the date the grade was issued. Steps outlining the process are available in [Appendix S-6](#).

Appendix S-6: Instructional and Final Grade Grievance Process

Overview-please note the requirements for review which include specific written documentation and signatures, etc.

INSTRUCTIONAL GRIEVANCE

When there is a complaint by a student against a full-time or adjunct faculty member, proper district or college authority will work in confidence with the parties to resolve the conflict. A full-time or adjunct faculty member will not be required to respond to any complaint that is not in writing over a complainant's signature or to complaints that do not have specific documentation of incidents such as dates, times, etc. this complaint must be made available to the full-time or adjunct faculty member involved.

- STEP ONE:
 - A student who feels that they have been treated unfairly or unjustly by a full-time or adjunct faculty member with regard to an academic process such as grading, testing, or assignments, shall discuss the issue first with the faculty member involved. This conference shall be requested by the student within fifteen (15) business days from the time the student knew or reasonably should have known about the unfair or unjust treatment.

- This instructional grievance process shall not be utilized in a case in which a student feels they have experienced discrimination. If the student feels that they have experienced discrimination on the basis of race, color, religion, national origin, gender, age, disability, veteran status, or sexual orientation, the student shall refer to the discrimination complaint procedures for students as administered by the college's Equal Opportunity & Title IX Regional Director or designee.
- STEP TWO:
 - IF, within ten (10) business days of the request for the conference with the full-time or adjunct faculty member, the problem is not resolved or the faculty member has been unable to meet with the student, the student may continue the process by filing a written complaint with the Faculty Chair and appropriate administrative office at the college. This written complaint must be filed within ten (10) business days following the previous deadline. The written complaint will be given to the full-time or adjunct faculty member five (5) days before any official meetings are convened.
 - Upon receipt of a written complaint, the Faculty Chair or appropriate college administrative officer will work with the parties in an attempt to resolve the conflict. The full-time or adjunct faculty member may ask that the Faculty Senate President be in attendance. Every attempt will be made to maintain confidentiality during this process.
 - A full-time or adjunct faculty member will not be required to respond to a complaint that is not in writing and that, when appropriate, did not have the specific documentation including dates, times, materials, etc. the written complaint will be made available to the full-time or adjunct faculty member.
- STEP THREE:
 - If the complaint is not resolved at this level within ten (10) business days, the student should forward, to the VPAA or appropriate college administrative office, a copy of the original written complaint with an explanation regarding action taken at each prior level. The VPAA or appropriate college administrative officer will meet with the student, full-time or adjunct faculty member, the Faculty Chair, and the Faculty Senate President (the latter upon request of the full-time or adjunct faculty member), and attempt to resolve the issues. This level will be the final step in any complaint process regarding grades.

If the complaint, other than those concerning grades, is not resolved by the VPAA or the appropriate college administrative officer, it may be forwarded in writing by the student to the College President for final resolution. The College President or designee will expedite a timely examination of the issues and will issue a final written determination in the complaint process.

FINAL COURSE GRADE APPEAL

This process is to be used to appeal the final instructional grades for a course. Assignment or exam grades may be reviewed in this process if they impact continuation in a program.

A final grade can only be changed by the instructor of record through this process, except for extraordinary circumstances as outlined below.

This process should not be utilized in a case in which a student feels that they have experienced discrimination or harassment. A student who feels that they have experienced discrimination on the basis of race, color, religion, gender, sex, sexual orientation, gender identity, or national origin, citizenship status (including document abuse), age, disability, veteran status or genetic information should refer to the discrimination complaint procedures for students found on the district's student and faculty resources webpage.

In addition, a student who feels that they have experienced sexual harassment should refer to the sexual harassment policy for students.

TIMELINESS OF APPEAL

Any appeal of a final grade must be initiated no later than sixty (60) calendar days from the date the grade is issued. Absent exceptional circumstances, as determined at the sole discretion of the Faculty Chair, no untimely appeals will be considered. The resolution timeline for grade appeals that occur after the spring semester may be deferred until the first day of accountability of the following fall semester if so desired by the full-time or adjunct faculty member who assigned the grade.

PROCESS DEADLINES

The Faculty Chair or VPAA, as appropriate based on the level, may, upon a showing of good cause, extend any of the deadlines set forth in this process. Alternatively, any deadline may be extended by mutual agreement of the full-time or adjunct faculty member and student.

DOCUMENTATION

The student is responsible for providing a rationale for initiating a grade appeal. Any documentation to support the student's appeal is encouraged.

REMEDIES

Remedies under this process may include, as appropriate, a change in the grade received for the course, exam, project, or other assignment. Documentation of the resolution will be housed within the department/division.

FINAL GRADE APPEAL PROCESS

- **FACULTY LEVEL**
 - A student who wants to appeal a final grade shall first attempt to resolve the issue with the full-time or adjunct faculty member involved.
 - The student shall initiate the process by submitting to the full-time or adjunct faculty member a written grade appeal explaining why they feel there is an issue with the final grade.
 - Upon receipt of the written grade appeal, the full-time or adjunct faculty member shall contact the student to make arrangements for discussing the appeal.
 - Communication may occur in person, by phone, by mail, or by online means.
 - The full-time or adjunct faculty member and student shall make reasonable efforts to conduct the meeting within fifteen (15) business days from the submission of the written grade appeal.
 - When discussing concerns or complaints with an instructor it is most effective to arrange a time when the instructor is available for a confidential conversation.
 - The full-time or adjunct faculty member shall attempt to investigate and resolve the issue and inform the student of the resolution no later than ten (10) business days from the date of the meeting between the student and full-time or adjunct faculty member.

- If the full-time or adjunct faculty member is unavailable or fails to timely resolve the appeal, the student may escalate their appeal to the department/division level.
- A record of the resolution or reasons for non-resolution will be documented by the full-time or adjunct faculty member.
- DEPARTMENT/DIVISION LEVEL
 - If, after ten (10) business days, the appeal remains unresolved; the full-time or adjunct faculty member has been unable to meet with the student; or the student believes that the full-time or adjunct faculty member has reached an resolution, the student may, within ten (10) business days, forward the written appeal to the Faculty Chair. Upon receipt of the written appeal, the Faculty Chair will meet with the parties to attempt to resolve the appeal.
 - The full-time or adjunct faculty member may ask that the college Faculty Senate President or designee attend any meetings to advise on concerns of policy.
 - The student shall have the right to be assisted by any member of the college community they choose. A student who elects to be assisted by a member of the college community must notify the college community member's supervisor and Faculty Chair of the name and contact information of the college community member not less than two (2) business days before the scheduled meeting.
 - The college community member may not be serving in a legal capacity. The student is responsible for presenting their own information and, therefore, the college community member is not permitted to speak on behalf of or participate directly in any final grade appeal process meeting. The meeting may take place in person, by telephone, by mail, or by online means. Every attempt will be made to maintain confidentiality during this process.
 - A record of the resolution or reasons for non-resolution will be documented by the Faculty Chair on the intake form.
- VPAA LEVEL
 - If the appeal is not resolved at the department/division level within ten (10) business days, the student may forward the written appeal to the VPAA or designee a copy of the written appeal with an explanation of the action taken at each prior level.
 - The VPAA or designee will meet with the student, full-time or adjunct faculty member, the college Faculty Senate President (if requested by the full time or adjunct faculty member), the member of the college community (if requested by the student), and the Faculty Chair to attempt to resolve the matter.
 - The VPAA or designee shall issue a written decision regarding the outcome of the appeal no later than ten (10) business days following the date of the meeting.
 - Except as outlined below (extraordinary circumstances), this is the final level of review for appeals regarding grades. A record of the resolution will be documented by the VPAA or designee on the intake form.
- Extraordinary Circumstances
 - In extraordinary circumstances and where the VPAA deems it necessary in the interest of fairness, the VPAA may convene a committee to resolve the appeal. To minimize conflicts of interest, the committee shall be composed of neutral parties including:
 - At least one full-time faculty member from the academic discipline from which the appeal rises.

- One faculty senate member as designated by the college Faculty Senate President; the Faculty Chair.
- the Dean of Instruction or appropriate college/center administrative officer.
- A student from the student government or similar representative body. The committee will issue a written decision, which shall be final and binding as to appeals regarding grades.
- Examples of extraordinary circumstances may include, but are not limited to the following:
 - The faculty member is no longer employed within the district.
 - The faculty member deviated substantially from the course syllabus or any communicated changes in the course syllabus.
 - Other review processes of the faculty revealed inconsistencies in grading/assessment practices or unprofessional behavior.

Within thirty (30) business days of seating the committee, a resolution must be reached and documented. This is the final level of appeal for grades reviewed under this process.

EXPEDITED GRADE APPEAL PROCESS FOR TECHNICAL ERRORS OR OMISSIONS

This process may be used only to resolve grade appeals regarding technical errors or omissions in calculating or recording (a) a grade on an exam, project, or other assignment, or (b) an overall course grade. The grade appeal process should be used to process all other appeals regarding grades. This is the exclusive process for appeals regarding technical errors or omissions in grading.

- **FACULTY LEVEL**
 - A student who feels that a technical error or omission has occurred with respect to the calculation or recording of a grade shall first attempt to resolve the issue with the full-time or adjunct faculty member who issued the alleged incorrect grade.
 - An appeal regarding a technical error or omission in grading must be brought to the full-time or adjunct faculty member's attention no later than fifteen (15) business days from the date the student knew or reasonably should have known of the error or omission.
 - The student shall provide the appeal to the full-time or adjunct faculty member in writing. The full-time or adjunct faculty member shall attempt to investigate and resolve the appeal and inform the student of the resolution no later than ten (10) business days from the date the student first reported the appeal to the full-time or adjunct faculty member.
 - If the full-time or adjunct faculty member is unavailable or fails to timely resolve the appeal, the student may escalate the appeal to the department/division level. A record of the resolution or reasons for non-resolution will be documented by the full-time or adjunct faculty member.
- **DEPARTMENT/DIVISION LEVEL**
 - If the full-time or adjunct faculty member or representative faculty member has not resolved the appeal within ten (10) business days, or if the student believes the full-time or adjunct faculty member or representative faculty member has reached an erroneous resolution, the student may within ten (10) business days forward the written appeal to the Faculty Chair.

- The Faculty Chair shall investigate the appeal and inform the student of the resolution no later than ten (10) business days from the date the student reported the appeal to the Faculty Chair.
- The decision of the Faculty Chair is final and binding. Once a resolution has been made at any level of the process, it is considered final and will be documented as such. The request for the grade appeal cannot be reopened.

AMENDED through the Administrative Regulation Approval Process, May 12, 2025

AMENDED through the Administrative Regulation Approval Process, June 4, 2024

AMENDED technical change made to align with Article 20.7.6 of the Faculty Agreement, August 9, 2021

2.3.12 Non-Instructional Complaint Resolution Process

A student who feels that he or she has been treated unfairly or unjustly by any employee with regard to a non-instructional process such as a student or administrative services has the right to file a formal and written complaint according to the approved procedures. See [Appendix S-8](#).

Appendix S-8: Non-Instructional Complaint Resolution Process

A student who feels that he or she has been treated unfairly or unjustly by any employee with regard to a non-instructional process such as a student or administrative services has the right to file a formal and written complaint according to the approved procedures. Steps for students to follow:

1. Discuss the issue with the employee involved. The student should request this conference within fifteen (15) working days from the time the student knew or reasonably should have known about the unfair or unjust treatment.
2. If, within ten (10) working days of the request for the conference with the employee, the problem is not resolved or the employee has been unable to meet with the student, the student may continue the process by filing a written complaint with the appropriate supervisor of the employee where authority exists to take corrective action. This written complaint must be filed within ten (10) working days following the previous deadline. The written complaint will be given to the employee five (5) working days before any official meetings are convened.
3. Upon receipt of a written complaint, the appropriate supervisor will work with the parties in an attempt to resolve the conflict. Every attempt will be made to maintain confidentiality during this process. An employee will not be required to respond to a complaint which is not in writing and which, when appropriate, does not have specific documentation including dates, times, actions, supporting documents, etc. The written complaint will be made available to the employee.
4. If the complaint is not resolved at this level within ten (10) working days, the student should forward to the Vice President of Student Affairs or Designee, a copy of the original written complaint with an explanation regarding action taken at each prior level. The dean and/or associate dean will meet with the student, the employee, and the relevant supervisor and attempt to resolve the issues.
5. If the associate dean and/or dean do not resolve the complaint, the student may forward it in writing to the college president for final resolution. The college president or designee will issue a final written determination in the complaint process.

2.3.6 Withdrawal

The Office of Admissions and Records/Office of Student Enrollment Services provides information about the withdrawal process. To withdraw from a course or courses from the college, students must follow approved procedures as outlined below. The official date of withdrawal is the date the withdrawal is received in the Admissions and Records Office/Office of Student Enrollment Services. Withdrawal from a course (or courses) does not automatically qualify for a refund of tuition and fees. Tuition and fee refunds will be calculated based on [2.2.10 Refund Policy](#) or reviewed under the refund appeal process. Never attending is not an allowable refund exception or an excuse of the debt incurred through registration. Please see the refund policy.

TYPES OF WITHDRAWALS

STUDENT WITHDRAWAL: Is a change in the student's course schedule where one or more courses are withdrawn before the end of the term.

FACULTY WITHDRAWAL: Occurs when a faculty member withdraws a student.

COMPASSIONATE WITHDRAWAL: Is considered when a sudden emergency or severe change in personal circumstances, result in an inability to continue/complete courses. The student provides a written statement of their situation and any documentation to support this request if applicable (e.g. death certificate, accident report, etc.). Steps outlining the process are available in [Appendix S-20](#).

MEDICAL WITHDRAWAL: Is considered when there is an unexpected serious illness or injury that prevents the student from continuing with their course or courses. The medical withdrawal policy covers physical health and mental health difficulties. All applications for compassionate and medical withdrawal that are submitted by the student, or on their behalf, require thorough and credible documentation. An approved medical/compassionate withdrawal request will result in a note on the student's official transcript, under each course affected by the withdrawal clarifying that the withdrawal was for extenuating circumstances, although the specific reason will not be identified to maintain privacy. Medical and compassionate withdrawal applications and supporting documents are retained for at least five years and filed securely. If a request for refund has also been made, further assessment is done to determine eligibility. Steps outlining the process are available in [Appendix S-20](#).

LEAVE OF ABSENCE: Assists and encourages students to return and graduate after an absence due to military deployment, service on an official church mission, or with a foreign aid service of the federal government. If your absence is due to this or any other reason, you may be eligible to return to a Maricopa College through a quick re-entry process, which permits students to enroll without submitting a new application if they previously attended a maricopa college. If the leave of absence is due to military commitments, students should also reference [Administrative Regulation 2.2.3\(3\)](#).

WITHDRAWAL OF FINANCIAL AID STUDENTS

Withdrawing can have implications for certificate or degree completion, future registration, financial aid eligibility, and return of financial aid funds. In accordance with federal regulations ([34CFR 668.22](#)), a student may be required to repay federal financial aid funds if they completely withdraw or are withdrawn, or fail to earn a passing grade from all courses during a semester. This could affect a student's ability to receive financial aid in the future at Maricopa or any school.

Prior to submitting a request for any withdrawal or leave of absence, students are encouraged to meet with a college advisor about the potential impact related to the student's academic progress. Students using financial aid, VA education benefits, or active duty tuition assistance should contact their Financial Aid and Veterans Services offices to review possible impacts to their funding.

WITHDRAWAL PROCEDURES

WITHDRAWAL FROM SPECIFIC COURSES

A student may officially withdraw from specific courses in the following ways:

- The prescribed time limits are for full semester courses. Time limits for courses which meet fewer than sixteen (16) weeks are adjusted accordingly. See [Important Deadlines for Students](#). Failure to file an official withdrawal form may result in failing grades and responsibility for course tuition and fees. Tuition and fee refunds will be processed based on the [2.2.10 Refund Policy](#).
- Through the 7th week*, a student may initiate an official withdrawal from any course by completing the withdrawal process online using the student self service system or by submitting a course withdrawal form to the

Admissions and Records Office/Office of Student Enrollment Services in accordance with the published deadlines. A grade of W (withdrawn, passing - not computed in the grade point average) will be assigned.

- After the 7th week, a student must initiate a withdrawal request with the faculty member. If, after consultation with the student, the faculty member approves the request, a grade of W (withdrawn, passing - not computed in the grade point average) or Y (withdrawn, failing - computed in the grade point average as a failing grade) will be assigned. If the request is not approved, the student will remain in the course.

A student has the right to appeal a withdrawal decision according to the approved procedures. Steps outlining the process are available in [Appendix S-6](#).

COMPLETE WITHDRAWAL FROM COLLEGE

Students electing to withdraw from the college must contact the Admissions and Records Office/Office of Enrollment Services no later than two weeks* before the end of the last class meeting and may be required to file a written request.

A grade of W will be assigned in all courses for students who withdraw by the end of the 7th week* of classes. Withdrawals completed after this time will result in a grade of W (withdrawn, passing – not computed in the grade point average) or Y (withdrawn, failing – computed in the GPA as a failing grade).

*The prescribed time limits are for full semester classes. Time limits for classes which meet fewer than sixteen (16) weeks are adjusted accordingly. See [Important Deadlines for Students](#). Failure to file an official withdrawal form may result in failing grades and responsibility for course tuition and fees. Refunds will only be processed within the [Refund Period](#).

FACULTY WITHDRAWAL PROCEDURES

A faculty member has the option of withdrawing a student who has accumulated unofficial absences in excess of the number of times indicated in that faculty member's attendance policy in the course syllabus (See AR 2.3.2). A grade of W (withdrawn passing - not computed in gpa) or a grade of Y (withdrawn failing - 0 grade points per credit hour) may be assigned in accordance with the course syllabus. Faculty members electing to withdraw students must record the withdrawal through the online system, including last date of attendance and withdrawal code. Students withdrawn for excessive absences may be reinstated only with the approval of the faculty member. Any impact on attendance that is protected by the exercise of students' rights under ADA/504, Title IX, Title VI, or other recognized law or policy do not count as unexcused absences for the purposes of instructor-initiated withdrawals for lack of attendance/participation. Requests for withdrawals should be referred directly to the college of enrollment.

Also See:

[2.2.10 Refund Policy](#)

AMENDED through the Administrative Regulations Approval Process, June 4, 2024

TECHNICAL CHANGE, September 25, 2023

TECHNICAL CHANGE, July 11, 2023

AMENDED through the Administrative Regulations Approval Process, June 12, 2023

Appendix S-7 Student and Faculty Withdrawal Procedures

Appendix S-7 Student and Faculty Withdrawal Procedures was removed from the Common Pages through the Catalog Common Pages Administrative Regulation Review Process, June 12, 2023. Refer to [Administrative Regulation 2.3.6 Withdrawal](#) for information regarding withdrawal procedures.

AMENDED through the Administrative Regulations Approval Process, June 12, 2023
AMENDED through the Administrative Regulations Approval Process, December 12, 2018
AMENDED through the Administrative Regulations Approval Process, February 23, 2010
AMENDED through the Administrative Regulations Approval Process, August 18, 2008
AMENDED through the Administrative Regulations Approval Process, March 5, 2009

2.3.7 Academic Renewal (“Academic Forgiveness”)

The Maricopa Community Colleges recognize that a student’s academic record may contain grades that are not reflective of more recently demonstrated academic success. Academic renewal (or academic forgiveness) is defined as the process by which a student’s previously recorded substandard credit coursework is excluded from the student’s cumulative grade point average (Refer to [2.3.3 GRADING](#)). Through this regulation, a student may request that grades and credits for all courses in which they earned a grade of D, F, or Y are disregarded from the cumulative GPA. Courses earned with a GRADE of A, B, and C will not be excluded and will be calculated into the GPA and total credits completed. A maximum of 24 credits taken at Maricopa are eligible to be disregarded under this policy. The academic renewal policy may be used only once and cannot be revoked once approved.

To apply for academic renewal the student must:

1. Complete the academic renewal request form, attaching unofficial transcripts.
2. Submit the completed form to the Admissions and Records/Enrollment Services office.

Upon approval, courses with a grade of D, F, or Y will be annotated on the student's official transcript as excluded from the calculation of their cumulative GPA by academic renewal. All courses will remain on the student’s permanent record to reflect an accurate academic history.

Academic renewal at one of the Maricopa Community Colleges does not guarantee that colleges outside the Maricopa Colleges will accept this action. Acceptance of the adjusted GPA (post academic renewal) is at the discretion of the receiving institution.

FINANCIAL AID/VETERAN BENEFITS AND SATISFACTORY ACADEMIC PROGRESS (SAP)

The academic renewal policy can improve a student's GPA, while reducing their earned credit hours towards degree and certificate requirements, so students must be aware of all consequences before pursuing academic renewal. If interested in financial aid and/or veteran benefits, students are required to meet the financial aid standards of academic progress (SAP) as academic renewal does not replace or override the SAP requirement. Students should follow financial aid SAP appeal procedures outlined in [Administrative Regulation 2.3.6 Withdrawal](#) or section [2.9 Veteran Services](#) satisfactory progress standards for regaining aid eligibility.

Additionally, students are encouraged to speak with the Financial Aid and the Veteran Services Offices If they have questions about how the academic renewal process may affect their aid and benefit eligibility.

[For more information on SAP.](#)

Also See:

[2.3.4 Academic Standing, Warning, and Probation](#)

[2.3.6 Withdrawal](#) (Medical/ Compassionate Withdrawal)

[2.3.11 Academic Misconduct](#)

[More on Financial Aid](#)

AMENDED through the Administrative Regulations Approval Process, June 4, 2024
TECHNICAL CHANGE, JULY 11, 2023

2.3.8 Honors Opportunities & Recognition

Honors Program

Each of the Maricopa Community Colleges has an honors program. Interested students should contact the college honors coordinator for information about the program requirements and available scholarships, including the Chancellor's, Foundation's, President's Scholarships, and honors achievement award.

President's Honor List

The President's Honor List for each college consists of all students who complete twelve (12) or more credit hours in residence in courses numbered 100 or higher in a given semester with a college semester grade point average of 3.75 or higher. This is a distinct acknowledgement of academic achievement not related to participation in the honors program.

Graduation With Honors

[See General Graduation Requirements \(AR 2.3.9\)](#). This is a distinct acknowledgement of academic achievement tied to graduation. This is a distinct acknowledgement of academic achievement not related to participation in the honors program.

AMENDED through the Administrative Regulations Approval Process, June 12, 2023

2.3.9 General Graduation Requirements

Note: Also see Catalog Under Which a Student Graduates ([AR 2.2.5](#))

Earning a Certificate or Degree

The Maricopa Community Colleges offers certificates and degrees in a variety of areas. Each certificate and degree has specified program requirements for graduation. See certificate and degree information for specific program requirements. It is the student's responsibility to be aware of these requirements.

Candidates for graduation must satisfy the following requirements:

- Complete a minimum number of credits required for the certificate or degree. MCCCCD may waive total credit requirements in limited cases where a course requirement has been waived or credit for a course was increased after the student completed the course, and further, it has been determined by the college that there is no appropriate course substitute or applicable credit to fulfill the requirement (refer to [A.R. 2.3.13 Course Substitutions and Waivers](#)). The amount of credit earned toward the program requirements shall not be less than 120 for bachelor's degrees and 60 for Associate degrees. No more than 10% of the minimum required number of credits within a certificate of completion credits can be waived. Such cases must have prior written approval of the Program Director, Department/Division Chair, or designee who has oversight for the degree or certificate and/or in the cases of general education the disciplinary subject matter expert. Documentation of rationale and approval must be included as part of the application to graduate or institutional graduation process.
- Complete the minimum number of credits (i.e., establish institutional residency) at the Maricopa Community College conferring the degree or certificate as follows:
 - For bachelor's degrees, at least 30 credits applicable to the degree must be completed at the awarding college.
 - For associate's degrees, at least 15 credits applicable to the degree must be completed at the awarding college.

- For certificates that are 15 or more credits, at least 6 credits applicable to the certificate must be completed at the awarding college.
- For certificates that are 14 or fewer credits, at least a quarter of the credits applicable to the certificate must be completed at the awarding college.
- For certificates, if there is a range of credits to complete the certificate, residency will be calculated on the minimum number of credits required to complete the certificate, and any resulting quarter calculations will be rounded up to the nearest whole number. Certificates that require completion of one course or a single choice of requirements will not be split for purposes of residency determination.
- Refer to the section on the Arizona General Education Curriculum (AGEC) further in this regulation for specific information regarding the minimum number of credits required at the awarding college.

Credit awarded for prior learning assessment (PLA) does not count as credits in residence for graduation requirements. Student appeals to residency requirements must have prior written approval of the Program Director, Department/Division Chair, or designee and documentation of rationale and approval included as part of the admission process and/or application to graduate/institutional graduation process. Exceptions to residency may also be made by the college for unique programs of study (e.g., educational service agreements).

- All new Maricopa students who declare a degree will be required to successfully complete a first-year experience course (FYE101 or FYE103) within the first two semesters at a MCCCDC college. Students who enrolled but did not earn any credit at MCCCDC are considered new to MCCCDC. Students who have only earned credits via Prior Learning Assessment (Refer to [AR. 2.2.4 Transfer Credit And Prior Learning Assessment](#)), previous Dual Enrollment, or who withdrew from all previously attempted courses at MCCCDC are considered new to Maricopa.
- Meet the required certificate or degree requirements (general education, required courses, restricted electives, and/or general electives). Requirements can be satisfied by MCCCDC coursework, prior learning assessment, and transfer credit. Transfer credit from outside of MCCCDC or from Maricopa Community Colleges not awarding the degree or certificate and prior learning assessment does not count as hours in residence for graduation requirements.
- Earn a minimum grade point average (GPA) of 2.0 on a four-point grading scale in the coursework (100-level and above) used to satisfy degree or certificate requirements (completed in residence and accepted in transfer). Some awards may specify additional GPA requirements.
- Remove all deficiencies (e.g. incomplete grades, missing transcripts, national test results, course substitutions, course waivers, etc.) on the record to use those courses toward program completion.
- Fulfill any financial obligations with the college.
- Complete and submit a Petition/Application for Graduation with the Admissions, Records, & Registration/Enrollment Services office with the exception of reverse transfer and proactive graduation programs as outlined further in this policy.
Note that commencement ceremonies are a separate process and may include the submission of an additional form for students to participate in the celebration. Participation in commencement (walking/marching) does not guarantee a student has graduated or a degree has been earned.

Appeals to this institutional regulation may be considered prior to the admission process and/or petition to graduate. See the Admissions, Records, & Registration/Enrollment Services Office for a copy of the appeals process.

Multiple Certificates And Degrees

A student may earn a total of one of the same type of degree (AA, AS, AAEE, ABUS, AGS, or BSN) from the colleges in the Maricopa County Community College District regardless of emphasis, if applicable.

Because of the inherent unique required course requirements within, students may earn multiple distinct certificates (AC, CCL, and CCT) and degrees (AAFA, BA, BS, and BAS) from the college(s) offering the awards but cannot earn the same certificate or degree at one or more Maricopa Community Colleges.

AWARD TYPE	NUMBER THAT CAN BE EARNED
AA or AA With Emphasis	One AA with or without emphasis may be awarded across all MCCCCD
AS OR AS With Emphasis	One AS with or without emphasis may be awarded across all MCCCCD
AAFA	Student may earn multiple distinct AAFA emphasis, but cannot earn the same AAFA emphasis at one or more Maricopa Community Colleges
ABUS	One ABUS either GR or SR may be awarded across all MCCCCD
BA	Students may earn multiple distinct BA degrees, but cannot earn the same BA degree at one or more Maricopa Community Colleges
BAS	Students may earn multiple distinct BAS degrees, but cannot earn the same BAS degree at one or more Maricopa Community Colleges
BS	Students may earn multiple distinct BS degrees, but cannot earn the same BS degree at one or more Maricopa Community Colleges
BSN	One may be awarded across all MCCCCD
AAEE	One may be awarded across all MCCCCD
AGS	One may be awarded across all MCCCCD

AAS	Students may earn multiple distinct AAS, but cannot earn the same AAS degree at one or more Maricopa Community Colleges
AC	Students may earn multiple distinct ACs, but cannot earn the same AC at one or more Maricopa Community Colleges
CCL OR CCT	Students may earn multiple distinct CCLs or CCTs, but cannot earn the same CCL or CCT at one or more Maricopa Community Colleges

HISTORICAL REPLACED AWARDS

Students may not earn awards that replace historical awards with similar to the same content. Replaced awards are identified in the program notes.

Student-Initiated Graduation

Students should complete a petition for graduation when they intend to graduate and should contact the admissions & records office at their college for the deadlines.

Proactive Graduation

In an effort to support students to completion, each of the colleges in MCCCCD may elect to confer an award to current and former students who have met graduation requirements for any degree or certificate offered at the Maricopa Community Colleges in a process known as proactive graduation. The proactive graduation process applies to students who meet the following criteria:

- Met all graduation and program requirements for the eligible catalog year used in the proactive graduation process (Refer to A.R. 2.2.5 Catalog Under Which a Student Graduates).
- Earned the minimum cumulative credits for institutional residency for the degree(s) or certificate(s) between Maricopa Community Colleges.
- Degree(s) or certificate(s) will be conferred from the Maricopa Community College accredited to offer the program at which the student has completed the greatest number of institutional resident credit hours directly applicable to the degree or certificate.
- Students will be given the opportunity to opt out of the proactive awarding of the degree or certificate by notifying the college prior to the award.
- Students will be awarded the certificate and/or degree on the day, month, and year it is processed. The posting date will not be backdated to when the student completed the last course requirement nor future dated to the next commencement date.

Students should not depend on this process for graduation. The petition for graduation should always be submitted when a student intends to graduate.

Reverse Transfer Partnership Initiative

In an effort to assist former Maricopa students who have transferred to a university without first completing an Associate degree, coursework can be transferred backward (or in reverse) from a participating institution to the Maricopa Community Colleges for the purpose of fulfilling Associate degree requirements. The reverse transfer initiative applies to students, identified by the partnering university or college, who do not yet have an Associate's degree (or higher), and who meet the following criteria:

- Completed a minimum of 15 credits at one or more Maricopa Community Colleges
- Earned a minimum of 60 cumulative credits between Maricopa Community Colleges and other accredited institutions attended
- Met all requirements for an associate degree as outlined in the Maricopa Community Colleges catalog, with the exception of the MCCCDC additional/specific requirements of First Year Experience, Reading, And Oral Communication
- Interested students at participating accredited institutions must meet that accredited institution's criteria and provide appropriate consent to qualify for free transcript exchange

If eligible, students will receive their degree from the Maricopa Community College, where the majority (greatest amount of credit) of the student's applicable coursework toward the graduating program was completed.

Participation in reverse transfer does not guarantee coursework applicability or degree or certificate eligibility. Students participating in reverse transfer must meet all curriculum and college requirements in order to graduate as outlined in this regulation. Students should not depend on reverse transfer for graduation. The petition for graduation should always be submitted when a student is intending to graduate. Students will be awarded the certificate and/or degree on the day, month, and year it is processed. The posting date will not be backdated to when the student completed the last course requirement nor future dated to the next commencement date. Students interested in applying university or college credit after transfer toward the completion of a Maricopa Community college degree or certificate outside of a partnership initiative will follow the general graduation requirements outlined previously in this regulation.

Refer to the [Reverse Transfer Process](#) for partnering institutions and additional information

Maricopa Nursing Program

For the Maricopa Nursing program, the cumulative GPA for awarding purposes is calculated based on courses required for the degree or certificate taken at any Maricopa campus and includes pre-requisites, co-requisites, and nursing blocks. Students must apply for graduation from the college where they have successfully completed Block 4 of the Associate in Applied Science in Nursing.

Graduation with Honors

All courses used to fulfill graduation and degree requirements, including courses from other institutions outside of MCCCDC are used in the grade point average calculation (GPA) at graduation. Degree-seeking students who have distinguished themselves with GPAs 3.50 and higher are recognized with the following graduation honors*:

- 3.50 to 3.69 graduation "with distinction"
- 3.70 to 3.89 graduation "with high distinction"
- 3.90 to 4.0 graduation "with highest distinction"

Certificate programs are not eligible for institutional honors.

*GPA for honors distinction is calculated at the time of graduation application/petition submission and does not include any in-progress grades, grades received after the initial calculation, or grades not on file at the initial calculation. The final GPA and resulting distinction level will not be changed based on new grades.

Degrees and certificates will not be reposted if grades are contested after the initial award posting.

Arizona General Education Curriculum (AGEC)

The Arizona public community and tribal colleges and three public universities have agreed upon a common structure for a transfer general education curriculum. This curriculum provides students attending any Arizona public community or tribal college with the opportunity to build a general education curriculum that is transferable upon completion without loss of credit to another Arizona public community or tribal college or university. This common agreement is called the Arizona General Education Curriculum (AGEC).

Students must earn a minimum of 12 credits in the AGEC at one or any combination of the MCCCDC colleges. Students who complete the requirements will have the AGEC posted on their official transcripts. AGEC awards are not printed or sent to students.

Any transfer credit or Prior Learning Assessment (PLA) granted for the AGEC, a limit of up to 20 such credits, is for the purpose of satisfying the AGEC requirements within the Maricopa County Community College District. Although the AGEC will transfer to the Arizona public universities as a whole in order to satisfy their lower-division general education requirements, each course, individually, may not be awarded credit similarly at all public Arizona universities. Students should contact their transferring institution to determine their PLA requirements and policies.

Refer to [Academic Policies](#)

Refer to [A.R. 2.2.4 Transfer Credit and Prior Learning Assessment](#)

Refer to the [AGEC POLICIES](#)

Intersegmental General Education Transfer Curriculum (IGETC)

The California public community colleges and state universities have agreed upon a common structure for a general education core curriculum. This common structure is called the Intersegmental General Education Transfer Curriculum (IGETC) or the California State General Education Pattern (CSUGE). The IGETC and the CSUGE are composed of a minimum of 35 - 40 semester units of lower-division general education coursework that prepares the student for transfer.* All transferable coursework must be completed with a grade of -C- or better.

Students transferring to the Maricopa Community Colleges from California with an IGETC certified by a California community college will have completed the majority of the MCCCDC's general education and additional requirements. successful completion of the IGETC will fulfill the following requirements:

- First-Year Composition (6 credits)
- Oral Communication (3 credits)
- Mathematics (3 credits)
- Humanities, Arts, and Design (6 credits)
- Social-behavioral Sciences (6 credits)
- Cultural Diversity in the US (3 credits)

Note: To earn a specific degree, programs may require students take a designated course to fulfill the general education requirement. Acceptance of the IGETC does not supersede these requirements. Students may request a course substitution (Refer to [A.R. 2.3.13 Course Substitutions](#)).

To complete the Natural Sciences (7-8 Credits),MCCCDC will need to validate the student's completion of two laboratory science courses at the transfer institution or at MCCCDC. To satisfy the literacy requirement, MCCCDC will need to verify the student's completion of a course at the transfer institution or at MCCCDC that involves the development of competence in written discourse and involves the gathering, interpretation, and evaluation of evidence. To satisfy the historical/global awareness requirement,MCCCDC will need to verify the student's completion of a course at the transfer institution or at MCCCDC that focuses on contemporary global/international awareness or historical awareness.

Maricopa Community Colleges reserve the right to verify that an IGETC or CSUGE certified by a community college or university conforms to California-approved policy before the IGETC is applied toward a MCCCCD degree.

In the absence of a certified IGETC, transfer students from California colleges and universities may meet the MCCCCD general education requirements with a combination of courses taken before their initial enrollment at MCCCCD subject to the results of a course-by-course evaluation, along with subsequent MCCCCD general education course work.

Refer to [A.R. 2.2.4 Transfer Credit and Prior Learning Assessment](#)

AMENDED through the Administrative Regulations Approval Process, May 12, 2025

AMENDED through the Administrative Regulations Approval Process, June 4, 2024

AMENDED by Direct Approval from the Chancellor, September 19, 2023

AMENDED through the Administrative Regulation Approval Process, June 12, 2023

AMENDED through the Administrative Regulation Approval Process, May 24, 2022

AMENDED through the Administrative Regulation Approval Process, June 24, 2021

AMENDED by Direct Approval from the Chancellor, December 6, 2019

AMENDED through the Administrative Regulations Approval Process, June 5, 2017

2.2.5 Catalog Under Which a Student Graduates

Catalogs for the Maricopa Community Colleges are published each academic year and contain information about courses, certificates, degrees, and academic regulations and procedures. Academic program requirements and academic regulations are updated often and may change.

In determining the catalog under which a student graduates, students maintaining continuous enrollment at any public Arizona community college or university may graduate according to the requirements of the catalog in effect at the time of initial enrollment or according to the requirements of any single catalog in effect during subsequent terms of continuous enrollment. Students may maintain continuous enrollment whether attending a public community college or public university or transferring among public institutions in Arizona.

The rules for maintaining continuous enrollment are:

1. A semester in which a student earns course credit will be counted toward continuous enrollment. Enrollment by Arizona community college students in nontransferable courses still constitutes enrollment for purposes of determining whether the student has been continuously enrolled. Noncredit courses, audited courses, failed courses and courses from which the student withdraws do not count toward the determination of continuous enrollment for catalog purposes.
2. Failure to earn course credit in three consecutive regular (fall/spring/fall or spring/fall/spring) semesters at any Arizona community college or public university means students are no longer considered continuously enrolled. Students are not obligated to enroll and earn course credit during summer terms, but summer enrollment may be used to maintain continuous enrollment status.
3. If continuous enrollment is not maintained, the student must fulfill the requirements for graduation specified in the catalog in effect at the time they readmit/enroll or any single catalog in effect during terms of continuous enrollment after readmitting/re-enrolling.
4. Students who initially admitted/enrolled or readmitted/re-enrolled to an Arizona community college or public university during a summer term must follow the requirements of the catalog in effect for the following fall semester or of any single catalog in effect during the subsequent terms of continuous enrollment.

Age of Credit

In areas of study in which the subject matter changes rapidly, material in courses taken long before graduation may become obsolete or irrelevant. Coursework that is more than ten years old is applicable to completion of certificate and degree requirements at the discretion of the designated individuals at the college. The college may accept such coursework, reject it, or request that the student revalidate its substance. The ten-year limit on coursework applies except when

program accreditation agencies limit the life of coursework to less than 10 years. Departments may also require students to satisfy current major requirements rather than major requirements in earlier catalogs, when completing earlier requirements is no longer possible or educationally sound. Exceptions made by a college apply only to the college that made the exception.

Continuous Enrollment Examples

STUDENT'S ACTIVITY	SEMESTER/YEAR	STATUS
Example A		
Admitted and Earned Course Credit at an Arizona Community College	Fall 2019	Active
Continued at an Arizona Community College	Spring 2020 Fall 2020	Active
Transferred to an Arizona Public University	Spring 2021	Student Enrolled Under 2019–2020 or Any Subsequent Catalog
Example B		
Admitted and Earned Course Credit at an Arizona Community College	Fall 2015	Active
Enrolled but Earned all “W”S, “Z”S, or “F”S (0.00)	Spring 2016	Inactive
Enrolled in Audit Courses Only	Fall 2016	Inactive
Nonattendance	Spring 2017	Inactive
Transferred to an Arizona Public University	Fall 2018	Student Enrolled Under 2018–2019 or Any Subsequent Catalog
Example C		
Admitted and Earned Course Credit at an Arizona Community College	Fall 2018	Active
Nonattendance	Spring 2019 Fall 2019 Spring 2020	Inactive
Readmitted and Earned Course Credit at an Arizona Community College	Fall 2020	Active
Transferred to an Arizona Public	Spring 2021	Student Enrolled Under 2020–2021

University		or Any Subsequent Catalog
Example D		
Admitted and Earned Course Credit at an Arizona Community College	Fall 2018	Active
Nonattendance	Spring 2019	Inactive
Readmitted and Earned Course Credit at an Arizona Community College	Summer 2019	Active
Nonattendance	Fall 2019 Spring 2020	Inactive
Transferred to an Arizona Public University	Fall 2020	Student Enrolled Under 2018–2019 or Any Subsequent Catalog
Example E		
Admitted and Earned Course Credit at an Arizona Community College	Summer 2017	Active
Continued at an Arizona Community College	Fall 2018 Spring 2019	Active
Nonattendance	Fall 2019	Inactive
Readmitted and Earned Course Credit at an Arizona Community College	Spring 2020	Active
Transferred to an Arizona Public University	Summer 2020	Student Enrolled Under 2017–2018 or Any Subsequent Catalog
Example F		
Admitted and Earned Course Credit at an Arizona Public University	Summer 2018	Active
Nonattendance	Fall 2018	Inactive
Nonattendance	Spring 2019	Inactive
Readmitted and Earned Course Credit at an Arizona Public University	Fall 2019	Active

Admitted and Earned Course Credit at an Arizona Community College	Spring 2020	Student Enrolled Under 2018–2019 or Any Subsequent Catalog

*Please note that the above language is guided by statewide practices.

AMENDED through the Administrative Regulations Approval Process, June 4, 2024

AMENDED through the Administrative Regulations Approval Process, June 24, 2021

2.3.13 Course Substitutions and Waivers

A course substitution is a course that takes the place of a course requirement in a degree or certificate when a clear relationship exists between the two. course substitutions are made on a case-by-case basis with the intent that the integrity of the learning will not be compromised. Course substitutions differ from waivers of program requirements outlined in the curriculum or Prior Learning Assessment activities.

Course substitutions should only be made in a consistent and transparent manner, according to [Transfer Credit and Prior Learning Assessment](#) (A.R. 2.2.4), academic policies, and the following guidelines:

Students may seek to have course(s) requirements (including required courses, restricted electives, and prescribed general education requirements) in their declared bachelor's, associate in applied science or certificate program substituted.

Because a substituted course may not be accepted by a transfer institution or meet transfer degree requirements, course substitutions are not allowed in any of the required course areas of the Associate in Arts or Associate in Science degrees (including the "with emphasis" versions), Associate in Business - GR, Associate of Business - SR, Associate in Arts, Elementary Education, or the Associate in Arts, Fine Arts with Emphasis. Substitutions in the required course areas of these degrees may be considered in limited cases when a student has successfully completed a course that requires the substituted course as the prerequisite.

The course being used as a substitution must meet the equivalent content and/or rigor of the substituted course in the student's pathway plan (or for date status petitions by reason of disability). If the pathway course being substituted satisfies an Arizona General Education Curriculum requirement, the substituted course must meet that same requirement. Considerations for substitutions should also include impact to satisfying transfer pathway and industry requirements. Substituted courses should provide the skills and knowledge specified by the pathway learning outcomes.

Course substitutions should not be processed for degree-seeking students who have earned fewer than 15 credits (at Maricopa or elsewhere).

To pursue a course substitution, students must obtain a course substitution petition from the Admissions and Records office or Academic Advisor. Substitutions must be approved by the Program Department Chair, Program Division Chair, Academic/Occupational Program Director, or designee responsible for the degree or certificate program. The Department Chair, Division Chair, or Academic/Occupational Program Director will work with other departments as needed for courses within the degree or certificate that are outside of the discipline. The student may also request to meet with the designated college personnel to discuss or appeal a substitution decision.

If the credits of a substituted course are fewer than the original requirement, the missing credit hours are not granted by a substitution. Students must complete the minimum credit hours required by the award. [Refer To General Graduation Requirements \(A.R. 2.3.9\)](#) regarding exceptions/appeals to minimum credit hours to meet graduation requirements.

Students are encouraged to seek substitutions prior to enrollment in an intended substitute course, but substitutes can be reviewed and determined as a part of the graduation process if the substitute course has already been taken. Requests for course substitutions and supporting documentation (e.g. transcripts, course outlines/syllabi, catalog

descriptions of the requested course, etc.) should be submitted as soon as possible when transcripts are reviewed. For assistance, students should meet with an Academic Advisor specific to the declared transfer emphasis. Students seeking Title IV financial aid and veteran benefits for a course substitution must have the substitution approved and processed prior to registering for the substitute course. Course substitutions do not expire but may no longer be applicable if a student changes academic plans or catalog years.

COURSE WAIVERS

A course waiver is an exemption from a course within the program because the competencies of the course have already been attained due to prior training, education, or work experience but for which Prior Learning Assessment (PLA) is not applicable. A demonstration of these competencies by the student will be required as part of a waiver request process. A course waiver must have prior written approval of the Program Director, Department/Division Chair, or designee who has oversight for the degree or certificate and/or in the cases of general education the disciplinary subject matter expert. Documentation of rationale and approval must be included as part of the waiver request process.

Course waivers do not require the student to make up the deficient credit(s). However, there are limits to the number of credits that can be waived in a program. Waivers may not drop a student's required credits under 60 hours for an associate degree. The amount of credit earned toward the program requirements are 120 for bachelor's degrees and 60 for Associate degrees. No more than 10% of the minimum required number of credits within a certificate of completion credits can be waived.

Because a waiver may not be accepted by a transfer institution or meet transfer degree requirements, course waivers are not allowed in the Associate in Arts or Associate in Science degrees (including the "with emphasis" versions), Associate in Business - GR, Associate of Business - SR, Associate in Arts, Elementary Education, or the Associate in Arts, Fine Arts with Emphasis.

See also, Administrative Regulation [3.5 Course Substitution for Students With Documented Disabilities](#).

Administrative Regulation [2.2.4 Credit For Prior Learning](#)

Administrative Regulation [2.3.9 General Graduation Requirements](#)

AMENDED through the Administrative Regulations Approval Process, May 12, 2025

AMENDED through the Administrative Regulations Approval Process, June 12, 2023

ADOPTED through the Administrative Regulations Approval Process, June 24, 2021

2.3.10 Transcripts for Transfer

An official student transcript is a permanent academic record issued by the college registrar. It displays all courses taken for credit within the Maricopa Community College District and includes all grades received. Unlike an unofficial transcript, it is signed and dated by the College Registrar and displays the college seal of the Maricopa College issuing the official transcript.

The transcript is issued upon request only. Those students who want to transfer to other institutions of higher education must request their transcript be sent from the Admissions and Records Office/Office of Student Enrollment Services. However, transcripts may be shared within the Maricopa Community College District without the written request of the student in compliance with FERPA. Students should check with the institution they intend to transfer to for requirements regarding the type (official or unofficial), handling, and number of transcripts.

Upon request by a student and payment of transcript fee, MCCCCD will provide an official transcript that includes all the credit or clock hours from the enrollment.

MCCCCD will not withhold transcripts against a student related to a balance owed by the student, unless the balance owed was the result of fraud on the part of the student. Refer to [A.R. 2.5.3\(A\)\(3\)](#) for additional information.

The release of transcripts is governed by the guidance of the Family Education Rights and Privacy Act of 1974 (see Records Policy in the Student Rights and Responsibilities section of this manual). There is no charge for unofficial transcripts, or for official transcripts sent between Maricopa Community Colleges. Refer to S-4 Tuition and Fee Schedule for charges for other official transcripts.

AMENDED through Direct Approval by the Chancellor, June 17, 2024

AMENDED through the Administrative Regulation Approval Process, June 5, 2017

COLLEGE ENVIRONMENT

2.4.4 Sexual Harassment Policy (replaced with Administrative Regulation 5.1.16).

Administrative Regulation 2.4.4 is rescinded effective August 14, 2020. For cases made prior to August 14, 2020, 2.4.4 applies. Administrative Regulation 2.4.4 has been archived for transitional purposes.

RESCINDED by Direct Approval from the Chancellor, August 3, 2020

5.1.8 Policy Prohibiting Harassment

A. Policy

The policy of the Maricopa County Community College District (MCCCD) is to provide an educational, employment, and business environment free of harassment that is based on race, color, religion, sex, sexual orientation, gender identity, national origin, citizenship status (including document abuse), age, disability, pregnancy, veteran status or genetic information. Such prohibited harassment includes but is not limited to sexual violence, unwelcome sexual advances, requests for sexual favors, and other verbal and/or physical conduct or communications constituting harassment with regards to race, color, religion, sex, sexual orientation, gender identity, national origin, citizenship status (including document abuse), age, disability, pregnancy, veteran status or genetic information as defined and otherwise prohibited by state and federal law.

Employee complaints of harassment must be reported to the District Office of Equal Employment and Opportunity.

Harassment based on race, color, religion, sex, sexual orientation, gender identity, national origin, citizenship status (including document abuse), age, disability, pregnancy, veteran status or genetic information violates MCCCD Policy when the conduct is unwelcome, verbal, or physical conduct that is sufficiently severe, or pervasive that it alters working conditions and creates a hostile environment for employees. The unwelcome behavior may be based on power differentials, the creation of a hostile environment, or retaliation for harassment complaints. Harassment by and between any student or employee (paid, unpaid, or contract), is prohibited by this policy.

Due process is afforded any employee accused of harassment. Upon receipt of a complaint, an immediate preliminary review will be conducted to determine if there is reasonable cause to believe the nondiscrimination policy may have been violated. If so, then a prompt, thorough, impartial investigation will be conducted by the authorized administrator, or designee. If the final decision is that harassment occurred, the college will take immediate action to eliminate the hostile environment, prevent its recurrence, and address its effects. Remedies for the complainant will also be sought. Violations of this policy may result in disciplinary action up to and including termination for employees, sanctions up to and including suspension or expulsion for students, and appropriate sanctions against campus visitors. This policy applies to prohibited conduct that occurs both on and off campus and covers employees, and visitors.

MCCCD affirms its commitment to supporting the academic and personal freedom of all members of the community. In particular, the policy against harassment shall not be applied in a manner that contradicts the principle of academic freedom: Faculty and other members of the community are entitled to freedom in research, and faculty members are entitled to freedom in the classroom to pursue controversial matters related to their disciplines. However, this right to teach controversial material entails the responsibility that it be carried out in a way that would be judged by peers as not violating the District's non-discrimination policy.

Questions about this policy may be directed to the [MCCCD EEO/Affirmative Action Office](#).

B. Examples of Policy Violations

It shall be a violation of MCCC'D's Harassment Policy for any employee (paid, unpaid, or contract), student or campus visitor to engage in any unwelcome conduct that is based on race, color, religion, sex, sexual orientation, gender identity, national origin, citizenship status (including document abuse), age, disability, pregnancy, veteran status or genetic information. Such as to:

1. Engage in offensive conduct that is sufficiently severe or pervasive to create a work or academic environment that a reasonable person would consider intimidating, hostile, or abusive. Such conduct must be based on race, color, religion, sex, sexual orientation, gender identity, national origin, citizenship status (including document abuse), age, disability, pregnancy, veteran status or genetic information.
2. Engage in unwelcome verbal or physical conduct, including intimidation, ridicule, insult, or comments, when the behavior can reasonably be considered to adversely affect the work or academic environment, or an employment decision based upon the employee's acceptance or rejection of such conduct. Such verbal or physical conduct must be based on race, color, religion, sex, sexual orientation, gender identity, national origin, citizenship status (including document abuse), age, disability, pregnancy, veteran status or genetic information or on their protected activities under applicable non-discrimination laws and policies,
3. Engage in Sexual Harassment, which includes, but is not limited to:
 - A. Make unwelcome sexual advances to another employee (paid, unpaid, or contract), student or campus visitor;
 - B. Make unwelcome requests for sexual favors, whether or not accompanied by promises or threats with regard to the employment or academic relationship;
 - C. Engage in verbal or physical conduct of a sexual nature with another employee, student or campus visitor, that may threaten or insinuate, either explicitly or implicitly, that the individual's submission to, or rejection of, the sexual advances will in any way:
 1. Influence any personnel decision regarding that person's employment, evaluation, wages, advancement, assigned duties, shifts or any other condition of employment or career development; or
 2. Influence his or her grades, participation in or access to academic programs, class standing or other educational opportunities;
 - D. Engage in verbal or physical conduct of a sexual nature that:
 1. Has the purpose or effect of substantially interfering with an employee's ability to do his or her job; or with a student's ability to learn or participate in a class; or
 2. Which creates an intimidating, hostile or offensive work or academic environment;
 - E. Commit any act of sexual assault or public sexual indecency against any employee or student whether on MCCC'D property or in connection with any MCCC'D-sponsored activity;
 - F. Continue to express sexual interest in another employee, student or campus visitor after being informed or on notice that the interest is unwelcome (reciprocal attraction is not considered sexual harassment);
4. Engage in other harassing conduct in the workplace or academic environment, whether physical or verbal, including, but not limited to, commentary about an individual's body (or body parts), degrading words to describe an individual, offensive comments, suggestive language or jokes, innuendoes, and suggestive objects, print or digital media. Misconduct may include exploitation, stalking, bullying. Such conduct must be based on an individual's race, color, religion, sex, sexual orientation, gender identity, national origin, citizenship status (including document abuse), age, disability, pregnancy, veteran status or genetic information.
5. Treat a complainant or witness of harassment in a manner that could dissuade a reasonable person from pursuing or participating in the complaint and investigation. Such treatment must be based on an individual's race, color, religion, sex, sexual orientation, gender identity, national origin, citizenship status (including document abuse), age, disability, pregnancy, veteran status or genetic information.
6. Engage in sexual misconduct, including but not limited to:
 - A. The use or display in the classroom, including electronic, of pornographic or sexually harassing materials such as posters, photos, cartoons or graffiti without pedagogical justification.
 - B. Explicit sexual comments by one or more employees about another employee or student, or circulating drawings or other images depicting an employee or student in a sexual manner.

- C. Unwelcome sexual advances, repeated propositions or requests for a sexual relationship to an individual who has previously indicated that such conduct is unwelcome, or sexual gestures, noises, remarks, jokes, questions, or comments by a student about another person's sexuality or sexual experience.
- D. Harassment based on sex, pregnancy, gender identity, gender expression, or sexual orientation that creates a hostile environment. A hostile environment exists when the conduct is sufficiently severe, or pervasive that it unreasonably interferes with, limits, or deprives an individual from participating in or benefitting from the District's education programs and/or activities, including employment. The existence of a hostile environment is to be judged both objectively (meaning a reasonable person would find the environment hostile) and subjectively (meaning the impacted individual felt the environment was hostile).
- E. Sexual Exploitation, which means taking non-consensual or abusive sexual advantage of another for anyone's advantage or benefit other than the person being exploited. Examples of behavior that could rise to the level of Sexual Exploitation include:
 - 1. Recruiting, harboring, transporting, providing, or obtaining another person for the purpose of sexual exploitation;
 - 2. Non-consensual visual (e.g., video, photograph) or audio-recording of sexual activity;
 - 3. Non-consensual distribution of photos, other images, or information of an individual's sexual activity, intimate body parts, or nakedness, with the intent to or having the effect of embarrassing an individual who is the subject of such images or information;
 - 4. Going beyond the bounds of consent (such as attempting to kiss an employee or student without their consent)
 - 5. Engaging in non-consensual voyeurism;
 - 6. Knowingly transmitting an STI (sexually transmitted infection), such as HIV, to another without disclosing one's STI status;
 - 7. Exposing one's genitals in non-consensual circumstances, or inducing another to expose their genitals;
 - 8. Possessing, distributing, viewing or forcing others to view obscenity.
- 7. All complaints of sexual harassment or sexual misconduct shall be referred promptly to the college Title IX Coordinator (or the District Title IX Coordinator, if the allegations concern a District Office employee), for initial review in determining the appropriate investigation channel.
- 8. Matters pertaining to sexual harassment/misconduct that do not meet the definition of sexual harassment as outlined in Administrative Regulation 5.1.16 or otherwise do not meet the definition of an educational program or activity and do not occur against a person within the United States will be referred by the Title IX Coordinator to the College or District's respective Human Resources Department for investigation and adjudication under this conduct policy.

AMENDED by Direct Approval from the Chancellor, August 18, 2020

AMENDED by Direct Approval from the Chancellor, April 8, 2020

AMENDED by the Administrative Regulations Approval Process, January 2, 2020

5.1.9 Additional Policy Violations

Mandatory Reporters (as defined in Administrative Regulation 5.1.16) must report allegations of sexual harassment/assault (whether reported by the person who is the subject of the sexual harassment or a witness) to an Official with Authority or the Title IX Coordinator (as defined in Administrative Regulation 5.1.16). Failure to report to an Official with Authority or the Title IX Coordinator is a policy violation subject to discipline up to and including dismissal.

Campus Security Authority (CSAs) are mandatory reporters under the Cleary Act. Failure to report is a policy violation subject to discipline up to and including dismissal.

Mandatory Reporters are expected to report harassment/discrimination (whether reported by the person who is the subject of the sexual harassment or a witness) based on an individual's race, color, religion, sex, sexual orientation, gender identity, national origin, citizenship status (including document abuse), age, disability, veteran status or genetic information. Failure to report may be a policy violation subject to discipline up to and including dismissal.

5.1.10 Responsibility for Policy Enforcement

Employees and students must avoid offensive or inappropriate harassing behavior based on an individual's race, color, religion, sex, sexual orientation, gender identity, national origin, citizenship status (including document abuse), age, disability, veteran status or genetic information at work or in the academic environment (in and out of the classroom).

Employees and students are encouraged (but not required) to inform perceived offenders of this policy and that the commentary/conduct is offensive and unwelcome.

AMENDED by the Administrative Regulations Approval Process, January 2, 2020

5.1.11 Complaints

1. Employees

Employees who experience harassment at work (by a supervisor, co-employee, student or visitor) are urged to report such conduct to the direct attention of their supervisor, their college president or to the Maricopa County Community College District (MCCCD) Equal Employment Opportunity/Affirmative Action Office. If the complaint involves the employee's supervisor or someone in the direct line of supervision, or if the employee for any reason is uncomfortable in dealing with their immediate supervisor, the employee may go directly to the MCCCD EEO/AA Office.

2. Students

Students who experience sexual harassment or sexual assault in a school's education program and activities (by a faculty member, administrator, staff, campus visitor or other student) are urged to report such conduct to the designated Title IX Coordinator, of which there is one for each MCCCD college. A student may also contact the MCCCD EEO/AA Office to obtain the name and phone number of the college official designated to respond to harassment complaints based on an individual's race, color, religion, sex, sexual orientation, gender identity, national origin, citizenship status (including document abuse), age, disability, veteran status or genetic information.

3. General

- A. Complaints by employees will be investigated according to procedures established by the MCCCD EEO/AA Office. Copies of these procedures may be obtained on the District website and the MCCCD EEO/AA Office.
- B. Complaints by students will be investigated according to the procedures established in the College Environment section of the Administrative Regulations (AR 2.4). Copies of these procedures are posted on the District website.
- C. All complaints will be investigated in a prompt, thorough, and impartial manner.
- D. Where investigation confirms the allegations, appropriate, response action will be taken by the college/center/MCCCD.

AMENDED by the Administrative Regulations Approval Process, January 2, 2020

5.1.12 Confidentiality

Records will be maintained in a confidential manner to the extent permitted by law and insofar as they do not interfere with the Maricopa County Community College District's (MCCCD) legal obligation to investigate and resolve issues of discrimination and harassment based on one's protected class status as outlined in law and in MCCCD policy. The MCCCD cannot promise complete confidentiality.

AMENDED by the Administrative Regulations Approval Process, January 2, 2020

5.1.13 Violations of Law

An employee or student may be accountable for sexual harassment under applicable local, state, and/or federal law, as well as under Maricopa County Community College District (MCCCD) policy. Disciplinary action by MCCCD may proceed while criminal proceedings are pending and will not be subject to challenge on the grounds that criminal charges involving the same incident have been dismissed or reduced.

AMENDED by the Administrative Regulations Approval Process, January 2, 2020

5.1.14 False Statements Prohibited

Any individual who knowingly provides false information pursuant to filing a discrimination charge or during the investigation of a discrimination charge, will be subject to appropriate disciplinary action, up to and including, employment termination or academic dismissal.

AMENDED by the Administrative Regulations Approval Process, January 2, 2020

5.1.15 Retaliation Prohibited

Retaliation against an employee or student for engaging in protected activity is strictly prohibited. The Maricopa County Community College District (MCCCD) strictly prohibits taking an adverse action that might deter a reasonable person from participating in activity protected by antidiscrimination laws. Protected activity consists of:

- (a) opposing conduct reasonably believed to constitute discrimination, including harassment which violates a nondiscrimination statute or which MCCCD policy prohibits;
- (b) filing a complaint about such practice; or
- (c) testifying, assisting, or participating in any manner in an investigation or other proceeding related to a discrimination complaint.

Retaliatory actions are not limited to formal personnel actions such as termination, demotion, non-promotion, or non-selection. Retaliatory actions are broadly defined as harassing behavior, significant changes to job duties or working conditions, and even threats to take personnel actions based on engaging in protected activity. MCCCD will take appropriate disciplinary action, up to and including employment termination or academic dismissal if retaliation occurs.

AMENDED by the Administrative Regulations Approval Process, January 2, 2020

5.1.16 TITLE IX Sexual Harassment Policy

I. DEFINITIONS

1. **Actual Knowledge** means that an employee, student, or third-party informs the Title IX Coordinator or other Official with Authority of the alleged occurrence of alleged harassing, discriminatory, and/or retaliatory conduct. Actual knowledge compels the Maricopa County Community College District (MCCCD) to initiate action.
2. **Advisor** means a person chosen by a party or appointed by the institution to accompany the party to meetings related to the resolution process, to advise the party on that process, and to conduct cross-examination for the party at the hearing, if a hearing is held. This individual may be an MCCCD employee, a member of the community, or attorney (hired and paid for by a party).
3. **Complainant** means an individual who is alleged to be the victim of conduct that could constitute sexual harassment or retaliation for engaging in a protected activity.
4. **Formal Complaint** means a document filed with the Title IX Coordinator/signed by a Complainant or signed by the Title IX Coordinator alleging against sexual harassment or retaliation for engaging in a protected activity against a Respondent and requesting that the MCCCD investigate the allegation.
5. **Confidential Resource** means an employee who is not a Mandatory Reporter or an Official with Authority (irrespective of Clery Act Campus Security Authority status). At

MCCCD, there is only one confidential resource. This confidential resource is the Ombudsman, who is located in the MCCCD Office of Public Stewardship.

6. **Day(s)** means a business day when the MCCCD is in normal operation.
7. **Education program or activity** means locations, events, or circumstances where MCCCD exercises substantial control over both the Respondent and the context in which the sexual harassment or discrimination occurs and also includes any building owned or controlled by a student organization that is officially recognized by the MCCCD.
8. **Final Determination of Responsibility** means a conclusion by preponderance of the evidence that the alleged conduct occurred, or did not occur, and whether it did, or did not, violate policy.
9. **Formal Grievance Process** means a method of formal resolution designated by MCCCD to address conduct that falls within the policies included below, and which complies with the requirements of 34 CFR Part 106.45.
10. **Grievance Process Pool** means any investigators, appeal officers, hearing administrators, and Advisors who may perform any or all of these roles (though not at the same time or with respect to the same case).
11. **Hearing Decision-maker** means a person who has decision-making and sanctioning authority within the MCCCD's Formal Title IX Grievance process.
12. **Investigator** means the person or persons charged by MCCCD with gathering facts about an alleged violation of this policy, assessing relevance and credibility, synthesizing the evidence, and compiling this information into an investigation report and file of directly related evidence.
13. **Mandatory Reporter** means an employee of MCCCD who is obligated by policy to share knowledge, notice, and/or reports of harassment, discrimination, and/or retaliation with the Title IX Coordinator. Mandatory reporters do not convey actual knowledge to the MCCCD. Mandatory Reporter under this policy does not diminish the requirement under Arizona state law to report alleged or suspected child abuse, elder abuse, and/or abuse of individuals with disabilities to appropriate officials, though these responsibilities may overlap with those who have mandatory reporter responsibility in this policy.
14. **Official with Authority (OWA)** means an employee of the MCCCD explicitly vested with the responsibility to implement corrective measures for harassment and/or retaliation on behalf of the MCCCD. Notice to an OWA of an allegation of sexual harassment as defined in this policy conveys actual knowledge to the MCCCD and triggers a responsibility to act.
15. **Parties** include the Complainant(s) and Respondent(s), collectively.
16. **Promptness** means the time period in which allegations are acted upon once MCCCD has received notice or a formal complaint. Typically, complaints can take 60-90 business days to resolve. There are always exceptions and extenuating circumstances that can cause a resolution to take longer, but MCCCD will avoid all undue delays within its control.
17. **Remedies** means post-finding actions directed to the Complainant and/or the community as mechanisms to address safety, prevent recurrence, and restore access to MCCCD's educational program.
18. **Respondent** means an individual who has been reported to be the perpetrator of conduct that could constitute harassment or discrimination based on a protected class; or retaliation for engaging in a protected activity. When the Respondent is a member of the MCCCD community, a grievance process may be available regardless of the status of the Complainant, who may or may not be a member of the MCCCD community.
19. **Resolution** means the result of an informal or formal grievance process.
20. **Sanction** means a consequence imposed by MCCCD on a Respondent who is found to have violated this policy.
21. **Sexual Harassment** means the umbrella category including the offenses of sexual harassment, sexual assault, stalking, and dating violence and domestic violence.
22. **Title IX Coordinator** is at least one official designated by MCCCD to ensure

compliance with Title IX and the MCCCDC's Title IX program. References to the Coordinator throughout this policy may also encompass a designee of the Coordinator for specific tasks.

23. **Student** means any individual who is registered or enrolled for credit or non-credit bearing coursework, camps and other District-sponsored programs or activities, and who maintains an ongoing relationship with the MCCCDC, which means the student is on leave (medical, administrative, or other documented leave of absence), but is not registered or taking classes at the time of the complaint being filed.
24. **Title IX Team** refers to the Title IX Coordinator, any deputy coordinators, and any member(s) of the Grievance Process Pool.

II. RATIONALE FOR POLICY

MCCCDC is committed to providing a workplace and educational environment, as well as other benefits, programs, and activities, that are free from sexual harassment, discrimination on the basis of sex, and retaliation. To ensure compliance with federal and state civil rights laws and regulations, and to affirm its commitment to promoting the goals of fairness and equity in all aspects of the educational program or activity, MCCCDC has developed internal policies and procedures that provide a prompt, fair, and impartial process for those involved in an allegation of sexual harassment, and for allegations of retaliation. MCCCDC values and upholds the equal dignity of all members of its community and strives to balance the rights of the parties in the grievance process during what is often a difficult time for all those involved.

III. TITLE IX COORDINATOR

Each MCCCDC college has a designated Title IX Coordinator who oversees implementation of this policy. The Title IX Coordinator has the primary responsibility for coordinating MCCCDC's efforts related to the intake, investigation, resolution, and implementation of supportive measures to stop, remediate, and prevent discrimination, harassment, and retaliation prohibited under this policy.

The names and contact information for each college Title IX Coordinator can be found on the following page: <https://district.maricopa.edu/consumer-information/title-ix/title-ix-coordinators>. It is the responsibility of each of the MCCCDC colleges' Vice Presidents of Student Affairs to ensure this list is up-to-date with correct information. The college Title IX Coordinators must act with independence and authority free from bias and conflicts of interest.

To raise any concern involving bias or conflict of interest by the college Title IX Coordinator, contact the Compliance Office in the Office of General Counsel by emailing compliance@domail.maricopa.edu. Concerns of bias or a potential conflict of interest by any other Title IX team member should be raised with the respective college Title IX Coordinator.

Reports of misconduct or discrimination committed by the college Title IX Coordinator should be reported to the college Human Resources Department. Reports of misconduct or discrimination committed by any other Title IX Team member should be reported to the respective college Title IX Coordinator.

IV. OFFICIALS WITH AUTHORITY AND MANDATORY REPORTERS

OFFICIALS WITH AUTHORITY

MCCCDC has determined that the following administrators are Officials with Authority to address and correct sexual harassment and/or retaliation. In addition to the Title IX team members listed in Section 1. Definitions, these Officials with Authority listed below may also accept notice or complaints on behalf of the MCCCDC. Knowledge on the part of an Official with Authority conveys actual knowledge to the MCCCDC.

1. College/District Title IX Coordinator
2. Chancellor
3. Provost
4. General Counsel and Associate General Counsels
5. Chief Human Resources Officer
6. Chief Executive Officer
7. College Presidents

8. College Vice Presidents (at all levels)
9. Associate Vice Chancellors
10. Law enforcement
11. Athletic Directors
12. Directors (in any administrative area of a college or the District)

MANDATORY REPORTERS

The following classification of employees are mandatory reporters and are required to report actual or suspected discrimination or harassment to the respective college Title IX Coordinator or to the District Compliance Office for District employees. A Complainant who expects formal action in response to their allegations, but does not wish to contact the Title IX Coordinator should report their allegations to any mandatory reporter who can connect them with resources to report crimes and/or policy violations. Mandatory reporters will, within twenty-four (24) hours, refer reports to the Title IX Coordinator (and/or police, if desired by the Complainant), who will take action. Mandatory reporters must promptly (within twenty-four (24) hours) share with the Title IX Coordinator all known details of a report made to them in the course of their employment. The persons occupying the following positions are mandatory reporters. Knowledge to a mandatory reporter does not convey actual knowledge to the MCCCCD.

1. Chancellor
2. Provost
3. General Counsel
4. Chief Human Resources Officer
5. Chief Workforce and Economic Development Officer
6. Chief Executive Officer
7. College Presidents
8. Associate Vice Chancellors
9. Director of Communications
10. Associate General Counsels
11. Supervisors/Managers/Directors (but not including division or department chairs)
12. College Vice Presidents, at all levels
13. Deans, at all levels
14. Athletic Directors/Coaches/Trainers
15. Law enforcement

Anonymous Notice to Mandated Reporters

A Complainant may request that the mandatory reporter provide notice to the Title IX Coordinator anonymously, without identification of the Complainant. A mandatory reporter cannot remain anonymous themselves. The MCCCCD will investigate matters in which anonymous notice has been given to the extent possible, both to assess the underlying allegation(s) and to determine if supportive measures or remedies can be provided. However, anonymous notice typically limits the MCCCCD's ability to investigate, respond, and provide remedies, depending on what information is shared. When a Complainant has made a request for anonymity, the Complainant's personally identifiable information may be withheld by a mandatory reporter, but all other details of the alleged incident(s) must be shared with the Title IX Coordinator. Supportive measures may be offered to the Complainant as the result of such disclosures without formal MCCCCD action.

Failure of a mandatory reporter to report an incident of harassment or discrimination of which they become aware is a violation of MCCCCD policy and the mandatory reporter may be subject to disciplinary action, up to and including termination, for failure to comply.

V. CONFIDENTIAL RESOURCES AND FEDERAL RESOURCES

A Complainant who wants to keep the details of an incident confidential may speak with:

- On-campus (Maricopa Community Colleges District Office) Office of Public Stewardship
- Off-campus (non-employees):

- o Licensed professional counselors and other medical providers
- o Local rape crisis counselors
- o Domestic violence resources
- o Local or state assistance agencies
- o Clergy/Chaplains
- o Attorneys

The Office of Public Stewardship will timely submit anonymous statistical information for Clery Act purposes unless they believe it would be harmful to their client.

External Inquiries may also be made to:

Office for Civil Rights,

Denver Office

U.S. Department of Education

Cesar E. Chavez Memorial Building

1244 Speer Boulevard, Suite 310

Denver, CO 80204-3582

Telephone: (303) 844-5695

Facsimile: (303) 844-4303

Email: OCR.Denver@ed.gov

VI. NOTICE/COMPLAINTS OF DISCRIMINATION, HARASSMENT, AND/OR RETALIATION

Notice or complaints of discrimination, harassment, and/or retaliation in violation of this policy may be made using any of the following options:

1) File a complaint with, or give verbal notice to, a college Title IX Coordinator or an Official with Authority. Such a report may be made at any time (including during non-business hours) by using the telephone number or email address, or by mail to the office address, listed for the Title IX Coordinator or any other official listed. Title IX Coordinators can be found on the following page: <https://district.maricopa.edu/consumer-information/title-ix/title-ix-coordinators>. It is the responsibility of each of the MCCCDC college's Vice President of Student Affairs to ensure this list is up to date with correct information.

2) Report online, using the reporting form posted at <https://district.maricopa.edu/consumer-information/reporting>. Anonymous reports are accepted, but can give rise to a need to investigate. The MCCCDC tries to provide supportive measures to all Complainants, which is impossible with an anonymous report when the name of the Complainant is not shared in the report. Since anonymous reporting carries no obligation to initiate a formal response and since the MCCCDC respects a Complainant's requests to dismiss complaints, unless there is a compelling threat to health and/or safety, the matter will be dismissed.

A formal complaint is a document filed and signed by the Complainant or signed by the Title IX Coordinator alleging a policy violation by a Respondent and requesting that the MCCCDC investigate the allegation(s). A complaint may be filed with the Title IX Coordinator in person, by mail, or by electronic mail, by using the contact information in the section immediately above, or as described in this section. As used in this paragraph, the phrase "document filed by a Complainant" means a document or electronic submission (such as by electronic mail or through an online portal provided for this purpose by the MCCCDC) that contains the Complainant's physical or digital signature, which can include the Complainant's name on the email, or otherwise indicates that the Complainant is the person filing the complaint.

The Title IX Coordinator will contact the Complainant regarding any notice that is submitted in a form that does not comply with these requirements to ensure that it is filed correctly.

VII. SUPPORTIVE MEASURES

MCCCDC will offer and implement appropriate and reasonable supportive measures to the parties upon notice of alleged harassment, discrimination, and/or retaliation.

Supportive measures are non-disciplinary, non-punitive individualized services offered as appropriate, as reasonably available, and without fee or charge to the parties to restore or preserve access to the MCCCCD's education program or activity, including measures designed to protect the safety of all parties, the MCCCCD's educational environment, and/or deter sexual harassment, discrimination on the basis of sex, and/or retaliation.

The Title IX Coordinator shall make supportive measures available to the parties upon receiving notice of allegations or a formal complaint. There is no statute of limitations for filing a Title IX Complaint. The Title IX Coordinator works with the Complainant to ensure their wishes are considered with respect to the planned and implemented supportive measures.

The MCCCCD will maintain the privacy of the supportive measures, provided that maintaining privacy does not impair the MCCCCD's ability to provide the supportive measures. MCCCCD will act to ensure as minimal an academic impact on the parties as possible. The MCCCCD will implement measures in a way that does not unreasonably burden the other party.

These actions may include, but are not limited to:

1. Referral to counseling, medical, and/or other healthcare services
2. Referral to the Employee Assistance Program
3. Referral to community-based service providers
4. In-house visa and immigration assistance
5. Student financial aid counseling
6. Education to the community or community subgroup(s)
7. Altering work arrangements for employees or student-employees
8. Safety planning
9. Providing campus safety escorts
10. Implementing contact limitations (no contact orders) between the parties
11. Academic support, extensions of deadlines, or other course/program-related adjustments
12. Trespass orders, when applicable
13. Timely warnings under the Clery Act
14. Class schedule modifications, withdrawals, or leaves of absence
15. Increased security and monitoring of certain areas of the campus
16. Any other actions deemed appropriate by the Title IX Coordinator

Violations of no contact orders will be referred to appropriate student or employee conduct processes for enforcement and further discipline, as is necessary.

VIII. EMERGENCY REMOVAL

MCCCCD can act to remove a Respondent entirely or partially from its education program/activities or MCCCCD employment on an emergency basis when an individualized safety and risk analysis has determined that an immediate threat to the physical health or safety of any student or other individual justifies removal. This risk analysis is performed by the Title IX Coordinator in conjunction with the college or District Behavioral Intervention Team (also known as BIT/BAT/TAT/CARE, etc.) using its standard objective violence risk assessment procedures.

The Title IX Coordinator has sole discretion under this policy to implement or stay an emergency removal and to determine the conditions and duration. Violation of an emergency removal under this policy will be grounds for discipline, which may include expulsion from the MCCCCD or termination from employment.

In all cases where an emergency removal is imposed:

1. The Respondent will be given written notice of the action. In the written notice will be the option to request to meet with the Title IX Coordinator as soon as reasonably possible, to show cause as to why the action/removal should not be implemented or should be modified. This meeting is not a hearing on the merits of the underlying Title IX allegations, but rather an administrative process intended to determine solely whether the emergency removal is appropriate.
2. The Respondent has three (3) days after the receipt of the emergency removal to request a meeting with the Title

IX Coordinator. If the Respondent does not make such a request within the three (3) day time period, objection to the emergency removal is deemed waived.

3. The Respondent may be accompanied by an Advisor of their choosing in the Show Cause administrative meeting with the Title IX Coordinator.
4. The Respondent will be given access to a written summary of the basis for the emergency removal prior to the meeting to allow for adequate preparation. Such summary will be included in the notification letter regarding the emergency removal.
5. The Title IX Coordinator will issue a Show Cause Meeting Determination letter to the Respondent within two (2) days of the meeting taking place.
6. There is no appeal process for emergency removal decisions.
7. A Complainant and their Advisor may be permitted to participate in this meeting, as it is equitable to do so.
8. MCCCCD will implement the least restrictive emergency actions possible in light of the circumstances and safety concerns.

For additional information regarding emergency removals, please see [Emergency Removals](#).

IX. PRIVACY

Every effort is made by the MCCCCD to preserve the privacy of a report under this policy.

For additional information regarding privacy and confidentiality under this policy, please see [Privacy and Confidentiality](#).

X. JURISDICTION

This policy applies to all MCCCCD educational programs and activities, and to conduct that takes place on the campus or on property owned or controlled by the MCCCCD, at MCCCCD-sponsored events, or in buildings owned or controlled by MCCCCD's recognized student organizations. The Respondent must be a member of MCCCCD's community in order for its policies to apply. Nevertheless, even when the Respondent is not a member of the MCCCCD's community, supportive measures, remedies, and resources may be accessible to the Complainant by contacting the Title IX Coordinator.

This policy applies to the effects of off-campus misconduct that effectively deprive someone of access to MCCCCD's educational programs. The MCCCCD may also extend jurisdiction to off-campus and/or to online conduct when the Title IX Coordinator determines that the conduct affects a substantial MCCCCD interest.

Regardless of where the conduct occurred, the MCCCCD will address notice/complaints to determine whether the conduct occurred in the context of its employment or educational program or activity and/or has continuing effects on campus or in an off-campus sponsored program or activity.

A Title IX Coordinator may be able to provide guidance for a student or employee Complainant who experiences sexual harassment/discrimination in an externship, study abroad program, or other environment external to the MCCCCD under the MCCCCD's Student Conduct Code or employee conduct or nondiscrimination policies.

For additional information regarding the MCCCCD jurisdiction over Title IX matters, please see [Jurisdiction](#).

XI. TIME LIMITS ON REPORTING

There is no time limitation on providing notice/complaints to the Title IX Coordinator. However, if the Respondent is no longer subject to the MCCCCD's jurisdiction and/or significant time has passed, the ability to investigate, respond, and provide remedies may be more limited or impossible.

Acting on notice/complaints significantly impacted by the passage of time (including, but not limited to, the rescission or revision of policy) is at the discretion of the Title IX Coordinator (except in cases where mandatory dismissal is required), who may document allegations for future reference, offer supportive measures and/or remedies, and/or engage in informal or formal action, as appropriate.

The MCCCCD will apply the policy in place at the time of the alleged misconduct and the procedures in place at the time of the notice of alleged misconduct or complaint of sexual harassment.

XII. ONLINE HARASSMENT AND MISCONDUCT

This policy is written and should be interpreted broadly to include online and cyber manifestations of any of the behaviors prohibited below, when those behaviors occur in or have an effect on the MCCCCD's education programs and activities or use MCCCCD networks, technology, or equipment.

When harassing communications made on websites, social media, and other venues not controlled by the MCCCCD are reported to the MCCCCD pursuant to this policy the MCCCCD will attempt to address and mitigate the effects of such communications. Any online postings or other electronic communication by students and employees, including cyber-bullying, cyber-stalking, cyber-harassment, etc., occurring completely outside of the MCCCCD's control (e.g., not on MCCCCD networks, websites, or between MCCCCD email accounts) will only be subject to this policy when such online conduct can be shown to cause a substantial in-program disruption to the student's educational pursuit of MCCCCD's educational programs and/or activities.

Off-campus harassing speech by employees, whether online or in person, may be regulated by the MCCCCD only when such speech is made in an employee's official or work-related capacity, including where the speaker holds themselves out as employees of an MCCCCD college or District office. Otherwise, such communications are considered speech protected by the First Amendment. Supportive measures for Complainants will be provided, but protected speech will not be subjected to discipline.

XIII. TITLE IX SEXUAL HARASSMENT

MCCCCD has adopted the following definition of Title IX Sexual Harassment in order to address the unique environment of an academic community, which consists not only of employer and employees, but of students as well.

Acts of sexual harassment may be committed by any person upon any other person, regardless of the sex, sexual orientation, and/or gender identity of those involved.

Sexual Harassment, as an umbrella category, includes the offenses of sexual harassment/discrimination, sexual assault, domestic violence, dating violence, and stalking, and is defined as:

Conduct on the basis of sex that satisfies one or more of the following:

- 1) Quid Pro Quo:
 - a. an employee of the MCCCCD,
 - b. conditions the provision of an aid, benefit, or service of the MCCCCD,
 - c. on an individual's participation in unwelcome sexual conduct; and/or
- 2) Sexual Harassment:
 - a. unwelcome conduct,
 - b. determined by a reasonable person,
 - c. to be so severe, and
 - d. pervasive, and,
 - e. objectively offensive,
 - f. that it effectively denies a person equal access to the MCCCCD's education program or activity.

Severity, pervasiveness, and objective offensiveness are evaluated based on the totality of the circumstances from the perspective of a reasonable person in the same or similar circumstances ("in the shoes of the Complainant"), including the context in which the alleged incident occurred and any similar, previous patterns that may be evidenced.
- 3) Sexual assault, defined as:
 - a) Sex Offenses, Forcible:
 - i) Any sexual act directed against another person,
 - ii) without the consent of the Complainant,
 - iii) including instances in which the Complainant is incapable of giving consent.
 - b) Forcible Rape:
 - i) Penetration,
 - ii) no matter how slight,

- iii) of the vagina or anus with any body part or object, or
 - iv) oral penetration by a sex organ of another person,
 - v) without the consent of the Complainant.
- c) Forcible Sodomy:
 - i) Oral or anal sexual intercourse with another person,
 - ii) forcibly,
 - iii) and/or against that person's will (non-consensually), or
 - iv) not forcibly or against the person's will in instances in which the Complainant is incapable of giving consent because of age (under the age of 18) or because of temporary or permanent mental or physical incapacity.
- d) Sexual Assault with an Object:
 - i) The use of an object or instrument to penetrate,
 - ii) however slightly,
 - iii) the genital or anal opening of the body of another person,
 - iv) forcibly,
 - v) and/or against that person's will (non-consensually),
 - vi) or not forcibly or against the person's will in instances in which the Complainant is incapable of giving consent because of age or because of temporary or permanent mental or physical incapacity.
- e) Forcible Fondling:
 - i) The touching of the private body parts of another person (buttocks, groin, breasts),
 - ii) for the purpose of sexual gratification,
 - iii) forcibly,
 - iv) and/or against that person's will (non-consensually),
 - v) or not forcibly or against the person's will in instances in which the Complainant is incapable of giving consent because of age or because of temporary or permanent mental or physical incapacity.
- f) Sex Offenses, Non-forcible:
 - i) Incest:
 - 1) Non-forcible sexual intercourse,
 - 2) between persons who are related to each other,
 - 3) within the degrees wherein marriage is prohibited by Arizona law.
 - ii) Statutory Rape:
 - 1) Non-forcible sexual intercourse,
 - 2) with a person who is under the Arizona statutory age of consent, which is the age of 18 years old.
- 4) Dating Violence, defined as:
 - a. violence,
 - b. on the basis of sex,
 - c. committed by a person,
 - d. who is in or has been in a social relationship of a romantic or intimate nature with the Complainant.
 - i. The existence of such a relationship shall be determined based on the Complainant's statement and with consideration of the length of the relationship, the type of relationship, and the frequency of interaction between the persons involved in the relationship. For the purposes of this definition
 - ii. Dating violence includes, but is not limited to, sexual or physical abuse or the threat of such abuse.
 - iii. Dating violence does not include acts covered under the definition of domestic violence.
- 5) Domestic Violence, defined as:
 - a. violence,
 - b. on the basis of sex,
 - c. committed by a current or former spouse or intimate partner of the Complainant,

- d. by a person with whom the Complainant shares a child in common, or
- e. by a person who is cohabitating with, or has cohabitated with, the Complainant as a spouse or intimate partner, or
- f. by a person similarly situated to a spouse of the Complainant under the domestic or family violence laws of the state of Arizona or
- g. by any other person against an adult or youth Complainant who is protected from that person's acts under the domestic or family violence laws of the state of Arizona.

To categorize an incident as Domestic Violence, the relationship between the Respondent and the Complainant must be more than just two people living together as roommates. The people cohabitating must be current or former spouses or have an intimate relationship.

6) Stalking, defined as:

- a. engaging in a course of conduct,
- b. on the basis of sex,
- c. directed at a specific person, that would cause a reasonable person to fear for the person's safety, or the safety of others; or suffer substantial emotional distress.

For the purposes of this definition—

- (i) Course of conduct means two or more acts, including, but not limited to, acts in which the Respondent directly, indirectly, or through third parties, by any action, method, device, or means, follows, monitors, observes, surveils, threatens, or communicates to or about a person, or interferes with a person's property.
- (ii) Reasonable person means a reasonable person under similar circumstances and with similar identities to the Complainant.
- (iii) Substantial emotional distress means significant mental suffering or anguish that may but does not necessarily require medical or other professional treatment or counseling.

MCCCD reserves the right to impose any level of sanction, ranging from a reprimand up to and including suspension or expulsion/termination, for any offense under this policy.

Force, Coercion, Consent, and Incapacitation:

As used in the offenses above, the following definitions apply:

Force: Force is the use of physical violence and/or physical imposition to gain sexual access. Force also includes threats, intimidation (implied threats), and coercion that is intended to overcome resistance or produce consent.

Sexual activity that is forced is, by definition, non-consensual, but non-consensual sexual activity is not necessarily forced. Silence or the absence of resistance alone is not consent. Consent is not demonstrated by the absence of resistance. While resistance is not required or necessary, it is a clear demonstration of non-consent.

Coercion: Coercion is unreasonable pressure for sexual activity. Coercive conduct differs from seductive conduct based on factors such as the type and/or extent of the pressure used to obtain consent. When someone makes clear that they do not want to engage in certain sexual activity, that they want to stop, or that they do not want to go past a certain point of sexual interaction, continued pressure beyond that point may be coercive.

Consent is:

- knowing, and
- voluntary, and
- clear permission

- by word or action
- to engage in sexual activity.

Since individuals may experience the same interaction in different ways, it is the responsibility of each party to determine that the other has consented before engaging in the activity. No one under the age of consent in Arizona, specifically, 18 years old, can consent to sexual activity.

If consent is not clearly provided prior to engaging in the activity, consent may be ratified by word or action at some point during the interaction or thereafter, but clear communication from the outset is strongly encouraged.

For consent to be valid, there must be a clear expression in words or actions that the other individual consented to that specific sexual conduct. Reasonable reciprocation can be implied. For example, if someone kisses you, you can kiss them back (if you want to) without the need to explicitly obtain *their* consent to being kissed back.

Consent can also be withdrawn once given, as long as the withdrawal is reasonably and clearly communicated. If consent is withdrawn, that sexual activity should cease within a reasonable time.

Consent to some sexual contact (such as kissing or fondling) cannot be presumed to be consent for other sexual activity (such as intercourse). A current or previous intimate relationship is not sufficient to constitute consent.

Proof of consent or non-consent is not a burden placed on either party involved in an incident. Instead, the burden remains on the MCCCCD to determine whether its policy has been violated. The existence of consent is based on the totality of the circumstances evaluated from the perspective of a reasonable person in the same or similar circumstances, including the context in which the alleged incident occurred and any similar, previous patterns that may be evidenced.

Incapacitation: Incapacitation occurs when someone cannot make rational, reasonable decisions because they lack the capacity to give knowing/informed consent (e.g., to understand the “who, what, when, where, why, or how” of their sexual interaction).

Incapacitation is determined through consideration of all relevant indicators of an individual’s state and is not synonymous with intoxication, impairment, blackout, and/or being drunk.

A person cannot consent if they are unable to understand what is happening or are disoriented, helpless, asleep, or unconscious, for any reason, including by alcohol or other drugs. As stated above, a Respondent violates this policy if they engage in sexual activity with someone who is incapable of giving consent.

It is a defense to a sexual assault policy violation that the Respondent neither knew nor should have known the Complainant to be physically or mentally incapacitated. “Should have known” is an objective, reasonable person standard which assumes that a reasonable person is both sober and exercising sound judgment.

This policy also covers a person whose incapacity results from a temporary or permanent physical or mental health condition, involuntary physical restraint, and/or the consumption of incapacitating drugs.

XIV. RETALIATION

Protected activity under this policy includes reporting an incident that may implicate this policy, participating in the grievance process, supporting a Complainant or Respondent, assisting in providing information relevant to an investigation, and/or acting in good faith to oppose conduct that constitutes a violation of this policy.

Acts of alleged retaliation should be reported immediately to the Title IX Coordinator and will be promptly investigated. The MCCCCD is prepared to take appropriate steps to protect individuals who fear that they may be subjected to retaliation.

It is prohibited for the MCCCCD or any member of MCCCCD's community to take materially adverse action by intimidating, threatening, coercing, harassing, or discriminating against any individual for the purpose of interfering with any right or privilege secured by law or policy, or because the individual has made a report or complaint, testified, assisted, or participated or refused to participate in any manner in an investigation, proceeding, or hearing under this policy and procedure.

Charges against an individual for Student Conduct Code violations that do not involve sex discrimination or sexual harassment but arise out of the same facts or circumstances as a report or complaint of sex discrimination, or a report or complaint of sexual harassment, for the purpose of interfering with any right or privilege secured by Title IX, constitutes retaliation.

The following do not constitute retaliation under this policy:

1. The exercise of rights protected under the First Amendment.
2. Charging an individual with a code of conduct violation for making a materially false statement in bad faith in the course of a grievance proceeding under this policy and procedure. A determination regarding responsibility, alone, is not sufficient to conclude that any party has made a materially false statement in bad faith.

For additional information on prohibited retaliation, please see [Retaliation](#).

XV. WHEN A COMPLAINANT DOES NOT WISH TO PROCEED

If a Complainant does not wish for their name to be shared, does not wish for an investigation to take place, or does not want a formal complaint to be pursued, they may make such a request to the Title IX Coordinator, who will evaluate that request in light of the duty to ensure the safety of the campus and to comply with state or federal law.

The Title IX Coordinator has ultimate discretion over whether the MCCCCD proceeds when the complainant does not wish to do so. The Title IX Coordinator may sign a formal complaint to initiate a grievance process upon completion of an appropriate violence risk assessment. The Title IX Coordinator's decision to sign a formal complaint should be based on results of the violence risk assessment that show a compelling risk to health and/or safety that requires the MCCCCD to pursue formal action to protect the community.

When the Title IX Coordinator executes the written complaint, they do not become the Complainant. The Complainant is the individual who is alleged to be the victim of conduct that could constitute a violation of this policy. The Complainant (or their Advisor) may have as much or as little involvement in the process as they wish. The Complainant retains all rights of a Complainant under this Policy irrespective of their level of participation. Typically, when the Complainant chooses not to participate, the Advisor may be appointed as proxy for the Complainant throughout the process, acting to ensure and protect the rights of the Complainant.

In cases in which the Complainant requests confidentiality/no formal action and the circumstances allow the MCCCCD to honor that request, the MCCCCD will offer supportive measures, and remedies to the Complainant and the community, but will not otherwise pursue formal action.

If the Complainant elects to take no action, they can change that decision if they decide to pursue a formal complaint at a later date. Upon making a formal complaint, a Complainant has the right, and can expect, to have allegations taken seriously by the MCCCCD, and to have the incidents investigated and properly resolved through these procedures.

XVI. FEDERAL TIMELY WARNING OBLIGATIONS

Parties reporting sexual assault, domestic violence, dating violence, and/or stalking should be aware that under the Clery Act, MCCCCD must issue timely warnings for incidents reported to them that pose a serious or continuing threat of bodily harm or danger to members of the campus community.

MCCCCD will ensure that a Complainant's name and other identifying information is not disclosed, while still providing enough information for community members to make safety decisions in light of the potential danger.

XVII. FALSE ALLEGATIONS AND EVIDENCE

Deliberately false and/or malicious accusations under this policy, as opposed to allegations which, even if erroneous, are made in good faith, are a serious offense and will be referred to either the Student Conduct Code or employee conduct policies for appropriate disciplinary action.

Additionally, witnesses and parties knowingly providing false evidence, tampering with or destroying evidence after being directed to preserve such evidence, or deliberately misleading an investigator or hearing Decision-maker will be subject to discipline under the appropriate student or employee policy as well as under this policy for providing false testimony.

XVIII. AMNESTY FOR COMPLAINANTS AND WITNESSES

The MCCCCD community encourages the reporting of misconduct and crimes by Complainants and witnesses. Sometimes, Complainants or witnesses are hesitant to report to MCCCCD officials or participate in grievance processes because they fear that they themselves may be in violation of certain policies, such as underage drinking or use of illicit drugs at the time of the incident. Respondents may hesitate to be forthcoming during the process for the same reasons.

It is in the best interests of the MCCCCD community that Complainants choose to report misconduct to MCCCCD officials, that witnesses come forward to share what they know, and that all parties be forthcoming during the process. To encourage reporting and participation in the process, MCCCCD maintains a policy of offering parties and witnesses amnesty from minor policy violations, such as underage consumption of alcohol or the use of illicit drugs related to the incident being reported.

Amnesty does not apply to more serious allegations such as physical abuse of another or illicit drug distribution. A decision not to offer amnesty to a Respondent should not be based on sex nor gender, but should take into account the rationale for amnesty. The incentive to report serious misconduct is rarely applicable to Respondents with respect to a Complainant.

MCCCCD maintains a policy of amnesty for students who offer help to others in need via bystander intervention. While policy violations cannot be overlooked, MCCCCD may provide purely educational options with no official disciplinary finding, rather than punitive sanctions, to those who offer their assistance to others in need.

XIX. FEDERAL STATISTICAL REPORTING OBLIGATIONS

Certain campus officials – those deemed Campus Security Authorities – have a duty to report the following for federal statistical reporting purposes (Clery Act):

- a) All “primary crimes,” which include homicide, sexual assault, robbery, aggravated assault, burglary, motor vehicle theft, and arson;
- b) Hate crimes, which include any bias motivated primary crime as well as any bias motivated larceny or theft, simple assault, intimidation, or destruction/damage/vandalism of property;
- c) VAWA based crimes, which include sexual assault, domestic violence, dating violence, and stalking (VAWA is the Violence Against Women Act, enacted in 1994 codified in part at 42 U.S.C. sections 13701 through 14040); and
- d) Arrests and referrals for disciplinary action for weapons-related law violations, liquor-related law violations, and drug abuse-related law violations.

All personally identifiable information is kept private, but statistical information must be passed along to campus law enforcement regarding the type of incident and its general location (on or off-campus or in the surrounding area, but no addresses are given) for publication in the Annual Security Report and daily campus crime log.

Campus Security Authorities include: presidents, vice-presidents, student affairs/student conduct staff, campus law enforcement/public safety, local police, coaches, athletic directors, student activities staff, human resources staff, Advisors to student organizations, and any other official with significant responsibility for student and campus activities.

XX. ALLEGED VIOLATIONS OF THE TITLE IX POLICY

1. Overview

MCCCD will act on any formal or informal notice/complaint of violation of the Title IX Sexual Harassment policy ("the Policy") that is received by the Title IX Coordinator or any other Official with Authority by applying these procedures.

The procedures below apply **only** to qualifying allegations of sexual harassment (including sexual assault, dating violence, domestic violence, and stalking, as defined in Section XIII) involving MCCCD students, staff, administrator, or faculty members.

Unionized/other categorized employees are subject to the terms of their agreements/employees' rights to the extent those agreements do not conflict with this policy.

2. Notice/Complaint

Upon receipt of a complaint or notice to the Title IX Coordinator of an alleged violation of this Policy, MCCCD will initiate a prompt initial assessment to determine the next steps. The Title IX Coordinator will initiate at least one of three responses:

- 1) Offering supportive measures because the Complainant does not want to proceed formally;
- 2) Offering supportive measures and initiating an informal resolution; or
- 3) Offering supportive measures and initiating a Formal Grievance Process including an investigation and a hearing to determine whether or not the Policy has been violated.

3. Initial Assessment

Following receipt of notice or a complaint of an alleged violation of this Policy, the Title IX Coordinator (or designee) will engage in an initial assessment, which is typically one (1) to five (5) business days in duration.

For more information related to the Initial Assessment, please see [The Investigative Process](#).

4. Emergency Removal

In the event an emergency removal is considered, the Title IX Coordinator will follow the procedures outlined in Section VIII of this policy.

5. Dismissal (Mandatory and Discretionary)

Mandatory Dismissal: The Title IX Coordinator **must** dismiss a formal complaint or any allegations therein if, at any time during the investigation or hearing, it is determined that:

- 1) The conduct alleged in the formal complaint would not constitute sexual harassment as defined in the Policy hereinabove, even if proved; and/or
- 2) The conduct did not occur in an educational program or activity controlled by MCCCD (including buildings or property controlled by recognized student organizations), and/or MCCCD does not have control of the Respondent; and/or
- 3) The conduct did not occur against a person in the United States.

Any conduct alleged in the formal complaint that is dismissed under the first (1st) provision above will be referred by the Title IX Coordinator to the Student Code of Conduct administrator (for student Respondents) or the college or district Human Resources administrator (for employee/third party Respondents). Referrals shall take place within three (3) days of the date of the Dismissal Letter being mailed to the parties.

Discretionary Dismissal: The Title IX Coordinator **may** choose to dismiss a formal complaint or any allegations therein if, at any time during the investigation or hearing:

- 1) A Complainant notifies the Title IX Coordinator in writing that the Complainant would like to withdraw the formal complaint or any allegations therein. A Complainant who decides to withdraw a complaint may later request to reinstate it or refile it; or

- 2) The Respondent is no longer enrolled in or employed by the MCCCCD; or
- 3) Specific circumstances prevent MCCCCD from gathering evidence sufficient to reach a determination as to the formal complaint or allegations therein.

Upon any dismissal, MCCCCD will promptly send written notice of the dismissal and the rationale for doing so simultaneously to the parties.

Both mandatory and discretionary dismissal decisions are appealable by any party under the procedures for appeal below.

6. Counterclaims

MCCCCD is obligated to ensure that the grievance process is not abused for retaliatory purposes. MCCCCD permits the filing of counterclaims but uses an initial assessment, described above, to assess whether the allegations in the counterclaim are made in good faith. Counterclaims made with retaliatory intent will not be permitted and may constitute a violation of this policy.

Counterclaims determined to have been reported in good faith will be processed using the grievance procedures below. Investigation of such claims may take place after resolution of the underlying initial allegation, in which case a delay may occur.

Counterclaims may also be resolved through the same investigation as the underlying allegation, at the discretion of the Title IX Coordinator.

7. Right to an Advisor

The parties may each have an Advisor of their choice. The Advisor may be a friend, mentor, family member, attorney, or any other individual a party chooses to advise, support, and/or consult with them throughout the resolution process. The parties may choose Advisors from inside or outside of the MCCCCD community. The Advisor may be present with the Complainant or Respondent for all of their meetings and interviews within the resolution process, if they so choose.

The parties may select whoever they wish to serve as their Advisor as long as the Advisor is eligible and available. "Available" means the party agrees to act as Advisor and has no conflict of interest in doing so. Also, the Advisor cannot have institutionally conflicting roles, such as being a Title IX administrator who has an active role in the matter, or a supervisor who must monitor and implement sanctions.

Choosing an Advisor who is also a witness in the process creates potential for bias and conflict-of-interest. A party who chooses an Advisor who is also a witness can anticipate that issues of potential bias will be explored by the hearing Decision-maker.

If the parties choose an Advisor from the pool available from the MCCCCD, the Advisor will be trained by the MCCCCD and be familiar with the MCCCCD's resolution process. If the parties choose an Advisor from outside the pool of those identified by the MCCCCD, the Advisor may not have been trained by the MCCCCD and may not be familiar with MCCCCD policies and procedures.

Parties also have the right to choose not to have an Advisor in the initial stages of the resolution process, prior to a hearing. If either party chooses not to have an Advisor present in the initial stages of the resolution process, this choice will be documented in the record of the case.

For more information regarding the training received by an Advisor, please see [Advisors FAQ](#).

a. Advisors in Hearings/MCCCCD-Appointed Advisor

Under U.S. Department of Education regulations applicable to Title IX, cross-examination is required during the hearing, but must be conducted by the parties' Advisors. The parties are not permitted to directly cross-examine each other or

any witnesses. If a party does not have an Advisor for a hearing, MCCCCD will appoint a trained Advisor for the limited purpose of conducting cross-examination.

A party may reject this appointment and choose their own Advisor, but they may not proceed with the hearing without an Advisor. If the party's Advisor will not conduct cross-examination, MCCCCD will appoint an Advisor who will do so thoroughly, regardless of the participation or non-participation of the advised party in the hearing itself. Extensive questioning of the parties and witnesses may also be conducted by the Decision-maker during the hearing.

b. Pre-Interview Meetings

Advisors may request to meet with the administrative officials conducting interviews/meetings in advance of these interviews or meetings. In order for a pre-interview meeting to be held it must be requested by the Advisor. This pre-meeting allows Advisors to clarify and understand their role and MCCCCD's policies and procedures. A pre-interview meeting is not mandatory.

c. Advisor Violations of MCCCCD Policy

All Advisors are subject to the same MCCCCD policies and procedures, whether they are attorneys or not. Advisors are expected to advise without disrupting proceedings. Advisors may not address MCCCCD officials in a meeting or interview unless invited to do so (e.g., asking procedural questions). The Advisor may not speak on behalf of their advisee during any meeting or proceeding and may not speak on behalf of the advisee to the investigator(s) or other Decision-maker except during a hearing proceeding, during cross-examination.

The parties are expected to respond to questions on their own behalf throughout the investigation phase of the resolution process. Although the Advisor generally may not speak on behalf of their advisee, the Advisor may consult with their advisee, either privately as needed, or by conferring or passing notes during any resolution process meeting or interview. For longer or more involved discussions, the parties and their Advisors should ask for breaks to allow for private consultation.

Any Advisor who oversteps their role as defined by this policy will be warned only once. If an Advisor continues to disrupt or otherwise fails to respect the limits of the Advisor role, the meeting will be ended, or other appropriate measures implemented. Subsequently, the Title IX Coordinator will determine how to address the Advisor's non-compliance and future role.

d. Sharing Information with the Advisor

Parties may share documentation and evidentiary information directly with their Advisor or other individuals if they wish. Doing so may help the parties participate more meaningfully in the resolution process.

MCCCCD also provides a consent form (FERPA authorization to release) that authorizes the MCCCCD to share such information directly with a party's Advisor. The parties must either complete and submit this form to the Title IX Coordinator or provide similar documentation demonstrating consent to a release of information to the Advisor before MCCCCD is able to share records with an Advisor.

The MCCCCD will not comply with any party's request that all communications be made through their attorney Advisor.

e. Privacy of Records Shared with Advisor

Advisors are expected to maintain the privacy of the records shared with them. These records may not be shared with third parties, disclosed publicly, or used for purposes not explicitly authorized by MCCCCD. MCCCCD may seek to restrict the role of any Advisor who does not respect the sensitive nature of the process or who fails to abide by the MCCCCD's privacy expectations.

f. Expectations of an Advisor

The MCCCCD expects an Advisor to adjust their schedule to allow them to attend MCCCCD meetings when planned. At the sole discretion of the Title IX Coordinator, scheduled meetings may be changed to accommodate an Advisor's inability to attend, if doing so does not cause an unreasonable delay. A Title IX Coordinator's decision as to whether to change meeting dates and times is final.

MCCCCD may also make reasonable provisions to allow an Advisor who cannot attend in person to attend a meeting by telephone, video conferencing, or other similar technologies as may be convenient and available.

g. Expectations of the Parties with Respect to Advisors

A party may elect to change Advisors during the process and is not obligated to use the same Advisor throughout. The parties are expected to inform the Investigator(s) of the identity of their Advisor at least two (2) business days before the date of their first meeting with Investigators (or as soon as possible if a more expeditious meeting is necessary or desired).

The parties are expected to provide timely notice to the Title IX Coordinator if they change Advisors at any time. It is assumed that if a party changes Advisors, consent to share information with the previous Advisor is terminated, and a release for the new Advisor must be secured. Parties are expected to inform the Title IX Coordinator of the identity of their hearing Advisor at least two (2) business days before the hearing.

8. Resolution Processes

Resolution proceedings are private. All persons present at any time during the resolution process are expected to maintain the privacy of the proceedings in accordance with MCCCCD policy. While there is an expectation of privacy around what Investigators share with parties during interviews, the parties have discretion to share their own knowledge and evidence with others if they so choose. MCCCCD encourages parties to discuss this topic with their Advisors before doing so.

9. Formal Grievance Process

The Formal Grievance Process relies on a pool of administrators ("the Pool") to carry out the process. Members of the Pool are announced in an annual distribution of this policy to all students, parents/guardians of students, employees, prospective students, and prospective employees. They are also listed in the Annual Title IX Report published by the Title IX Office.

For more information regarding the Formal Grievance Pool—including selection, training, and responsibilities—please see [Formal Grievance Pool](#).

10. Formal Grievance Process: Notice of Investigation and Allegations

The Title IX Coordinator will provide written notice of allegations (the "NOA") to the Respondent upon commencement of the Formal Grievance Process. This facilitates the Respondent's ability to prepare for the interview and to identify and choose an Advisor to accompany them. The NOA is also copied to the Complainant, who is to be given advance notice of when the NOA will be delivered to the Respondent.

The NOA will include:

- A meaningful summary of all of allegations,
- The identity of the involved parties (if known),
- The precise misconduct being alleged,
- The date and location of the alleged incident(s) (if known),
- The specific policies implicated,
- A statement of the potential sanctions/responsive actions that could result,
- A statement that the MCCCCD presumes the Respondent is not responsible for the reported misconduct unless and until the evidence supports a different determination,
- A statement that determinations of responsibility are made at the conclusion of the process and that the parties will be given an opportunity to inspect and review all directly related and/or relevant evidence obtained during

- the review and comment period,
- A statement about the MCCCCD's policy on retaliation,
- Information on the need for each party to have an Advisor of their choosing and suggestions for ways to identify an Advisor,
- A statement informing the parties that the MCCCCD's policy prohibits knowingly making false statements, including knowingly submitting false information during the resolution process,
- Detail on how the party may request disability accommodations during the interview process,
- A suggested date and time for an initial meeting (proper time will be given to allow for the selection of an Advisor)
- The name(s) of the Investigator(s), along with a process to identify, in advance of the interview process, to the Title IX Coordinator any conflict of interest that the Investigator(s) may have, and
- An instruction to preserve any evidence that is directly related to the allegations.

Amendments and updates to the NOA may be made as the investigation progresses and more information becomes available regarding the addition or dismissal of various charges.

Notice will be made in writing and will be sent via electronic mail to the MCCCCD-issued email account and mailed via regular mail to the local or permanent address as indicated in official MCCCCD records. Notice is presumed to have been given upon emailing the NOA to the Respondent's MCCCCD-owned email address. The NOA will also be placed in regular mail, postage pre-paid.

11. Resolution Timeline

The MCCCCD will make a good faith effort to complete the resolution process within a sixty-to-ninety (60-90) business day time period, including appeal, which can be extended as necessary for appropriate cause by the Title IX Coordinator, who will provide notice and rationale for any extensions or delays to the parties as appropriate, as well as an estimate of how much additional time will be needed to complete the process.

12. Appointment of Investigators

Once the decision to commence a formal investigation is made, the Title IX Coordinator shall appoint a team of two (2) investigators to investigate the allegations. Appointment of investigators typically occurs within two (2) business days of determining that an investigation should proceed.

13. Ensuring Impartiality

Any individual materially involved in the administration of the resolution process may neither have nor demonstrate a conflict of interest or bias for a party generally, or for a specific Complainant or Respondent. The Title IX Coordinator will vet the assigned Investigator(s) to ensure impartiality by ensuring there are no actual or apparent conflicts of interest or disqualifying biases. The parties may, at any time during the resolution process, raise a concern regarding bias or conflict of interest, and the Title IX Coordinator will determine whether the concern is reasonable and supportable. The Title IX Coordinator's decision allegations of bias or conflict of interest is final.

The Formal Grievance Process involves an objective evaluation of all relevant inculpatory and exculpatory evidence obtained. Credibility determinations may not be based solely on an individual's status or participation as a Complainant, Respondent, or witness.

A Respondent is presumed not to be responsible for the reported misconduct unless and until the Respondent is determined to be responsible for a policy violation by the applicable preponderance of the evidence standard.

14. Delays in the Investigation Process and Interactions with Law Enforcement

The MCCCCD may undertake a short delay in its investigation (several days) if the following circumstances require: a request from law enforcement to temporarily delay the investigation, the need for language assistance, the absence of parties and/or witnesses, and/or accommodations for disabilities or health conditions, or such circumstances as determined by the Title IX Coordinator in their sole discretion.

The MCCCCD will communicate in writing the anticipated duration of the delay and reason to the parties and provide the parties with status updates if necessary. The MCCCCD will promptly resume its investigation and resolution process as

soon as feasible. During such a delay, MCCCCD will implement supportive measures, as deemed appropriate.

The MCCCCD's action(s) are not typically altered or precluded on the grounds that civil or criminal charges involving the underlying incident(s) have been filed or that criminal charges have been dismissed or reduced.

15. The Investigation Process

All investigations should be thorough, reliable, impartial, prompt, and fair. Investigations involve interviews with all relevant parties and witnesses; obtaining available, relevant evidence; and identifying sources of expert information, as necessary. Either party may submit a written statement to the Title IX Coordinator outlining their position on the allegations.

All parties have a full and fair opportunity, through the investigation process, to suggest witnesses and questions, to provide evidence and expert witnesses (at their own expense), and to fully review and respond to all evidence on the record.

For additional information regarding steps in the investigative process, please see [Investigative Process](#).

16. Role and Participation of Witnesses in the Investigation

Witnesses (as distinguished from the parties) who are employees or students of the MCCCCD are expected to cooperate with and participate in the MCCCCD's investigation and resolution process. Failure of such witnesses to cooperate with and/or participate in the investigation or resolution process constitutes a violation of this policy and may warrant discipline.

While in-person interviews for parties and all potential witnesses are ideal, circumstances (e.g., study abroad, summer break) may require individuals to be interviewed remotely. Skype, Zoom, FaceTime, WebEx, or similar technologies may be used for interviews if the Investigator(s) determine that timeliness or efficiency dictate a need for remote interviewing. MCCCCD will take appropriate steps to reasonably ensure the security/privacy of remote interviews.

Witnesses may also provide written statements in addition to being interviewed.

17. Recording of Interviews

No audio or video recording of any kind is permitted during investigation meetings.

18. Evidentiary Considerations in the Investigation

The investigation does not consider:

- 1) incidents not directly related to the possible violation, unless they evidence a pattern;
- 2) the character of the parties; or
- 3) questions and evidence about the Complainant's sexual predisposition or prior sexual behavior, unless such questions and evidence about the Complainant's prior sexual behavior are offered to prove that someone other than the Respondent committed the conduct alleged by the Complainant, or if the questions and evidence concern specific incidents of the Complainant's prior sexual behavior with respect to the Respondent and are offered to prove consent.

19. Referral for Hearing

The Title IX Coordinator will refer the matter for a hearing, once the final investigative report is shared with the parties.

The hearing cannot be less than ten (10) business days from the conclusion of the investigation, when the final investigation report is made available to the Parties and the Decision-maker for review and comment, unless all parties, and the Decision-maker agrees to an expedited timeline. This agreement must be in writing.

The Title IX Coordinator will select a Decision-maker that is hired from a list of approved attorneys for any hearing held under the Title IX policy.

20. Hearing Decision-maker Composition

The MCCCCD will designate a single decision-maker. The single Decision-maker will also be the Chair of the hearing. The Decision-maker will not have had any previous involvement with the investigation. The Decision-maker is an out-sourced position. The Decision-maker will not be an MCCCCD employee. The Decision-maker will have had no previous involvement in the matter at hand.

21. Evidentiary Considerations in the Hearing

Any evidence that the Decision-maker determines is relevant and credible may be considered. The hearing does not consider:

- 1) incidents not directly related to the possible violation, unless they evidence a pattern;
- 2) the character of the parties; or
- 3) questions and evidence about the Complainant's sexual predisposition or prior sexual behavior, unless such questions and evidence about the Complainant's prior sexual behavior are offered to prove that someone other than the Respondent committed the conduct alleged by the Complainant, or if the questions and evidence concern specific incidents of the Complainant's prior sexual behavior with respect to the Respondent and are offered to prove consent.

Previous disciplinary action of any kind involving the Respondent may be considered in determining an appropriate sanction upon a determination of responsibility. This information is only considered at the sanction stage of the process.

The parties, if they so choose, may submit a written impact statement prior to the hearing for the consideration of the Decision-maker at the sanction stage of the process when a determination of responsibility is reached.

After post-hearing deliberation, the Decision-maker renders a determination based on the preponderance of the evidence—whether it is more likely than not that the Respondent violated the policy as alleged.

22. Notice of Hearing

No less than ten (10) business days prior to the hearing, the Title IX Coordinator will send notice of the hearing to the parties via email to the individual MCCCCD-issued email address. Once emailed, notice will be presumptively delivered.

The notice will contain:

1. A description of the alleged violation(s), a list of all policies allegedly violated, a description of the applicable procedures, and a statement of the potential sanctions/responsive actions that could result.
2. The time, date, and location of the hearing and a reminder that attendance is mandatory, superseding all other campus activities. Thoroughness and fairness are the primary FOCI of any Title IX hearing process. Hearings are generally scheduled for two (2) hours, but can be extended, as needed at the discretion of the Decision-maker, to ensure that both parties are able to present the information relevant to their position. (e.g., complicated fact pattern, numerous witnesses, etc.).
3. Any technology that will be used to facilitate the hearing.
4. A list of all those who will attend the hearing, along with an invitation to object to the Decision-maker on the basis of demonstrated bias. This must be raised with the Title IX Coordinator at least two (2) business days prior to the hearing.
5. Information on how the hearing will be recorded and on access to the recording for the parties after the hearing.
6. A statement that if any party or witness does not appear at the scheduled hearing, the hearing may be held in their absence. For compelling reasons, the Decision-maker may reschedule the hearing.
7. Notification that the parties may have the assistance of an Advisor of their choosing at the hearing and will be required to have one present for any questions they may desire to ask. The party must notify the Title IX Coordinator if they do not have an Advisor, and the MCCCCD will appoint one. Each party must have an Advisor present. There are no exceptions.
8. An invitation to each party to submit to the Decision-maker an impact statement. Pre-hearing that the Decision-maker will review during any sanction determination.
9. An invitation to contact the Title IX Coordinator to arrange any disability accommodations, language assistance,

and/or interpretation services that may be needed at the hearing, at least seven (7) business days prior to the hearing.

10. Direction that the parties may not bring mobile phones/devices into the hearing.

Hearings for possible violations that occur near or after the end of an academic term (assuming the Respondent is still subject to this policy) and are unable to be resolved prior to the end of term will typically be held immediately after the end of the term or during the summer, as needed, to meet the resolution timeline followed by the MCCCCD and remain within the 60-90 business day goal for resolution.

In these cases, if the Respondent is a graduating student, a hold may be placed on graduation and/or official transcripts until the matter is fully resolved (including any appeal). A student facing charges under this policy is not in good standing to graduate.

23. Virtual Hearings

All hearings will occur virtually by use of technology, specifically WebEx or Zoom technology. Each party will be located in a separate room from the Decision-maker, but will be able to see and hear each other. Witnesses will testify in the same room as the Decision-maker, but not the room where the parties and their Advisors sit. The Title IX Coordinator will arrange to use technology to allow remote testimony without compromising the fairness of the hearing.

24. Pre-Hearing Preparation

The Decision-maker, or designee, after any necessary consultation with the parties, Investigator(s) and/or Title IX Coordinator, will provide the names of persons who will be participating in the hearing, all pertinent documentary evidence, and the final investigation report to the parties at least ten (10) business days prior to the hearing. During the ten (10) business day period prior to the hearing, the parties have the opportunity to review and comment on the final investigation report and available evidence.

The Decision-maker, or designee will also provide the parties a copy of the pre-hearing preparation checklist/document. A copy of the pre-hearing preparation checklist/document may be found on the MCCCCD's Title IX webpage: <https://district.maricopa.edu/consumer-information/title-ix/>

25. Hearing Procedures

At the hearing, the Decision-maker has the authority to hear and make determinations on all allegations of sexual harassment and/or retaliation and may also hear and make determinations on any additional alleged policy violations that have occurred in concert with the discrimination, harassment, and/or retaliation, even though those collateral allegations may not specifically fall within the Title IX policy.

Participants at the hearing will include the Decision-maker, the hearing facilitator, the Investigator(s) who conducted the investigation, the parties, Advisors to the parties, any called witnesses, the Title IX Coordinator and anyone providing authorized accommodations or assistive services.

The Decision-maker will answer all questions of procedure. Anyone appearing at the hearing to provide information will respond to questions on their own behalf.

The Decision-maker will allow witnesses who have relevant information to appear at a portion of the hearing in order to respond to specific questions from the Decision-maker and the parties and will then be excused from attendance.

26. Joint Hearings

In hearings involving more than one Respondent or in which two (2) or more Complainants have accused the same individual of substantially similar conduct, the parties may agree to hear the allegations jointly. All parties must agree to a joint hearing. If one party does not agree, the default will be to hold the hearings separately.

In joint hearings, separate determinations of responsibility will be made for each Respondent with respect to each alleged policy violation.

27. Refusal to Submit to Cross-Examination and Inferences

The Decision-maker may not draw any inference solely from a party's or witness's absence from the hearing or refusal to answer cross-examination or other questions.

If charges of policy violations other than sexual harassment are considered at the same hearing, the Decision-maker may consider all evidence it deems relevant.

If a party's Advisor of choice refuses to comply with MCCCCD's established rules of decorum for the hearing, MCCCCD may require the party to use a different Advisor. If a MCCCCD-provided Advisor refuses to comply with the rules of decorum, the Title IX Coordinator may provide that party with a different Advisor to conduct cross-examination on behalf of that party.

28. Recording Hearings

Hearings (but not deliberations) are recorded by MCCCCD for purposes of review in the event of an appeal. The parties may not record the proceedings and no other unauthorized recordings are permitted.

The Decision-maker, the parties, their Advisors, and appropriate administrators of the MCCCCD will be permitted to listen to the recording in a controlled environment determined by the Title IX Coordinator. No person will be given a copy or be allowed to make a copy of the recording.

29. Deliberation, Decision-making, and Standard of Proof

The Decision-maker will deliberate alone to determine, by a preponderance of the evidence, whether the Respondent is responsible or not responsible for the policy violation(s) in question. The deliberation period is not to exceed five (5) days. The Decision-maker may consider the previously submitted party impact statements in determining appropriate sanction(s), when there is a finding of responsibility as to one or more of the allegations.

The Decision-maker will ensure that each of the parties has an opportunity to review any impact statement submitted by the other party(ies). The Decision-maker may--at their discretion--consider the statements, but they are not binding.

The Decision-maker will then prepare a written deliberation statement and deliver it to the Title IX Coordinator, detailing the determination, rationale, the evidence used in support of its determination, the evidence disregarded, credibility assessments, and any sanctions. This report typically should not exceed three (3) to five (5) pages in length and must be submitted electronically to the Title IX Coordinator within two (2) business days of the end of deliberations, unless the Title IX Coordinator grants an extension. If an extension is granted, the Title IX Coordinator will notify the parties in writing of the extension.

30. Notice of Outcome

Using the deliberation statement, the Title IX Coordinator will prepare a Notice of Outcome, which shall include the final determination, rationale, and any applicable sanction(s). The Title IX Coordinator will then provide the Notice of Outcome to the parties and their Advisors within five (5) business days of receiving the Decision-maker's deliberation statement. The Notice of Outcome must be shared with the parties simultaneously.

Notification will be made in writing and will be mailed to the local or permanent address of the parties as indicated in official MCCCCD records, or emailed to the parties' MCCCCD-issued email or otherwise approved account. Once mailed, emailed, and/or received in-person, notice will be presumptively delivered.

For more information about the Notice of Outcome Letter, please see [Notice of Outcome](#).

31. Sanctions

Factors considered when determining a sanction/responsive action may include, but are not limited to:

1. The nature, severity of, and circumstances surrounding the violation(s)
2. The Respondent's disciplinary history

3. Previous allegations or allegations involving similar conduct
4. The need for sanctions/responsive actions to bring an end to the discrimination, harassment, and/or retaliation
5. The need for sanctions/responsive actions to prevent the future recurrence of discrimination, harassment, and/or retaliation
6. The need to remedy the effects of the discrimination, harassment, and/or retaliation on the Complainant and the community
7. Any other information deemed relevant by the Decision-maker

The sanctions will be implemented as soon as is feasible, either upon the outcome of any appeal or the expiration of the window to appeal without an appeal being requested.

The sanctions described in this policy are not exclusive of, and may be in addition to, other actions taken or sanctions imposed by external authorities.

a. Student Sanctions

The following are the usual sanctions that may be imposed upon students or organizations singly or in combination:

1. *Warning*: A formal statement that the conduct was unacceptable and a warning that further violation of any MCCCCD policy, procedure, or directive will result in more severe sanctions/responsive actions.
2. *Required Counseling*: A mandate to meet with and engage in external counseling to better comprehend the misconduct and its effects.
3. *Probation*: A written reprimand for violation of institutional policy, providing for more severe disciplinary sanctions in the event that the student is found in violation of any institutional policy, procedure, or directive within a specified period of time. Terms of the probation will be articulated and may include denial of specified social privileges, exclusion from co-curricular activities, exclusion from designated areas of campus, no-contact orders, and/or other measures deemed appropriate.
4. *Suspension*: Termination of student status for a definite period of time not to exceed two years and/or until specific criteria are met. Students who return from suspension are automatically placed on probation through the remainder of their tenure as a student at MCCCCD.
5. *Expulsion*: Permanent termination of student status and revocation of rights to be on any MCCCCD campus for any reason or to attend MCCCCD-sponsored events.
6. *Withholding Diploma*: MCCCCD may withhold a student's diploma for a specified period of time and/or deny a student participation in commencement activities if the student has an allegation pending or as a sanction if the student is found responsible for an alleged violation.
7. *Revocation of Degree*: MCCCCD reserves the right to revoke a degree previously awarded from MCCCCD for fraud, misrepresentation, and/or other violation of MCCCCD policies, procedures, or directives in obtaining the degree, or for other serious violations committed by a student prior to graduation.
8. *Organizational Sanctions*: Deactivation, loss of recognition, loss of some or all privileges (including MCCCCD registration) for a specified period of time.
9. *Other Actions*: In addition to or in place of the above sanctions, MCCCCD may assign any other sanctions as deemed appropriate.

b. Employee Sanctions

Responsive actions for an employee who has engaged in harassment, discrimination, and/or retaliation include:

1. Warning – Verbal or Written
2. Performance Improvement/Management Process
3. Required Counseling
4. Required Training or Education
5. Probation
6. Loss of Annual Pay Increase
7. Loss of Oversight or Supervisory Responsibility
8. Demotion

9. Suspension with pay
10. Suspension without pay
11. Termination
12. Other Actions: In addition to or in place of the above sanctions, the MCCCCD may assign any other sanctions as deemed appropriate.

32. Withdrawal or Resignation While Charges Pending

Students: If a student is a Respondent in a pending matter alleging a violation of the Title IX policy, the MCCCCD may place a hold on a student's ability to graduate and/or to receive an official transcript/diploma.

Should a student decide to not participate in the resolution process, the process proceeds absent their participation to a reasonable resolution. Should a student Respondent permanently withdraw from the MCCCCD, the resolution process ends, as the MCCCCD no longer has disciplinary jurisdiction over the withdrawn student. A student who withdraws or leaves while the process is pending may not return to any MCCCCD college. Such exclusion applies to all campuses of MCCCCD. A hold will be placed on their ability to be readmitted. They may also be barred from MCCCCD property and/or events.

However, MCCCCD will continue to address and remedy any systemic issues, variables that may have contributed to the alleged violation(s), and any ongoing effects of the alleged harassment, discrimination, and/or retaliation.

During the resolution process, MCCCCD may put a hold on a responding student's educational record that a disciplinary matter is pending.

Employees: Should an employee Respondent resign with unresolved allegations pending, the resolution process ends, as MCCCCD no longer has disciplinary jurisdiction over the resigned employee. The employee who resigns with unresolved allegations pending is not eligible for rehire with any MCCCCD or any campus of the MCCCCD, and the records retained by the Title IX Coordinator will reflect that status. Human Resources should also be notified and make the appropriate notation on its list of people who are not permitted to be rehired.

However, MCCCCD will continue to address and remedy any systemic issues, variables that contributed to the alleged violation(s), and any ongoing effects of the alleged harassment or discrimination.

All MCCCCD responses to future inquiries regarding employment references for that individual will include that the former employee resigned during a pending disciplinary matter.

33. Appeals

Any party may file a Request for Appeal by submitting such a request in writing to the Title IX Coordinator within five (5) days of the delivery of the Notice of Outcome Letter. Once the five (5) days have passed, the matter will be deemed closed.

The request for appeal will be forwarded to the Provost or Chief Academic Officer for the MCCCCD, acting as the Appeal Chair, for consideration to determine if the request meets the grounds for appeal.

a. Grounds for Appeal

Appeals are limited to the following grounds:

- (A) Procedural irregularity that affected the outcome of the matter;
- (B) New evidence that was not reasonably available at the time the determination regarding responsibility or dismissal was made, that could affect the outcome of the matter; and
- (C) An allegation that the Title IX Coordinator, Investigators, or Decision-maker had a conflict of interest or bias for or against Complainants or Respondents generally or the specific Complainant or Respondent that affected the outcome of the matter.

The Appeal Chair will deny any request for appeal that does not meet the grounds in this policy and will notify the parties and their Advisors in writing of the denial and the rationale. Denials based on lack of grounds shall be communicated to the requesting party within five (5) days of the request for appeal being received by the Appeal Chair.

If any of the grounds in the Request for Appeal meet the grounds in this policy, then the Appeal Chair will:

1. Notify the other party(ies) and their Advisors, the Title IX Coordinator, and, when appropriate, the investigators and/or the original Decision-maker.
2. Provide the other party(ies) and their Advisors, the Title IX Coordinator, and, when appropriate, the Investigators and/or the original Decision-maker a copy of the appeal request with the approved grounds outlined.
3. Provide the other party(ies) and their Advisors, the Title IX Coordinator, and when appropriate, the investigators and/or the original Decision-maker five (5) days to submit a response to the portion of the appeal that was approved and involves them.
4. Collect any additional information needed and all documentation regarding the approved grounds and the subsequent responses and render a decision in no more than fifteen (15) days from the date the Request for Appeal was filed, barring exigent circumstances. All decisions apply the preponderance of the evidence.
5. Prepare a Notice of Appeal Outcome letter and send it to all parties simultaneously, which includes the decision on each approved ground and rationale for each decision. The Notice of Appeal Outcome letter will also outline specific instructions for remand or reconsideration of any sanction imposed by the Decision-maker, which MCCCCD is permitted to share according to state or federal law.

The Notice of Appeal Outcome letter will be mailed to the local or permanent address of the parties as indicated in official institutional records and emailed to the parties' MCCCCD-issued email or otherwise approved account. Notice is presumed to have been made once the letter is emailed.

b. Sanctions Status During the Appeal

Any sanctions imposed as a result of the hearing are stayed during the appeal process. Supportive measures may be continued or reinstated, subject to the supportive measures procedure in Section VII of this policy.

MCCCCD may still place holds on official transcripts, diplomas, graduations, and course registration pending the outcome of an appeal when the original sanctions included separation.

34. Long-Term Remedies/Other Actions

Following the conclusion of the resolution process, and in addition to any sanctions implemented, the Title IX Coordinator may implement additional long-term remedies or actions with respect to the parties and/or the campus community that are intended to stop the harassment, and/or retaliation, remedy the effects, and prevent reoccurrence.

These remedies/actions may include, but are not limited to:

1. Referral to community services including counseling and health services
2. Referral to the Employee Assistance Program
3. Education to the individual and/or the community
4. Permanent alteration of work arrangements for employees
5. Provision of campus safety escorts
6. Climate surveys
7. Policy modification and/or training
8. Implementation of long-term contact limitations between the parties
9. Implementation of adjustments to academic deadlines, course schedules, etc.

At the discretion of the Title IX Coordinator, certain long-term support or measures may also be provided to the parties even if no policy violation is found.

When no policy violation is found, the Title IX Coordinator will address any remedies owed by the MCCCCD to the Respondent to ensure that the Respondent did not experience effective denial of educational access.

The MCCCCD will maintain the privacy of any Party subject to any long-term remedies/actions/measures, provided doing so does not impair the MCCCCD's ability to provide these services.

35. Failure to Comply with Sanctions and/or Interim and Long-term Remedies and/or Responsive Actions

All parties are expected to comply with the assigned sanctions, responsive actions, and/or corrective actions within the timeframe specified by the final Decision-maker (including the Appeal Chair).

Failure to abide by the sanction(s)/action(s) imposed by the date specified, whether by refusal, neglect, or any other reason, may result in additional sanction(s)/action(s), including suspension, expulsion, and/or termination from the MCCCCD.

A suspension will only be lifted when compliance is achieved to the satisfaction of the Title IX Coordinator.

36. Recordkeeping

MCCCCD will maintain for a period of seven (7) years records of:

1. Each sexual harassment investigation including any determination regarding responsibility and any audio or audiovisual recording or transcript required under federal regulation;
2. Any disciplinary sanctions imposed on the Respondent;
3. Any remedies provided to the Complainant designed to restore or preserve equal access to the MCCCCD's education program or activity;
4. Any appeal and the result therefrom;
5. Any Informal Resolution and the result therefrom;
6. All materials used to train Title IX Coordinators, investigators, Decision-makers, and any person who facilitates an Informal Resolution process. MCCCCD will make these training materials publicly available on MCCCCD's website. (Note: If the MCCCCD does not maintain a website, MCCCCD must make these materials available upon request for inspection by members of the public.); and
7. Any actions, including any supportive measures, taken in response to a report or formal complaint of sexual harassment, including:
 - a. The basis for all conclusions that the response was not deliberately indifferent;
 - b. Any measures designed to restore or preserve equal access to the MCCCCD's education program or activity; and
 - c. If no supportive measures were provided to the Complainant, document the reasons why such a response was not clearly unreasonable in light of the known circumstances.

The MCCCCD will also maintain any and all records in accordance with state and federal laws. The MCCCCD will follow the destruction of records policy as outlined by the state of Arizona.

37. Disabilities Accommodations in the Resolution Process

MCCCCD is committed to providing reasonable accommodations and support to qualified students, employees, or others with disabilities to ensure equal access to the MCCCCD's resolution process. Anyone needing such accommodation should contact the Title IX Coordinator and request the accommodation. The Title IX Coordinator shall seek consultation from the college Disability Resource Services Manager (for students) or Human Resources (for employees).

38. Mandatory Training

This policy requires that annual training for the Title IX Coordinators, investigators, decision-makers, and any person who facilitates an informal resolution process will include:

1. the definition of sexual harassment under this policy,

2. the scope of the MCCCCDs education program or activity,
3. how to conduct an investigation and grievance process including hearings, appeals, and informal resolution processes, as applicable, and
4. how to serve impartially, including by avoiding prejudgment of the facts at issue, conflicts of interest, and bias.

Decision-makers will receive annual training on any technology to be used at a live hearing and on issues of relevance of questions and evidence, including when questions and evidence about the complainant's sexual predisposition or prior sexual behavior are not relevant.

Investigators will receive annual training on issues of relevance to create an investigative report that fairly summarizes relevant evidence.

Any materials used to train Title IX Coordinators, investigators, decision-makers, and any person who facilitates an informal resolution process, must not rely on sex stereotypes and must promote impartial investigations and adjudications of formal complaints of sexual harassment.

39. Revision of this Policy and Procedures

This policy and procedures supersede any previous policy(ies) addressing Title IX sexual harassment and discrimination. The policy (administrative regulation) will be reviewed and updated as needed by the Title IX Coordinator, in consultation with any other stakeholders deemed necessary by the Title IX Coordinator and upon approval by the Chancellor. MCCCCD reserves the right to make changes to this document as necessary, and once those changes are posted online, they are in effect.

During the resolution process, the Title IX Coordinator may make minor modifications to procedures that do not materially jeopardize the fairness owed to any party, such as to accommodate summer schedules. District legal may also vary procedures materially with notice (on the institutional website, with the appropriate effective date identified) upon determining that changes to law or regulation require policy or procedural alterations not reflected in this policy and procedures.

If government laws or regulations change – or court decisions alter – the requirements in a way that impacts this document, this document will be construed to comply with the most recent government regulations or holdings.

This document does not create legally enforceable protections beyond the protection of the background state and federal laws which frame such policies and codes, generally.

This policy and procedures are effective August 14, 2020.

ATIXA 2020 ONE POLICY, TWO PROCEDURES MODEL.

USE AND ADAPTATION OF THIS MODEL WITH CITATION TO ATIXA IS PERMITTED THROUGH A LIMITED LICENSE TO MARICOPA COUNTY COMMUNITY COLLEGE DISTRICT ALL OTHER RIGHTS.

AMENDED by Direct Approval from the Chancellor, September 20, 2021

AMENDED by Direct Approval from the Chancellor, September 16, 2020

ADOPTED by Direct Approval from the Chancellor, August 3, 2020

5.1.17 Prohibited Sex Discrimination, Sex-Based Harassment, and Retaliation (2024) has been hereby repealed and is no longer effective.

DIRECT APPROVAL by the Chancellor, January 23, 2025;

ADOPTED by Direct Approval from the Chancellor, July 31, 2024

5.1.18 Pregnancy and Related Conditions and Parenting Student

1. Non-discrimination Statement

MCCCD does not discriminate in its education program or activity against any applicant for admission, student, applicant for employment, or employee on the basis of current, potential, or past pregnancy or related conditions as mandated by title ix of the education amendments of 1972 (Title IX). MCCCD prohibits members of the MCCCD community from adopting or implementing any policy, practice, or procedure which treats an applicant for admission, student, applicant for employment, or employee differently on the basis of current, potential, or past parental, family, or marital status. This policy and its pregnancy-related protections apply to all pregnant persons, regardless of gender identity or expression.

2. Definitions

- **Familial status.** The configuration of one's family or one's role in a family.
- **Marital status.** The state of being married or unmarried.
- **Parental status.** The status of a person who, with respect to another person who is under the age of 18 or a person who is 18 or older but who is incapable of self-care because of a mental or physical disability. Is a biological, adoptive, foster, or stepparent; a legal custodian or guardian; in loco parentis with respect to such a person; or actively seeking legal custody, guardianship, visitation, or adoption of such a person.
- **Pregnancy and related conditions.** The full spectrum of processes and events connected with pregnancy, including pregnancy, childbirth, termination of pregnancy, or lactation; related medical conditions; and recovery therefrom. Termination of pregnancy includes the end of pregnancy in any manner, including, miscarriage, stillbirth, or abortion.
- **Reasonable modifications.** Individualized modifications to the recipient's policies, practices, or procedures that do not fundamentally alter the recipient's education program or activity.

3. Reasonable Adjustments for Students

Students who are pregnant or are experiencing related conditions are entitled to reasonable adjustments to prevent sex discrimination and ensure equal access to MCCCD's education program and activity. Any student seeking reasonable modifications must contact the TIXC to discuss appropriate and available reasonable modifications based on their individual needs. Students are encouraged to request reasonable modifications as promptly as possible, although retroactive modifications may be available in some circumstances. Reasonable modifications are voluntary, and a student can accept or decline the offered reasonable modifications. Not all reasonable modifications are appropriate for all contexts.

Reasonable modifications/adjustments and other information is located at:

<https://district.maricopa.edu/consumer-information/title-ix/working-pregnant-and-parenting-students>

Supporting documentation for reasonable adjustments will only be required when it is necessary and reasonable under the circumstances to determine which reasonable adjustments to offer to determine other specific actions to take to ensure equal access.

Information about pregnant students' requests for modifications will be shared with faculty and staff only to the extent necessary to provide the reasonable modification.

Students experiencing pregnancy-related conditions that manifest as a temporary disability under the Americans with Disabilities Act (ADA) or section 504 of the Rehabilitation Act are eligible for reasonable accommodations just like any other student with a temporary disability. The TIXC will consult with Disability Resources and Services (DRS) to ensure the student receives reasonable accommodations for their disability as required by law.

4. Certification to Participate

All students should be informed of health and safety risks related to participation in academic and co-curricular activities, regardless of pregnancy status. A student may not be required to provide health care provider or other certification that the student is physically able to participate in the program or activity, unless:

- The certified level of physical ability or health is necessary for participation;
- The institution requires such certification of all students participating; and
- The information obtained is not used as a basis for pregnancy-related discrimination.

5. Lactation Space Access

MCCCD provides students and employees with access to lactation spaces that are functional, appropriate, and safe. Such spaces are regularly cleaned, shielded from view, and free from the intrusion of others.

6. Leaves of Absence

Students are permitted to take a voluntary leave of absence for a reasonable time as deemed medically necessary by their healthcare provider because of pregnancy and/or the birth, adoption, or placement of a child. The leave term may be extended in the case of extenuating circumstances or medical necessity. To the extent possible, MCCCD will take reasonable steps to ensure that students who take a leave of absence or medical leave return to the same position of academic progress that they were in when they took leave, including access to the same or an equivalent course catalog that was in place when the leave began.

Continuation of students' scholarships, fellowships, or similar MCCCD-sponsored funding during the leave term will depend on student registration status and the policies of the funding program regarding registration status. Students will not be negatively impacted by or forfeit their future eligibility for their scholarship, fellowship, or similar MCCCD-supported funding by exercising their rights under this policy.

In order to initiate a leave of absence, the student must contact the TIXC at least thirty (30) calendar days prior to the initiation of leave, or as soon as practicable. The TIXC will assist the student in completing any necessary paperwork.

7. Student Parents

Students with child caretaking/parenting responsibilities who wish to remain engaged in their coursework while adjusting their academic responsibilities because of the birth or adoption of a child or placement of a foster child may request an academic modification period during the first eight (8) weeks from the time the child entered the home. Extensions may be granted when additional time is required by medical necessity or extraordinary caretaking/parenting responsibilities. During the modification period, the student's academic requirements will be adjusted and deadlines postponed as appropriate, in collaboration among the student's academic advisor, and the appropriate academic department(s).

Students seeking a period of modified academic responsibilities may consult with the TIXC to determine appropriate academic adjustment requests. Students are encouraged to work with their faculty members to reschedule course assignments, lab hours, examinations, or other requirements, and/or to reduce their overall course load, as appropriate, once authorization is received from the TIXC. If, for any reason, caretaking/parenting students are not able to work with their faculty members to obtain appropriate modifications, students should alert the TIXC as soon as possible, and the office will help facilitate needed accommodations and modifications.

Students can request modified academic responsibilities under this policy regardless of whether they elect to take a leave of absence. While receiving academic modifications, students will remain registered and retain benefits accordingly.

8. Regulation Dissemination and Training

A copy of this Regulation will be made available to employees in annually required training and posted on the MCCCCD website. MCCCCD will alert all new students about this regulation and the location of this regulation as part of orientation. The TIXC will make educational materials available to all members of the MCCCCD community to promote compliance with this regulation and familiarity with its procedures.

9. Revision of this Regulation

The Regulation will be reviewed and updated as needed by the TIXC, in consultation with any other stakeholders deemed necessary and upon approval by the chancellor. MCCCCD reserves the right to make changes to this document as necessary, and once those changes are posted online, they are in effect.

If government laws or regulations change, or court decisions alter, the requirements in a way that impacts this Regulation, this Regulation will be construed to comply with the most recent government regulations or holdings.

This Regulation is effective August 1, 2024.

BASED ON THE 2024 ATIXA TITLE IX MODEL POLICY AND PROCEDURES (AMPP).

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AMENDED by Direct Approval from the Chancellor, January 23, 2025;

ADOPTED by Direct Approval from the Chancellor, July 31, 2024

***** SECTION TO INCLUDE IN HANDBOOK*****

Appendix ND-2 Discrimination Complaint Procedures for Students

I. This procedure provides for the prompt and equitable resolution of discrimination and harassment complaints brought by students against a member of the college community that is based on membership in a “protected class/category” (not otherwise addressed in the Title IX Sexual Misconduct Policy).

1. Complaints may be brought under this procedure for discrimination based on membership in a protected group: race, color, religion, national origin, citizenship status (including document abuse), sex (including pregnancy and sexual harassment) not including those cases under the Title IX Policy Jurisdiction), sexual orientation, gender identity, age, veteran status, physical or mental disability, or genetic information.
2. All members of the college community should act promptly upon receipt of an allegation of conduct that might constitute harassment and/or discrimination. Any member of the college community should refer a person who might be a victim of such conduct the college’s Equal Opportunity & Title IX Regional Director [Regional Director] (or designee) or to the district’s Title IX, ADA/504 Coordinator who are both responsible for resolving complaints of unlawful harassment/discrimination.
3. Students who believe they are experiencing sexual harassment IN VIOLATION OF TITLE IX SHOULD submit a written complaint under [Administrative Regulation 5.1.16, Title IX Sexual Harassment Policy](#).
4. Students who wish to file a complaint related to disability accommodations should first exhaust the remedies outlined under [A.R. 2.8 Students With Disabilities](#).

5. Students who feel they have been treated unfairly or unjustly by a faculty member regarding instruction or a grade **not involving discrimination based on membership in a protected group (as outlined above)** should utilize the S-6 INSTRUCTIONAL GRIEVANCE PROCESS.

II. College officials should take all necessary steps to ensure the prompt and equitable resolution of any complaint of harassment/discrimination. The typical time period to resolve allegations under this policy is sixty (60) business days. MCCCDC will make a good faith effort to complete the resolution process within this period. any extenuating circumstances that extend this time period will be communicated to the complainant and respondent and noted in the investigative file.

1. The term 'complainant' refers to an individual who has experienced the alleged prohibited conduct. only the person who has experienced the alleged prohibited conduct may file a complaint under this policy. The term "Respondent" refers to an individual who has been accused of engaging in prohibited conduct.
2. The written complaint must identify the action, decision, conduct, or basis that the student believes constitutes prohibited discrimination or harassment. If the complaint does not contain the above-referenced information, the regional Title IX Director Or district Title IX, ADA/504 Coordinator will request clarification.
3. Every effort will be made to address the complaint consistent with the complainant's desires. However, under certain circumstances, the MCCCDC may have a legal obligation to identify and remedy discrimination or harassment, irrespective of whether a formal complaint is actually filed and even if the complainant would prefer no action be taken.

III. Optional Informal Resolution of Discrimination Complaints

1. Before filing a formal complaint under this procedure, the student may attempt to resolve the problem through informal discussions with the respondent. Students are not required to use the informal resolution process before filing a formal complaint.
2. The student should work with the regional director to schedule and facilitate the informal resolution meeting.
3. The informal resolution process consists of:
 - a. The discussion between parties regarding the allegations,
 - b. The response to the allegations, and
 - c. A written resolution agreement between the parties as to the disposition of the allegations. The regional director shall be involved with the drafting of the written resolution agreement.
4. Both parties must sign the written resolution agreement in order to deem the matter closed.
5. There is no appeal to the informal resolution process. The Regional Director is charged with ensuring the disposition (and any actions stated therein) is completed.
6. At any time before the signing of the resolution agreement, the student can end the informal process and initiate the formal process.
7. If the complaint cannot be informally resolved to the satisfaction of the student, the student has the right to file a formal complaint and to proceed under the formal resolution procedures.

IV. Formal Resolution of Discrimination Complaints

1. A student who contends that unlawful or MCCCDC-prohibited discrimination has occurred may file a formal complaint by contacting the Regional Director at each respective college or center or the district's Title IX, ADA/504 Coordinator if the respondent is a district office employee.
2. A formal complaint is a signed and dated document submitted by the complainant (an email from the student will suffice) alleging a policy violation by a respondent, a summary of allegations, and requesting that the MCCCDC investigate the allegation(s).
3. The formal process consists of a signed complaint, preliminary assessment, an investigation, a determination regarding the allegation, appropriate corrective action or sanctions when the complaint is substantiated, and an offered appeal process.
4. Upon receipt of a formal complaint of discrimination or harassment, the regional director shall conduct a preliminary assessment to determine whether, if substantiated, the behavior or conduct reported would constitute a violation of MCCCDC policy. The Regional Director Has sole discretion to determine whether further

investigation is necessary in any particular case. In circumstances where a complaint will not be investigated, the complaint will be notified.

5. Following the determination that an investigation should take place, the Regional Director shall appoint two (2) trained investigators to investigate the allegations. The complainant, respondent and/or investigators shall disclose any potential conflicts of interest or bias regarding the complaint to the Regional Director.
6. Regional Director will provide written notice of allegations (the "NOA") to the respondent upon commencement of the formal resolution process. The NOA will include:
 - a summary of all allegations,
 - specific policies implicated,
 - a statement of the potential sanctions/corrective actions that could result,
 - a statement that the applicable evidentiary standard is a preponderance of the evidence,
 - a statement that the MCCCCD presumes the respondent is not responsible for the reported misconduct unless and until the evidence supports a determination of a policy violation,
 - the name(s) of the assigned investigator(s),
 - detail on how the party may request disability accommodations during the interview process,
 - a statement about MCCCCD'S policy on retaliation, and
 - an instruction to preserve any evidence that is directly related to the allegations.
7. Amendments and updates to the NOA may be made as the investigation progresses and more information becomes available. Notice is presumed to have been given upon emailing the NOA to the respondent's MCCCCD-owned email address.
8. The investigators shall review all information provided to the Regional Director and will interview individuals who potentially possess relevant evidence as identified by the parties and determined by the investigators. the investigators shall focus on the allegation(s) of policy violation, assess the relevance of witnesses and evidence, and work efficiently to conclude the investigation promptly (within 60 business days), as outlined in this procedure. The investigators shall deliver to the Regional Director the investigation report, which shall include:
 - a. a summary of the allegations,
 - a detailed fact-finding report of relevant evidence
9. Within ten (10) business days following receipt of the results of the investigation report the Regional Director will accept the investigation report or recommend further investigation. The Regional Director will issue a written determination regarding the allegations and whether a violation is substantiated or unsubstantiated. The Regional Director will provide a written notification of the investigation outcome simultaneously to the complaint and respondent. This outcome notification will include a summary of the investigator's written findings, whether a violation is substantiated or unsubstantiated, and recommendation(s) addressing substantiated findings.

V. Sanctions And Corrective Action

1. The Vice President of Student Affairs will implement student sanctions as appropriate under A.R. 2.5 Student Rights And Responsibilities Policy. If the respondent is an employee, the Vice President of Student Affairs will report the findings of fact and policy conclusions to the college or district human resources who will issue appropriate disciplinary sanctions or corrective action.
2. MCCCCD has clear policy goals to prevent and correct discrimination or harassment, therefore, possible sanctions include, but are not limited to: written warning, counseling, suspension, transfer, mandatory training, or dismissal of the respondent. As appropriate to remedy the effects of policy violations, action on behalf of complainants, such as employee assistance, professional counseling, voluntary transfer, etc., may also be offered. The institution will take appropriate steps to prevent further occurrences.

VI. Supportive Measures

For any allegation of unlawful discrimination, the MCCCCD may provide supportive measures to assist or protect the parties during the pendency of the investigation. Such measures may include academic adjustments, arranging for changes in class schedules, or other appropriate temporary measures.

VII. Appeal Right

1. A complaint or respondent who is not satisfied with the outcome has five (5) business days to submit an appeal of the decision in writing, to the College President. If a conflict of interest prevents the College President from serving as the appeal officer, then the district Provost shall serve as the appeal officer. For respondents who are district office employees, the Provost shall serve as the appeal officer. If the provost has a conflict of interest, a College President may serve as the appeal officer. Conflicts of interest requiring a change of appeal officer shall be communicated to the requesting party.

GROUND FOR APPEAL. Appeals are limited under the following grounds:

- A) Procedural irregularity that affected the outcome of the matter; **or**,
 - B) New evidence that was not reasonably available at the time the determination regarding responsibility or dismissal was made that could affect the outcome of the matter.
2. The appeal request must state the grounds for appeal and why the complainant or respondent believes the outcome was improper.
 3. Denials based on lack of grounds shall be communicated to the requesting party within five (5) business days of the request for appeal being received by the appeal officer.
 4. If any grounds for appeal are met, the appeal officer will review the results of the investigation and written findings and respond to the request within ten (10) business days from receipt of the request. The ten-day review and response period may be extended for extenuating circumstances, with notice to all parties. the appeal officer may accept, reject, or modify the investigatory outcome. If the appeal officer determines that it is necessary to remedy a substantial deficiency caused by one of the appeal grounds above, the case file will be reopened and assigned for further investigation. If necessary, other investigator(s) may be assigned. If the appeal officer determines that the investigation was thorough and complete and that the decision is supported by the evidence, he or she will affirm the investigation outcome. At this point, the student has exhausted the Discrimination Complaint Procedure for Students.

VIII. Maintenance of Documentation

Documentation resulting from each level in the Formal Resolution Process (including witness statements, investigative notes, etc.) will be maintained in accordance with state and MCCCCD document retention guidelines, [A.R. 4.15 Retrieval, Disclosure and Retention of Records](#).

IX. Confidentiality of Proceedings

Every effort will be made by the college and MCCCCD to protect the confidentiality of the parties during the processing of complaints under this procedure. Records will be maintained in a confidential manner to the extent permitted by law and insofar as they do not interfere with MCCCCD's legal obligation to investigate and resolve issues of discrimination.

X. Retaliation Prohibited

Retaliation against a person who has filed a complaint or against any witness questioned during an investigation is strictly prohibited. Any retaliatory action by instructors, supervisors, managers, academic professionals, administrators, or other employees who have the authority to take adverse action against a complainant or witness is prohibited and may be grounds for disciplinary action. As per [A.R. 5.1.15 Retaliation Prohibited](#), "MCCCCD" strictly prohibits an adverse action that might deter a reasonable person from participating in activity protected by anti-discrimination laws.

XI. False Statements Prohibited

Any individual who knowingly provides false information pursuant to filing a discrimination charge or during the investigation of a discrimination charge will be subject to appropriate discipline under the Student Conduct Code or appropriate employee Administrative Regulation.

External Filing of Discrimination Complaint

MCCCD encourages students to use the MCCCD Discrimination Complaint Procedure for Students to resolve discrimination concerns. Students also have the right to file civil rights complaints with appropriate external agencies. No retaliation will be taken against a person for filing a complaint with an external agency. The following agency accepts discrimination charges filed by, or on behalf of, students:

Office for Civil Rights, Region VIII (OCR)
Denver Office
U.S. Department of Education
Federal Building
1244 Speer Boulevard, Suite 310
Denver, Colorado 80204-3582
Phone: 303-844-5695
Fax: 303-844-4303
TDD: 303-844-3417
E-mail: OCR_Denver@ed.gov

AMENDED by Direct Approval from the Chancellor, April 18, 2025

AMENDED by the Administrative Regulations Approval Process, June 12, 2023

AMENDED by Direct Approval from the Chancellor, April 1, 2015

*****END SECTION*****

2.4.6 Emissions Control Compliance

Pursuant to ARS §15-1444 C. no vehicle shall be allowed to park in any college parking lot unless it complies with ARS §49-542 (the annual vehicle emissions inspection program). At the time of course registration, every out-of-county and out-of-state student will be required to sign an affidavit stating that the student's vehicle meets the requirements of ARS §49-542. Vehicles that are not in compliance are subject to being towed at the owner's expense.

2.4.8 Petition Signature Solicitation

1. This regulation shall govern access to college premises by representatives who wish to solicit signatures on petitions for the purpose of submission of a ballot proposition to voters, or nomination of a candidate for elective office, in a city-, county-, or state-wide election.
2. Each college president shall designate general hours of accessibility for solicitation and a location on college premises where all representatives on behalf of any candidate or ballot proposition may solicit signatures. The location shall be in a common area where the solicitation will not serve as an obstruction to student activities or otherwise disrupt the college environment.
3. All solicitation must take place in designated areas. Standard space may include one or two tables and chairs. Campus restrictions regarding amplification will apply. Representatives may not distribute or make available to students, employees, or college visitors any tangible item, except for informational literature about the proposed candidate or ballot initiative.
4. Representatives shall notify the designated official at each college or center for their intent to be present on college premises no fewer than three working days prior to soliciting signatures. Upon obtaining authorization, representatives shall be provided a written version of this regulation.

Specific procedures on how to implement the Petition Signature regulation can be found in [Appendix S-14](#).

2.4.9 Use of College Grounds by Non-MCCCD-Affiliated Users

In contrast to traditional public forums such as a public square, park, or right of way, Maricopa's campuses are dedicated by law to the purpose of formal education. They are, and have been since their creation, for the use and benefit of prospective and enrolled students, the Maricopa employees who serve them, and those who are invited to campus by members of the College community to attend or participate in sponsored events. The Maricopa County Community

College District (MCCCD) has a long history of regulating the time, place, and manner in which expressive activities are conducted on campuses, for the purposes of avoiding disruption or interference with its educational activities, and protecting the rights of the members of the campus community and their invited guests to express themselves and access information. While members of the general community always have been welcome to share their ideas with the campus community, they are subject to reasonable, content-neutral regulation of the time, place and manner of the event and to the institution's mission-based priorities – including but not limited to the need to provide an environment conducive to teaching and learning.

POLICY

This administrative regulation governs use of the college grounds, defined as the open areas and walkways of the campus by non-MCCCD-affiliated users. Use of college facilities is governed by a separate administrative regulation. Parking lots are not available for events and activities other than those sponsored and authorized by the College president.

Camping is not permitted anywhere on the campuses. Camping is defined as the use of college grounds or facilities for living accommodations or housing purposes such as overnight sleeping or making preparations for overnight sleeping (including the laying down of bedding for the purpose of sleeping), the making of any fire for cooking, lighting or warmth, or the erection or use of tents, motor vehicles, or other structures for living or shelter. These activities constitute camping when it reasonably appears, in light of all the circumstances, the participants conducting these activities intend to use or are using the facilities or grounds for living accommodations or housing, regardless of the duration or other purpose of the use.

Lawful use of college grounds for events or expressive activities by individuals, groups, and organizations may be authorized by college officials when the events and activities are lawful and consistent with the non-profit, educational nature of the campus, authorized and conducted in accordance with MCCCD policies, administrative regulations and priorities, and compliant with reasonable restrictions as to time, place, and manner. The content of the expression will not be a factor in authorizing, locating, or scheduling decisions. However, events and activities will not be permitted to disrupt or obstruct the teaching, research, or administrative functioning of the College by means of physical obstacles and crowds, by the creation of sound or noise that would interfere with teaching, learning, and the conduct of College business, or by any other means. Each College president will designate a Responsible College Official with delegable authority to approve, locate, and schedule use of college grounds.

Permit Application: Any non-MCCCD-affiliated organization, group, or individual desiring to use campus grounds for an event or activity must submit a request form to the Responsible College Official in advance of the use date.

If the activities proposed in the application are limited to low-impact, non-commercial activities the request form shall be submitted at least two business days in advance of the expected use date. For purposes of this administrative regulation, “low-impact, non-commercial activities” are defined as: (1) activities that do not seek to sell or promote a product or service for direct or indirect financial gain; (2) activities that are limited to gatherings of five people or less at any given time; and (3) activities that do not involve machinery, temporary structures, tables, chairs, displays or electronic equipment, including amplifiers, or the distribution of food products.

For events that are not low-impact, non-commercial activities, the request form shall be submitted at least seven business days before the expected use. The additional advance time is required to allow the College to prepare for conditions that may affect the flow of foot traffic, involve signs and displays, create crowds, involve significant numbers of participants, or require the use of significant amounts of space and/or use of equipment and resources.

Designated Areas: Because each College has a limited amount of outdoor space, activities and events sponsored by non-MCCCD-affiliated users, including speech and literature distribution, shall be restricted to designated areas. For each College, the Responsible College Official shall establish specific designated areas for such activities. A written description of these areas shall be maintained at the office of Student Life and Leadership for each College. Consistent with the goal of providing a healthy, comfortable, and educationally productive environment, the Responsible College

Official should attempt to locate the designated areas in prominent locations on campus where there is a likelihood of significant pedestrian traffic. The designated areas shall not be located in building stairways and entryways, parking lots, or congested areas. The Responsible College Official will make every effort to assign users to their requested space when a specific space is desired. However, in order to ensure the potential success of all scheduled events, the College reserves the right to assign an event or activity to the area the College deems most appropriate in light of the campus capacity, other activities scheduled, and the type of event or activity being planned.

Use Fees and Proof of Insurance: To offset the costs associated with the use of college grounds, non-MCCCD-affiliated users shall be required to pay a fee of \$50 per day or \$125 per week. In order to protect the health and safety of College students, faculty and staff and to protect MCCCD resources, non-MCCCD-affiliated users shall also be required to provide proof of insurance that indicates at least \$1 million in general liability coverage and names the MCCCD as an additional insured for the anticipated use date.

The fee and proof-of-insurance provisions of this Administrative Regulation shall not be applied to low-impact, non-commercial users. A user may request designation as a low-impact, non-commercial user from the applicable College's Responsible College Official. Any questions or comments about the criteria for approval or denial of such request shall be directed to the District Ombudsman.

Permits: The approved request form will describe the location of the authorized activity and any other restrictions specific to the event. Violation of the terms of the permit, District policy, administrative regulation or law shall be grounds for immediate revocation of the permit, and the individual violators and their organizations may be banned from the campus.

Priorities and Criteria for Approval of Permits: The content or subject of the proposed expressive activity or event will not affect approval of the application. Availability of space is not guaranteed. Reservations shall be approved on a space-available basis and will be addressed on a first come-first served basis, subject to the following priorities and criteria for the use and scheduling of space on campus grounds:

Scheduling Priorities (in order)

1. The use of facilities and grounds for the operations of the College. For example, there are times when the college is unusually crowded by members of the campus community, such as registration and orientation at the beginning of the semester. Other uses may reasonably be precluded during those times.
2. Activities and events sponsored by the College administration.
3. Activities and events sponsored by MCCCD student organizations or employee groups.
4. Activities of non-MCCCD-affiliated individuals and organizations.
5. Commercial advertising or activities.

Criteria

1. Capacity of college grounds to accommodate the number of participants at the scheduled time and proposed location.
2. Capacity of College Safety staff to provide security for all events and activities scheduled at the time.
3. Possible interference or conflict with College operations or other scheduled activities and events on the grounds.
4. General feasibility of hosting the event as proposed.

Other Policies: This administrative regulation will be applied in conjunction and coordination with all other MCCCD policies and administrative regulations and College processes and procedures, including but not limited to regulations on facilities use, signage, sales of alcohol and/or food, and solicitation of donations.

Specific procedures on how to implement the Use of College Grounds regulation can be found in [Appendix S-15](#).

2.4.10 Children on Campus

Children (younger than 18) may not attend any class unless they are officially registered for the class.

Children will not be allowed on campus unless participating in an authorized college program or under the supervision of an adult.

2.4.11 Crime Awareness and Campus Security Act

Federal legislation requires the college to maintain data on the types and number of crimes on college property as well as policies dealing with campus security. To obtain additional information on this subject, contact the college Safety and Security Department.

2.4.15 Campus Sex Crimes Prevention Act

Federal legislation requires that the MCCCCD establish notification procedures concerning the presence of registered sex offenders enrolled either as students or those working for the institution. The Registered Sex Offender Notification Procedure is outlined in Appendix item S-18.

ADOPTED by Direct Approval from the Chancellor, March 6, 2019

Appendix Item S-18: Maricopa County Community College District Registered Sex Offender Notification Procedure

The Campus Sex Crime Prevention Act (CSCPA), (section 1601 of Public Law 106-386), is a Federal Law enacted on October 28, 2000. In compliance with this law, the Maricopa County Community College District (MCCCCD) will work in collaboration with the Sheriff's Department to identify convicted registered sex offenders enrolled as students at one of MCCCCD's colleges or working at the District office or at any of the MCCCCD colleges (in paid or unpaid positions).

GENERAL INFORMATION

- I. In accordance with the CSCPA, the MCCCCD will provide on its Sex Offender Information Website, found [Sex Offender Information and Notification](#) website, a link to the Arizona Sex Offender Registry website and instructions on how to access it.
- II. Arizona Revised Statutes require persons convicted of any of the following 21 different offenses to register as sex offenders: 1) unlawful imprisonment if the victim is under 18 years of age; 2) kidnapping if the victim is under 18 years of age; 3) sexual abuse if the victim is under 18 years of age; 4) sexual conduct with a minor; 5) sexual assault; 6) sexual assault of a spouse; 7) molestation of a child; 8) continuous sexual abuse of a child; 9) taking a child for the purpose of prostitution; 10) child prostitution; 11) commercial sexual exploitation of a minor; 12) sexual exploitation of a minor; 13) luring a minor for sexual exploitation; 14) aggravated luring a minor for sexual exploitation; 15) unlawful age misrepresentation for the purpose of committing a sexual offense 16) sex trafficking of a minor; 17) a second or subsequent violation of indecent exposure to a person under 15 years of age; 18) a second or subsequent violation of public sexual indecency to a minor under the age of 15; 19) a third or subsequent violation of indecent exposure; 20) a third or subsequent violation of public sexual indecency; and 21) violations relating to the failure to register as a sex offender. (See, [A.R.S. §13-3821](#)).
- III. The Arizona Department of Public Safety classifies sex offenders according to levels. The levels consist of Level 1: Low risk to the community, Level 2: Intermediate risk to the community, and Level 3: High risk to the community.
- IV. By law, Registered Sex Offenders (RSO) are required to contact the Maricopa County Sheriff's office or local police agency when they enroll in or are employed at a college—in either paid or unpaid status. ([A.R.S. § 13-3821](#)).
 - a. Level Two and Level Three Offender's Obligation to Notify the College:

STUDENTS

- i. **Current Students** who are enrolled and receive their final classification or a change in classification as a Level 2 or Level 3 sex offender during their period of enrollment must notify the Campus Public Safety Officer within five (5) business days of the start of the semester. Campus Public Safety Officers for each college and for the district office can be found at the [MCCCD Police](#) website. The Campus safety officer will schedule a meeting with the Dean of Students (or designee) and the Registered Sex Offender student to take place within ten (10) days of the notification to Public Safety.
 1. Failure to comply with this procedure may lead to discipline under the Student Code of Conduct as well as possible criminal penalty as outlined in Arizona state law.
- ii. **Potential Students** who have been designated as a Level 2 or Level 3 sex offender must notify the Campus Public Safety Officer to arrange a meeting when they intend to enroll at a College. Campus Public Safety Officers for each college and for the district office can be found at the [MCCCD Police](#) website. This meeting must take place at least ten (10) calendar days prior to the start of classes. The meeting shall include the RSO, the Dean of Students (or designee), and the Campus Public Safety Officer.)
 1. A person who is classified as a Level Two or Three sex offender has been admitted to MCCCD and who has failed to timely to register pursuant to these procedures may be subject to discipline under the Student Code of Conduct as well as possible criminal penalties as outlined in Arizona state law.

EMPLOYEES

- iii. **Current Employees** who receive their final classification or a change in classification as a Level 2 or Level 3 sex offender during their period of employment must immediately notify the Campus Public Safety Officer. The campus public safety officer will arrange meeting with the Human Resources Manager (or designee) at the individual campus and the Registered Sex Offender employee. Campus Public Safety Officers for each college and for the district office can be found at the [MCCCD Police](#) website. The meeting with the college human resources manager and the Campus Public Safety Officer must take place within ten (10) days of the original notification to Public Safety.
- iv. **Potential Employees** who have been classified as a Level 2 or Level 3 sex offender must notify the Campus Public Safety Officer to arrange a meeting when they are offered employment at the College. Campus Public Safety Officers for each college and for the district office can be found at the [MCCCD Police](#) website. This meeting must take place at least ten (10) calendar days prior to the start of employment. The meeting shall include the RSO, the college human resources manager and the Campus Public Safety Officer (or their designees).

V. COLLEGE OFFICIALS' MEETING WITH LEVEL 2 OR LEVEL 3 SEX OFFENDER

- a. After notification that a student or employee has been classified as a Level Two or Three Sex Offender, MCCCD Public Safety will collect information from the RSO student or employee, probation/parole officer, Sheriff's Office, and/or arresting agency regarding the type of crime, conditions for probation, and/or level of risk.

- b. For Students: MCCCCD Public Safety will notify the Dean of Student Affairs (or designee) when a RSO has enrolled or expressed a desire to enroll at a MCCCCD college. A representative from the Student Affairs office shall participate in the required meeting with the RSO.
 - i. An RSO identification must be placed in the Advocate online system. The identification should include a summary of the offense/court-ordered conditions in place upon release, information from the parole/probation officer, and possible interventions needed at the college/District level.
- c. For Employees: MCCCCD Public Safety will notify District and college Human Resources (or designee) when an RSO has registered due to being offered employment with the MCCCCD or is a current employee who has been classified as a Level Two or Three Sex Offender. A representative from District and the identified college's Human Resources department shall participate in the required meeting with the RSO.
 - i. An RSO identification must be placed in the employee's personnel file. The identification should include a summary of the offense/court-ordered conditions in place upon release, information from the parole/probation officer, and possible interventions needed at the college/District level.
- d. At the meeting referred to above, the student or employee who is classified as a Level Two or Three sex offender will be advised of the following information:
 - i. The College's knowledge of his/her final classification.
 - ii. The College's obligation to provide public access to Level 2 & 3 sex offender information through its Department of Public Safety.
 - iii. Any restrictions that will be imposed on the sex offender—based on any Court restrictions, restraining orders, or orders of protection that may be in place—and the duration of such restrictions.
 - iv. If the offender is classified at Level 3, he/she is further informed of:
 - 1. The College's policy of posting notice at each college campus within two (2) days of receipt of the RSO's information, regardless of when the meeting occurs.
 - 2. The Level 3 RSO will receive a copy of the community notification the College intends to post.
 - 3. The functional areas of the College which will be provided with the public notification that will be posted.
 - v. At any time, the Department of Public Safety can communicate with the offender's parole/probation officer.

VI. FERPA: The CSCPFA further amends the Family Educational Rights and Privacy Act of 1974 (FERPA) to clarify that nothing in the Act can prohibit an educational institution from disclosing information provided to the institution concerning the presence of registered sex offenders.

VII. ANNUAL AND OFF-CYCLE REVIEWS: Public Safety and the Student Affairs Dean (or designee) or Human Resources representative, depending on the status of the RSO, shall meet on an annual basis to review the conditions of enrollment, employment, and campus engagement. Additional, off cycle, reviews should be conducted when an RSO student or employee transfers within MCCCCD or new information about criminal conduct has been received. District imposed conditions may be removed, added, or altered based on

changes in enrollment location(s), legal case status, new criminal activity, and/or disciplinary standing. Both Public Safety and Dean of Students or Human Resources professionals, for students and employees, respectively, shall maintain documentation regarding all initial, annual, and off-cycle meetings and reviews.

- VIII. FAILURE TO NOTIFY CAMPUS ADMINISTRATION: Failure to notify campus administration, as outlined in this procedure, of one's status as a RSO may lead to discipline up to and including removal from classes and/or suspension from participation in academic or extra-curricular programs, termination from employment as well as possible criminal penalty as outlined in Arizona state law.
- IX. CAMPUS AND COMMUNITY NOTIFICATION OF RSO STATUS: Pursuant to Arizona law, the MCCCCD shall make campus notifications of RSO status, as follows:
- For level two and level three offenders, the MCCCCD Public Safety Office, in conjunction with the Public Safety office at each college will coordinate with the local law enforcement agency responsible for the individual community notifications to ensure the sex offender notification is provided to the individual campus community.
 - The [Sex Offender Information and Notification](#) website will host the notification of RSO's employed by or attending a MCCCCD college, including employment with the District office.
 - For Colleges with facilities off-site from the main campuses that receive a registered sex offender community notification flyer from a local law enforcement agency, building managers are advised to post the flyer the building's common area easily accessed by students, staff, and faculty for a at least thirty (30) days. Specific information and instructions related to the community notification will be contained in the flyer and such instructions should be followed.
 - Any criminal activity involving a registered sex offender should be reported to police.
- X. ADMINISTRATIVE OVERSIGHT:
- Students: A campus administrator has the right to, at her or his discretion, require currently enrolled RSOs to attend regular meetings. The meetings will serve as a way to monitor compliance with conditions for enrollment and assist with student success. The frequency, duration, attendees to the meeting, and location of the meetings will vary based upon the needs of the RSO.
 - Employees: A supervisor, in conjunction with a Human Resources representative, at her or his discretion, may require currently employed RSOs to attend regular meetings. The meetings will serve as a way to monitor compliance with conditions for employment and assist with student success. The frequency, duration, attendees to the meeting, and location of the meetings will vary based upon the needs of the RSO.

ADOPTED by Direct Approval from the Chancellor, March 6, 2019

2.4.12 Workplace Violence Prevention

Purpose

It is the policy of the Maricopa County Community College District to promote a safe environment for its employees, students, contractors, and visitors. MCCCCD is committed to working with its employees to maintain an environment free from violence, threats of violence, harassment, intimidation, and other disruptive behavior.

Policy

Violence, threats, harassment, intimidation, and other disruptive behavior in our facilities is prohibited and will not be tolerated. It is the responsibility of all employees, students, contractors, and visitors of MCCCCD to report any occurrence of such conduct to MCCCCD Public Safety. Every employee, student, contractor, and visitor on MCCCCD property should report threats or acts of physical violence and acts of harassment, intimidation, and other disruptive behavior of which he/she is aware. All reports will be taken seriously and will be investigated by public safety immediately in order to

protect everyone from danger. Such behavior can include oral or written statements, gestures, or expressions that communicate a direct or indirect threat of physical harm.

Prohibited Behavior

For example, and without limiting the generality of the foregoing statement, this policy prohibits:

- direct threats or physical intimidation
- implications or suggestions of violence
- stalking
- assault of any form
- physical restraint, confinement
- dangerous or threatening horseplay
- loud, disruptive, or angry behavior or language that is clearly not part of the typical work environment
- blatant or intentional disregard for the safety or well-being of others
- commission of a violent felony or misdemeanor on MCCCCD property
- abuse
- violation of a protective order or restraining order
- any other act that a reasonable person would perceive as constituting a threat of violence

This list is illustrative only and not exhaustive.

Future Violence

Employees, students, and visitors who have reason to believe they, or others, may be victimized by a violent act or sometime in the future, at the workplace or as a direct result of their relationship with MCCCCD, shall inform a supervisor or manager as soon as possible. The supervisor or manager shall inform the Public Safety Department. Students, contractors, and visitors shall contact the Public Safety Department as soon as possible.

Employees who have signed and filed a restraining order, temporary or permanent, against an individual due to a potential act of violence, who would be in violation of the order by coming near them at work, shall immediately supply a copy to the Department Director, Human Resources, and Public Safety. Students shall supply a copy of the signed order to the Public Safety Department.

This policy applies to employees and students, as well as independent contractors and other non-employees doing business with the MCCCCD. Individuals who commit such acts may be removed from the premises and may be subject to disciplinary action, criminal penalties, or both. The Chancellor is hereby instructed to enact all administrative regulations necessary to implement this policy.

2.4.13 Student Right to Know

Under the terms of the Student Right To Know Act, the college must maintain and report statistics on the number of students receiving athletically related student aid reported by race and sex, the graduation rate for athletes participating in specific sports reported by race and sex, the graduation rate for students in general, reported by race and sex and other similar statistics. To obtain copies of these reports, contact the Office of Admissions and Records.

STUDENT RIGHTS AND RESPONSIBILITIES

2.4.5 Copyright Act Compliance

Students are expected to comply with the provisions of the Copyright Act of 1976 pertaining to photocopying of printed materials, copying of computer software and videotaping. In order to assist students in complying with the Copyright Law, appropriate notices shall be placed on or near all equipment capable of duplicating copyrighted materials.

3.2 Copyright Regulation

1. It is the intent of the Governing Board of the Maricopa County Community College District to adhere to the provisions of the U.S. Copyright Law (Title 17, United States Code Section 101 et seq.). Though there continues to be

controversy regarding interpretation of the Copyright Law, this policy represents a sincere effort by the Board to operate legally within the District.

2. The Governing Board directs the Chancellor or his designee(s) to develop and distribute to employees guidelines that (1) clearly discourage violation of the Copyright Law and (2) inform employees of their rights and responsibilities under the Copyright Law.
3. Each college president or provost and the Chancellor shall name an individual(s) at each district location who will assume the responsibilities of distributing copyright guidelines, act as a resource person regarding copyright matter and provide training programs on current copyright laws.
4. Employees are prohibited from copying materials not specifically allowed by the (1) copyright Law, (2) fair use guidelines, (3) Licenses or contractual agreements, or (4) other permission.
5. The Governing Board disapproves of unauthorized duplication in any form. Employees who willfully disregard this Board policy and/or the aforementioned copyright guidelines do so at their own risk and assume all liability for their actions.
6. In order to assist employees and students in complying with the Copyright Law, appropriate notices shall be placed on or near all equipment capable of duplicating copyrighted materials.

What Students Should Know About Copyright

What is copyright?

Copyright is a protection afforded under federal law for various types of creative works. A work is copyrightable if it is an original work of authorship fixed in a tangible medium of expression. Copyrightable works include literary, musical or dramatic works; motion pictures and other audiovisual works; choreographic works and pantomimes; sound recordings; and architectural works.

The owner of a copyright in a particular work has the exclusive right to copy, display, perform, distribute, and create a derivative version of the work. Generally, then, this means that you may not do things like duplicate, show or perform a copyrighted work unless it is expressly allowed under the Copyright Act or you have the prior permission of the copyright holder.

A copyright exists in a work at the time it becomes fixed in some tangible medium of expression. Neither registration of the copyright with the federal government nor a copyright notice on the work itself is required for copyright protection.

What is copyright infringement?

Generally, copyright infringement occurs when you copy, display, perform, distribute or create a derivative version of a copyrightable work either without the permission of the copyright holder or when such activity is not otherwise allowed under an exception provided by federal copyright law. The penalties for infringement include significant damages-potentially in excess of \$100,000 for each work infringed as well as criminal penalties, which may include fines and even incarceration.

How does copyright law affect information I obtain off the Internet?

Copyright law covers works in both traditional and new media, including digital media. Copyrightable materials are often available on the Internet without any indication of their copyrighted status. As a rule of thumb, you should assume that everything you find on the Internet is copyrighted, unless otherwise labeled. Even popular activities, such as file swapping or copying software or pictures from the Internet, may be copyright infringement and should be avoided.

The Digital Millennium Copyright Act, which Congress enacted in 2000, affords greater protection for copyright holders of digital works. Generally, then, even if a work appears solely in a digital form, it is likely subject to copyright law protections.

New technology has made many creative works widely available through the Internet. For example, the technology known as Peer to Peer (P2P) allows for the transmission of music, videos, movies, software, video games and other materials-most of which is subject to copyright protection.

Remember that a copyright exists in a work at the time it becomes fixed in some tangible medium of expression. That means that an image you have downloaded from the Internet, as well as a video or musical performance is almost certainly subject to copyright protection. When you download these works, transfer them to a disk or other medium, or send them to a friend, you are infringing on the rights of the copyright holder. Trafficking in such material without the permission of the copyright holder, then, violates copyright law. This includes unauthorized music file sharing over the Internet.

According to a statement recently issued by representatives of the motion picture, recording and songwriting industries, uploading and downloading copyrighted works over the Internet is theft: "It is no different from walking into the campus bookstore and in a clandestine manner walking out with a textbook without paying for it."

Why is it important for a student to be aware of copyright law?

Copyright infringement is expressly prohibited by the US Copyright Act. Anyone who infringes another's copyright in a creative work is subject to liability, and could be required to pay large sums in damages.

In addition, as the law clearly prohibits copyright infringement, using any college resources-such as photocopiers, desktop and laptop computers, printers, central computing facilities, local-area or college-wide networks, Internet access, or electronic mail-for the purpose of infringing a copyright in any work may be grounds for student discipline. According to Maricopa Community College District administrative regulation, "students are expected to comply with the provisions of the Copyright Act of 1976 pertaining to photocopying of printed materials, copying of computer software and videotaping."

Moreover, under the Maricopa Community Colleges Computing Resource Standards, a student is prohibited from the "use of software, graphics, photographs, or any other tangible form of expression that would violate or infringe any copyright or similar legally-recognized protection of intellectual property rights." The Standards also prohibit "transmitting, storing, or receiving data, or otherwise using computing resources in a manner that would constitute a violation of state or federal law ..."

A student who violates these policies, then, can be disciplined at any of the Maricopa Community Colleges. This discipline could include suspension or even expulsion.

Does copyright law allow me to download files from a college web site?

Thanks to recent changes to copyright law, colleges and universities are allowed to transmit copyrighted images, recordings, and other materials over the Internet in connection with distance learning offerings. These changes allow for the performance of non-dramatic literary works or musical works, as well as the display of "reasonable and limited portions" of any work in an amount comparable to that typically displayed in a live classroom setting. Use of the works must, however, be "an integral part" of the distance-learning class session, and available solely to students enrolled in the class. In addition, the transmission of the copyrighted works must be under the direction or actual supervision of an instructor.

Even though the college does not hold the copyright to these works, or even have the express permission of the copyright holder, they may be delivered over the Internet to students in distance learning classes.

The fact that the law authorizes such use of copyrighted materials, though, does not allow a student in these classes to freely download, copy, or re-transmit the works. They are intended solely for use by the institution in connection with distance instruction; any other use would likely constitute a violation of copyright law.

3.4 Recording of Faculty Lectures

1. MCCCDC acknowledges that faculty members are, by law, afforded copyright protection in their classroom lectures and, therefore, may limit the circumstances under which students may record (audio/visual) their classes.
2. Each faculty member shall inform their students in the course syllabus or other course introductory material of their

policy with regard to recording of class lectures. Failure to do so will accord students the right to record lectures. A lecture is defined as anything upon which a student is tested or that is part of the curriculum or course content whether in person, virtual, or pre-recorded. A restriction on recording does not apply if the recording is allowed under another policy.

- a. Students, regardless of whether they have permission or not from the faculty member to record class lectures, may not reproduce or otherwise share and/or distribute all or part of recorded class lectures and/or activities taking place during class time, without the written consent of the faculty member. (Reproducing includes, but is not limited to, posting any pre-recorded or real time recording of a class lecture—in whole or in part—to any social media platform (TikTok, Twitter, Facebook, Instagram, YouTube, etc.)).
- b. Any violation of AR 3.4 (2)(a) may constitute "academic misconduct" prohibited by AR 2.3.11 Academic Misconduct.

3. Students with disabilities that render them unable to take adequate lecture notes are entitled to reasonable accommodation – subject to engagement in the interactive process and a determination of functional limitation as outlined in AR 2.8 Students with Disabilities – to remedy this inability. Approved accommodation may require a faculty member to modify their recording policy for the affected student.

In accordance with Subpart E of Section 504 of the Rehabilitation Act of 1973, a student with a qualifying disability which adversely affects the student's ability to take or read notes may be permitted to audio record class lectures as a reasonable academic accommodation.

In an effort to address faculty concerns for privacy and protection of copyright while still assuring the availability of recording classroom lectures as a reasonable accommodation for students, use of this accommodation is subject to the following conditions:

- a. The faculty member must have received the Disability Resource Services (DRS) Faculty Notification Letter specifying the recording of classroom lectures as a granted reasonable accommodation.
- b. Such recordings of class lectures are only for the student's personal use in study and preparation related to class.
- c. The student must comply with a faculty request to stop recording during discussions, demonstrations, presentations, guest speakers, and situations of a sensitive nature. The faculty member should provide as much notice of these situations as possible in order for the student to coordinate with the faculty member and DRS to have notes taken on the substantive parts of the lecture.
- d. The student may not share classroom lecture, or any other recordings made during class time with any other person or in any media or on a public or private platform without the written consent of the faculty member.
- e. Information contained in the authorized audio recorded lectures, and any other recordings whether authorized or unauthorized, may be protected under federal copyright laws and may not be published or quoted without the written consent of the faculty and without giving proper identity and credit to speakers, this includes publication via any social media platform, emails, or text messages.
- f. The student may not use the authorized recorded lectures, and any other recordings whether authorized or unauthorized, against the faculty member, other instructors, or students whose classroom comments are recorded as part of the class activity. This provision is subject to the protections under

policy and the law.

g. The student will erase all recorded class lectures when they are no longer needed for academic work. Upon written request from the faculty member, the student will return all class recordings to the faculty member for erasure. Faculty members should provide DRS with a copy of the aforementioned written request. Likewise, students are not permitted to post the lectures on any social media platform, website, or learning management system without the instructor's written consent except for communications to the instructor of record.

h. Students who wish to keep recordings beyond the end of the course for future review must obtain written permission from the faculty member.

i. Audio, or any other recordings outside of the aforementioned lectures (including fieldwork, internships, etc.) may be discussed on a case-by-case basis in collaboration with the faculty member, program of study, site manager, and DRS. In clinical/experiential learning placements, the recording of any discussions, lectures, or conversations are never permitted.

j. Students, regardless of whether they have permission or not from the faculty member to record class lectures or any other part of the classroom/class time experience, may not post all or part of recorded class lectures or any other recordings made during class time to any social media platform (TikTok, Twitter, Facebook, Instagram, YouTube, etc.), or otherwise reproduce, share and/or distribute to any other person or party.

k. Any violation of AR 3.4(3) may constitute "academic misconduct" prohibited under AR 2.3.11 Academic Misconduct.

AMENDED through the Administrative Regulations Approval Process, April 20, 2021

4.4 Technology Resource Standards

Introduction

The Maricopa County Community College District (MCCCD) provides its students, employees, Governing Board members and the public with access to information resources and technologies. MCCCD recognizes that the free exchange of opinions and ideas is essential to academic freedom, and the advancement of educational, research, service, operational, and management purposes, is furthered by making these resources accessible.

Arizona constitutional and statutory mandates require that MCCCD resources, including technology, be used only for the public's business, and not for private purposes. Those mandates apply to all MCCCD public officials—employees of every kind and the Governing Board. The aim of those laws is to safeguard the use of resources, including technology resources, acquired and maintained with public funds. Compliance with other laws—both federal and state—also dictates the need for standards for the use of MCCCD technology resources. In some cases, the Governing Board policies emphasize the importance of compliance with the law such as the requirement to adhere to copyright laws. Governing Board policies also establish MCCCD's own standards, such as the directive that all persons within the MCCCD community be treated in a manner that is humane, fair and dignified.

This administrative regulations established standards for the use of MCCCD technology resources. They should be seen as supplementing, and not in lieu of, Governing Board policy, applicable law and other applicable administrative regulations such as Administrative Regulation 4.3 "Electronic Communications."

General Responsibilities

Technology resources (including, but not limited to, desktop and laptop systems, printers, central computing facilities, MCCCD-wide or college-wide networks, local-area networks, telephones, facsimile machines, scanners, access to the

Internet, electronic mail and similar electronic devices and information) of the MCCCCD are available to MCCCCD Governing Board members, employees, students and, in a limited number of cases, MCCCCD contractors and the public. Use of all those resources is subject to the standards set forth in this regulation (Standards).

The first screen that each MCCCCD computer exhibits on starting up advises users of these Standards and requires an acknowledgment before the user may proceed to the next screen. Additionally, all MCCCCD employees are responsible for annually acknowledging receipt of the Blue Book, which contains this regulation. So all users of MCCCCD technology resources are presumed to have read and understood the Standards. While the Standards govern use of technology resources MCCCCD-wide, an individual community college or center may establish guidelines for technology resource usage that supplement, but do not replace or waive, these Standards.

Use of Non-MCCCCD Technology

Under Arizona's public records law, MCCCCD is required to transact business so that its records are accessible and retrievable. The policy underlying the law is that work done in the name of the public be transparent. Thus, any member of the public may request public records and, except in a few specific instances, are entitled to get copies of them.

Each individual employee or Governing Board member is responsible for ensuring that MCCCCD records that he or she initiates or receives are retained for the period of time required by and disposed of according to mandates established by Arizona State Library, Archives and Public Records—the state agency tasked with setting standards for record retention. Therefore, an employee's or Governing Board member's use of non-MCCCCD technology resources for communication of any type of MCCCCD business is heavily discouraged because those records are less capable of being managed according to MCCCCD's process for ensuring retention, retrieval and disclosure set forth in Administrative Regulation 4.15 "Retrieval, Disclosure and Retention of Records."

Additionally, an MCCCCD employee who receives a communication allegedly from another MCCCCD employee using a non-MCCCCD e-mail address is not required to respond substantively to that e-mail. The employee receiving the e-mail is entitled to verify that the sender is whom he or she says that he or she is. The employee receiving the e-mail may request that the sender provide the information or inquiry set forth in the e-mail via hard-copy form.

Acceptable Use

Use of MCCCCD's technology resources, including websites created by MCCCCD employees and students, is limited to educational, research, service, operational and management purposes of the MCCCCD and its member institutions. Likewise, data, voice, images and links to external sites posted on or transmitted via MCCCCD's technology resources are limited to the same purposes.

Frequently, access to MCCCCD's technology resources can be obtained only through use of a password known exclusively to the MCCCCD employees, Governing Board members or students. It is those users' responsibility to keep a password confidential. While MCCCCD takes reasonable measures to ensure network security, it cannot be held accountable for unauthorized access to its technology resources by other persons, both within and outside the MCCCCD community. Moreover, it cannot guarantee employees, Governing Board members and students protection against reasonable failures. Finally, under certain limited circumstances defined in Administrative Regulation 4.15 "Retrieval, Disclosure and Retention of Records," certain MCCCCD employees are authorized to access information on an MCCCCD technology device.

It is not Maricopa's practice to monitor the content of electronic mail transmissions, files, images, links or other data stored on or transmitted through Maricopa's technology resources. The maintenance, operation and security of Maricopa's technology resources, however, require that network administrators and other authorized personnel have access to those resources and, on occasion, review the content of data and communications stored on or transmitted through those resources. Any other review may be performed exclusively by persons expressly authorized for such purpose and only for cause. To the extent possible in the electronic environment and in a public setting, a user's privacy will be honored. Nevertheless, that privacy is subject to Arizona's public records laws and other applicable state and federal laws, as well as policies of Maricopa's Governing Board all of which may supersede a user's interests in maintaining privacy in information contained in Maricopa's technology resources.

Incidental Computer and Technology Usage

Limited incidental personal use of MCCCCD technology resources including through use of personal e-mail systems is permitted, except as described in item 16 under "Prohibited Conduct." MCCCCD employees are responsible for exercising good judgment about personal use in accordance with this regulation, Colleges' consistent local guidelines and MCCCCD ethical standards. Personal use refers to activities which only affect the individual and that are not related to an employee's outside business. MCCCCD employees are required to conduct themselves in a manner which will not raise concern that they are or might be engaged in acts in violations of the public trust. Refer to the Guidelines for Incidental Computer Usage for the Maricopa Community Colleges ([Appendix AS-8](#)) and Guidelines for Incidental Telephone Usage for the Maricopa Community Colleges ([Appendix AS-9](#)).

Prohibited Conduct

The following is prohibited conduct in the use of MCCCCD's technology resources

1. Posting to the network, downloading or transporting any material that would constitute a violation of MCCCCD contracts.
2. Unauthorized attempts to monitor another user's password protected data or electronic communication, or delete another user's password protected data, electronic communications or software, without that person's permission.
3. Installing or running on any system a program that is intended to or is likely to result in eventual damage to a file or computer system.
4. Performing acts that would unfairly monopolize technology resources to the exclusion of other users, including (but not limited to) unauthorized installation of server system software.
5. Hosting an unauthorized website that violates the .EDU domain request.
6. Use of technology resources for non-MCCCCD commercial purposes, including to advertise personal services, whether or not for financial gain.
7. Use of software, graphics, photographs, or any other tangible form of expression that would violate or infringe any copyright or similar legally-recognized protection of intellectual property rights.
8. Activities that would constitute a violation of any policy of MCCCCD's Governing Board, including, but not limited to, MCCCCD's non-discrimination policy and its policy against sexual harassment.
9. Transmitting, storing, or receiving data, or otherwise using technology resources in a manner that would constitute a violation of state or federal law, or MCCCCD policy or administrative regulation including, but not limited to, obscenity, defamation, threats, harassment, and theft.
10. Attempting to gain unauthorized access to a remote network or remote computer system.
11. Exploiting any technology resources by attempting to prevent or circumvent access, or using unauthorized data protection schemes.
12. Performing any act that would disrupt normal operations of computers, workstations, terminals, peripherals, or networks.
13. Using technology resources in such a way as to wrongfully hide the identity of the user or pose as another person.
14. Allowing any unauthorized access to MCCCCD's technology and non-technology resources.
15. Making personal long distance or other toll calls, except where the charges for the calls are incurred directly by the caller or arrangements are otherwise made at the time of the call to directly bill the caller.
16. Intermittent use of technology resources that interferes with the performance of an employee's main responsibilities.
17. Use of technology resources to market or conduct other activities on behalf of a third-party regarding the "hosting" of an event that is prohibited under MCCCCD's Use of College Facilities administrative regulation.
18. Conducting District or college-related business using any electronic mail account other than one hosted or provided by MCCCCD, and approved by the Vice Chancellor of Information Technology Services, even when the e-mail account copies all outgoing and incoming messages to the MCCCCD hosted account.
19. Deleting or altering a technology public record in violation of public records retention requirements, or in anticipation of receiving or after receipt of a public records request, subpoena or a complaint filed as part of an MCCCCD grievance, investigation or review, or other lawful request for the record.

20. Deleting or altering a technology record on an MCCCCD device in anticipation or after receipt of a public records request, subpoena or a complaint filed as part of an MCCCCD grievance, investigation or review, or other lawful request for the records where the record may demonstrate a misuse of technology resources under this regulation.

Review and Approval of Alternate E-Mail Account Systems

The prior review and approval by the Vice Chancellor of Information Technology is required for the implementation of alternate College electronic mail account systems. Requests will be evaluated based upon the following considerations:

1. The system must be compatible and interoperable with the MCCCCD e-mail system. All information within the e-mail system must meet the standards and authorize District Office access as specified in Administrative Regulation 4.15, "Retrieval, Disclosure and Retention of Records."
2. Any proposed changes to an MCCCCD's entity's e-mail system with e-discovery implications must be approved in advance during the planning stages as specified in Administrative Regulation 4.15, "Retrieval, Disclosure and Retention of Records."

Disclaimer

The home page of an MCCCCD web site must display, or link to, the following disclaimer in a conspicuous manner:

All information published online by MCCCCD is subject to change without notice. MCCCCD is not responsible for errors or damages of any kind resulting from access to its internet resources or use of the information contained therein. Every effort has been made to ensure the accuracy of information presented as factual; however errors may exist. Users are directed to countercheck facts when considering their use in other applications. MCCCCD is not responsible for the content or functionality of any technology resource not owned by the institution.

The statements, comments, or opinions expressed by users through use of Maricopa's technology resources are those of their respective authors, who are solely responsible for them, and do not necessarily represent the views of the Maricopa County Community College District.

Information Accuracy and Marketing Standards

In order to help ensure that the most accurate information sources are reflected on web pages, information should be cited, sourced or linked from the website of the official District or college custodian responsible for the particular subject. In addition, the design of web pages shall reflect established marketing standards with respect to the imaging and using of MCCCCD marks as outlined in the marketing standards handbook and Use of Marks administrative regulation.

Complaints and Violations

Complaints or allegations of a violation of these standards will be processed through Maricopa's articulated grievance procedures or resolution of controversy.

Upon determination of a violation of these standards, MCCCCD may unilaterally delete any violative content and terminate the user's access to MCCCCD's technology resources. It is the user's responsibility to demonstrate and/or establish the relevance of content in the event that a content complaint is made official. Users retain the right to appeal actions through MCCCCD's grievance procedures or resolution of controversy.

2.6 Hazing Prevention Regulation

The Maricopa County Community College District (MCCCCD) strives to exceed the changing expectations of our many communities for effective, innovative, student-centered, flexible and lifelong educational opportunities. Our employees are committed to respecting diversity, continuous quality improvement and the efficient use of resources. We are a learning organization guided by our shared values of: education, students, employees, excellence, diversity, honesty and integrity, freedom, fairness, responsibility and public trust.

Central to the vitality and dignity of our community of learners is an environment that produces broadly educated responsible citizens, who are prepared to serve and lead in a free society. Academic instruction, co-curricular activities

and community involvement come together to meet this goal. All members of the MCCCCD community, through the best of their abilities, must be provided the opportunity to contribute in a safe, orderly, civil and positive learning environment. One factor that inhibits the achievement of the above stated purpose is the practice of hazing.

1. Hazing by any student, employee or other person affiliated with MCCCCD is prohibited.
2. "Hazing" is defined as any intentional, knowing or reckless act committed by a student or other person in any MCCCCD college or affiliated educational setting, whether individually or in concert with other persons, against another student, and in which both of the following apply:
 - A. The act was committed in connection with an initiation into, an affiliation with or the maintenance of membership in any club/organization that is affiliated with MCCCCD; and
 - B. The act contributes to a substantial risk of potential physical injury, mental harm or personal degradation, or causes physical injury, mental harm or personal degradation.
3. Any solicitation to engage in hazing is prohibited.
4. Aiding and abetting another person who is engaged in hazing is prohibited.
5. Victim consent is not a defense for violation of the Maricopa Community Colleges Hazing Prevention Regulation.
6. All students, faculty and staff must take reasonable measures within the scope of their individual authority to prevent violations of the MCCCCD Hazing Prevention Regulation.
7. Hazing activities and situations include, but are not limited to, the following:
 - A. Pre-pledging, illegal pledging or underground activities.
 - B. Acts of mental and physical abuse, including, but not limited to: paddling, slapping, kicking, pushing, yelling, biting, duck-walking, line-ups, tuck-ins, belittling, excessive exercise, beating or physical abuse of any kind, and the potentially forced consumption of any food or beverage that contributes to or causes physical injury, mental harm or personal degradation.
 - C. Sleep deprivation (activities that deprive prospective and/or current students and/or members of the opportunity of a minimum of six hours sufficient sleep each day).
 - D. Encouraging or forcing use of alcohol or drugs.
 - E. Any type of student club/organization scavenger hunt, quest, road trip or other activity that would physically or psychologically endanger prospective and/or current students and/or members or others.
 - F. Stroking or physically touching in an indecent or inappropriate manner. See Sexual Harassment Policy 5.1.8
 - G. Student club/organization activities that subject prospective and/or current students and/or members or others to public nuisance or spectacle.
 - H. Aiding or abetting theft, fraud, embezzlement of funds, destruction of public, personal or private property, or academic misconduct.
 - I. Being required to wear odd or look-alike apparel that contributes to or causes physical injury, mental harm or personal degradation.
 - J. Personal services that contribute to or cause physical injury, mental harm or personal degradation.
8. Alleged violations of this regulation by students or student organizations can be reported to the vice president of student affairs' office for investigation by any member of the college community. The vice president of student affairs' office will investigate the complaint in accordance with the student disciplinary code, all other college and MCCCCD policies, and local and state laws.

Alleged violations of the MCCCCD hazing prevention regulation or interference with an investigation under this regulation by students or student organizations are subject to sanctions under the student disciplinary code.

The student disciplinary code shall govern all proceedings involving such a complaint. Decisions arrived at as outcomes of the proceedings shall be final, pending the normal appeal process.

9. Alleged violations of the MCCCCD hazing prevention regulation by any faculty or staff member can be reported to the vice president of student affairs' office for investigation by any member of the college community. The vice president of student affairs' office will investigate the complaint in accordance with college and MCCCCD policies, and local and state laws.

Any MCCCCD faculty or staff member who knowingly permitted, authorized or condoned the alleged hazing activity is subject to disciplinary action in accordance with college and MCCCCD policies, and local and state laws.

10. If the vice president of student affairs' office receives a report or complaint of an alleged hazing activity involving physical injury, threats of physical injury, intimidation, harassment or property damage, or any other conduct that appears to violate Arizona state law, the college will report such conduct to the appropriate college safety office. The said college safety office will investigate, respond to and report on the alleged hazing activity in accordance with all college, district, local, state and federal guidelines, policies and laws.
11. Should the proceedings outlined above substantiate an occurrence of hazing activity-where students or student organizations knowingly permitted, authorized or condoned the hazing activity-the college can recommend the following sanctions against student clubs/organizations:
 - A. CENSURE: Censure can include the required completion of a program designed with the intent of eliminating the hazing activity. The programs will be devised with the cooperation of all involved parties and monitored by the vice president of student affairs' office.
 - B. PROBATION: The student club(s)/organization(s) will be placed on probation for a specified period of time. Conditions of probation will be determined by the vice president of student affairs' office and outlined in writing to the student club(s)/organization(s). The probationary term will be monitored by the vice president of student affairs.
 - C. SUSPENSION: The student club(s)/organization(s) will be suspended. The terms of the suspension can be defined in the sanction, including criteria the student club(s)/organization(s) must meet within a specified time to be considered for admission or renewal of college recognition status.
 - D. REVOCATION: The student club(s)/organization(s) will have its status revoked, with the loss of all college associations, recognitions and privileges. The national or international office of an organization, if so affiliated, will be requested to revoke the charter of an organization.
12. The MCCCCD hazing prevention regulation is not intended to prohibit or sanction the following conduct:
 - A. Customary athletic events, contests or competitions that are sponsored by the college or MCCCCD.
 - B. Any activity or conduct that furthers the goals of a legitimate educational curriculum, a legitimate co-curricular experience or a legitimate military training program.
13. For the purposes of the MCCCCD hazing prevention regulation:

"Organization" is defined as an athletic team, association, order, society, corps, cooperative, club or other similar group that is affiliated with MCCCCD, whose membership consists primarily of students enrolled at MCCCCD and that may also be classroom-related or co-curricular in nature.

2.4.7 Abuse-Free Environment

See also the Auxiliary Services section for Tobacco-Free Environment and the Appendices/Student Section Medical Marijuana Act of the Administrative Regulations.

1. Substance Abuse/Misuse Statement

Drug abuse and misuse has become a national issue and is receiving national attention, particularly in the academic community. The insidious effects of the abuse of these agents are also felt by all walks of life and economic levels. Therefore, as an education providing institution, we are responsible to provide knowledge and guidelines about prevention, control, and treatment of the abuse/misuse of alcohol, illegal and legal drug uses and misuses. Annual Acknowledgements for students and employees are provided through the online messaging accounts.

Students who experiment with drugs, alcohol, and illegal substances or use them recreationally may develop a pattern of use that leads to abuse and addiction. Maricopa Community Colleges recognized drug and alcohol abuse as an illness and a major health problem as well as a potential safety and security issue.

Part of the educational mission of the Maricopa Community Colleges is to educate students about positive self-development, the benefits of a healthy lifestyle and the health risks associated with substance abuse. This mission closely aligns with the Drug-Free School and Communities Act of 1989, and other relevant substance abuse laws.

2. Student Program to Prevent Illicit Use of Drugs and Abuse of Alcohol

The Maricopa Community College District fully supports disciplinary action for misconduct and the enforcement of state laws governing the use of alcohol and the use, abuse, possession or distribution of controlled substances or illegal drugs.

A. Introduction and Purpose

The Federal Drug-Free Schools and Communities Act of 1989 (Public Law 101-226) requires federal contractors and grantees to certify that they will provide a drug-free school. As a recipient of federal grants, the District must adopt a program toward accomplishing this goal. While federal legislation has been the impetus for creation of the program, the administration and Governing Board recognize that substance abuse is a problem of national proportions that also affect students at the Maricopa Community Colleges.

The Maricopa Community Colleges are committed to maintaining learning environments that enhance the full benefits of a student's educational experience. The Maricopa County Community College District will make every effort to provide students with optimal conditions for learning that are free of the problems associated with the unauthorized use and abuse of alcohol and drugs.

B. Standards of Conduct

In the student handbooks of the Maricopa Community Colleges under codes of conduct, the following are examples of behavior that is prohibited by law and/or college rules and policies:

- i. Drinking or possession of alcoholic beverages on the college campus.
- ii. Misuse of narcotics or drugs.

C. Sanctions for Violation of Standards of Conduct

Disciplinary actions include, but are not limited to:

- i. Warning,
- ii. Loss of privileges,
- iii. Suspension, or
- iv. Expulsion.

D. Legal Sanctions

Local, state, and federal law prohibit the unlawful possession, use or distribution of illicit drugs and alcohol. Conviction for violating these laws can lead to imprisonment, fines, probation, and/or assigned community service. Persons convicted of a drug-and/or alcohol related offense will be ineligible to receive federally funded or subsidized grants, loans, scholarships, or employment.

Any employee is subject to disciplinary action, up to and including employment termination, for any of the following: reporting to work under the influence of alcohol and/or illegal drugs or narcotics; the use, sale, dispensing, or possession of alcohol and/or illegal drugs or narcotics on MCCCCD premises, while conducting MCCCCD business, or at any time which would interfere with the effective conduct of the employee's work for the MCCCCD; and use of illegal drugs.

3. MCCCCD Program Standards

The Maricopa Community College District is committed to establishing a preventative substance abuse program at each college designed to affect positively the problems of irresponsible use of alcohol and the use and abuse of illegal substances. A main focus of the program will be on education of the campus community and assistance to individuals.

- A. Identify a key individual, at each college, to provide emergency services and/or to contact and work with outside agencies that provide drug and alcohol counseling, treatment or rehabilitation programs that may be available to students and employees.
- B. Support disciplinary action for misconduct and the enforcement of state laws governing the use of alcohol and the use, abuse, possession or distribution of controlled substances or illegal drugs.
- C. Establish a preventative substance abuse program at each college designed to affect positively the problems of irresponsible use of alcohol and the use and abuse of illegal substances.

4. Alcoholic Beverages—Usage Regulation (AR 4.13)

This Administrative Regulation prohibits the use of District funds to purchase alcoholic beverages or services related to them except in small amounts to be used in cooking for the District's culinary programs. Additionally, it generally prohibits the presence of alcoholic beverages on premises owned by the District, or those leased or rented by the institution. It permits a few, narrow exceptions to that latter prohibition. The exceptions are not available to the general population of District employees or officials. More importantly, they are established to ensure that the District's actions stay within the boundaries of state law and the District's insurance coverage. Therefore, strict compliance with this regulation is essential.

- A. **No Funds.** No funds under the jurisdiction of the governing board of the District may be used to purchase alcoholic beverages, except for the limited purposes of purchasing small amounts of them for use solely as ingredients in food preparation for classes and at the District's culinary institutes. Alcoholic beverages may not be stored on premises owned, leased, or rented by MCCCCD except as provided in Paragraph H.
- B. **No Service or Sale of Alcoholic Beverages.** The law of the state of Arizona strictly regulates the service, sale, distribution and consumption of alcoholic beverages. In light of that law, the District does not permit alcoholic beverages to be served, sold or distributed on or in the premises owned by the District or leased or rented by the Maricopa Community Colleges for District-approved educational, fund-raising or other community purposes, except as provided in Paragraphs C and G.
- C. **Service at District Events on District-owned Property.** The Chancellor has the sole authority to approve the service, but not the sale or other distribution, of wine or beer at District events on district-owned property that the Chancellor either sponsors or approves. The only District employees authorized to request the Chancellor's approval are the College Presidents and the Vice Chancellors. Additionally, the law strictly limits the service of wine or beer by the District on District-owned property, and those restrictions are specified in Paragraph E. Unless approved by the Chancellor in compliance with the law and this regulation, alcoholic beverages may not be served on District-owned property.
- D. **Event Form Required.** A College President or Vice Chancellor who wishes to obtain the Chancellor's approval for the service of wine or beer at a District-sponsored event on District-owned property shall forward a completed written request to the Chancellor no later than 30 days before the event. The request form is available at: [AS-6 Notice of Intent to Serve Beer and Wine Form](#) . On signing the form, the Chancellor will provide a copy of it to the requestor and to the MCCCCD Risk Manager. For events that the Chancellor sponsors, he or she will complete the form, sign it and provide it to the MCCCCD Risk Manager no later than 10 business days before the event.
- E. **Service restrictions required by law.** An event approved under Paragraph D must, by law, comply with the all of the following restrictions:
 - i. The only alcoholic beverages that may be served and consumed are wine and beer. Wine consumption is limited to 6 oz. per person, and beer consumption is limited to 24 oz;
 - ii. The gathering must be by invitation only, and not open to the public;
 - iii. The gathering may not exceed 300;
 - iv. Invitees may not be charged any fee for either the event or the beer or wine; and
 - v. The consumption may only take place between noon and 10:00 p.m.

Additionally, beer and wine may only be served by a beverage service contractor whose liquor license with the state of Arizona is in good standing, except as provided in Paragraph F. The contractor must provide all of the beverages served and well as the servers or bartender. Before the event, the contractor must provide a certificate of insurance that meets the requirements of the District's Risk Manager and that adds the District as an additional insured. The contractor must also agree in writing to indemnify the District regarding the service of the beverages.

- F. **Culinary Institutes.** The Chancellor may sponsor or approve an event at one of the District's culinary institutes. Students may serve wine and beer at the event as part of their class requirements, subject to the limitations of Paragraph E. Any student serving those beverages must, by law, be 19 years or older.
- G. **Third-Party Event.** The Maricopa County Community College District Foundation and the Friends of Public Radio Arizona may, with the approval of the Chancellor, sponsor an event on District-owned property under this regulation. The City of Phoenix and the Friends of the Phoenix Public Library may also do so, with the approval of the Chancellor, at the joint library on the campus of South Mountain Community College. These third-party,

non-district entities are solely responsible for determining the steps that they are required to take to comply with Arizona's alcoholic beverages laws. Additionally, they must comply with the following steps:

- i. The entity obtains a liquor license, if required by law, from the Arizona Department of Liquor Licenses and control for each event and fully complies with the laws, rules and other requirements applicable to that license;
 - ii. The entity completes the form available at [AS-7 Request to Serve Beer and Wine — Third Party Form](#) . And provides it to the Chancellor for approval along with a copy of the liquor license no later than 30 days before the event, unless the Chancellor approves a shorter period of time in a particular case;
 - iii. The entity provides or currently has on file with the District a certificate of insurance demonstrating that it has liquor liability coverage and that adds the District as an additional insured;
 - iv. The entity agrees in writing to indemnify the District from any claims of any kind arising out of the event;
 - v. Beer and wine are the only alcoholic beverages served and only served through a beverage service contractor whose liquor license with the state of Arizona is in good standing;
 - vi. The contractor provides all of the beverages served and well as the servers or bartenders;
 - vii. Before the event, the contractor provides a certificate of insurance that meets the requirements of the District's Risk Manager and that adds the District as an additional insured; and
 - viii. The contractor agrees in writing to indemnify the District regarding the service of the beverages.
- H. **Receipt of beverages; storage.** It is not permissible to store wine or beer on premises owned, leased or rented by MCCCCD, except as provided in this paragraph. Alcoholic beverages purchased for use in cooking in District culinary courses must be stored in such a way that it is inaccessible to anyone except the Director or designee of the culinary program. For wine and beer to be used for receptions at the district's culinary institutes, as authorized by this administrative regulation, the following storage requirements apply:
- i. Wine and beer to be served may only be brought to MCCCCD property no sooner than four hours prior to the event, and remain there no longer than four hours after the event; and
 - ii. Once the wine and beer arrives on MCCCCD property, the Director the culinary program shall assign an MCCCCD employee to ensure that it is not stolen or that it is not opened until ready to be served.
- I. **Compliance with law.** In compliance with applicable law, any persons planning an event under this administrative regulation are required to familiarize themselves with the pertinent laws and other requirements established by the state of Arizona for the service of alcoholic beverages, particularly those in Arizona Revised Statutes Title 4 (Alcoholic Beverages) Chapters 1 (General Provisions), 2 (Regulations and Prohibitions) and 3 (Civil Liability of Licensees and Other Persons) as well as Arizona Administrative Code Title 19, Articles 1 (State Liquor Board) and 3 (Unlicensed Premises Definitions and Licensing Time-Frames).
- J. **Residential Housing.** Lawful occupants of residential housing under the jurisdiction of the Governing Board, if over the age of 21 years and not otherwise lawfully barred from such practice, may possess and consume alcoholic beverages in the privacy of their respective leased housing facility. Guests of such occupants over the age of 21 years shall have the same privilege. No alcohol is permitted in public areas (nor common areas of a dormitory) at any time.
- K. **Personal Responsibility.** The personal or individual purchase of alcoholic beverages by individuals attending District-approved functions held in places serving alcoholic beverages is a personal and individual responsibility. Administrative discretion shall be exercised in the approval of the location of such activities, as such decision pertains to the nature of the group involved.
- L. **Miscellaneous Usage Issues.** Any issues that are not specifically addressed within this regulation require the review and determination by the Chancellor or Executive Vice Chancellor and Provost on matters related to culinary programs, academic or student affairs.

5. Other Health Concerns

General Guidelines Concerning AIDS

Neither a diagnosis of AIDS nor a positive HIV antibody test will be part of the initial admission decision for those applying to attend any of the Maricopa Community Colleges. The Maricopa Community Colleges will not require screening of students for antibody to HIV.

Students with AIDS or a positive HIV antibody test will not be restricted from access to student unions, theaters, cafeterias, snack bars, gymnasiums, swimming pools, recreational facilities, restrooms, or other common areas, as there is not current medical justification for doing so.

Where academically and logistically feasible, students who have medical conditions, including AIDS, may seek accommodation in order to remain enrolled. Medical documentation will be needed to support requests for accommodation through the Office of Disabled Resources and Services or the Office of Vice President of Student Affairs.

The Maricopa Community Colleges acknowledge the importance of privacy considerations with regard to persons with AIDS. The number of people who are aware of the existence and/or identity of students who have AIDS or a positive HIV antibody test should be kept to a minimum. When a student confides in an faculty member, knowledge of the condition should be transmitted to the appropriate vice president or designee who will make the determination if the information should be further disseminated. It should be remembered that mere exposure to the person in a classroom does not constitute a need to know the diagnosis. It is, therefore, unnecessary to document in a student's file the fact that he or she has AIDS unless the information is to be used for accommodation reasons. Sharing confidential information without consent may create legal liability.

Students are encouraged to contact the Office of Disabled Resources and Services and/or the vice president of student affairs or designee for the types of services available in the district or community on matters regarding AIDS or the HIV virus.

4.12 Smoke-Free/Tobacco-Free Environment

The Maricopa County Community College District is dedicated to providing a healthy, comfortable, and educationally productive environment for students, employees, and visitors. In order to promote a healthy learning and work environment, the Chancellor has directed that the Maricopa County Community College District serve as a total smoke free and tobacco free environment, effective July 1, 2012. Smoking (including the use of "e-cigs") and all uses of tobacco shall be prohibited from all District owned and leased property and facilities, including but not limited to parking lots, rooftops, courtyards, plazas, entrance and exit ways, vehicles, sidewalks, common areas, grounds, athletic facilities, and libraries.

Support signage prohibiting the use of smoking instruments and tobacco shall be placed throughout all college and District locations.

Continued violations by an employee or student shall be handled through the respective conduct procedures established for employees and students.

Appendix S-16: Statement on the Arizona Medical Marijuana Act (Proposition 203)

In 2010, Arizona voters approved the Arizona Medical Marijuana Act (Propositions 203), a state law permitting individuals to possess and use limited quantities of marijuana for medical purposes. Because of its obligations under federal law, however, the Maricopa Community Colleges will continue to prohibit marijuana possession and use on campus for any purpose.

Under the Drug Free Workplace Act of 1988, and the Drug Free Schools and Communities Act of 1989, "...no institution of higher education shall be eligible to receive funds or any other form of financial assistance under any federal program, including participation in any federally funded or guaranteed student loan program, unless it has adopted and has implemented a program to prevent the use of illicit drugs and abuse of alcohol by students and employees." Another federal law, the Controlled Substances Act, prohibits the possession, use, production, and distribution of marijuana for any and all uses, including medicinal use. This law is not affected by the passage of the Arizona Medical Marijuana Act. Because Maricopa Community Colleges could lose its eligibility for federal funds if it fails to prohibit marijuana, it is exempt from the requirements of the Arizona Medical Marijuana Act. Therefore, Maricopa Community Colleges will

continue to enforce its current policies prohibiting the unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance on its property or as part of any of its activities.

Employees and students who violate Maricopa Community Colleges policy prohibiting the use or possession of illegal drugs on campus will continue to be subject to disciplinary action, up to and including expulsion from school and termination of employment.

2.8 Students with Disabilities

2.8.1 Eligibility for Accommodations & Required Disability Documentation

This policy is intended to specify the disability documentation required that will qualify Maricopa County Community College District (MCCCD) students for reasonable and appropriate academic adjustments through each college's Disability Resources And Services (DRS) office.

Only accommodations granted by the respective college drs office and communicated to faculty through a Faculty Notification Letter (FNL) will be recognized by the District as approved accommodations for students with disabilities.

Faculty are not required to provide reasonable accommodations/academic adjustments to students with disabilities unless the student has registered with drs and engages in the interactive process.

I. General Eligibility Requirements

1. To receive services from the DRS, a student must be admitted and enrolled as an MCCCD student.
2. The student must provide the DRS office with documentation of a qualifying disability that verifies the nature and extent of the disability prior to receiving any accommodation or academic adjustment.
 - a. Any of the following submitted by an individual seeking admission to MCCCD is sufficient to establish that the individual is an individual with a disability:
 1. Documentation that the individual has had an individualized education program in accordance with Section 614(d) of the Individuals with Disabilities Education Act, including an individualized education program that is not current on the date of the determination that the individual has a disability. MCCCD may ask for additional documentation from an individual who had an individualized education program but who was subsequently evaluated and determined to be ineligible for services under the Individuals with Disabilities Education Act, including an individual determined to be ineligible during elementary school.
 2. Documentation describing services or accommodations provided to the individual pursuant to a Section 504 plan as defined in Section 15-731.
 3. A plan or record of service for the individual from a private school, a local education agency, a state educational agency or an institution of higher education provided in accordance with the Americans with Disabilities Act of 1990.
 4. A record or evaluation from a relevant licensed professional finding that the individual has a disability.
 5. A plan or record of disability from another institution of higher education.
 6. Documentation of a disability due to service in the uniformed services.

b. If a student does not have documentation, they are still required to follow the application and intake process, which includes meeting with a DRS representative and participating in the interactive process. Additional documentation may be required to establish the need for an academic adjustment/accommodation after a student has been identified as a student with disabilities (see section IV1(F)).

c. Provisional accommodations may be granted to a student by DRS to assist students while they collect appropriate documentation to support their eligibility for accommodations/academic adjustments. such provisional accommodations must not exceed thirty (30) days, unless such extensions are granted due to extenuating circumstances. In these cases, an additional thirty (30) days of provisional accommodations may be granted. Any extension request beyond the additional thirty (30) days must be reviewed by the District ADA/504 Coordinator. Such extension must be based on extenuating circumstances beyond the control of the requesting student, and is not guaranteed.

d. In the case of compressed classes (classes shorter than the standard 14 or 16-week schedule), provisional accommodations (as defined in 2.3 above) should be granted when the student has provided proof of a disability (as outlined in 2(A)(1-6)) and either supporting documentation regarding the need for academic adjustments/accommodations or other information at the intake meeting (or other meeting/email exchange with the DRS office) to support the need for academic adjustments/accommodations in order to access education and/or the educational environment. Reasonable provisional accommodations should be granted for compressed classes until such time as formal approval of academic adjustments can be arranged, a determination is made that the student is not eligible for reasonable accommodations/academic adjustments, or thirty (30) days of provisional accommodations have passed. The DRS office and the student requesting accommodations/academic adjustments should work together to ensure reasonable accommodations are granted promptly. Nothing in this paragraph is intended to disturb DRS processing of accommodation requests or the need for reasonable documentation to support the request for accommodations/academic adjustments.

II. Who Is Eligible For Services

1. To be eligible for DRS support services, a student must have a disability as defined by federal law (Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act of 1990, and the Americans with Disabilities Act Amendments Act of 2008 (ADAAA)).
2. An individual with a disability is a person who has a physical or mental impairment which substantially limits one or more major life activities. These persons are protected by Section 504 of the Rehabilitation Act and the Americans with Disabilities Act. Individuals with a record of such an impairment and individuals who are regarded as having such an impairment are also protected by these federal laws.
3. The definition of "disability" in Section 504 and the ada should be interpreted to allow for broad coverage.

III. Definitions

1. **Academic Adjustment** means: a modification of a non-essential academic requirement, an examination, or an institutional rule that is necessary to provide access to the academic and educational environment. Academic adjustments may include changes in the length of time permitted for completion of degree requirements, substitution of specific courses required for the completion of degree requirements, and adaptation of the manner in which specific courses are conducted. academic adjustments may not substantially or materially alter the course modality, curriculum, competencies or degree requirements.
2. **Accommodation** means: An alteration of environment, curriculum format, or equipment that allows a student with a disability to gain access to content and/or complete assigned tasks. accommodations allow students with disabilities to pursue a regular course of study. Since accommodations do not alter what is being taught,

instructors should be able to implement the same grading scale for students with disabilities as they do for students without disabilities.

Examples of accommodations include, but are not limited to, sign language interpreters for students who are hearing impaired, computer text-to-speech, computer-based systems for students with visual impairments or dyslexia; extended time for students with fine motor limitations, visual impairments, or learning disabilities, and large-print books and worksheets for students with visual impairments.

3. **Current Documentation** means: documentation of a diagnosed physical or mental impairment that is dated within 5-7 years. Adult norms must be used for all testing provided as documentation.
4. **Major Life Activities** include, but are not limited to: functions such as caring for one's self, performing manual tasks, seeing, hearing, eating, sleeping, walking, standing, lifting, bending, speaking, breathing, learning, reading, concentrating, thinking, communicating and working. Major life activities also include major bodily functions such as functions of the immune system, normal cell growth, and digestive, bowel, bladder, neurological, brain, respiratory, circulatory, endocrine, and reproductive function.
5. **Mental Impairment** means: any mental or psychological disorder, including but not limited to, intellectual disabilities (intellectual developmental disorder), organic brain syndrome, emotional or mental illness, specific learning disabilities, post-traumatic stress disorder, depression and bipolar disorder. The phrase substantially limits must be interpreted without regard to the ameliorative effects of mitigating measures, other than ordinary eyeglasses or contact lenses. Mitigating measures are things like medications, prosthetic devices, assistive devices, or learned behavioral or adaptive neurological modifications that an individual may use to eliminate or reduce the effects of an impairment. These measures cannot be considered when determining whether a person has a substantially limiting impairment. an impairment that is episodic or in remission is a disability if, when in an active phase, it would substantially limit a major life activity. For example, a student with bipolar disorder would be covered if, during manic or depressive episodes, the student is substantially limited in a major life activity (e.g., thinking, concentrating, neurological function, or brain function).
6. **Physical Impairment** means: a physiological disorder or condition, a cosmetic disfigurement, or an anatomical loss, that affects one or more of the following body systems: neurological; musculoskeletal; special sense organs (which would include speech organs that are not respiratory such as vocal cords, soft palate, tongue, etc.); respiratory, including speech organs; cardiovascular; reproductive; digestive; genitourinary; hemic and lymphatic; skin; and endocrine. examples include, but are not limited to, orthopedic, visual, speech, and hearing impairments, cerebral palsy, epilepsy, muscular dystrophy, multiple sclerosis, cancer, heart disease, diabetes, HIV (symptomatic or asymptomatic), tuberculosis, drug addiction, and alcoholism.

IV. Procedures

1. General Procedures
 - a. The DRS office alone is responsible for evaluating documentation and determining eligibility and reasonable academic adjustments/accommodations.
 - b. Any instructor, academic staff member, or support staff (i.e., admissions of financial aid employees) who receives a request from a student for accommodations/academic adjustments due to a disability must refer the student to the college's DRS office.
 - c. All requests for academic adjustments/accommodations shall be considered on an individual, case-by-case basis and all reasonable and appropriate requests for academic adjustments/accommodations from eligible students shall be considered by DRS. DRS may exercise its right to require additional documentation in support of a request for academic

adjustment/accommodation.

- d. Academic adjustments/accommodations are determined by the DRS office through an interactive exchange (the interactive process) with the eligible student. The interactive exchange may continue during the course of the year and may involve faculty members' input regarding the terms and conditions of the course or program of study. Accommodations/ academic adjustments in the classroom environment shall require participation of course faculty.
 - e. MCCCCD is not required to provide "best" or "most desired" accommodations, but rather a reasonable accommodation sufficient to provide the eligible student equal access to the educational environment/activities.
 - f. MCCCCD shall continue the interactive process to establish a reasonable accommodation for an individual pursuant to Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 until it finds an accommodation or accommodations that meet the needs of the individual and do not impose an undue burden on college/district.
2. Material Alteration of class or certification requirement
 - a. If a faculty member believes the DRS approved academic adjustment/ accommodation would alter an essential academic course competencies, curriculum, or a licensing requirement, the instructor shall meet with the DRS office as part of the interactive process. In the event this issue was not previously addressed in the interactive process, a conversation with DRS should take place within five (5) days of the faculty member's receipt of the faculty notification letter outlining the approved academic adjustment/accommodation. The parties will attempt to resolve the concern.
 - b. If the faculty member's concerns are not resolved after the meeting with the DRS Manager/Director, the faculty member and the DRS Manager/Director will meet with the Chief Academic Officer, or designee, and the District ADA/504 Coordinator to resolve the concern. This meeting should take place within three (3) days of the meeting between the DRS Manager/Director and the faculty member. The Chief Academic Officer's decision is final.
 - c. Any change in the DRS office's initial recommendation resulting from the meeting with the Chief Academic Officer will be communicated to the student by the DRS office and the interactive process will continue in an effort to provide reasonable and appropriate academic adjustments/accommodations.
 3. Recipients of federal funds are prohibited from intimidating, threatening, coercing, discriminating or otherwise retaliating against any individual for the purpose of interfering with any right or privilege secured by this policy or by federal and/or state law. Any retaliatory action by instructors, supervisors, managers, academic professionals, administrators, or other employees who have the authority to take adverse action against a complainant or witness is strictly prohibited and may be grounds for disciplinary action.

V. Rights And Responsibilities

1. Students served by Disability Resources and Services have the right:
 - a. To an equal opportunity to access course information and materials
 - b. To an equal opportunity to participate in and benefit from the college community

- c. To choose whether or not to disclose the nature of their disability to their professor(s). The information the student provides to DRS is protected by FERPA.
- d. To request reconsideration of accommodation determinations if dissatisfied with the granted accommodations because they believe their disability(ies) is/are not being properly accommodated or if they believe they have been discriminated against during the interactive process.
- e. To be free from retaliation for seeking redress under this or other district policy.

2. Students served by Disability Resources and Services responsibilities:

- a. Self-identify to DRS as having a disability and provide accurate, recent, and timely documentation.
- b. Check MCCCCD email and/or DRS connect portal for updates and announcements.
- c. Request accommodations each semester in a timely manner and understand that a late request does not constitute retroactive adjustments.
- d. Notify DRS if classes are dropped or added.
- e. Ensure that instructors have received the Faculty Notification Letter once it has been issued through drs connect.
- f. Communicate directly with DRS regarding exam accommodations, such as taking exams in the testing center, and stay in communication about the time and place for such exams.
- g. Contact DRS in a timely manner if having any difficulty securing or arranging accommodations.
- h. Promptly return any borrowed or assigned equipment (as an accommodation) to DRS when it is no longer needed.
- i. If approved for note taking or audio recording services, understand that these services are for personal use only and may not be shared. In addition, the student must understand that you must be present in class to receive these services.
- j. Understand that requesting accommodations does not mean that the student's request will be approved.
- k. Meet the same standards—academic, technical, performance, and behavioral—expected of all Maricopa County Community College students.
- l. Accommodations may be granted on a provisional basis (30 days). This may be based on the need for additional documentation. In these cases, the student will need to update their documentation to receive accommodations beyond the 30 days. The student must understand that approval will be based on a review of the new documentation and there is no guarantee that the provisional (or any) accommodations will be approved.
- m. Understand that faculty are not required to provide any accommodation that fundamentally alters the nature of their course or lowers the academic standards.

VI. General Disability Documentation Guidelines

Physical Disabilities

Maricopa County Community College District, Disability Resources and Services will accept current diagnoses of physical disabilities that are based on appropriate diagnostic evaluations administered by trained and qualified (i.e., certified and/or licensed) professionals (e.g., medical doctors, ophthalmologists, psychologists, neuropsychologists, audiologists).

Learning Disabilities

Maricopa County Community College District, Disability Resources and Services will accept diagnoses of specific learning disabilities that are based on comprehensive, age-appropriate, psychoeducational evaluations that demonstrate current functional limitations of the disability.

The assessment must be administered by a trained and qualified (i.e., certified and/or licensed) professional (e.g., psychologist, school psychologist, neuropsychologist, educational diagnostician) who has had direct experience with adolescents and adults with learning disabilities, including all battery scores in addition to evaluative notes.

Attention Deficit Hyperactivity Disorder (ADHD)/Attention Deficit Disorder (ADD)

Maricopa County Community College District, Disability Resources and Services will accept current diagnoses of ADHD that are based on age-appropriate, diagnostic evaluations, administered by trained and qualified (i.e., certified or licensed) professionals (e.g., psychiatrists, psychologists, or neuropsychologists). submitted documentation must demonstrate current functional limitations of the disability.

Psychiatric Disabilities

Maricopa County Community College District, Disability Resources and Services will accept current diagnoses of psychiatric disabilities that are based on comprehensive and appropriate diagnostic evaluations completed by trained and qualified (i.e., licensed or certified) professionals (e.g., psychologists, psychiatrists, neuropsychologists, school psychologists).

Submitted documentation must demonstrate current functional limitations of the disability.

VII. Additional Documentation Guidelines and Resources

The Maricopa County Community College District, Disability Resources and Services can provide a "disability verification form" that can be completed by a trained and qualified professional, or the professional may choose to submit a letter. The letter must be on letterhead, with date and signature (including license number, if applicable), and must include the following:

1. a diagnostic statement identifying the disability (including the date of the diagnosis)
2. current severity/impact of the disability (mild/moderate/severe)
3. an assessment of major life activities that are impacted by the disability (e.g., learning, concentration, class attendance, social interactions, reading, walking, etc.) and
4. specific recommendations for accommodations. The DRS office alone is responsible for evaluating documentation and determining eligibility and reasonable academic adjustments/accommodations.

VIII. Request for Reconsideration and Grievance Procedure

1. Request For Reconsideration

- a. If a student is unsatisfied with either the academic adjustments/ accommodations granted by the DRS office or the denial of academic adjustments/accommodations, the student should submit **in writing** to the respective

college DRS Manager/Director the specific reason(s) they are unsatisfied and the redress they seek. The DRS Manager/Director will respond to this communication within five (5) business days. The communication should outline the Manager/Director's response as well as if there has been a determination that an adjustment or change of accommodation status is warranted.

- b. If the student is still dissatisfied with their academic accommodations or the denial of their accommodations, the student may submit a formal request for reconsideration of accommodation to the accommodation review committee (ARC).
 1. The request for reconsideration must be made in writing within ten (10) business days of the mailing of the DRS response to the initial request for reconsideration.
 2. This written request should be delivered to the District ADA/504 Coordinator and must include a statement of desired outcome. In reviewing a request for reconsideration, the ARC will rely on the documentation available to the DRS at the time of the initial decision in making accommodation determinations.
 3. The ARC shall consist of two (2) DRS Managers/Directors from colleges unaffiliated with the student, and one Equal Opportunity & Title IX Regional Program Director.
- c. The ARC will respond to students within ten (10) business days of the district ADA/504 Coordinator receiving the request for reconsideration.
- d. **The ARC may uphold the original accommodation determination or may return the matter to the granting college's DRS team to revisit the interactive process.** The decision of the ARC Shall be final. any changes to accommodations will be communicated **to the student by the DRS office.** Accommodations are not retroactive.

2. Grievance Procedure

- a. If a student believes they have been subject to unlawful discrimination based on their disability, the student may file a complaint under the [Discrimination Complaint Procedures for Students](#) (Appendix ND-2).

TECHNICAL CHANGE, AMENDED through Direct Approval by the Chancellor, January 31, 2024

AMENDED through Direct Approval by the Chancellor, November 14, 2023

AMENDED through Direct Approval by the Chancellor, August 3, 2023

AMENDED through the Administrative Regulations Approval Process, June 12, 2023

AMENDED through Direct Approval by the Chancellor, September 14, 2022

AMENDED, November 15, 2021 (Office of Public Stewardship housekeeping update)

AMENDED through the Administrative Regulation Approval Process, June 24, 2021

AMENDED by Direct Approval from the Chancellor, January 4, 2017

2.8.2 Eligibility of Students Taking Reduced Course Loads

Although any student may register for fewer than twelve credit hours, a student with a disability may request a reduced academic load as a reasonable and appropriate accommodation. A college Disability Resource Services (DRS) professional may certify that a student who is afforded a reduced academic load as an accommodation for a disability shall nevertheless be deemed a full-time student. Such certification shall be solely to enable the student to seek eligibility for health insurance benefits and to seek eligibility to comply with mandates of the National Junior College Athletic Association. The college DRS professional will certify that a student may be deemed a full-time student as provided under this regulation only on a semester-by-semester basis.

The appropriate college offices will receive documentation of the DRS professional's certification from the professional or the student. An incoming student may apply for such certification upon acceptance to the college. Requests for certification must be made prior to the beginning of each semester. Every attempt will be made to accommodate these requests.

The following criteria also apply:

1. Students taking a reduced course load must register for at least 6 credit hours (based on DRS approval) during the regular fall and spring semesters. It is recommended that students register for at least three (3) credit hours during the summer to offset the impact of academic eligibility.
2. Students taking a reduced course load must maintain satisfactory academic progress standards as defined by the College catalog.
3. The reduced credit load may result in an adjusted financial aid package. There may be additional ramifications including, but not limited to, extra time to complete college, insurance coverage, Vocational Rehabilitation funding, etc.
4. Eligibility for Federal Stafford Loans may be reduced according to the total number of credit hours taken in the full academic year. A student, taking a reduced course load, must be at least half time in a semester (6 credits) in order to receive a Stafford Loan.
5. The amount of Federal Financial Aid (Title IV) awarded is based on the actual number of credit hours taken.
6. Requirements for continuation of funding through Vocational Rehabilitation may differ. The student must contact his/her VR counselor to determine how a reduced course load will impact their funding.
7. The National Junior College Athletic Association (NJCAA) has published standards in regard to the designation of Certified Disabled Student-Athlete in Article V Section J of the NJCAA bylaws. This procedure addresses the NJCAA criteria for reduced course loads.

Application Process

1. Applications for reduced course loads must be submitted to the Disability & Services professional with supporting documentation. Requests must be made prior to the beginning of each semester.
2. Supporting documentation must include a diagnostic evaluation from an appropriate professional. The documentation must meet the guidelines set forth by the Maricopa Community College District's Documentation Policy in order to evaluate the current impact of the disability in regards to the request. Students are required to complete an application form for this status every semester, but do not need to re-submit their documentation. Continuation of this status is not automatic. Each case will be re-evaluated at the end of the semester to determine if this accommodation is still appropriate.
3. Students requesting a reduced course load should consult with their academic advisor regarding the consequences of this status for making progress toward graduation requirements and eligibility for various academic distinctions and designations.
4. Students registered in occupational and/or academic programs that have specific block formats will not be considered for reduced course loads.
5. Students who are approved for a reduced course load will be required to sign the Reduced Course Load Approval Form (see [Appendix S-10](#)), which includes a statement acknowledging that he or she has reviewed the consequences that go with reduced load status and accepts them.
6. When a reduced course load status is granted by the Disability Resources & Services professional, a copy of the Reduced Course Load Approval Form will be sent to the appropriate individuals.

2.3.11 Academic Misconduct

1. Definitions

- A. **Academic Misconduct** - includes any conduct associated with the classroom, laboratory, or clinical learning process that is inconsistent with the published course competencies/objectives and/or academic standards for the course, program, department, or institution. Examples of academic misconduct include, but are not limited to: (a) cheating and plagiarism (including any assistance or collusion in such activities, or requests or offers to do so); (b) excessive absences; (c) use of abusive or profane language; and (d) disruptive behavior.
- B. Cheating is any form of dishonesty in an academic exercise. It includes, but is not limited to, (a) use of any unauthorized assistance in taking quizzes, tests, examinations, or any other form of assessment whether or not the items are graded; (b) dependence upon the aid of sources beyond those authorized by the faculty member in writing papers, preparing reports, solving problems, or carrying out other assignments; (c) the acquisition, without permission, of tests or other academic material belonging to or administered by the college or a member of the college faculty or staff; (d) unauthorized (as determined by instructor) collaboration, contract cheating, or engaging a third-party individual or service (e.g. ghostwriting) to complete an assignment or exam without the approval of the instructor of the class; (e) unauthorized use of generative Artificial Intelligence (AI) tools to complete an assignment or exam without the approval of the instructor of the class; and (f) fabrication of data, research, facts, or information.
- C. Plagiarism is the act of using the ideas, words, or creative work generated by another person or entity without proper attribution. It includes, but is not limited to: (a) the use of paraphrase or direct quotation of the published or unpublished work of another person without full and clear acknowledgment; (b) unacknowledged use of materials prepared by another person or unauthorized (as determined by instructor) collaboration, contract cheating, or engaging a third-party individual or service (e.g. ghostwriting) to complete an assignment or exam without the approval of the instructor of the class; (c) information gathered from the internet and not properly identified; and (d) the unauthorized use of generative AI tools to complete some or all of an assignment or exam without the approval of the instructor of the class.

2. Academic Consequences

Any student found by a faculty member to have committed academic misconduct may be subject to the following academic consequences, based on the faculty member's judgment of the student's academic performance including, but not limited to:

- **Warning** - A notice in writing to the student that the student has violated the academic standards as defined in 1.A.
- **Grade Adjustment** - Lowering of a grade on a test, assignment, or course.
- **Discretionary Assignments** - Additional academic assignments determined by the faculty member.
- **Course Failure** - Failure of a student from a course where academic misconduct occurs.

3. Disciplinary Sanctions

A faculty member may remove a student from one (1) class meeting for disciplinary reasons. For involuntary removal from more than one (1) class period, the faculty member should invoke the procedures outlined in AR 2.5.2.

If the misconduct is sufficiently serious to warrant course failure, and if either:

- (a) the failure results in a student being removed from an instructional program, or
- (b) the student refuses to accept responsibility for the misconduct and its academic consequences, the faculty member will, in addition to awarding the course grade, consult the department chair and the vice president of academic affairs as to whether institutional sanctions set forth below should be sought under AR 2.5. Regardless of whether the student has accepted responsibility for academic consequences, in all cases of academic misconduct the faculty member may make recommendations for sanctions and may file a written complaint of misconduct. The vice president of academic affairs will serve as the Student Conduct Administrator in all academic misconduct cases, and will follow the procedure established in AR 2.5.2 to evaluate whether disciplinary sanctions are warranted. College probation, suspension, or expulsion will be imposed only by the

vice president of academic affairs or designee, and only after the student has received the procedural rights provided in AR 2.5.2.

Disciplinary Probation - Disciplinary probation is for a designated period of time and includes the probability of more severe sanctions if the student commits additional acts of academic misconduct.

College Suspension - Separation of the student from the college for a definite period of time, after which the student is eligible to return. Conditions for readmission may be specified. (A suspension from one Maricopa Community College will apply to all other colleges/centers in the District.)

College Expulsion - Permanent separation of the student from the college. (Expulsion from one Maricopa Community College will apply to all colleges/centers in the District.)

4. Appeal of Sanctions for Academic Misconduct

Students can appeal academic consequences by following the instructional grievance procedure (AR 2.3.5; [Appendix S-6](#)). Students may appeal disciplinary sanctions as provided in AR 2.5.2. If the student appeals through both processes, the instructional grievance process will be suspended until a final decision is reached in the student discipline procedure. In all cases in which financial aid has been adversely affected by academic consequences or disciplinary sanctions that are the subject of ongoing hearing or appeal proceedings, the student may appeal the financial aid determination on the grounds that a final decision has not been made. In such an event, a final decision on financial aid will not be made until after the final decision on consequences and/or sanctions.

Also See:

[2.3.4 Academic Standing, Warning, and Probation](#)

[2.3.5 Instructional Grievance Process \(Appendix S-6 Instructional Grievance Process\)](#)

[2.5.2 Student Conduct Code](#)

AMENDED through the Administrative Regulation Approval Process, June 4, 2024

AMENDED through the Administrative Regulation Approval Process, May 24, 2022

Amended through Direct Approval from the Chancellor and Executive Vice Chancellor & Provost on August 7, 2013

2.11 Student-Athlete Name, Image, Likeness Activity

The purpose of this regulation is to define the institutional guidelines and limitations relating to Maricopa County Community College District (MCCCD) student-athletes who use their name, images, or likenesses (NIL) for monetary compensation.

Regulation

1. **Scope and Definition** – For the purpose of this regulation, an “NIL activity” is any business activity in which a student-athlete is compensated in any way by a third party (not related to the Maricopa County Community College District) for the use of the student-athlete’s name, image, or likeness.
2. **Permissible NIL Activities** – Student-athletes may be compensated for participation in NIL activities so long as those activities are permissible under NJCAA and MCCCD/college policies and regulations, federal regulations, and comply with Arizona law.
3. **Student-Athlete Disclosure of NIL Activities** – Student-athletes must disclose the details of any NIL inquiry to their respective college’s Athletic Director prior to entering into any agreement. Once an NIL agreement is signed, a copy of the agreement must be given to the student-athlete’s Athletic Director for recordkeeping purposes. Any modifications to an existing agreement must be reported to the Athletics Director prior to the change being implemented and a copy of the signed, modified agreement must be delivered to the student

athlete's Athletic Director for recordkeeping purposes.

4. **No Impermissible Recruitment or Benefits through NIL Activities**— NIL activities may not be used by MCCCCD or any of its representatives to recruit prospective student-athletes to MCCCCD or for the purposes of compensating student-athletes for their athletic performance. Among other things, this means:
 - a. Compensation for NIL activities must be commensurate with the going rate for similar services in the relevant market.
 - b. Student-athlete staff members, including active outside consultants, may not assist student-athletes in the development, operation, or promotion of NIL activities.
 - c. Athletics staff members may not provide apparel or gear to student-athletes for purposes of NIL activities.
 - d. Student-athlete access to MCCCCD resources and facilities for purposes of NIL activities is provided at the same level of availability and cost as to the public.
5. **Restrictions on Types of Businesses or Activities** – Student-athletes may not engage in NIL activities with people, institutions, businesses, or other entities in the following categories:
 - a. Alcohol and alcohol products;
 - b. Casinos, gambling, and sports betting/wagering;
 - c. Cannabis and marijuana in any form, along with associated products, dispensaries, or paraphernalia;
 - d. Firearms and other weapons;
 - e. Gentlemen's clubs, adult entertainment, and/or escort services;
 - f. NJCAA banned substances;
 - g. Political purposes or causes;
 - h. Post-Secondary educational institutions or online educational organizations;
 - i. Pharmaceuticals;
 - j. Sexually explicit materials; and/or
 - k. Tobacco products.
6. **NIL activities while participating as a student-athlete**— Student-athlete may not engage in NIL activities during required team activities or while representing MCCCCD in any capacity, including during travel related to MCCCCD athletics competition(s).

Student-athlete may not miss class to participate in NIL activities.

Student-athlete may not sell items provided by MCCCCD and/or the NJCAA until the student-athlete has exhausted all team eligibility. "Items," for purposes of this regulation includes jerseys, gear, apparel, equipment,

or awards. After the student has exhausted their eligibility, the student-athlete may sell items that are not required to be returned to the college, the NJCAA, or the college's athletics department.

7. **Professional Service Providers**– Student-athletes may use professional service providers (e.g., marketing agents, brand managers) to assist with the management and procurement of NIL activities and to review NIL agreements. Such providers' engagement must be limited to NIL activities and may not be used to secure opportunities as professional athletes. Professional services providers must be duly licensed as per state law requirements.
8. **Use of Institutional Marks** – Student-athletes may not use MCCCDC and college-specific intellectual property in connection with NIL activities without permission. Permission to use such intellectual property may be requested via the individual use of Intellectual Property Request form (see [Appendix S-19](#)). Student-athletes must request the use of protected marks at least five (5) days before the activity is scheduled to occur. Student-athletes cannot resell institutional marks (such as apparel) or copyrighted material that belongs to the college, district, or NJCAA.
9. **Review** – The respective college Athletics Director will review NIL activities for conflict with this regulation and NJCAA regulation. Neither the Athletics Director, nor any other MCCCDC entity will perform a legal review of the student-athlete NIL agreement.
10. **International Student-Athletes** – International student-athletes are not eligible to receive compensation for NIL agreements in the United States due to their visa status and lack of work authorization. International student-athletes should consult with MCCCDC'S District Compliance office to discuss whether they are eligible to receive NIL compensation from a United States company when the student-athlete is in their home country.
11. **Violations**– Violations of this regulation may result in a variety of penalties depending on the nature and type of regulation deviation. The most egregious deviations (i.e., proof that an NIL activity was used to compensate a student-athlete for performance or to induce a prospect to attend) may lead to termination of employment for staff members, booster dissociation, and student-athlete scholarship and athletic participation modification. Violations of NJCAA regulation will be reported to NJCAA and could result in additional NJCAA-mandated penalties. Penalties for student-athletes who violate this regulation will be commensurate with the nature and type of regulation deviation and will be addressed via the Student Code of Conduct.
12. The terms of this regulation may be modified at the discretion of the MCCCDC.

ADOPTED by Direct Chancellor Approval, September 14, 2022

DISCIPLINARY STANDARDS

2.5.1 Conduct Standards and Authority

Disciplinary Probation and Suspension Standards

According to the laws of the State of Arizona, jurisdiction and control over the Maricopa County Community College District (MCCCDC) are vested in the MCCCDC Governing Board. The MCCCDC Governing Board and its agents-the Chancellor, administration, and employees are granted authority to regulate student behavior subject to basic standards of reasonableness.

In developing responsible student conduct, the MCCCDC prefers mediation, guidance, and admonition. However, when these means fail to resolve problems of student conduct and responsibility, appropriate disciplinary procedures will be followed. The MCCCDC reserves the right to levy discipline rather than attempt mediation and guidance, based on the severity of the conduct.

AMENDED through the Administrative Regulation Approval Process, May 24, 2022

2.5.2 Student Conduct Code

The purpose of this Student Code of Conduct is to help ensure a productive and safe environment for students, employees, and visitors. This conduct code is not a stand-alone policy. This code is subject to the provisions outlined in AR 5.1.16, generally known as the Title IX policy, and AR 6.24, generally known as the Free Expression policy, and AR 5.1, generally known as the Non-Discrimination policy. There are other policies that may intersect with other administrative regulations.

Article I: Definitions

The following are definitions of terms or phrases contained within this Code:

1. **"College"** means a Maricopa County Community College District (MCCCD) College or center/ site.
2. **"College premises"** means all land, buildings, facilities and other property in the possession of or owned, used, or substantially controlled by the college or MCCCD.
3. **"College official"** means any person employed by the college or MCCCD, performing assigned administrative or professional responsibilities pursuant to this Student Conduct Code. The college president shall designate the college/center official who is responsible for the administration of the Student Conduct Code.
4. **"Complainant"** means any person who submits a complaint alleging that a student violated this Student Conduct Code. When a student believes they have been a victim of another student's misconduct, the student who believes they have been a victim will have the same rights under this Student Conduct Code as are provided to the Complainant, even if another member of the college community submitted the Complaint itself.
5. **"Day"** means business day when college is in session, and shall exclude weekends and college/MCCCD holidays.
6. **"Disruptive behavior"** means conduct that materially and substantially interferes with or obstructs the teaching or learning process in the context of a classroom or educational setting/facility, which includes educational or professional internships, clinical placements, or other experiential learning opportunities. Disruptive behavior also includes conduct that materially interferes with or obstructs college business operation.
7. **"District"** means the Maricopa County Community College District (MCCCD).
8. **"Faculty member"** means any person hired by the college or MCCCD to conduct classroom or teaching activities or who is otherwise considered by the college to be a member of the faculty in credit / non-credit courses and clock hour courses and programs.
9. **"Member of the college community"** means any person who is a student, faculty member, college official, or any other person employed by the college or center/site. A person's status in a particular situation shall be determined by the college President.
10. **"Organization"** means any number of persons who have complied with the formal requirements for college recognition.
11. **"Policy"** is defined as the written regulations of the college and/or MCCCD as found in, but not limited to, this Student Conduct Code and MCCCD Governing Board policy.
12. **"Respondent"** means any student accused of violating MCCCD's Student Conduct Code. Respondents enjoy the presumption of innocence until such time as the respondent is adjudicated to have violated the Student Conduct Code.
13. **"Student"** means any individual who is currently admitted or registered in credit or non-credit college programs on a full or part time basis, or who participates in a college function (such as orientation, in anticipation of enrollment) or who

was enrolled in the immediate previous term or is registered for a future term, including college employees so admitted, registered, or enrolled.

14. **"Student Conduct Administrator"** means a college official authorized by the college official responsible for administration of the Student Conduct Code to impose sanctions upon students found to have violated this Student Conduct Code.
15. **"Threatening behavior"** means any written or oral statement, communication, conduct or gesture directed toward any member of the college community, which causes a reasonable apprehension of physical harm to self, others, or property. It does not matter whether the person communicating the threat has the ability to carry it out, or whether the threat is made on a present, conditional, or future basis.

Article II: Judicial Authority

1. Decisions made by a Student Conduct Administrator shall be final, pending the normal appeal process.
2. Matters pertaining to sexual harassment must always be referred first to the college Title IX Coordinator for review under AR 5.1.16. Conduct that does not meet the definition of sexual harassment as outlined in AR 5.1.16, or otherwise do not meet the definition of an educational program or activity, do not occur against a person within the United States, or are otherwise dismissed either under the mandatory or discretionary dismissal provisions will be referred by the Title IX Coordinator back to the college's respective Student Conduct Administrator for investigation and adjudication under the Student Conduct Code.

Article III: Prohibited Conduct

1. Jurisdiction

The Student Conduct Code shall apply to conduct that occurs on any college or MCCCCD premises, or at any center/site or MCCCCD-sponsored event or activity that adversely affects the college community and/or the pursuit of its objectives

A. Jurisdiction may be applied against student behavior conducted online, via email, or other electronic medium provided that it meets the criteria listed above. Further, jurisdiction under this policy applies to any person who is currently admitted or in credit or non-credit college programs or who participates in a college function (such as orientation, in anticipation of enrollment) or who was enrolled in the immediate previous term or is registered for a future term, including college employees so admitted, registered, or enrolled.

B. The Student Conduct Code shall apply to a student's conduct even if the student withdraws from school while a disciplinary matter is pending.

2. Title IX Sexual Harassment.

Matters pertaining to sexual harassment/misconduct that do not meet the definition of sexual harassment as outlined in Administrative Regulation 5.1.16 or otherwise do not meet the definition of an educational program or activity and do not occur against a person within the United States will be referred by the Title IX Coordinator to the College's respective Student Conduct Administrator for investigation and adjudication under the Student Conduct Code.

3. Disruptive Behavior in Class (Temporary Removal of Student)

Disruptive behavior includes conduct that distracts or intimidates others in a manner that interferes with instructional activities, fails to adhere to a faculty member's appropriate classroom rules or instructions, or interferes with the normal operations of the college. Students who engage in disruptive behavior or threatening behavior may be directed by the faculty member to leave the classroom or by the college official responsible for administration of the Student Conduct Code to leave the college premises. (Academic Misconduct AR 2.3.11). If the student refuses to leave after being requested to do so, college police may be summoned to provide assistance. For involuntary removal from more than one (1) class period, the faculty member should invoke the procedures outlined below.

4. Conduct - Rules and Regulations

Any student found to have committed the following misconduct is subject to the disciplinary sanctions outlined in Article IV:

- A. Acts of dishonesty, including but not limited to the following:
 - i. Knowingly furnishing false information to any college official or officer (including filing a false report or complaint), including during an official investigation (i.e., Title IX, conduct, or campus police investigation).
 - ii. Forgery, alteration or misuse of any college document, record or instrument of identification, even if there is no reliance on the forged or altered document in the posting of grades or other academic/financial benefit.
 - iii. Tampering with the election of any college-recognized student organization.
 - iv. Financial aid fraud or corresponding behaviors that would allow a student to receive a monetary benefit for which they are not eligible.
 - v. Misrepresentation of one's identity (see also Identity Theft Red Flag and Security Incident Reporting AR 6.11).
 - vi. Misuse of the colleges copyrighted content and trademark (Copyright Act Compliance AR 2.4.5).
 - vii. Knowingly filing a false report (Title IX, conduct, or campus police investigation) to a college official or campus police.
- B. Obstruction or disruption of teaching, research, administration, disciplinary proceedings or other college activities, including its public service functions on campus, in clinical settings or other authorized non-college activities;
- C. Conduct that intentionally or recklessly causes physical harm or that otherwise threatens or endangers the health or safety of any person.
 - i. Physical abuse – hitting, pushing, use of a weapon, beating or other such activity resulting in or, intended to cause physical harm.
 - ii. Making a threat(s) of violence (including verbal, written, or virtual communication) that does or could cause(s) a reasonable expectation of harm to the health or safety of a specific person. _
 - iii. Substantial or repeated acts and/or harassment directed at a person or group of people that would cause a reasonable person to feel fearful and/or find intimidating, hostile, or offensive, including but not limited to, bullying, stalking, and hazing (Hazing Prevention Regulation AR 2.6) as defined in Article I.
 - iv. Any form of retaliation towards a complainant or any participant in an investigation or conduct process.
- D. Attempted or actual theft of, damage to, or unauthorized use of property of the college or property of a member of the college community or other personal or public property.
- E. Trespassing or unauthorized access to physical or virtual/cyber property or services of the college.
- F. Having an animal in a campus building, other than in accordance with MCCCDC policy (Domesticated Animals on Campus AR 3.9 and Guidelines for Service Animals on Campus) and ADA laws, such as permitted service animals individually trained to perform tasks for the benefit of an individual with a disability.
- G. Failure to comply with direction of college officials or law enforcement officers in the performance of their duties and/or failure to properly identify oneself to these persons when requested to do so.

- H. Unauthorized possession, duplication or use of keys to any college premises, or unauthorized entry to or use of college premises.
- I. Violation of any college or MCCCDC policy, rule or regulation published in hard copy or online, such as a college catalog, handbook, program guide, etc. available electronically on the college's or MCCCDC'S website.
- J. Violation of federal, state or local law.
- K. Use, possession, manufacturing or distribution of illegal or other controlled substances except as expressly permitted by law, unless such use is prohibited due to a program of study for fields that are deemed safety sensitive positions. (Abuse-Free Environment AR 2.4.7, S-16 Statement on the Arizona Medical Marijuana Act Proposition 203).
- L. Illegal use, possession, manufacturing or distribution of alcoholic beverages or public intoxication.
- M. Smoking tobacco products, using e-cigarettes, or any other violation of the Smoke-Free/Tobacco-Free Environment policy (AR 4.12).
- N. Illegal or unauthorized possession of firearms, explosives, other weapons, or dangerous chemicals on college premises, or use of any such item, even if legally possessed, in a manner that harms, threatens, or causes fear to others, or property damage (Weapons policy AR 4.6).
- O. Participation in a demonstration, riot or activity that disrupts the normal operations of the college and infringes on the rights of other members of the college community; leading or inciting others to disrupt scheduled and/or normal activities within any college building or area.
- P. Obstruction of the free flow of pedestrian or vehicular traffic on college premises or at college-sponsored or supervised functions.
- Q. Conduct that is disorderly, lewd or indecent; breach of the peace; or aiding, abetting or procuring another person to breach the peace on college premises or at functions sponsored by or participated in by the college or members of the academic community. Disorderly conduct includes but is not limited to: any unauthorized use of electronic or other devices or to make an audio or video record of any person while on college or MCCCDC premises without their prior knowledge, or without their effective consent or when such a recording is likely to cause injury or distress. This includes, but is not limited to, secretly taking pictures of another person in a gym, locker room, or restroom.
- R. Engaging in individual conduct that materially and substantially infringes on the rights of other persons to engage in or listen to expressive activity is subject to discipline under this conduct code. (Free Expression policy AR 6.24).
- S. Attempted or actual theft or other abuse of technology facilities or resources, including but not limited to:
 - i. Unauthorized entry into a file, to use, read or change the contents or for any other purpose
 - ii. Unauthorized transfer of a file
 - iii. Unauthorized use of another individual's identification and/or password
 - iv. Use of technology facilities or resources to interfere with the work of another student, faculty member or college official
 - v. Use of technology facilities or resources to send obscene or abusive messages
 - vi. Use of technology facilities or resources to interfere with normal operation of the college technology system or network
 - vii. Use of technology facilities or resources in violation of copyright laws (Copyright Act Compliance AR 2.4.5)
 - viii. Any violation of the MCCCDC'S technology resource standards (Technology Resource Standards AR 4.4)
 - ix. Use of technology facilities or resources to illegally download files
 - x. Unauthorized use of intellectual property (Intellectual Property policy)
- T. Abuse of the Student Conduct system, including but not limited to:
 - i. Falsification, distortion or misrepresentation of information before a Student Conduct Official.
 - ii. Invoking a Student Conduct Code proceeding with malicious intent or under false pretenses

- iii. Attempting to discourage an individual's proper participation in, or use of, the Student Conduct system
- iv. Attempting to influence the impartiality of the member of a judicial body prior to, and/or during the course of, the Student Conduct proceeding
- v. Harassment, either verbal or physical, and/or intimidation of a Student Conduct Administrator prior to, during and/or after a Student Conduct proceeding
- vi. Failure to comply with the sanctions imposed under this Student Conduct Code
- vii. Influence or attempting to influence another person to commit an abuse of the Student Conduct Code system
- viii. Failure to obey the notice from a Student Conduct or college official to appear for a meeting or hearing as part of the Student Conduct system.
- U. Engaging in irresponsible social media conduct. All Student Conduct policies apply to social networking platforms.
- V. Attempt to bribe a college or MCCCCD employee.
- W. Stalking behavior, which occurs if a student intentionally or knowingly maintains visual or physical proximity toward another person on two (2) or more occasions over a period of time and such conduct would cause a reasonable person to fear for their safety.
- X. Sexual misconduct, including but not limited to:
 - i. The use or display in the classroom, including electronic, of pornographic or sexually harassing materials such as posters, photos, cartoons or graffiti without pedagogical justification.
 - ii. Explicit sexual comments by one (1) or more students about another student, or circulating drawings or other images depicting a student in a sexual manner.
 - iii. Unwelcome sexual advances, repeated propositions or requests for a sexual relationship to an individual who has previously indicated that such conduct is unwelcome, or sexual gestures, noises, remarks, jokes, questions, or comments by a student about another student's sexuality or sexual experience.
 - iv. Harassment based on sex, pregnancy, gender identity, gender expression, or sexual orientation that creates a hostile environment. A hostile environment exists when the conduct is sufficiently severe, persistent, or pervasive that it unreasonably interferes with, limits, or deprives an individual from participating in or benefitting from the MCCCCD education programs and/or activities. The existence of a hostile environment is to be judged both objectively (meaning a reasonable person would find the environment hostile) and subjectively (meaning the impacted individual felt the environment was hostile).
- Y. Sexual Exploitation
 - i. Taking non-consensual or abusive sexual advantage of another for anyone's advantage or benefit other than the person being exploited. Examples of behavior that could rise to the level of Sexual Exploitation include:
 - a. Recruiting, harboring, transporting, providing, or obtaining another person for the purpose of sexual exploitation;
 - b. Non-consensual visual (e.g., video, photograph) or audio-recording of sexual activity;
 - c. Non-consensual distribution of photos, other images, or information of an individual's sexual activity, intimate body parts, or nakedness, with the intent to or having the effect of embarrassing an individual who is the subject of such images or information;
 - d. Going beyond the bounds of consent (such as letting your friends hide in the closet to watch you having consensual sex);
 - e. Engaging in non-consensual voyeurism;
 - f. Knowingly transmitting an STI (sexually transmitted infection), such as HIV, to another without disclosing one's STI status;
 - g. Exposing one's genitals in non-consensual circumstances, or inducing another to expose their genitals;
 - h. Possessing, distributing, viewing or forcing others to view obscenity.

5. Violation of Law and College Discipline

- A. Disciplinary proceedings may be instituted against a student charged with conduct that potentially violates both the criminal law and this Student Conduct Code (that is, if both possible violations result from the same factual situation) without regard to pending civil or criminal litigation. If a criminal investigation and/or prosecution

results from the same factual situation, proceedings under this Student Conduct Code may be carried out prior to, simultaneously with, or following civil or criminal proceedings off campus at the discretion of the college official responsible for administration of the Student Conduct Code. Determinations made or sanctions imposed under this Student Conduct Code shall not be subject to change because criminal charges arising out of the same facts giving rise to violation of college rules were dismissed, reduced, or resolved in favor of or against the criminal law defendant.

- B. When a student is charged by federal, state or local authorities with a violation of law, the college will not request or agree to special consideration for that individual because of their status as a student. If the alleged offense is also being processed under this Student Conduct Code, however, the college may advise external law enforcement and other authorities of the existence of this Student Conduct Code and of how such matters will be handled internally within the college community. The college will cooperate fully with the law enforcement and other agencies in the enforcement of criminal law on campus and in the conditions imposed by criminal courts for the rehabilitation of student violators. Individual students and faculty members, acting within their personal capacities, remain free to interact with governmental representatives, as they deem appropriate.
- C. The Student Code of Conduct may apply to off-campus behavior that affects a substantial interest of the college. A substantial college interest means:
 - i. Any situation where it appears that the student's conduct may present a danger or threat to the health or safety of themselves or others; and/or
 - ii. Any situation that significantly impinges upon the rights, property or achievements of self or others or significantly breaches the peace and/or causes social disorder; and/or
 - iii. Any situation that is detrimental to the educational mission and/or interests of the college, unless it is protected by a student's constitutional right to free expression.

Article IV: Student Conduct Code Procedures

1. Allegations And Resolution Options

- A. Any member of the college community may file a complaint against a student for violations of this Student Conduct Code. A complaint may be in writing or verbally given to the Student Conduct Administrator. Once the complaint has been made, it shall be put in writing and a notice of allegation should be submitted to the Respondent. A Respondent must receive written notice of the allegations before a meeting is held with the Respondent regarding the conduct. The notice of allegations should outline the particulars of the complaint, the presumption of innocence, an outline of the Respondent's due process rights, and the contact information for the Student Conduct Administrator.
- B. There is no statute of limitations for bringing a complaint under the Student Conduct Code, but it is advisable to bring a complaint as soon after the conduct being reported occurred.
- C. Both the Complainant and the Respondent shall have the right to be assisted by an Advisor of their choosing. A party who elects to be assisted by an Advisor must notify the Student Conduct Administrator of the name and contact information of the Advisor not less than two (2) days before the scheduled meeting with the party. Advisors may not be an attorney. Both the Complainant and the Respondent are responsible for presenting their own information during the course of the meeting. Advisors are not permitted to speak or participate directly in any Student Conduct meeting or proceeding and can be removed from proceedings by not abiding by these parameters.
- D. Misconduct that would fall under the jurisdiction of AR 5.1.16, meaning it alleges sexual harassment, discrimination, sexual assault, dating/domestic violence, or stalking should be forwarded to the Title IX Coordinator for a jurisdictional review. In such cases where the conduct alleged does not meet the definition of sexual harassment, as outlined in the Title IX Regulations (and MCCCCD policy AR 5.1.16) or is otherwise subject to

mandatory or discretionary dismissal, the alleged conduct will be referred back to the Student Conduct Code for investigation and adjudication.

- E. After receiving information on alleged violations of the Student Conduct Code, the Student Conduct Administrator will review the information, gather facts, and make a determination on the appropriate next steps. Documentation regarding the aforementioned steps must be maintained. Next steps are:
- i. Dismiss the case due to insufficient evidence, lack of jurisdiction, or the alleged behavior, even if proven true, would not violate the code.
 - ii. Proceed with a full, thorough, and impartial investigation with formal disciplinary proceedings.
 - iii. Initiate an informal resolution outside of formal disciplinary proceedings provided involved parties mutually agree and the Student Conduct Administrator determines this option is appropriate given the nature of the allegations. An informal resolution can also be an option when the Respondent accepts responsibility for the behavior.
 - iv. If the informal resolution option is initiated, the determination with regard to responsibility and sanctions is final and cannot be appealed.

2. Informal Resolution Options

A. Informal resolution options include, but are not limited to: administrative dispositions, mediation, facilitated dialogue, and restorative justice practices.

B. Determinations regarding the type of informal resolution offered in a particular case will be made in consultation with the Student Conduct Administrators, other MCCCCD leadership, as necessary, and the students at issue. Staff outside of the Student Conduct Administrator's office may be involved in facilitating the agreed upon option.

C. Informal resolutions can result in the same sanctions and institutional responses as are reserved for matters that have been addressed through a full investigation.

D. The Student Conduct Administrator will make the determination with regard to responsibility.

E. Should new facts come forward during the informal resolution process that significantly alter the nature of the allegations, the Student Conduct Administrator has the discretion to initiate a full investigation. If one of the involved parties decides that the informal resolution option is not appropriate, they may request a full investigation. This request must be submitted to the Student Conduct Administrator before the conclusion of the informal resolution process. If this action is taken, the Student Conduct Administrator will document the end of the informal resolution process and shall initiate a formal investigation.

F. Both the Complainant and the Respondent must sign an agreement to engage in the informal resolution process.

3. Interim Actions

A. If the Student Conduct Administrator is in receipt of information indicating that the Respondent poses a threat of harm or substantial disruption, the Student Conduct Administrator may take administrative action(s) to restrict, suspend, or alter the rights of a student for a temporary period. The interim action(s) will be communicated in writing to involved parties and will remain in place until a final decision on the pending allegations has been made or until the Student Conduct Administrator believes the reason(s) for issuing the interim action(s) no longer exists. These administrative actions are not designed to be punitive, and they are not issued as sanctions.

B. A student who is restricted from campus or suspended due to interim action(s) may appeal the interim action(s) in writing to the Dean or Vice President of Student Affairs (VPSA) who is over the Student Conduct Administrator, and in the case that a VPSA is the Student Conduct Administrator, to the President of the college, no later than five (5) business days following the effective date of the interim action(s). This person will determine, within five (5) business days of receipt of the appeal, if the interim action(s) should remain in place, be modified, or lifted.

C. Examples of interim actions include, but are not limited to, no contact directives, removal from a class or classes or specific MCCCCD locations, administrative removal from campus, administrative/enrollment holds, and temporary suspension.

D. Factors considered before issuing interim actions include, but are not limited to, individual safety, community safety, and the need to maintain an academic and work environment free from disruption. If the interim action is temporary suspension or removal from campus, the Student Conduct Administrator will consult with the college's behavioral assessment team as part of the decision-making process.

4. Notice Of Allegations and Investigation

A. The notice of allegations letter sent to the Respondent will also be sent to the Complainant. The notice of allegation should specify that the investigation will be done to determine, under the preponderance of the evidence standard, if a violation of the policy has taken place. The notice of allegations should outline the particulars of the complaint, the presumption of innocence, an outline of the Respondent's due process rights, and the contact information for the Student Conduct Administrator.

B. Investigations will be conducted in a fair and impartial manner. Respondents are treated with a presumption of innocence until such time as it has been adjudicated that a violation of the Student Conduct Code has taken place.

C. If during the investigation additional allegations are presented or if allegations outlined in the original notice of allegations have been retracted, the Respondent must receive an amended notice of allegations and shall be allowed to address the new allegations.

5. Investigation Process

A. At the beginning of the investigation interview, the Student Conduct Administrator will review with the party being interviewed:

- the Student Conduct Code,
- the investigation process,
- how determinations are made,
- possible sanction(s),
- the prohibition against retaliation,
- and appeal options.

B. Students are expected to comply with requests and directives issued by the Student Conduct Administrator performing duties connected to an investigation. Should a student choose to not participate in the conduct process, the Student Conduct Administrator will proceed with the investigation and make determinations without gaining input from the non-participating student.

C. After the investigative interview, respondents will be given up to five (5) days to reflect upon and respond to the allegations(s) in writing. The written response should be delivered to the Student Conduct Administrator within that time period. Likewise, Complainants and witnesses will be given up to five (5) days to reflect upon and respond to the information presented and outlined during the investigative interview. The Student Conduct Administrator does not need to provide interview notes or additional information to the student to facilitate this process.

D. A student can have an advisor present in all conduct proceedings, but the advisor cannot speak on the student's behalf.

E. Involved parties can identify witnesses who have information relevant to the investigation. These witnesses will be contacted by the Student Conduct Administrator who will assess the relevance of the witnesses and conduct interviews as appropriate.

F. Complainants and Respondents will be notified in writing when an investigation has concluded and the investigative report has been completed, which will encompass all information except for a final determination.

6. Determinations

A. The Student Conduct Administrator will determine whether it is more likely than not that a student and/or student organization violated the Student Conduct Code.

B. The Student Conduct Administrator will consider any mitigating or aggravating factors and determine the appropriate sanctions.

C. Within five (5) business days of the determination, the Student Conduct Administrator will provide the parties a written decision. The written decision will indicate whether or not the charge(s) was substantiated and, if the charge(s) was/were substantiated, will outline the remedial action(s) taken including sanctions if applicable, to be issued by the college. The determination letter will summarize the investigation and outline the determination made regarding the allegations outlined in the complaint, as well as state any issued sanction(s) based on a finding of responsibility.

D. Respondent will be informed of the right to appeal the determination and will be given instructions on how to do so in the decision letter.

7. Appeals

A. The Respondent must submit a written appeal request to the supervising Dean Of Students or Vice President of Student Affairs (VPSA), or in the case that the Student Conduct Administrator is the VPSA, the President, no later than five (5) days from the date of the written determination.

B. If no appeal is filed within the five (5) day window, the determination regarding responsibility for a violation under this policy and sanctions is final.

C. Pending the filing of a timely appeal request, the decision by the Dean of Students or VPSA will delay the effective date of the disciplinary sanction.

D. The grounds for an appeal are restricted to the following:

I. Procedural irregularity that affected the outcome of the matter, and

II. New evidence that was not reasonably available at the time determinations regarding responsibility was made, or that could affect the outcome of the matter.

E. The Dean of Students or VPSA will notify the involved parties of a decision regarding the appeal within five (5) days of receiving the appeal request. Both parties to the original investigation will be notified of the appeal decision.

I. If the appeal is denied, the decision by the Student Conduct Administrator shall be considered final and binding upon all concerned.

II. If the appeal is granted, the rationale for the decision will be outlined in the decision letter as will the next steps in the process.

A. The appellate body has discretion upon granting an appeal to refer the matter back to the Student Conduct Administrator for re-consideration, or alter the sanction(s) only (including issuing more severe sanctions).

8. Matters Related to Infringement of the Right to Free Expression

A. As outlined in Arizona Revised Statute 15-1866, any student who engages in individual conduct that materially and substantially infringes on the rights of other persons to engage in or listen to expressive activity is subject to discipline under this conduct code.

B. In all disciplinary proceedings involving students, including proceedings involving expressive conduct, a student is entitled to a disciplinary hearing under published procedures that include, at a minimum, all of the following:

- i. The right to receive advanced written notice of the allegations.
- ii. The right to review the evidence in support of the allegations.
- iii. The right to confront witnesses who testify against that student.
- iv. The right to present a defense.
- v. The right to call witnesses.
- vi. A decision by an impartial person or panel.
- vii. The right to appeal.
- viii. If either a suspension of more than thirty (30) days or expulsion is a potential consequence of a disciplinary proceeding under this section, the right to active assistance of counsel.

9. Sanctions

A. The following sanctions may be imposed upon any student found to have violated the Student Conduct Code:

- i. **Warning** - a written notice to the student that the student is violating or has violated institutional rules or regulations.
- ii. **Disciplinary Probation** - a written reprimand for violation of specified rules or regulations. Probation is for a designated period of time and includes the probability of more severe disciplinary sanctions if the student is found to violate any institutional rules or regulation(s) during the probationary period.
- iii. **Loss of Privileges** - denial of specified privileges for a designated period of time which can include, but is not limited to, eligibility for some leadership roles, scholarships, membership in college-affiliated organizations, programs, and activities, and restricted access to college premises.
- iv. **Restitution** - compensation for loss, damage or injury. This may take the form of appropriate service and/or monetary or material replacement.
- v. **Discretionary Sanctions** - work assignments, essays, service to the college or community, apology letters, educational programs, or other related discretionary assignments. (Such assignments must have the prior approval of the Student Conduct Administrator And will have specific due dates).

- VI. **Behavioral Requirement** - engagement with services or programs designed to address behaviors of concern through education and skill-building.
- VII. **College Suspension** - separation of the student from all the colleges in MCCCCD for a definite period of time, after which the student is eligible to return. Conditions for readmission may be specified. Suspension from **ONE** college means a suspension from **ALL** colleges in MCCCCD.
- viii. **College Expulsion** - permanent separation of the student from all the colleges in MCCCCD. expulsion from one college means expulsion from all MCCCCD colleges.
- IX. **Degree/Certificate Revocation** - permanent revocation of a student's degree and/or certificate.
- X. **Other Sanctions** - additional or alternative sanctions may be created and designed as deemed appropriate to the offense with the approval of the Student Conduct Administrator.

B. More than one of the sanctions listed above may be imposed for any single violation.

C. Disciplinary sanctions are part of a student's educational record.

10. Miscellaneous

A. Administrative Hold

The Student Conduct Administrator may place a temporary administrative hold preventing a student's registration, transcript release, or graduation if it is necessary to secure the student's cooperation in the investigation or compliance with an administrative direction. This hold is not a sanction but a necessary step to resolve the complaint promptly.

B. Academic Consequences

Violations of the student conduct code can have academic consequences if the violation also constitutes failure to meet standards of performance or professionalism set by the instructor or the program, or if it constitutes cheating, plagiarism, falsification of data, or other forms of academic dishonesty. In such cases, the instructor may award a failing grade for the assignment or the course in such cases, and the program faculty may decide that the student is ineligible to continue in the program. Academic consequences are determined by the faculty and academic administration, and are not dependent on the decisions of the college officials charged with the administration of the Student Conduct Code.

Article V: Interpretation and Revision

Any question of interpretation regarding the Student Conduct Code shall be referred to the college official responsible for administration of the Student Conduct Code for final determination.

AMENDED through the Administrative Regulation Approval Process, May 12, 2025

AMENDED through the Administrative Regulation Approval Process, May 24, 2022

AMENDED by Direct Approval from the Chancellor, August 11, 2020

2.5.3 Student Records

1. Definitions

For the purposes of this policy, the Maricopa County Community College District has used the following definition of terms.

- A. "College" includes all colleges, educational centers, skill centers and District office.

- B. "Educational Records" are any record (in handwriting, print, tapes, film, or other media) maintained by the college or an agent of the college which is directly related to a student, except:
- A personal record kept by a staff member, if it is kept in the personal possession of the individual who made the record, and information contained in the record has never been revealed or made available to any other person except the maker's temporary substitute
 - An employment record of an individual whose employment is not contingent on the fact that he or she is a student, provided the record is used only in relation to the individual's employment
 - Records maintained by the colleges security unit, if the record is maintained solely for law enforcement purposes, is revealed only to law enforcement agencies of the same jurisdiction and the security unit does not have access to education records maintained by the community college.
 - Records made or maintained by a physician, psychiatrist, psychologist, or other recognized professional or paraprofessional, if the records are used *only* for treatment of a student or made available only to those persons providing treatment.
 - Alumni records which contain information about a student after he or she is no longer an attendant of the community college and the records do not relate to the person as a student

2. Records Request

Official verification of educational records is issued by the Admissions and Records Office/Office of Student Enrollment Services.

3. Fees

If a copy(ies) of a portion or all of the records in a student's file is requested, the custodian of the records may charge a fee for copies made. However, the willingness or ability to pay the fee will not effectively prevent students from exercising their right to inspect and review (under supervision of a college employee) their records. A fee will not be charged to search for or to retrieve records. Standard fees for printing and duplication services will apply.

4. Annual Notification ([SEE ALSO FERPA EXPLANATION](#))

Students will be notified of their rights annually by electronic mail in a FERPA Annual Notification. Students rights may also be provided via the following means: FERPA Annual Notification placement on the college website, publication in the college catalog and/or handbook, etc. available electronically on the college's or MCCC'D'S website.

Individuals requesting admission or enrollment at any of the Maricopa County Community Colleges are asked to provide certain contact information that is collected and used for the purpose of responding to the request. The information collected may include your name, address, telephone number or email address. Maricopa county community colleges and/or its agents, including attorneys and/or collection agencies, may use this information to contact you through various means, including phone calls, text messages, e-mail and postal mail. Communication may include, but is not limited to, information regarding account balances, programs and services that MCCC'D offers.

5. Rights of Access to Educational Records

The Family Educational Rights and Privacy Act (FERPA) affords eligible students certain rights with respect to their education records. (FERPA defines an "eligible student" as a student who has reached 18 years of age or is attending a postsecondary institution at any age). These rights include:

A. The right to inspect and review the student's education records within 45 days after the day the college receives a request for access.

- Students should submit to the Admissions & Records Office/Enrollment Services written requests that identify the record(s) they wish to inspect at each college they attend. The form to do so may be found [HERE](#). The college official will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the college official to whom the request was submitted, that official shall advise the student of the correct official to whom the request should be addressed.
- There may be occasions when a record may not be copied, especially if doing so may compromise another student or faculty member's privacy. The college or district may deny access to the following records:
 - Parents' financial statements;
 - Letters of recommendation, if the student has waived his or her right of access;
 - Records filed before January 1, 1975; or

- d. Records not included in the FERPA definition of educational records.
- 3. The Maricopa County Community College District and its associated colleges reserve the right to deny copies of records, including transcripts, in any of the following situations:
 - a. There is an unresolved disciplinary action against the student; or
 - b. The educational record requested is an exam or set of standardized test questions.

B. *The right to request the amendment of the student's education records that the student believes is inaccurate, or misleading.*

- 1. Students may ask the college to amend a record that they believe is inaccurate or misleading. They should write the college official responsible for the record, clearly identify the part of the record they want changed, and specify why it is inaccurate or misleading.
- 2. A proper request to correct a student education record must:
 - a. Be written to the College Registrar;
 - b. Clearly identify the part of the record they want to be changed; and
 - c. Specify why the record is inaccurate or misleading.
- 3. Any written request which does not include the required information will not be considered. The requestor will be notified in writing that their request was not properly submitted and they will receive directions on how to resubmit it.
- 4. If the college decides not to amend the record as requested by the student, the college will notify the student of the decision and advise the student of his or her right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing. The FERPA Appeal Process is also outlined in the the college catalog and/or handbook, etc. available electronically on the college's or MCCCCD'S website and in Appendix S-17 of the MCCCCD Administrative Regulations.

C. *The right to provide written consent to disclosures of personally identifiable information contained in the student's education records, except to the extent that FERPA authorizes disclosure without consent.*

- 1. With the exception of directory information and the various FERPA authorized disclosures without consent, the Maricopa County Community College District or its associated colleges must receive written consent from students before disclosing any personally identifiable information from educational records. The FERPA Release of Information Consent may be found [here](#).

CONDITIONS OF DISCLOSURE WITHOUT CONSENT

FERPA permits the disclosure of personally identifiable information (PII) from students' education records, without consent of the student, if the disclosure meets certain conditions found in §99.31 of the FERPA regulations. Except for disclosures to school officials, disclosures related to some judicial orders or lawfully issued subpoenas, disclosures of directory information, and disclosures to the student, §99.32 of FERPA Regulations requires the institution to record the disclosure. Eligible students have a right to inspect and review the record of disclosures. A postsecondary institution may disclose PII from the education records without obtaining prior written consent of the student:

- 1. To other school officials, including instructions, administrators, supervisors, Governing Board members, academic or support staff, law enforcement and health staff, within the MCCCCD whom the college or District has determined to have legitimate educational interests. A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibilities. This includes contractors, attorneys, auditors, collection agents, consultants, volunteers, or other parties to whom the college has outsourced institutional services or functions, provided that the conditions listed in §99.31(A)(1)(B)(1) – (A)(1)(B)(2) are met. (§99.31(A) (1))
- 2. To officials of another school where the student seeks to or intends to enroll, or where the student is already enrolled if the disclosure is for purposes related to the student's enrollment or transfer, subject to the requirements of §99.34. (§99.31(A) (2))

3. To authorized representatives of the US Comptroller General, the US Attorney General, and the US Secretary of Education, or State and Local Educational Authorities, such as a state postsecondary authority that is responsible for supervising the college's state supported education programs. Disclosures under this provision may be made, subject to the requirements of §99.35, in connection with an audit or evaluation of federal-or state-supported education programs, or for the enforcement of or compliance with federal legal requirements that relate to those programs. These entities may make further disclosures of PII to outside entities that are designated by them as their authorized representatives to conduct any audit, evaluation, or enforcement, or compliance activity on their behalf (§§99.31(A) (3) AND 99.35)
4. In connection with financial aid for which the student has applied or which the student has received, if the information is necessary to determine eligibility for the aid, determine the amount of the aid, determine the conditions of the aid, or enforce the terms and conditions of the aid. (§99.31(A) (4))
5. To organizations conducting studies for, or on behalf of, the college, in order to: (A) Develop, Validate, or Administer Predictive Tests; (B) Administer student aid programs; or (C) Improve instruction (§99.31(A) (6))
6. To accrediting organizations to carry out their accrediting functions. (§99.31(A) (7))
7. To parents of an eligible student if the student is a dependent for IRS tax purposes. (§99.31(A) (8))
8. To comply with a judicial order or lawfully issued subpoena. (§99.31(A) (9))
9. To appropriate officials in connection with a health or safety emergency, subject to §99.36. (§99.31(A) (10))
10. Information the college has designated as "Directory Information" under §99.37. (§99.31(A) (11))
11. To a victim of an alleged perpetrator of a crime of violence or a non-forcible sex offense, subject to the requirements of §99.39. The disclosure may only include the final results of the disciplinary proceeding with respect to that alleged crime or offense, regardless of the finding. (§99.31(A) (13))
12. To the general public, the final results of a disciplinary proceeding, subject to the requirements of §99.39, if the school determines the student is an alleged perpetrator of a crime of violence or non-forcible sex offense and the student has committed a violation of the college's rules or policies with respect to the allegation made against him or her. (§99.31(A) (14))
13. To parents of a student regarding the student's violation of any federal, state, or local law, or of any rule or policy of the school, governing the use or possession of alcohol or a controlled substance if the school determines the student committed a disciplinary violation and the student is under the age of 21. (§99.31(A) (15))

Students who believe that MCCCCD or an agent of the college has disclosed information contrary to the provisions outlined in this section may submit a grievance via the non-instructional complaint resolution process. The process is posted at: [S-8 Non-Instructional Complaint Resolution](#)

D. *The right to file a complaint with the US Department to Education concerning alleged failures by the college to comply with the requirements of FERPA.*

The name and address of the Office that administers FERPA is:

Family Policy Compliance Office
US Department of Education
400 Maryland Avenue SW
Washington, DC 20202-5920

- E. *2012 FERPA AMENDMENT:*** As of January 3, 2012, the U.S. Department of Education's FERPA Regulations expand the circumstances under which your education records and Personally Identifiable Information (PII) contained in such records—including social security number, grades, or other private information—may be accessed without student consent. For more information on this amendment, please see: [FERPA
HTTPS://DISTRICT.MARICOPA.EDU/CONSUMER-INFORMATION/FAMILY-EDUCATIONAL-RIGHTS-PRIVACY-ACT-FERPA](https://district.maricopa.edu/consumer-information/family-educational-rights-privacy-act-ferpa)

F. *Student Directory Information*

1. A Maricopa County Community College may release directory information about any student who has not specifically requested the withholding of such information. Students who do not want directory information released may so indicate during the admissions process or notify the Admission & Records Office/Enrollment Services.

A. Students should consider very carefully the consequences of a decision to withhold directory information. A privacy block will call for the college or District to not release this directory information. Therefore, any future requests for such information from non-institutional persons or organizations will be refused.

2. Students may request their college to withhold the sharing of directory information by filing out a Request To Withhold Directory Information form and submitting that form to the college Admission & Records Office/Enrollment Services.

3. Directory information is considered public information. At any Maricopa County Community College, directory information is defined as a student's:

- A. Name
- B. Address
- C. Phone Number
- D. MCCCCD Email Address
- E. Photograph/Electronic Image
- F. Place of Birth
- G. Major Field of Study
- H. Current Enrollment Status
- I. Participation in Officially Recognized Activities
- J. Dates of Attendance
- K. Degrees Awarded
- L. Awards and Academic Honors Received/Dean's List Selection
- M. Previous Institutions Attended
- N. Program and promotional materials on participants in various sports and similar public activities, including weight and height of athletic team members.

G. Disclosure to Parents

In accordance with federal law, college officials may disclose educational records to parents of a student who have established the student's status as a dependent according to the Internal Revenue Code of 1986, section 152, without the written consent of the student.

RELEASE OF DIRECTORY (PUBLIC) INFORMATION

At its discretion, the college or District may provide *Directory Information* in accordance with the provisions of FERPA. Types of information considered As *Directory Information* are listed below. additional information may be found at: DISTRICT.MARICOPA.EDU under Consumer Information.

BLOCKING THE RELEASE OF DIRECTORY (PUBLIC) INFORMATION

By default, a college or District may release a student's directory information. Students may prohibit (or block) the public disclosure of directory information by completing a [PRIVACY BLOCK](#) form.

Students should consider *very carefully* the consequences of a decision to withhold directory information. A privacy block will call for the college or District to not release this *directory information*. Therefore, any future requests for such information from non-institutional persons or organizations will be refused.

Although the college or District will honor a student's request to withhold directory information, it cannot *assume responsibility* to contact the student for subsequent permission to release this information. Regardless of the effect upon the student, the college or District assumes no liability as a result of honoring a student's instructions to withhold such information.

ADDITIONAL INFORMATION:

- If a student blocks directory information, it still may be inspected by those MCCCCD officials authorized by law to inspect education records without consent.
- If a student chooses to block directory information, it cannot be released to friends, family, prospective employers, the news media, advisors, student activities, and honors societies.
- Some reasons for considering a privacy block on directory information include harassment or the advice of a legal or medical professional.
- If a student wishes to keep public data private but release information so it can be published in commencement programs and honors lists, contact the office of Admissions & Records/Enrollment Services at the appropriate college(s).

If a student wishes to remove the privacy block, he or she must rescind the previous block. The college and District cannot assume responsibility to contact students for subsequent permission to release this information. It is the sole responsibility of the student to initiate the release of blocked information.

USING SOCIAL SECURITY NUMBERS

Due to identity theft concerns and privacy issues, students will no longer be asked to provide a social security number as a personal identifier. Instead, students will be assigned a student id number upon enrollment that can be used to access education records, as needed.

AMENDED through the Administrative Regulations Approval Process, May 12, 2025

AMENDED through Direct Approval by the Chancellor, June 17, 2024

TECHNICAL CORRECTION made to remove duplicative and contradictory language (DOB), October 26, 2021

AMENDED through the Administrative Regulations Approval Process, June 4, 2019

[Appendix S-17: FERPA Appeal Process](#)

FERPA APPEAL PROCESS

In instances where the college decides not to amend an education record as requested by the student, the college will notify the student of the decision and advise him/her of the right to an appeal hearing according to the following process:

- The student must have first presented the issue in writing to the college's Admissions/Enrollment Office or designee identifying the records that he/she wishes to have amended and provided any supporting documentation. Note: With the exception of clerical errors, requests that are expressly related to grade disputes are not subject to this process and must be vetted through the Instructional Grievance Process.
- If the request to change the record was deemed unsubstantiated by the college designee and the institution was able to demonstrate that the record was accurate, the student will be informed of the right to a formal appeal hearing.
- Students must request a formal hearing within 10 business days from the date they are informed of the right to an appeal hearing.
- The request for a formal hearing must be in writing and delivered to the [Dean of Admissions/Enrollment Services, Vice President of Student Affairs] or designee.

- The college official who receives the formal hearing request will either review the case personally or designate a hearing committee if the issue involves a matter not clearly established by current policy or administrative regulation.
- A written decision will be delivered to all parties summarizing the evidence and stating the reason(s) for the decision. If the decision is in favor of the student, the education record will be amended. If the decision is for the record to remain the same, the student may place a statement commenting on or disagreeing with the decision in the education record.

STUDENT HANDBOOK

2.5.4 Student Employment

1. District Student Employees

A. Introduction

Students may be employed by the college as student help. District regulations require that students be hired in essential jobs and that they be properly trained and supervised.

B. Philosophy and Workload for Student Employees

- It shall be the philosophy of Maricopa Community College District that a student may work to augment college and living expenses, however, the scholastic endeavor should be foremost. Sufficient time should be allotted for classroom attendance, homework, out-of-class study and participation in activities.
- A workload of twenty (20) hours per week should be established as the maximum number of hours a student employee may work on campus. All student employees shall be enrolled in a minimum of three (3) semester credit hours. Any combination of day and evening hours would meet this requirement. Any student employee having special reasons to work over 20 hours per week or having dropped below three (3) credit hours should request his/her immediate supervisor to obtain approval from the College president or his/her designee.
- During the summer sessions, students may be eligible for employment if they were enrolled for a minimum of three (3) semester credit hours at the end of the spring semester, or if they have been accepted for admission for the fall semester. Exceptions to the three (3) semester credit hours may be made by the president or his/her designee. Summer shall be designated as the time from the official end of the spring semester to the beginning of classes for the fall semester.

C. Student Employee Benefits

As student employees, there are no entitlements to employee benefits; i.e., vacation, retirement, sick leave, health and life, or disability insurance. Students will, however, be covered under Worker's Compensation Insurance.

D. Student Employment Records

Student employee records will be maintained at the Financial Aid office, the office of the fiscal agent or the Career/Placement Office and will be reviewed periodically by the Vice President of Students Affairs.

E. Student Compensation

The hourly rate of pay for student employees shall coincide with the policies of the District Salary Schedule.

F. Employee Contracts and Forms (See [Appendix FM-3](#))

Student Employee Grievance Procedure

G. Part-time student employees working for one of the Maricopa Community Colleges may wish to file a grievance relating to certain working conditions or violation of student employment regulation. Please refer to the Non-Instructional Complaint Resolution Process ([AR 2.3.12](#))

2. Student Security Guards

A. Introduction and Philosophy

Students may be employed by the college as student help. If student guards do not come from the ranks of Administration of Justice classes, they must undergo appropriate training to qualify them as student guards. This training program is outlined in the regulation.

B. Workload of Student Security Guards

- i. Student security guards shall be enrolled for a minimum of three (3) semester hours.
 - ii. Student security guards shall be limited to 20 hours per week when the workweek starts at 7:00 a.m. on Monday and concludes at 11:00 p.m. on Friday. Additional hours may be worked if guards are assigned special duty at games or activities held on campus during the weekend, or if guards are assigned a shift on Saturday and Sunday, between 7:00 a.m. and 11:00 p.m.
- C. Students not in Administration of Justice Program
- i. Use of student other than those in Administration of Justice Program:
 - 1. Selection of the student must be personally approved by the vice president of students affairs and chief of security.
 - 2. Selection of a student should not extend beyond one semester without the approval of the vice president of students affairs.
 - 3. Selected student must undergo a special training program directed by the chief of security and approved by the vice president of student affairs.
 - ii. Recommended program for students other than those in Administration of Justice programs: Students employed by campus security who are not majors in the Administration of Justice program should be given at least twenty (20) hours of training with pay before being allowed to function independently as a campus security guard. This training should include, but not be limited to instruction in:
 - 1. Wearing of the uniform, general appearance, and demeanor
 - 2. The use of the various security report forms and how to properly complete them to provide requested information; General report writing methods
 - 3. Public relations methods used on the campus
 - 4. Crime prevention methods used on the campus; Patrol methods used in buildings and grounds.
 - 5. Basic techniques for interviewing students, faculty and visitors relative to the incidents
 - 6. Laws and regulations governing the actions of campus security personnel concerning rendering of assistance to students, faculty and visitors on the campus
 - 7. Basic first aid
- D. Student Security Guards Employee Benefits
- As student employees there are not entitlements to employee benefits; i.e., vacation retirement, sick leave, health and life, or disability insurance. Students will, however, be covered under Worker's Compensation Insurance.
- E. Student Employment Records
- The student security guard's employment records will be maintained at the office of the chief of security and reviewed periodically by the Vice President of Student Affairs.

2.5.5 Student Governance

Student governing bodies derive their authority from the Maricopa County Community College District Governing Board that exists in accordance with Arizona Revised Statutes. The administration of the District is vested in the Chancellor who delegates responsibility for each college to the College President who serves in a management and policy implementation capacity having the ultimate responsibility for all activities of the college. The President shall designate the administrator(s) (i.e., directors of student leadership) at each college who will be charged with the responsibility for working with the college student governing body(ies) in the development of college student activities and programs.

A representative form of student governance may exist at each college/center as well as district wide to provide an effective means of communication among students, faculty, staff and administration and to provide student input in college and District matters. Eligibility requirements are to be met and spelled out in detail in each student governance constitution. These constitutions shall establish the minimum requirements for the elective/appointive officers. All student government constitutions shall be submitted to the Governing Board General Counsel to ensure compliance with federal and state laws, the Maricopa Community Colleges Governing Board Policies and the Chancellor's Administrative Regulations. Since Rio Salado Community College is a countywide non-campus college, the president shall ensure that opportunities exist for student involvement.

College student constitutions should be reviewed annually by student governance. The appropriate vice president or designee of each college shall be responsible for submitting any changes to the president of the college for transmittal to the Governing Board General Counsel.

1. Officers/Members

All reference in this document to positions will designate whether the position is an officer position or a member position.

Each student governance constitution shall define which of its elected positions (maximum of 5) within its structure shall be designated as officers. The persons filling those positions shall be referred to, in this document, as officers. Persons filling all other positions, elected or appointed, shall be referred to as members (excluding non-voting committee members).

All positions filled by election shall be considered as elected positions, even though the person filling the position may have been appointed to fill an unexpired term of another individual.

2. Designation

Colleges with two (2) student governments shall designate the governments as "day" or "evening." Colleges with one (1) government shall be considered day students, for the purposes of this document.

3. Eligibility for Office

All student governance constitutions shall prescribe that all persons elected or appointed as officers shall be enrolled in and maintain a minimum of six (6) credit hours for day student governments, three (3) credit hours for evening student governments. Officers shall have and maintain a minimum cumulative grade point average of 2.50 and be in good standing (not on probation) according to the written district policy. Convicted felons shall be ineligible for office (ARS § 13-904). The constitution may, however, set more rigid requirements, if so desired by college student governance.

4. Tenure of Position

Tenure in any student governance position shall be determined by the respective student governance constitutions. In no case shall any student be allowed to serve in any combination of officer/member positions beyond a total of ten (10) semesters. Tenure in any combination of officer positions shall be limited to four (4) semesters.

5. Removal from Office

Provisions shall be made in all student governance constitutions for removal for cause of individuals from elected or appointed student governance positions.

6. Remuneration Limitations

- A. Student body officers may receive financial support and/or a letter grade in a leadership class during their terms of office as authorized in their respective student governance constitutions. Student body officers (maximum 5) may receive up to twenty (20) hours per week in financial support and/or up to six (6) credit hours in leadership classes per semester. Remuneration shall be for services rendered and not for merely holding the office.
- B. For qualifying students, Federal Work Study (FWS) funds may be used in accordance with Federal guidelines.
- C. The allowance for awarding honorariums or scholarships for executive student officers is a maximum of \$200.00.
- D. Compensation may be received for both honorariums/scholarships and college employment in the same semester.

7. Amending Student Constitutions

College student constitutions should be reviewed annually by student governance. The appropriate vice president or designee of each college shall be responsible for submitting any constitutional changes to the President of the college for transmittal to the Governing Board General Counsel.

8. Student Governance Advisors

College organization advisors will be provided for in each student governance constitutions. Such advisors shall be full-time or part-time employees of the Maricopa Community Colleges.

Recommendations for appointment of an advisor may be submitted to the appropriate vice president or college president. Recommendations for dismissal of an advisor with just cause may be submitted to the appropriate vice president or college president.

9. Legal/Fiscal/Financial Matters

Authority and responsibility beyond the scope specifically covered in student policies, or interpretation of such matters within laws, board policies, etc. shall rest with the offices of General Counsel and Chancellor, respectively.

10. Final Authority

In the event of a complete breakdown of the governance body, the college president will serve as the final authority.

Student Clubs and Organizations

In addition to student governing bodies, student clubs and organizations may be formed that fall under the operational direction of the Office of Student Life and Leadership and the administrative direction of the Vice President of Student Affairs at each college. Student clubs and organizations are generally interest-based in nature (such as for a particular program, discipline, or college activity) and are considered to be an important part of the total college experience. Each college shall outline the requirements necessary to establish the formation of an interest-based student club and organization (i.e., mission/purpose, size, structure, advisors). Club advisors shall be employees of the Maricopa County Community College District.

In most instances, student clubs and organizations shall be open to all students who are enrolled in credit courses at a Maricopa Community College. Pursuant to ARS §15-1863, religious or political student organizations may determine that the organization's internal affairs, selecting the organization's leaders and members, defining the organization's doctrines, and resolving the organization's disputes are part of the organization's religious or political mission and that only persons committed to that mission should conduct such activities. For religious and political organizations, state statute recognizes the role that viewpoint serves in the mission and purpose of the organization's operations. Thus, such groups may elect to select members based upon organizational doctrine. The MCCCDC may not deny recognition or any privilege or benefit to a religious or political student organization or group that exercises its rights pursuant to the statute.

Whereas ARS §15-1863 allows religious and political organizations to determine their internal affairs and the selection of their leaders and members, the MCCCDC non-discrimination policy is applicable to all other aspects of these student clubs and organizations.

*****INSERT INTO PROGRAM SECTION OF THE CATALOG AS ALLIED HEALTH*****

Appendix S-13: The Maricopa Community Colleges Allied Health or Nursing Program

Allied Health or Nursing Assumption of Risk/Release of Liability

Most of the allied health or nursing program pathways include a program of study in a clinical training environment that may contain exposures to risks inherent in patient-oriented educational experiences (such as but not limited to bodily injury or communicable and infectious diseases). Students enrolling in clinical educational courses will be asked to sign a statement assuming all risks inherent in their coursework.

Use of Confidential Information

Students enrolled in allied health or nursing program pathways will have learning experiences in a health care setting where they will have access to confidential information. Prior to beginning any clinical studies, the students will be asked to sign an agreement to adhere to the requirements of those clinical sites and applicable law, including the Health Insurance Portability and Accountability Act of 1996 (HIPAA).

MCCCDC Required Background Checks

Students enrolled in an MCCCDC allied health or nursing program are required to complete and pass clinical learning experiences, working with children, elderly persons, and other vulnerable populations. MCCCDC's major clinical agency partners now mandate that any college students assigned to them for clinical experiences submit to a comprehensive background clearance prior to entering such learning experiences. Because the clinical experience portion of the programs is critical to completing a program of study, MCCCDC has instituted two specific background check requirements in order for a student to enroll in a program. First, the student must obtain, at his or her own cost, a Level I Fingerprint Clearance Card from the Arizona Department of Public Safety. Precluding offenses for a Level I card can be found in

(<https://www.azleg.gov/viewdocument/?docName=https://www.azleg.gov/ars/41/01758-07.htm>). Additionally, students must also obtain a “pass” status on a MCCCCD supplemental background check from MCCCCD’s authorized background check contractor. The student must also pay for this background check. The supplemental check will be based on the most stringent standards of MCCCCD’s clinical experience partners.

The sole program for which the background check requirements are different is the Emergency Medical Technician program. For that program, students must have obtained a Level 1 Fingerprint Clearance Card from the Arizona Department of Public Safety. They are also required, at the time of their clinical assignments, to submit to, pay for and pass any additional background check requirements of the clinical agencies to which their EMT program places students.

Certain licensing boards may require a separate background check or clearance card upon application for licensure or certification.

The MCCCCD supplemental background check review may include searches of the following databases and information but MCCCCD reserves the right to change the search criteria and the program background check requirements at any time without notice:

1. *National Federal Health Care and Abuse Databases*
2. *Social Security Verification*
3. *Residency History*
4. *Arizona Statewide Criminal Records*
5. *Nationwide Criminal Databases*
6. *Nationwide Sexual Offender Registry*
7. *Homeland Security Search*

Examples of background information that will result in a “fail” status on the supplemental background check include:

1. *Social Security number does not belong to the applicant*
2. *Any inclusion on any registered sex offender database*
3. *Any inclusion on any of the Federal exclusion lists or Homeland Security watch lists*
4. *Any conviction of a felony no matter what age of the convictions*
5. *Any warrant any state*
6. *Any misdemeanor conviction for the following no matter how long ago:*
 - A. *Violent crimes*
 - B. *Sex crime of any kind including non consensual sexual crimes and sexual assault*
 - C. *Murder, attempted murder*
 - D. *Abduction*
 - E. *Assault*
 - F. *Robbery*
 - G. *Arson*
 - H. *Extortion*
 - I. *Burglary*
 - J. *Pandering*
 - K. *Any crime against minors, children, vulnerable adults including abuse, neglect, exploitation*
 - L. *Any abuse or neglect*
 - M. *Any fraud*
 - N. *Illegal drugs*
 - O. *Aggravated DUI*
7. *Any misdemeanor controlled substance conviction in last 7 years*
8. *Any other misdemeanor conviction within last 3 years*

EXCEPTIONS: Any misdemeanor traffic (DUI is not considered traffic).

The information that MCCCCD uses for the “pass/fail” background check is subject to change at any time without notice.

MCCCD recommends that students carry proof of the background clearance at all times during any clinical agency learning experience.

Duty to Report Changes; Removal

Students have an obligation to immediately report to the director of their program any change in the information that they supplied on forms submitted to initiate background checks relating to the allied health or nursing program. That includes information provided to the Arizona Department of Public Safety and MCCCD's supplemental background check vendor, as well as that related to the background check required by a clinical agency. Failure to do so will result in removal from the program. Additionally, any change in background check status that would affect the student's clearance under either MCCCD's or a clinical agency's standards will result in removal from a program.

Additional Clinical Agency Background Check

Some clinical agencies require that students assigned to their sites submit to a criminal background check covering other offenses, as well as to a drug screening. Students are required to pay for the additional agency clinical background check. A clinical agency that requires this additional background check may refuse to place a student due to information the clinical agency obtains in its background check even though that student possess a valid Level I Fingerprint Clearance Card and has obtained a "pass" status on the MCCCD supplemental background check.

Some conditions that have resulted in students being denied placement at clinical agencies include pending criminal charges, outstanding warrants, unfinished terms of a sentence (such as unpaid fines), pattern of repeated types of arrests/convictions, and failure to disclose all past arrests/convictions when asked to do so on any background check application.

Inability to Place

MCCCD has no obligation to make repeated attempts to place a student when the reason for MCCCD's inability to place the student is due to background check issues. Since clinical agency assignments are mandatory requirements for completion of a program, a student's inability to complete required clinical experience due to his or her background check issues will result in removal from the program.

Changes to Admission or Background Check Requirements

MCCCD may change its program admission requirements or background check requirements without notice at any time.

No Guarantee of Receipt of Licensure/Certificate

Many of the nursing and allied health programs prepare graduates for application for State or National certificates or licenses. In some professions, such licensure and certification is required prior to employment or practice in the profession. Graduation from a nursing and allied health program does not guarantee the receipt of a license or certificate to practice in the field of study.

AMENDED by Direct Approval from the Chancellor, June 1, 2017

*****END OF ALLIED HEALTH SECTION*****

4.18 Consensual Relationships

1. General

The existing Governing Board Policy on Hiring of Relatives prohibits employees from being involved in any employment or key decision that involves a relative. This would include work performance, job assignments, or pay related matters. In that such relationships can create a conflict with the interests of the Maricopa Community Colleges, and the increased potential for nepotism and favoritism, the same principles also apply in the case of consensual amorous, romantic and/or sexual relationships that occur between employees or between employees and students.

In the work and academic environment, such a relationship that might be appropriate in other circumstances is inappropriate if one of the individuals in the relationship has a professional responsibility toward, or is in a position

of authority with respect to, the other, such as in the context of supervision, instruction, coaching, counseling or advisement. An element of power is present in such a context and it is incumbent upon those with authority not to abuse that power. In addition, consensual relationships may yield to third parties the appearance that unfair bias or favoritism towards the student or supervisee is taking place.

A. Definitions

- i. Consensual relationships are defined as romantic, amorous and/or sexual relationships between consenting employees or between employees and adult (18 years or older) college students currently enrolled at one of the community colleges.
- ii. An employee is any individual who is employed by the Maricopa County Community College District (MCCCD). An employee includes an individual who is subject to an established employee job group policy manual, whether regular, full-time board approved, at-will, part-time, and/or temporary. An employee also includes a contract worker (special services employment, request for personnel services) working or serving as an agent or designee on behalf of the MCCCD.
- iii. A student is considered to be any person currently enrolled in a credit or non-credit class at one of the colleges or centers within the Maricopa County Community College District.
- iv. A vendor is someone who sells or can sell products or services to the Maricopa County Community College District.
- v. A recent consensual relationship is considered to be one that has taken place within the past 24 months.

B. Prohibited Conduct

- i. An employee shall not maintain, engage in or be involved in a consensual relationship with another employee who is subject to that individual's supervision or with a student that is currently enrolled in the individual's class, or a student whom the individual otherwise instructs, coaches, counsels or advises, or with a vendor if the employee manages that contract or otherwise exerts influence over the contract.
- ii. The Governing Board recognizes that the personal life of its employees is not a concern of the institution, and therefore, this regulation does not seek to prohibit romantic relationships that exist between parties where the context of power-authority between employees or between employees and students is not present; and provided that the relationship does not affect the employee's effectiveness in fulfilling his or her professional obligation. For these instances, appropriate measures should still be taken in order to avoid conflicts of interest from occurring. For relationships that may exist prior to the time that either a student or employee is placed in a situation of instruction or supervision that is considered to be a conflict of interest, the employee(s) involved shall disclose and take immediate measures to avoid the conflict or appearance of conflict.

2. Procedures for Disclosure

Employees should first avoid allowing an inappropriate consensual, amorous or sexual relationship to develop with a supervisee or student.

A. Where the employee is already in or has had a recent consensual relationship with a supervisee, the following procedures shall be followed:

- i. Immediate disclosure by the employee of the relationship to their supervisor and to the appropriate Vice President or Vice Chancellor in order to ensure that any conflicts of interest have been adequately addressed.
- ii. The respective administrator responsible for the department or division shall place the subordinate under alternate supervision when a supervisor under his/her direction has or has had a recent consensual relationship with the employee.
- iii. The supervisor shall recuse himself or herself from any discussions or involvement with decisions related to evaluations, promotion, hiring, determination of salary, or continuation of contract or employment.
- iv. The respective Vice President or Vice Chancellor shall prepare and retain a report that specifies the appropriate alternate arrangements that have been made to eliminate the conflict of interest. The EEO/AA Office shall be provided a copy of the report along with the employees involved in the relationship.

B. Where the employee is already in or has had a recent consensual relationship with a student prior to enrollment in his or her class, the following procedures shall be followed:

- i. The faculty member shall counsel and advise the student not to enroll in his or her course.

- ii. The Consensual Relationships Policy will be made available to students via the student handbook and other appropriate communications vehicles.
 - iii. If it is not possible for a student to enroll in another course, section, or course and section at another college due to a requirement for completion of a degree or certificate and no other academic option is available, disclosure of the relationship will be made to the appropriate Department Chair, Dean and Vice President of Academic Affairs or Vice President for Student Affairs as appropriate for review. The Vice President will refer the matter to the Vice Chancellor for Academic and Student Affairs for consideration. The Chancellor or his/her designee may allow a student to enroll in the class only upon a showing by the student that the enrollment is necessary to avoid an extreme hardship, and upon a showing by the college President or designee that the academic integrity of the student's enrollment in the class will nevertheless be maintained.
3. Persons who are married, or were married, are included within the definition of persons that have or who have had a consensual amorous relationship. Disclosure in this instance may be made via the Maricopa Disclosure process [The Annual Acknowledgement and Disclosures form may be found in the [Employee Learn Center](#). Employee credentials are needed to enter secure site].
 4. An employee who fails to follow the requirements established in this policy and who does not withdraw from participation in activities or decisions that may reward or penalize a supervisee or student with whom the employee has or has had a recent consensual amorous relationship, will be considered in violation of policy and will be addressed in accordance with established processes in job group policy manuals.

LANGUAGE ADOPTED BY DIRECT CHANCELLOR APPROVAL

2.8.3 Technology Accessibility

The Maricopa Community College District is committed to ensuring equal access to information, programs, services and activities through its technologies, Web pages, and resources both in the academic and work environments. This regulation establishes that Electronic and Information Technology (EIT) that are used to conduct the business of the Maricopa Community Colleges shall adhere to established accessibility standards and guidelines.

ADOPTED by Direct Approval from the Chancellor, April 1, 2015

AAA105	Peak Performance in Activated Learning	Techniques which enable the individual to achieve levels of peak performance using the activated learning process. Includes methods for developing a high level of motivation and self-discipline to achieve peak performance in areas such as sports, public speaking,	Prerequisites: None.	LEC 1.0 1.0 1.0
AAA115	Creating College Success	Strategies to create success in college. Methods for selecting and developing effective academic strategies, increasing self-awareness and developing self-management strategies. Elements of college resources and relationships with others explored in support of	Prerequisites: None.	LEC 1.0 1.0 1.0
AAA150	Strategies for College Success	Focus on increasing student success through college orientation and personal growth, study skills development, and educational and career planning.	Prerequisites: None.	LEC 3.0 3.0 3.0
ABA101	Hand and Power Tools	Selection, use, maintenance and safety procedures for common hand and power tools used in the construction industry.	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	L+L 1.0 1.0 1.0
ABA102	Electrical Fundamentals	Fundamentals of electricity including electrical hazards, Occupational Safety and Health Administration (OSHA) regulations, units of measurements and using Ohm's law. Circuit characteristics and the use of Kirchhoff's voltage and current laws to calculate voltage drop, current and resistance. Operation and use of specific	Prerequisites: None.	LEC 1.0 1.0 1.0
ABA103	Hand Bending of Electrical Conduit	Conduit bending and installation. Techniques for using hand operated and step conduit benders. Cutting,	Prerequisites: None.	LEC 0.5 0.5 0.5
ABA104	Raceways, Boxes, Fittings, Anchors/Supports	Types and applications of conduit, raceways, wireways and ducts. Types, applications and wiring techniques for conductors. Hardware and systems used to mount and support boxes, receptacles and other electrical	Prerequisites: Registered Apprentice status or permission of the Apprenticeship Coordinator.	LEC 1.5 1.5 1.5
ABA106	Introduction to Materials Handling	Introduction to materials handling equipment and appropriate use for common job-site tasks. Recognize hazards associated with materials handling and proper	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	LEC 0.5 0.5 0.5
ABA112	Electrical I	Theories and concepts in electrical safety basics and OSHA 10 certification. Introductory concepts in construction math, hand and power tools, drawings, rigging, and materials handling. Emphasis on	Prerequisites: Registered apprenticeship status or permission of Apprenticeship Coordinator.	L+L 6.0 6.0 6.0

ABA114	Electrical II	Fundamentals of the electrical trade, residential electrical services and test equipment. Emphasis on safety, electrical circuits, theory, National Electrical Code, device boxes. Use and selection of hand bending, raceways, fittings, conductors, cables.	Prerequisites: Registered apprenticeship status or permission of Apprenticeship Coordinator.	L+L 6.0 6.0 6.0
ABA120	Carpentry Fundamentals	Overview of the carpentry trade. Apprenticeship programs and responsibilities of the apprentice. Types and uses of nails, fasteners and adhesives. Types of wood, lumber and manufactured wood products	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	LEC 1.0 1.0 1.0
ABA121	Floor and Wall Systems	Framing systems, floor construction, center beam and post support systems. Construction of sills, joists and bridging. Subflooring, mechanical connectors and the use of prefabricated joists. Wall construction, stud walls, panelized walls, masonry walls, post and beam walls,	Prerequisites: (Registered apprentice status and a grade of C or better in ABA120) or permission of the Apprenticeship Coordinator.	LEC 2.0 2.0 2.0
ABA122	Electrical III	Theory and application of alternating current, lighting, conduit bending, pull and junction boxes.	Prerequisites: Registered apprenticeship status or permission of Apprenticeship Coordinator.	L+L 6.0 6.0 6.0
ABA124	Electrical IV	Principles of conductor installations, cable trays, conductor terminations and splices. Emphasis on grounding, bonding, circuit breakers, and fuses.	Prerequisites: Registered apprenticeship status or permission of Apprenticeship Coordinator.	L+L 6.0 6.0 6.0
ABA130	Installation of Electric Services	Electric services for commercial and industrial installations. Blueprints, diagrams and electrical calculations. Grounding, connecting three phase services and the installation of panelboards, switches	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	LEC 1.0 1.0 1.0
ABA135	Cast-In-Place Stairs	Cast-In-Place and Precast stair installation techniques, forming, erecting and safety procedures. Review American Concrete Institute (ACI) Codes and standard	Prerequisites: Registered apprenticeship status or permission of Apprenticeship Coordinator.	LEC 1.0 1.0 1.0
ABA136	Communications in Construction	Communication in the construction industry. Positive direct communication, written communication, active listening, understanding, negotiation, and dealing with difficult people. Communication skills at all organizational levels, with groups, combining oral and	Prerequisites: None.	LEC 1.0 1.0 1.0

ABA150	Advanced Calculations for Electricians	Advanced mathematical calculations in the electrical industry. Powers and roots in watts, voltage, current and resistance. Metric and engineering units. English and metric systems for length, area, volume and mass, and energy and temperature measurements. Ratios, proportions, formulas, symbols and representation. Trigonometry and the Pythagorean theory. Plane and	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	LEC 1.5 1.5 1.5
ABA179	Installing and Sizing Water Supply Piping	Connecting piping to a water main. Plumbing connections to buildings and air and hydrostatic testing of water supply piping. Operation and installation of water heaters. Types, operation and installation of water meters. Installation of water supply systems to given structures. Effects of valves, fittings and piping on water pressure. Calculations of pressure drop and sizing	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	LEC 3.0 3.0 3.0
ABA192	Plumbing Level I	History of plumbing, modern plumbing, safety, human relations, and construction career opportunities. Hand and power tool safety, use, and maintenance. Plumbing drawings, components, and symbols. Materials, schedules for plastic, copper, and cast-iron. Fittings, valves, hangers, and supports. Measuring, cutting, reaming, and joining pipe. Safety precautions for installation, operation and maintenance. Fixtures and	Prerequisites: None.	L+L 3.0 3.0 3.0
ABA204	Contactors and Relays	Operating principals of contactors and relays. Function in an electrical system. Operation and installation of specific contactors and relays. Interpretation of wiring diagrams. Connect and test a simple control circuit	Prerequisites: None.	LEC 1.0 1.0 1.0
ABA207	Construction Trades: Green Environment	Daily activities at work and at home that affect green environment. Leadership in Energy and Environmental Design (LEED) rating process. Carbon footprint and ways to reduce it. Construction of buildings that affect green environment. Application of principles of green	Prerequisites: Registered apprenticeship status or permission of Apprenticeship Coordinator.	LEC 1.0 1.0 1.0
ABA222	Introduction to Welding, Brazing and Cutting	Arc welding theory and safety hazards. AC, DC and AC-DC welding machines. Use of electrodes and safety requirements for arc-welding. Basic welding techniques and gas metal-arc and gas tungsten-arc welding	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	L+L 2.0 3.0 3.0
ABA232	Electrical V	The course content includes Load Calculations - Branch and Feeder Circuits, Conductor Selection and Calculations, Overcurrent Protection,	Prerequisites: Registered apprenticeship status or permission of Apprenticeship Coordinator.	L+L 6.0 6.0 6.0

ABA234	Electrical VI	Theories and concepts in distribution equipment, transformers, and commercial electrical services. Emphasis on motor calculations and voice/data and	Prerequisites: Registered apprenticeship status or permission of Apprenticeship Coordinator.	L+L 6.0 6.0 6.0
ABA242	Electrical VII	Principles of course load calculations, feeder and services and specialty transformers. Selection of standby and emergency systems. Emphasis on basic electronic theory, fire alarm systems and health care	Prerequisites: Registered apprenticeship status or permission of Apprenticeship Coordinator.	L+L 6.0 6.0 6.0
ABA244	Electrical VIII	Principles of heating, ventilation, and air conditioning (HVAC) controls and heat tracing. Use and control of freeze protection. Basics in motor operation and maintenance. Focus on medium-voltage terminations/splices and special locations.	Prerequisites: Registered apprenticeship status or permission of Apprenticeship Coordinator.	L+L 6.0 6.0 6.0
ABA251	High Voltage Termination and Splicing	Terminations and splices in high voltage systems (600+ volts). Identifying and splicing specific types of cables and making terminations. Includes using splicing kits and following manufacturer's specifications. Testing	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	LEC 1.0 1.0 1.0
ABA255	Commercial, Industrial and Special Lighting	Operating characteristics of incandescent, fluorescent and high intensity discharge lamps. Lighting controls and fixture installations. Blueprint reading exercise for commercial and industrial installations. Lighting requirement calculations. National Electrical Code (NEC)	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	LEC 0.5 0.5 0.5
ABA298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
ABA298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0

ABA298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
ABC118	OSHA Standards and Regulations	Provisions of and implementation of Occupational Safety and Health Administration (OSHA) Act in the work place. Rights and responsibilities under the OSHA Act. Appeals process, record keeping, and voluntary protection programs. OSHA's construction and general industry standards. Overview of the requirements of the	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	L+L 1.5 1.5 1.5
ABC119	Basic Safety	Overview of safety rules and procedures for working on construction job sites	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	LEC 1.0 1.0 1.0
ABC120	Basic Calculations for Construction	Addition, subtraction, multiplication and division of whole, decimal, fraction and metric numbers. Percentage and fraction conversions. Metric units of length, weight, volume and temperature. Metric system as it relates to the construction trade. Basic algebra and	Prerequisites: None.	L+L 1.5 1.5 1.5
ABC121	Introduction to Hand and Power Tools	Overview of the use, maintenance and safety procedures for common hand and power tools.	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	LEC 1.0 1.0 1.0
ABC122	Rigging Safety and Equipment	Rigging safety, equipment and inspection. Includes crane hand signals, common rope knots, types of derricks and cranes and safety procedures for rigging	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	LEC 1.0 1.0 1.0
ABC123	Introduction to Construction Drawings	Basic concepts of construction drawings, including terms and symbols. Drawing interpretation, use of drawing dimensions and recognition of drawing	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	L+L 0.5 0.5 0.5
ABC124	Conduit Bending	Types of conduit benders and bends. Conduit bending procedures and use of bends in conduit systems	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	LEC 1.0 1.0 1.0
ABC126	Electrical Test Equipment	Selection, inspection, use and maintenance of common electrical test equipment	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	LEC 1.0 1.0 1.0

ABC130	Conductor Installation/Termination	Transportation, storage and setup of cable reels, methods of rigging and procedures for installing conductors using cable pulls in raceways and cable	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	L+L 1.0 1.0 1.0
ABC131	Cable Tray Installation	National Electrical Manufacturer's Association (NEMA) and National Electrical Code (NEC) requirements for cable tray modified installation and cable installation	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	L+L 0.5 0.5 0.5
ABC132	Circuit Breakers and Fuses	National Electrical Code (NEC) requirements, Ground Fault Circuit Interrupters (GFCI), overcurrents, fuse sizing, safety techniques and short-circuit calculations.	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	L+L 1.0 1.0 1.0
ABC133	Basic Lighting	Principles of illumination and specific light sources. Includes practical applications for residential, commercial and industrial installations	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	L+L 1.0 1.0 1.0
ABC135	Fundamentals of Concrete	Materials used to make concrete, including specific types of cement, aggregate, admixtures and reinforcing materials. Handling procedures for concrete, conveying and placing concrete and finishing techniques for	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	LEC 1.0 1.0 1.0
ABC136	Roof Systems	Defining roof terminology. Identifying and understanding specific roof systems. Using the framing square and essex scale to calculate and measure specific types of rafters. Transcribing and transferring measurements onto rafters. Using "speed square" to determine measurements for specific types of rafters. Defining unequal roof pitch. Identifying specific types of	Prerequisites: (Registered apprentice status and a grade of C or better in ABC/MEC/PNT120) or permission of the Apprenticeship Coordinator. Xref: ABC120 MEC120	LEC 1.0 1.0 1.0
ABC142	Alternating Current	Production of electricity, including; current, voltage, induction, mutual inductance and capacitance. Calculations using Ohms Law. Operation of a three phase system.	Prerequisites: (Registered apprentice status and a grade of C or better in ABC/MEC/PED120) or permission of the Apprenticeship Director. Xref: ABC120 MEC120	LEC 1.0 1.0 1.0
ABC143	Motors: Theory and Application	Overview of electric motors including types, operation, and applications. Assembly and disassembly. Mounting and connections according to National Electrical Code (NEC). Also troubleshooting, installation and handling	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	LEC 2.0 2.0 2.0
ABC144	Grounding	Types of grounding and proper installation of grounds and grounding. OSHA and National Electrical Code (NEC) requirements specific to grounding. Purpose and operation of Ground Fault Circuit Interrupters (GFCI). Effects of soils and environment. Selection of grounds and grounding material for specific situations. Testing	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	LEC 1.0 1.0 1.0

ABC221	Motors and Motor Controls	Electrical symbols, line diagrams and logic. Contactors and starters, control devices, reversing circuits and power distribution systems. Electronic control devices, programmable controllers, reduced voltage starters, accelerating and decelerating methods and circuits.	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	L+L 3.0 3.0 3.0
ABC222	Hazardous Locations-Electrical	Hazardous location classifications. Equipment approved for use in specific hazardous locations. Wiring methods	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	LEC 1.0 1.0 1.0
ABC226	Raceways, Wiring Devices, Boxes and Fittings	Sizing, selecting, and installing raceways, junction boxes, outlet boxes and wiring devices. Calculating fill requirements according to National Electrical Code (NEC) regulations. Calculating bending radii in boxes and cabinets. Types and purpose of wiring devices and	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	LEC 1.5 1.5 1.5
ABC230	Stair Construction	Stair parts, materials and types. Stair dimensions and practical techniques for stair layout. Rough forming methods.	Prerequisites: (Registered apprentice status and a grade of C or better in ABC/MEC/PNT120) or permission of the Apprenticeship Coordinator. Xref: ABC120 MEC120	LEC 1.0 1.0 1.0
ABC231	Exterior Wall Finishes	Exterior wall finish work; placement and hanging of windows, siding and flashing for walls. Installation of floors, chimneys and insulation included	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	LEC 3.0 3.0 3.0
ABC256	Basic Plumbing	Plumbing fixtures, drainage fixture unit ratings, and installation procedures. Includes procedures for installing fixtures, water heaters, shower and bath units,	Prerequisites: None.	L+L 4.0 4.0 4.0
ABC298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
ABC298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0

ABC298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
ABO103	Introduction to Auto Body Repair	An introduction to basic auto body repair skills in dent removal. This course includes body filler application and sanding, plastic repair, metal repair, welding, plasma cutting, collision estimating, and air conditioning	Prerequisites: None.	156
ABO104	Introduction to Automotive Refinishing	An introduction to basic refinishing skills with dual and single stage paints. This course includes spray equipment setup, panel prep and tape, paint correction with cut and buffing, scratch repair and proper blending	Prerequisites: None.	156
ABO203	Advanced Automotive Body Repair	An advanced course in non-structural auto body repair. This course includes disassembly of a vehicle, development of a collision repair plan, and repair. Includes body filler application and sanding, plastic	Prerequisites: None.	156
ABO204	Advanced Refinishing Fundamentals	An advanced course in vehicle refinishing and reassembly. This course includes spray equipment setup, vehicle prep and tape, paint correction with cut and buffing, scratch repair and proper blending	Prerequisites: None.	156
ABS171	Introduction to Good Manufacturing Practices (GMP)-Regulated	Course is designed to provide individuals with an overview of Good Manufacturing Practices (GMP), their application in a variety of industries and the opportunities for in such fields.	Prerequisites: None.	LEC 3.0 3.0 3.0
ABS173	Basic Instrumentation and Lab Math	Introductory course covering basic equipment, measurements, and calculations used in biotechnology	Prerequisites: None. BIO156 or BIO181 recommended.	LEC 1.0 1.0 1.0
ABS174	BioSafety	General laboratory safety, hazardous chemical use and disposal, biohazardous material use and disposal, biosafety procedures, and radiation safety.	Prerequisites: None.	LEC 1.0 1.0 1.0

ABS175	Design and Analysis of Multivariable Biological Experiments	Fundamentals of planning and conducting biological experiments examining the effects of multiple simultaneous independent variables and their interactions on a single measured outcome using a structured Design of Experiments (DOE) statistical approach. Emphasis will also be given to maintaining written documentation of methodology, data and	Prerequisites: None. BIO156++ or BIO181++ recommended.	L+L 1.0 2.0 2.0
ABS194AA	Special Topics in Applied Biological	Exploration of the foundation and application of a current topic in biosciences.	Prerequisites: Permission of Instructor.	LEC 1.0 1.0 1.0
ABS194AB	Special Topics in Applied Biological	Exploration of the foundation and application of a current topic in biosciences.	Prerequisites: Permission of Instructor.	LEC 2.0 2.0 2.0
ABS194AC	Special Topics in Applied Biological	Exploration of the foundation and application of a current topic in biosciences.	Prerequisites: Permission of Instructor.	LEC 3.0 3.0 3.0
ABS283	Bioinformatics and Scientific Computing	Introduction to bioinformatics, including history, concepts, major genetic databases, access tools and programming software. Methodologies to extract meaning from biological sequences using sequence analysis, data visualization and statistics.	Prerequisites: A grade of C or better in [(BIO156 or BIO181) and (MAT114 or MAT115 or MAT12+ OR an appropriate district placement for MAT15+ or higher)] or permission of Instructor or Department/Division Chair. Concurrent enrollment in, or previous completion of, BIO208 is strongly suggested but not required.	L+L 3.0 4.0 4.0
ABS294AA	Special Topics in Applied Biological Sciences-Advanced	Exploration of a current topic in the biosciences and its advanced applications.	Prerequisites: Permission of Instructor.	LEC 1.0 1.0 1.0
ABS294AB	Special Topics in Applied Biological Sciences-Advanced	Exploration of a current topic in the biosciences and its advanced applications.	Prerequisites: Permission of Instructor.	LEC 2.0 2.0 2.0
ABS294AC	Special Topics in Applied Biological Sciences-Advanced	Exploration of a current topic in the biosciences and its advanced applications.	Prerequisites: Permission of Instructor.	LEC 3.0 3.0 3.0
ABS295AA	Independent Research in Applied Biology	Original scientific investigation of biological phenomenon with potential commercial applications.	Prerequisites: A grade of C or better in (BIO156++ or BIO181++ or BIO195++) and permission of	LAB 1.0 1.0 0.0
ABS295AB	Independent Research in Applied Biology	Original scientific investigation of biological phenomenon with potential commercial applications.	Prerequisites: A grade of C or better in (BIO156 or BIO181) and permission of Instructor.	LAB 2.0 2.0 0.0

ACC105	Payroll, Sales and Property Taxes	Tax reporting for payroll, sales, and personal property	Prerequisites: None.	LEC 3.0 3.0 3.0
ACC107	Bookkeeping Theory and Practice	Fundamental accounting practices; application to retail stores, professional firms, and personal service	Prerequisites: None.	L+L 4.0 5.0 5.0
ACC109	Accounting Concepts	Introduction to accounting with emphasis on analysis and applications of financial information.	Prerequisites: None. GBS151 and reading ability equivalent to RDG100 or RDG100LL suggested but not	LEC 3.0 3.0 3.0
ACC110	Understanding and Using Accounting Systems	Develops basic comprehension of the balance sheet, income statement, and equity and cash flow statements. Explores usage of specialized journals and subsidiary ledgers in a computerized system. Studies the impact of various transactions on an enterprise,	Prerequisites: None.	L+L 3.0 3.0 3.0
ACC111	Accounting Principles I	Fundamental theory of accounting principles and	Prerequisites: None.	LEC 3.0 3.0 3.0
ACC112	Accounting Principles II	Continuation of the fundamental theory of accounting principles and procedures, including interpretation of general purpose financial statements.	Prerequisites: A grade of C or better in ACC111 or permission of Department or Division.	LEC 3.0 3.0 3.0
ACC115	Computerized Accounting	Understanding of fundamental accounting principles and mastery of an accounting information systems including the general ledger, accounts receivable,	Prerequisites: None.	L+L 3.0 3.0 3.0
ACC121	Individual Tax Preparation	Theory and practice of accounting for individual taxation.	Prerequisites: None.	L+L 3.0 3.0 3.0
ACC211	Financial Accounting	Introduction to theory and practice in the preparation and interpretation of general purpose financial	Prerequisites: None.	LEC 3.0 3.0 3.0
ACC212	Managerial Accounting	Development and analysis of accounting information for managerial planning and control	Prerequisites: A grade of C or better in (ACC111 and ACC112) or ACC211 and (CIS105 or permission of Department or Division).	LEC 3.0 3.0 3.0
ACC215	Governmental and Not-For-Profit Accounting	Theories and procedures of accounting for governmental and not-for-profit organizations.	Prerequisites: A grade of C or better in ACC112 or ACC211, or permission of Department or Division.	LEC 3.0 3.0 3.0
ACC216	Fraud Examination	Fundamental theory of fraud examination methodology to detect and prevent accounting fraud.	Prerequisites: A grade of C or better in (ACC230 or ACC112 or ACC211) or permission of Department or	LEC 3.0 3.0 3.0
ACC219	Intermediate Accounting I	Continuation of the theory and practice of financial accounting, applicable to assets, liabilities, equity related problems of income determination and financial	Prerequisites: A grade of C or better in ACC212 or ACC240 or permission of Department or Division.	LEC 3.0 3.0 3.0

ACC220	Intermediate Accounting II	Continuation of the theory and practice of financial accounting, applicable to assets, liabilities, equity determination of asset values, liabilities, and related problems of income determination, special topics and	Prerequisites: A grade of C or better in ACC219 or permission of Department or Division.	LEC 3.0 3.0 3.0
ACC221	Tax Accounting	Theory and practice of accounting for personal, corporate, and non-corporate taxation.	Prerequisites: A grade of C or better in ACC111 or ACC211 or permission of Department or Division.	LEC 3.0 3.0 3.0
ACC222	Payroll Accounting	Payroll records for businesses required by federal and state laws	Prerequisites: A grade of C or better in ACC111 or ACC211 or permission of Department or Division.	LEC 3.0 3.0 3.0
ACC224	Tax Practice Administration and Business Entity	Federal income tax representation, practices, and procedures, including trust and estate income tax, exempt organizations, and retirement plans.	Prerequisites: A grade of C or better in ACC121 or ACC221.	LEC 3.0 3.0 3.0
ACC230	Uses of Accounting Information I	Introduction to the uses of accounting information for internal and external purposes with emphasis on financial statement analysis.	Prerequisites: A grade of C or better in ACC111 or ACC211 or (ENG101 and MAT151 and CRE101) or appropriate test scores on the District English, Reading and Math	LEC 3.0 3.0 3.0
ACC240	Uses of Accounting Information II	Introduction to the uses of accounting information for internal and external purposes with emphasis on	Prerequisites: A grade of C or better in ACC230.	LEC 3.0 3.0 3.0
ACC250	Introductory Accounting Lab	Procedural details of accounting for the accumulation of information and generation of reports for internal and	Prerequisites: None.	LAB 1.0 3.0 3.0
ACC260	Certified Bookkeeper (CB) Preparation	Fundamental accounting practices including accrual and deferral adjustments, correcting common transaction recording errors, bank reconciliations and adjusting entries. Includes payroll accounting and related Federal and State payroll law requirements. Accounting for depreciation for financial and tax accounting purposes covered. Inventory valuation methods. Includes calculating, recording, and reporting under generally accepted accounting principles (GAAP).	Prerequisites: A grade of C or better in ACC111 or ACC211 or (bookkeeping experience and permission of Instructor).	LEC 3.0 3.0 3.0
ACC270AA	Accounting Internship	Accounting work experience in a business or industry. Eighty hours of designated work per credit per	Prerequisites: Permission of Department or Division.	LAB 1.0 1.0 0.0
ACC270AB	Accounting Internship	Accounting work experience in a business or industry. Eighty hours of designated work per credit totaling 160	Prerequisites: Permission of Department or Division.	LAB 2.0 2.0 0.0
ACC270AC	Accounting Internship	Accounting work experience in a business or industry. Eighty hours of designated work per credit totaling 240	Prerequisites: Permission of Department or Division.	LAB 3.0 3.0 0.0

ACC282AA	Volunteerism Accounting: Service Learning Experience	Service learning field experience within private/public agencies, educational institution, and citizen volunteer groups.	Prerequisites: A grade of C or better in ACC111 or (ACC230 and ACC250) and permission of	LAB 1.0 1.0 0.0
ACC282AB	Volunteerism Accounting: Service Learning Experience	Service learning field experience within private/public agencies, educational institution, and citizen volunteer groups.	Prerequisites: A grade of C or better in ACC111 or (ACC230 and ACC250) and permission of	LAB 2.0 2.0 0.0
ACC282AC	Volunteerism Accounting: Service Learning Experience	Service learning field experience within private/public agencies, educational institution, and citizen volunteer groups.	Prerequisites: A grade of C or better in ACC111 or (ACC230 and ACC250) and permission of	LAB 3.0 3.0 0.0
ACC296WA	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 1.0 5.0 0.0
ACC296WB	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 2.0 5.0 0.0

ACC296WC	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 3.0 15.0 0.0
ACC296WD	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 4.0 20.0 0.0
ACC298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment are made available for student use. Allows the best aspects of independent study and individualized learning to be	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
ACC298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment are made available for student use. Allows the best aspects of independent study and individualized learning to be	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0

ACC298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment are made available for student use. Allows the best aspects of independent study and individualized learning to be	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
ACU305	Accounting Information Systems	Fundamentals of Accounting Information System concepts and applications as they relate to business processes, data analytics, technologies, and controls.	Prerequisites: A grade of C or better in ACC219, or permission of Program Director.	LEC 3.0 3.0 3.0
ACU315	Cost Accounting	In-depth analysis of accounting information for managerial planning and control with a focus on cost	Prerequisites: A grade of C or better in ACC212, or permission of Program	LEC 3.0 3.0 3.0
ACU321	Tax Accounting II	A continuation of theory and practice of accounting for personal, corporate, and non-corporate taxation, with an introduction to state and local tax issues.	Prerequisites: A grade of C or better in ACC221, or permission of Program Director.	LEC 3.0 3.0 3.0
ACU325	Forensic Accounting	Fundamentals of forensic accounting and fraud investigation. Focus on ethics, integrity, and legal	Prerequisites: A grade of C or better in ACC219, or permission of Program	LEC 3.0 3.0 3.0
ACU405	Auditing	Fundamentals of auditing and assurance concepts and applications as they relate to business processes and audit risks. Focus on ethics and legal considerations and auditing processes, including planning, obtaining	Prerequisites: A grade of C or better in ACU305, or permission of Program Director.	LEC 3.0 3.0 3.0
ACU410	Advanced Accounting I	Advanced analysis of accounting theory and practice. Focus on applying standards relevant to complex business structures, business combinations, consolidations and mergers, investments, segment and	Prerequisites: A grade of C or better in ACC220, or permission of Program Director.	LEC 3.0 3.0 3.0
ACU411	Advanced Accounting II	Continued advanced analysis of accounting theory and practice. Focus on applying standards relevant to reorganizations and liquidations, partnerships, not-for-profit entities, state and local governments, and estates	Prerequisites: A grade of C or better in ACU410, or permission of Program Director.	LEC 3.0 3.0 3.0
ACU490	Accounting Capstone	Completion of a comprehensive project incorporating major concepts and related topics within the field of accounting. Students will demonstrate the steps for project identification, related research, analysis, and presentation of information. Project topics will follow an	Prerequisites: Permission of Program Director or Department/Division Chair.	L+L 3.0 3.0 3.0

AEN102	Fundamentals of Facility Energy Management	Process of evaluation of types of energy use. Evaluation of the structure, energy transfer, lighting, heating, and cooling systems. Introduction to basic thermal process, including thermal capacity, heat transfer modes, psychometric charts, fan and pump laws, energy storage, and other factors related to HVAC and occupant comfort in commercial facilities. Includes an introduction to energy generation, construction and	Prerequisites: None.	LEC 4.0 4.0 4.0
AEN103	Hand Tools and Basic Maintenance for Building Energy Technicians	Basic tools and equipment for the building energy technician. Includes an overview of electrical theory and procedures for measurement and evaluation of common electric circuits, specific heating, ventilation, and air conditioning (HVAC) mechanical hardware devices, analysis of building environmental conditions, and safe procedures for starting and stopping equipment and systems. Also addresses basic repair and replacement	Prerequisites: None.	L+L 4.0 4.0 4.0
AEN142	Introduction to Energy Management	Introduction to building energy management concepts and procedures. Includes the carbon cycle, building envelope and materials of construction in their relation to energy management, occupant comfort, and indoor air quality. Major emphasis on identification of building system components, relations, interactions and basic operation, evaluation and reporting of energy trending	Prerequisites: A grade of C or better in AEN102, AEN103 and CNS182.	L+L 3.0 3.0 3.0
AEN190	Device Interface and Selection	Overview of building management systems, components, and controls. Includes energy consumption basics and measurement in addition to building systems evaluation. Also covers the process for evaluation and documentation of systems as well as	Prerequisites: A grade of C or better in AEN142 and (MAT112 or MAT122).	L+L 3.0 5.0 5.0
AES101	Heritage and Values I	Survey course designed to introduce students and cadets to the Department of the Air Force (DAF) and the Air Force Reserve Officer Training Corps (AFROTC). The course allows students and cadets to examine general aspects of the DAF, leadership fundamentals, service benefits, and opportunities for officers. The course also lays the foundation for becoming an Airman or Guardian by outlining our heritage and values. As a foundational course, this course provides a historical	Prerequisites: None.	LEC 2.0 1.0 0.0 LAB 0.0 1.0 0.0

AES103	Heritage and Values II	Survey course designed to introduce students and cadets to the Department of the Air Force (DAF) and the Air Force Reserve Officer Training Corps (AFROTC). The course allows students and cadets to examine general aspects of the DAF, leadership fundamentals, service benefits, and opportunities for officers. The course also lays the foundation for becoming an Airman or Guardian by outlining our heritage and values. As a foundational course, this course provides a historical	Prerequisites: None.	LEC 2.0 1.0 0.0 LAB 0.0 1.0 0.0
AES201	Team and Leadership Fundamentals I	A survey course designed to provide a fundamental understanding of both leadership and team building. Students and cadets will learn that there are many layers to leadership, including aspects that do not always come to mind. Such things include listening, understanding themselves, being a good follower, and problem solving efficiently. Students and cadets will apply these leadership perspectives when completing team building activities and discussing things like	Prerequisites: None.	LEC 2.0 1.0 0.0 LAB 0.0 1.0 0.0
AES203	Team and Leadership Fundamentals II	A survey course designed to provide a fundamental understanding of both leadership and team building. Students and cadets will learn that there are many layers to leadership, including aspects that do not always come to mind. Such things include listening, understanding themselves, being a good follower, and problem solving efficiently. Students and cadets will apply these leadership perspectives when completing team building activities and discussing things like	Prerequisites: None.	LEC 2.0 1.0 0.0 LAB 0.0 1.0 0.0
AES294	Air Force Physical Fitness	Physical training component of Air Force ROTC. Covers topics of immediate or special interest to a faculty	Prerequisites: None.	L+L 1.0 3.0 0.0
AES298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: None.	LAB 1.0 1.0 0.0

AES298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: None.	LAB 2.0 2.0 0.0
AES298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment are made available for student use. Allows the best aspects of independent study and individualized learning to be	Prerequisites: None.	LAB 3.0 3.0 0.0
AET107	Private Pilot Ground School	Ground school in preparation for the Federal Aviation Administration (FAA) Private Pilot Certificate written examination. Includes aerodynamics, airplane systems, airports, airspace, communications, Federal Air Regulations, navigation, airplane performance, flight planning, and flight physiology. Requires passing a	Prerequisites: None. Corequisites: AET110 or AET112.	LEC 5.0 5.0 5.0
AET107HH	Private Pilot Ground School: Helicopter	Ground school in preparation for the Federal Aviation Administration (FAA) Private Pilot Certificate written examination. Includes aerodynamics, helicopter systems, airports, airspace, communications, Federal Air Regulations, navigation, helicopter performance, flight planning, and flight physiology. Requires passing a	Prerequisites: None. Corequisites: AET110HH.	LEC 5.0 5.0 5.0
AET110	Private Pilot Flight	Flight course in preparation for the Federal Aviation Administration (FAA) Private Pilot Certificate practical examination. Includes preflight preparation and planning, ground operations, airport operations, departures, navigation, basic instrument flight, night flight, slow flight, ground reference maneuvers, emergency operations, and arrivals. Approximately 50 hours airplane flight experience at student's expense	Prerequisites: None. Corequisites: AET107.	LAB 1.0 5.0 5.0

AET110HH	Private Pilot Flight: Helicopter	Flight course in preparation for the Federal Aviation Administration (FAA) Private Pilot Certificate practical examination. Includes preflight preparation, preflight procedures, airport and heliport operations, hovering maneuvers, takeoffs, landings, and go-rounds, performance maneuvers, navigation, emergency operations, night operations, and post-flight procedures. Approximately 75-85 hours helicopter flight	Prerequisites: None. Corequisites: AET107HH.	LAB 2.0 5.0 5.0
AET112	Private Pilot Flight - Test Course	Flight course in preparation for transition into continued AET course work. Includes preflight preparation and planning, ground operations, airport operations, departures, navigation, basic instrument flight, slow flight, ground reference maneuvers, emergency operations, and arrivals. Requires passing check ride	Prerequisites: FAA Private Pilot Airplane Single-Engine Land or advanced certification. Corequisites: AET107.	LAB 1.0 5.0 5.0
AET115	Aviation Meteorology	Meteorology for professional pilots. Includes atmosphere, air mass circulation, cloud type identification, weather hazards, and high altitude, Arctic, and tropical weather systems. Basic forecasting, use of Direct User Access Terminal (DUAT) systems and	Prerequisites: None.	LEC 3.0 3.0 3.0
AET203	Basic Airplane Systems	Beginning commercial pilot ground course in preparation for the Federal Aviation Administration (FAA) Commercial Pilot Certificate and Commercial written examination. Discussions will include, but not be limited to reciprocating engines, engine systems,	Prerequisites: A grade of C or better in (AET207, AET217, and AET210) or permission of Instructor. Corequisites: AET222.	LEC 3.0 3.0 3.0
AET203HH	Basic Helicopter Systems	Beginning commercial pilot ground course in preparation for the Federal Aviation Administration (FAA) Commercial Pilot Certificate and Commercial written examination Discussions will include, but not be limited to reciprocating engines, engine systems,	Prerequisites: A grade of C or better in AET207HH, AET217HH and AET210HH or permission of Instructor. Corequisites: AET220HH and AET213HH.	LEC 2.0 2.0 2.0
AET205	Aircraft Structures, Systems, and Maintenance	Survey of airframe structures, systems, and maintenance regulations for pilots. Includes aircraft and airfoil design and construction, and electrical, instrumentation, and automatic flight control systems.	Prerequisites: Private Pilot Certificate or permission of Instructor.	LEC 4.0 4.0 4.0
AET207	Attitude Instruments and Navigation	Beginning instrument pilot ground course in preparation for the Federal Aviation Administration (FAA) Instrument Pilot Rating and Instrument Rating written examinations. Includes preflight preparation, flight instruments, basic attitude instrument flying, radio navigation systems, and	Prerequisites: A grade of C or better in AET110 or permission of Instructor. Corequisites: AET210, AET217 and AET220	LEC 3.0 3.0 3.0

AET207HH	Attitude Instruments and Navigation: Helicopter	Beginning instrument pilot ground course in preparation for the Federal Aviation Administration (FAA) Instrument Pilot Rating and Instrument rating written examinations. Includes preflight preparation, flight instruments, basic attitude instrument flying, radio navigation systems, and	Prerequisites: A grade of C or better in AET110HH or permission of Instructor. Corequisites: AET210HH and AET217HH.	LEC 2.0 2.0 2.0
AET208	Aviation Safety	Introduction to aviation safety, including aviation safety programs, risk management, pilot psychology, physiology, human factors, and accident review and	Prerequisites: A grade of C or better in AET107 or permission of Instructor.	LEC 3.0 3.0 3.0
AET210	Commercial Flight Lab I	Initial flight course in preparation for the Federal Aviation Administration (FAA) Commercial Pilot practical examination. Emphasis on instrument and technically advanced aircraft operations. Student must fly approximately 10 hours at own expense. Requires	Prerequisites: A grade of C or better in AET110 or permission of Instructor. Corequisites: AET207, AET217 and AET220.	LAB 1.0 5.0 5.0
AET210HH	Instrument Flight: Helicopter	Initial helicopter flight course in preparation for the Federal Aviation Administration (FAA) Instrument rating practical examination. Emphasis on helicopter instrument operations. Student must fly approximately	Prerequisites: A grade of C or better in AET110HH or permission of Instructor. Corequisites: AET207HH and AET217HH.	LAB 2.0 5.0 5.0
AET213	Aerodynamics and Performance	Advanced commercial pilot ground course in preparation for the Federal Aviation Administration (FAA) Commercial Pilot Certificate and Commercial written examinations. Includes discussion of aerodynamic factors including lift, weight, drag, and thrust. Discussions will include, but are not limited to	Prerequisites: A grade of C or better in AET207, AET217, and AET210. Corequisites: AET221.	LEC 3.0 3.0 3.0
AET213HH	Aerodynamics and Performance: Helicopter	Advance commercial pilot ground course in preparation for the Federal Aviation Administration (FAA) Commercial Pilot Certificate and Commercial written examinations. Includes discussion of aerodynamic factors including lift, weight, drag, and thrust. Discussions will include, but are not limited to	Prerequisites: A grade of C or better in AET207HH, AET217HH, and AET210HH. Corequisites: AET220HH and AET203HH.	LEC 2.0 2.0 2.0
AET215	Aircraft Powerplants	Survey of engines and engine systems for pilots. Includes theory and analysis of reciprocating and turbine aircraft engines. Lubrication, ignition, fuel	Prerequisites: A grade of C or better in AET205 or permission of Instructor.	LEC 4.0 4.0 4.0
AET217	Instrument Procedures	Advanced instrument pilot ground school course in preparation for the Federal Aviation Administration (FAA) Instrument pilot rating and Instrument rating written examinations. Includes Federal Aviation Regulations, instrument approach procedures, and instrument enroute considerations. Requires passing	Prerequisites: A grade of C or better in AET110 or permission of Instructor. Corequisites: AET207, AET210 and AET220.	LEC 3.0 3.0 3.0

AET217HH	Instrument Procedures: Helicopter	Advance helicopter instrument pilot ground school course in preparation for the Federal Aviation Administration (FAA) Instrument pilot rating and Instrument rating written examinations. Includes Federal Aviation Regulations, instrument approach procedures, and instrument enroute considerations. Requires passing written exams similar to the Instrument pilot	Prerequisites: A grade of C or better in AET110HH or permission of Instructor. Corequisites: AET210HH and AET207HH.	LEC 2.0 2.0 2.0
AET220	Instrument Flight Lab	Flight course in preparation for the Federal Aviation Administration (FAA) Instrument rating practical examination. Emphasis on instrument operations. Student must fly approximately 40 hours at own	Prerequisites: A grade of C or better in AET110 or permission of Instructor. Corequisites: AET207, AET210 and AET217.	LAB 1.0 5.0 5.0
AET220HH	Commercial Flight: Helicopter	Advanced flight course in preparation for the Federal Aviation Administration (FAA) Commercial Pilot practical examination. Emphasis on commercial and high performance helicopter operations. Student must fly approximately 60 hours at own expense. Requires passing instrument rating and commercial pilot stage	Prerequisites: A grade of C or better in AET210HH, AET207HH and AET217HH. Corequisites: AET203HH and AET213HH.	LAB 2.0 5.0 5.0
AET221	Commercial Flight Lab II	Intermediate flight course in preparation for the Federal Aviation Administration (FAA) Commercial Pilot practical examination. Emphasis on commercial and solo cross-country flight operations. Student must fly approximately 45 hours at their own expense. Maneuvers and procedures during dual instruction are designed to be performed with flight instructor guidance. Requires	Prerequisites: A grade of C or better in AET207 and AET210 or by permission of Instructor. Corequisites: AET213.	LAB 1.0 5.0 5.0
AET222	Commercial Flight Lab III	Advanced flight course in preparation for the Federal Aviation Administration (FAA) Commercial Pilot practical examination. Emphasis on commercial operations. Student must fly approximately 45 hours at their own expense. Maneuvers and procedures are designed to be performed with little flight instructor guidance.	Prerequisites: A grade of C or better in AET221 and AET213. Corequisites: AET203.	LAB 1.0 5.0 5.0
AET225	Advanced Aircraft Systems	Survey of advanced aircraft systems to include electrical, automatic flight control, pressurization, cabin atmosphere, ice control, rain control, fire detection and extinguishing. Includes theory and analysis of turbine aircraft engines. Introduction to turbine engine systems to include lubrication, ignition, fuel control, cooling, exhaust, and propellers. Includes overview of	Prerequisites: Private Pilot Certificate or permission of Instructor.	LEC 4.0 4.0 4.0

AET227	Certified Flight Instructor: Airplane, Single Engine Land Ground School	Ground school in preparation for the Federal Aviation Administration (FAA) Certified Flight Instructor and Fundamentals of Instruction written examinations. Includes fundamentals of instruction, aerodynamics, airplane performance, systems, operations, weight and balance, weather, federal regulations, navigation, maneuvers, pilot physiology, ethics, and aeronautical decision making. Requires passing written exams similar	Prerequisites: A grade of C or better in AET240 or FAA Commercial Pilot Certificate with instrument rating. Corequisites: AET230.	LEC 5.0 5.0 5.0
AET227HH	Certified Flight Instructor: Helicopter Ground School	Ground school in preparation for the Federal Aviation Administration (FAA) Certified Flight Instructor and Fundamentals of Instruction written examinations. Includes fundamentals of instruction, aerodynamics, helicopter performance, systems, operations, weight and balance, weather, federal regulations, navigation, maneuvers, pilot physiology, ethics, and aeronautical decision making. Requires passing written exams similar	Prerequisites: FAA Commercial Pilot Certificate. Corequisites: AET230HH.	LEC 4.0 4.0 4.0
AET229	Crew Resource Management	Crew communications, teamwork, leadership, "followership," decision-making, and situational awareness; also the benefits of diversity, and the role diversity plays in the modern aerospace industry. Emphasis on utilization of all available resources in	Prerequisites: A grade of C or better in AET217 or permission of Instructor.	LEC 3.0 3.0 3.0
AET230	Certified Flight Instructor: Airplane, Single Engine Land Flight Lab	Flight course in preparation for the Federal Aviation Administration (FAA) Certified Flight Instructor: Airplane practical examination. Emphasis on demonstration and analysis of flight maneuvers. Includes preflight, ground operations, airport operations, takeoffs, climbs, flight fundamentals, stalls, spins, slow flight, basic instrument operations, performance maneuvers, ground reference maneuvers, emergency operations, approaches, landings, and post-flight procedures. Requires approximately 25 hours of flight that includes high	Prerequisites: A grade of C or better in AET240 or FAA Commercial Pilot Certificate with instrument rating. Corequisites: AET227.	LAB 1.0 3.0 3.0

AET230HH	Certified Flight Instructor: Helicopter	Flight course in preparation for the Federal Aviation Administration (FAA) Certified Flight Instructor: Helicopter practical examination. Emphasis on demonstration and analysis of flight maneuvers. Includes preflight procedures, airport and heliport operations, hovering maneuvers, takeoffs, landings, and go-arounds, fundamentals of flight, performance maneuvers, emergency operations, special operations, and postflight procedures. Requires approximately 60	Prerequisites: FAA Commercial Pilot Certificate with instrument rating. Corequisites: AET227HH.	LAB 1.0 3.0 3.0
AET237	Multiengine Airplane Pilot Ground School	Aeronautical knowledge necessary to meet requirements for a multiengine airplane rating including orientation, aerodynamics, airplane systems, airplane performance, flight planning, and emergency	Prerequisites: A grade of C or better in AET220 or FAA Commercial Pilot Certificate with instrument rating. Corequisites: AET240.	LEC 2.0 2.0 2.0
AET239	Commercial Flight Lab IV	Final flight course in preparation for the Federal Aviation Administration (FAA) Commercial Pilot practical examination. Emphasis on commercial operations. Student must fly approximately 20 hours at their own expense. Maneuvers and procedures are designed to be performed without flight instructor guidance.	Prerequisites: A grade of C or better in (AET203 and AET222), or by permission of Instructor.	LAB 1.0 5.0 5.0
AET240	Multiengine Airplane Pilot Flight Lab	Flight course in preparation for the Federal Aviation Administration (FAA) Multi-engine Airplane practical examination. Approximately 18 hours of flight experience at the student's expense and passing	Prerequisites: A grade of C or better in AET239 or FAA Commercial Pilot Certificate with Single Engine Land and Instrument rating. Corequisites:	LAB 1.0 1.5 1.5
AET257	Readings in Aviation	Critical inquiry of a particular aviation theme from a wide variety of sources. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. International data communication facilities and equipment made available	Prerequisites: A grade of C or better in ENG102 or ENG111 and permission of Instructor.	L+L 3.0 4.0 4.0
AET258	Certified Flight Instructor: Instrument Airplane Ground School	Aeronautical knowledge and practical teaching ability necessary to obtain an Instrument Flight Instructor Certificate with an Airplane-Single-Engine rating and necessary to satisfactorily pass the Flight Instructor Instrument knowledge test.	Prerequisites: Valid FAA Commercial Pilot Certificate or Airline Transport Pilot Certificate with the appropriate category and class of airplane used in the course, instrument rating, and Flight Instructor Certificate-Airplane.	LEC 3.0 3.0 3.0

AET270	Certified Flight Instructor: Instrument Airplane Flight Lab	Flight experience in an airplane to meet flight proficiency and aeronautical experience requirements necessary to add an Instrument Airplane Rating to an existing Flight Instructor-Airplane certificate.	Prerequisites: Valid FAA Commercial Pilot Certificate or Airline Transport Pilot Certificate with the appropriate category and class of airplane used in the course, instrument rating, and Flight Instructor Certificate-Airplane.	LAB 1.0 3.0 3.0
AET296WA	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 1.0 5.0 0.0
AET296WB	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 2.0 10.0 0.0
AET296WC	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 3.0 15.0 0.0

AET296WD	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 4.0 20.0 0.0
AET298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
AET298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment are made available for student use. Allows the best aspects of independent study and individualized learning to be	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
AET298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
AFR110	Introduction to African-American Studies	Introduction to the study of the African-American experience. Interdisciplinary approach includes historical underpinnings; population and cultural characteristics; social, economic, and political issues; and implications	Prerequisites: None.	LEC 3.0 3.0 3.0

AFR200	Introduction to Africana Studies	Survey of the social, economic, political, environmental, and cultural developments of various African communities from the beginning of human civilization to the present, including the development of the African diaspora as well as the historical and cultural impacts of	Prerequisites: None.	LEC 3.0 3.0 3.0
AFR202	Ethnic Relations in the United States	Basic concepts and processes, including historic overview, of interethnic relations in the United States: culture, race, ethnicity, ethnocentrism, prejudice, discrimination, racism, assimilation, acculturation, and individual and group responses to interethnic contact. Cultural knowledge and intercultural communication skills and perspectives as fundamental tools for	Prerequisites: None.	LEC 3.0 3.0 3.0
AFR203	African-American History to 1865	History and cultural heritage of African-Americans from ancestral origins in Ancient Africa through the experience of chattel slavery in the Americas to eventual emancipation and participation in the	Prerequisites: None.	LEC 3.0 3.0 3.0
AFR204	African-American History 1865 to Present	The multifaceted history and cultural heritage of African-American communities since the Civil War, presented within the broader context of U.S. history. This course explores the social, economic, political, and cultural history of African-American communities, including the historical and cultural impacts of slavery and discrimination, and the collective struggle for freedom,	Prerequisites: None.	LEC 3.0 3.0 3.0
AFR207	Black Women	Analysis and discussion of critical issues for Black women in America today	Prerequisites: None.	LEC 3.0 3.0 3.0
AFR210	Multicultural Representation in the History of STEM	Aims to fill a gap by exploring the perspectives, experiences, and contributions of individuals from various cultural backgrounds in the study of science, technology, engineering, and mathematics (STEM). Analyzes and synthesizes how different cultures have shaped scientific knowledge, examining the impact of diversity on innovation and problem-solving, and	Prerequisites: None.	LEC 3.0 3.0 3.0
AGB130	Establishing and Running an Agribusiness	Basic principles used in establishing and running an Agribusiness. Emphasis on business requirements to maintain a business enterprise in Arizona	Prerequisites: None.	LEC 3.0 3.0 3.0

AGB132	Agribusiness and Management	Application of management principle skills in day-to-day operations for decision-making techniques base on collection, use and analysis of financial, employee, and customer data to determine and evaluate the daily	Prerequisites: None.	LEC 3.0 3.0 3.0
AGB139	Agribusiness Computer Operations	Agribusiness operations for solving, forecasting and projecting agribusiness problems, agribusiness communications, accounting systems and database	Prerequisites: None.	L+L 3.0 6.0 6.0
AGB140	Commercial Floral Design	Fundamentals of commercial floral design. Includes instruction and hands-on training in fresh, dried, and silk plants, flowers, and greens; materials; supplies; gift items; and industry conditions, standards, and trends. Covers design principles, identification, selection, care, maintenance, handling, and use of floral design	Prerequisites: None.	L+L 3.0 5.0 5.0
AGB142	Floriculture	Principles and species of floriculture. Includes instruction in cultural and production requirements of cut flowers and foliage. Covers general production information and basic plant physiology principles, propagation, production temperatures, plant nutrients,	Prerequisites: None.	L+L 3.0 5.0 5.0
AGB144	Agriculture Processing	Agricultural processing and the meat industry as a business enterprise. Carcass evaluation, grading, judging for cut ability and quality, cut identification, meat	Prerequisites: None.	L+L 3.0 5.0 5.0
AGB229	Landscape Management and	Covers landscape and nursery management concepts and applications for business, industry, and government	Prerequisites: None.	LEC 3.0 3.0 3.0
AGB231	Marketing of Agricultural Products	Principles of agricultural marketing including consumer demand, economic system fundamentals, functions and methods of marketing agricultural commodities, market planning, and promoting and selling in the agricultural	Prerequisites: None.	LEC 3.0 3.0 3.0
AGB260	Youth Leadership Development	Characteristics of effective Career and Technical Student Organization (CTSO) officers, leadership styles and strategies for the management and organization of youth groups in agriculture. Includes instruction and hands-on training in speech/workshop development,	Prerequisites: None.	L+L 4.0 6.0 6.0
AGB261	Advanced Youth Leadership Development	Characteristics of effective Career and Technical Student Organization (CTSO) officers, leadership styles and strategies for the management and organization of youth groups in agriculture. Includes instruction and hands-on training in speech/workshop development,	Prerequisites: None.	L+L 4.0 6.0 6.0

AGB290	Internship	Supervised field training for Agribusiness students with local industry businesses.	Prerequisites: Student shall be in final semester before graduation and permission of Department or Division.	LAB 3.0 6.0 0.0
AGB296WA	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 1.0 5.0 0.0
AGB296WB	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 2.0 10.0 0.0
AGB296WC	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 3.0 15.0 0.0

AGB296WD	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 4.0 20.0 0.0
AGB298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
AGB298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
AGB298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment are made available for student use. Allows the best aspects of independent study and individualized learning to be	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
AGL181	Landscape Construction Techniques	The methods used in site preparation, installation of edgings, construction of walks, patios and decks, installation of sprinkler systems, rock scapes and the planting of trees, shrubs, ground covers, and lawns.	Prerequisites: None.	L+L 3.0 6.0 6.0

AGL184	Landscape Drafting and Design I	Basic principles of landscape design, including drafting and design techniques commonly used in the field of landscaping. Emphasis on simple working drawings and detailed views, symbols, lettering, and drafting	Prerequisites: None.	L+L 2.0 4.0 4.0
AGL188	Arizona Landscape Design	Designed for residential homeowner and beginning professional. Emphasis on plant material groupings and basic design principles. History of landscape use, special features of hardscapes, irrigation systems, and	Prerequisites: None.	L+L 2.0 3.0 3.0
AGL189	Landscape Design I	Introduction to landscape design with an emphasis on residential and small scale projects. Application of design processes from inventory and analysis through design and development including program, measured base, study diagrams, rendered and colored plans, and sectional elevations. Architectural communication developed through hand sketch and hand drafting	Prerequisites: None.	L+L 3.0 6.0 6.0
AGL190	Landscape Design II	Advanced study of the principles, processes, and practice of Landscape Design, with an emphasis on residential and small scale design. Design problem-solving, use of landscape elements such as paving, fencing, small structures, low voltage lighting, plants, water and fire features. Construction documents will be produced including plans, estimates, details, and specifications. Regulatory agencies and other affective	Prerequisites: A grade of C or better in AGL189 or permission of Instructor.	L+L 3.0 6.0 6.0
AGL269	Computer Aided Landscape Design	Using AutoCAD to create landscape design drawings and wire frames in Sketchup for elevations, sections and perspective sketches.	Prerequisites: A grade of C or better in (AGB139 or CAD100 or CAD101) and AGL189 or permission of	L+L 3.0 6.0 6.0
AGL296WA	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 1.0 5.0 0.0

AGL296WB	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 2.0 10.0 0.0
AGL296WC	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 3.0 15.0 0.0
AGL296WD	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 4.0 20.0 0.0
AGL298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0

AGL298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
AGL298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
AGS100	Safety and Standard Operating Procedures for Sustainable	Introduction to sustainable horticulture industry standards. Includes an overview of safety practices, workplace habits, tools, and equipment.	Prerequisites: None.	LEC 1.0 2.0 2.0
AGS160	Introduction to Landscape Design	Introduction to landscape design and documentation with an emphasis on sketching and Building Information Modeling (BIM). Application of design processes from inventory and analysis through design and development including program, measured base, study diagrams, rendered and colored plans, and sectional elevations. Architectural communication developed	Prerequisites: None.	LEC 4.0 3.0 3.0 LAB 0.0 3.0 3.0
AGS164	Plant Growth and Development	Principles of growth in relation to seed germination, emergence, growth and reproduction processes of plants and the environmental influences on plant	Prerequisites: None.	LEC 4.0 2.0 2.0 LAB 0.0 4.0 4.0
AGS165AA	Fall Sustainable Crop Production	Study of the importance of Fall-planted crops for food, feed, and fiber. Cultural practices for raising the major crops in the State of Arizona, including planting, environmental modifications, harvesting, handling and	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: AGS164 or permission of Instructor.	LEC 3.0 2.0 2.0 LAB 0.0 3.0 3.0
AGS165AB	Spring Sustainable Crop Production	Study of the importance of Spring-planted crops for food, feed, and fiber. Cultural practices for raising the major crops in the State of Arizona, including planting, environmental modifications, harvesting, handling and	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: AGS164 or permission of Instructor.	LEC 3.0 2.0 2.0 LAB 0.0 3.0 3.0
AGS166	Aquaponics	Establishment, care, and selection of facilities for commercial production of animals and plants in a water-	Prerequisites: None.	LEC 3.0 2.0 2.0 LAB 0.0 3.0 3.0

AGS168	Grounds Equipment Management	Selection, use and maintenance of grounds equipment, including both manual and power equipment.	Prerequisites: None.	L+L 3.0 5.0 5.0
AGS170	Pesticides	Chemistry and classification of pesticides. Interpret the use of pesticide labels	Prerequisites: None.	LEC 0.5 0.5 0.5
AGS171	Insect Identification	Concepts of insect identification	Prerequisites: None.	LEC 0.5 0.5 0.5
AGS172	Household Pests	Problems associated with household pests	Prerequisites: None.	LEC 0.5 0.5 0.5
AGS173	Wood Destroying	Problems associated with wood destroying pests	Prerequisites: None.	LEC 0.5 0.5 0.5
AGS174	Regulations: Federal and State	Federal and state pesticide regulations and guidelines for licensing pest control use	Prerequisites: None.	LEC 0.5 0.5 0.5
AGS175	Pesticide Safety and Use of Equipment	Federal and state pesticide safety regulations and use of equipment	Prerequisites: None.	LEC 0.5 0.5 0.5
AGS176	Environment and Toxicology of	Environmental concepts, endangered species and toxicology associated with the use of pesticides	Prerequisites: None.	LEC 0.5 0.5 0.5
AGS177	Aquatic Pest Control	Aquatic ecosystems, pest organisms and their control	Prerequisites: None.	LEC 0.5 0.5 0.5
AGS178	General Pest Control	Arthropods and other pest organisms and their control	Prerequisites: None.	LEC 0.5 0.5 0.5
AGS179	Terrestrial Weed	Terrestrial weeds and their control	Prerequisites: None.	LEC 0.5 0.5 0.5
AGS182	Gardening Practices and Techniques	Cultural practices of vegetables, fruits and ornamental plants as they relate to organic and inorganic gardening	Prerequisites: None.	LEC 2.0 2.0 2.0
AGS182AA	Gardening Practices and Techniques	Cultural practices of vegetables, fruits and ornamental plants as they relate to organic and inorganic	Prerequisites: None.	LEC 3.0 1.0 1.0 LAB 0.0 3.0 3.0
AGS183	Urban Plant Identification and Use	Identification, growth, cultural requirements, uses, maintenance, and care of landscape trees, shrubs, vines and ground covers commonly used in Arizona	Prerequisites: None.	LEC 3.0 3.0 3.0
AGS183AA	Urban Plant Identification and Use: Trees	Emphasis on trees commonly used in cityscapes in the Southwest. Review of their origin, cultural requirements, uses, required maintenance, benefits and disadvantages. Identification, planting procedures,	Prerequisites: None.	LEC 1.0 1.0 1.0
AGS183AB	Urban Plant Identification and Use: Shrubs	Emphasis on shrubs commonly used in cityscapes in the Southwest. Review of their origin, cultural requirements, uses, required maintenance, benefits and disadvantages. Identification, planting procedures,	Prerequisites: None.	LEC 1.0 1.0 1.0
AGS183AC	Urban Plant Identification and Use: Vines, Flowers, Groundcovers	Emphasis on groundcovers, annuals, perennials and vines commonly used in cityscapes in the Southwest. Review of their origin, cultural requirements, uses, required maintenance, benefits and disadvantages. Identification, planting procedures, water and nutritional	Prerequisites: None.	LEC 1.0 1.0 1.0

AGS186	Greenhouse Management and Construction	Principles and practices of greenhouse operation; control of environmental factors and cultural practices affecting the production of greenhouse crops	Prerequisites: None.	LEC 3.0 2.0 2.0 LAB 0.0 3.0 3.0
AGS186AA	Greenhouse Management and Construction	Principles and practices of greenhouse operation; control of environmental factors and cultural practices affecting the production of greenhouse crops	Prerequisites: None.	LEC 3.0 3.0 3.0
AGS187	Indoor Foliage Plants	Environmental and nutritional requirements for foliage plants used for interior decoration. Includes	Prerequisites: None.	LEC 3.0 3.0 3.0
AGS188	Arid Landscape Plants	Provides information on currently propagated Xerophytes available in southern Arizona. Shows how each can be applied to specific desert landscape situations. Considers identification, cultural	Prerequisites: None.	LEC 3.0 6.0 5.1
AGS190	Arid Land Plants Identification and Use	Covers xerophytes common in southern Arizona and their applications to specific desert landscape situations. Identification, cultural requirements, and physical characteristics related to landscape design,	Prerequisites: None.	LEC 3.0 3.0 3.0
AGS192	Urban Plant Care	Establishment, care and preservation of ornamental trees, shrubs, vines, and ground cover plants used in landscape for human well-being and pleasure.	Prerequisites: None.	LEC 3.0 2.0 2.0 LAB 0.0 3.0 3.0
AGS192AA	Urban Plant Care: Site Analysis, Plant Selection and	Establishment of ornamental trees, shrubs, vines, and ground cover plants used in landscape for human well-being and pleasure	Prerequisites: None.	LEC 1.0 1.67 1.46
AGS192AB	Urban Plant Care: Maintenance of Urban Plants	Care of ornamental trees, shrubs, vines, and ground cover plants used in landscape for human well-being and pleasure	Prerequisites: None.	LEC 1.0 1.67 1.46
AGS192AC	Urban Plant Care: Diagnosing and Curing Plant Problems	Preservation of ornamental trees, shrubs, vines, and ground cover plants used in landscape for human well-being and pleasure	Prerequisites: None.	LEC 1.0 1.67 1.46
AGS200	Southwest Landscape Plants: Identification and Care	Establishment, identification, growth, use, environmental requirements, maintenance, and care of Southwest Desert landscape trees, shrubs, vines, and	Prerequisites: None.	LEC 4.0 2.0 2.0 LAB 0.0 4.0 4.0
AGS210	Landscape Construction	Focus on landscape construction methods for site preparation, planting of landscape plants, and installation of hardscapes and desertscapes. Also	Prerequisites: None.	LEC 4.0 3.0 3.0 LAB 0.0 3.0 3.0
AGS212	Sustainable Livestock Production	Exploration of conventional, organic, and sustainable livestock production systems.	Prerequisites: None.	LEC 3.0 2.0 2.0 LAB 0.0 3.0 3.0

AGS217	Introduction to Hydroponics and Greenhouse Management	Introduction to hydroponics and controlled environment agriculture. Includes a history of hydroponics and the greenhouse industry, basic plant physiology and anatomy, study of general cultural practices, plant protection, conventional and organic hydroponic production systems, pollination, and fertilization. Provides an overview of plant nutrition and disorders, irrigation systems and nutrients transplant production. Covers greenhouse site selection, structures and	Prerequisites: None.	LEC 4.0 2.0 2.0 LAB 0.0 4.0 4.0
AGS255	Plant Tissue Culture	Plant tissue culture techniques for cloning, reproduction, and manufacturing including media mixing, cell growth and development, aseptic transfer,	Prerequisites: A grade of C or better in AGS164.	L+L 3.0 5.0 5.0
AGS260	Soils	Fundamental properties of the physical, chemical, and biological relation of soil to plant growth. Evaluation of the human impact on soil health.	Prerequisites: None.	LEC 4.0 3.0 3.0 LAB 0.0 3.0 3.0
AGS261	Soil Fertility And Management	Relationship of soils, crops, and climatic factors to economic use of commercial fertilizer	Prerequisites: None.	LEC 3.0 3.0 3.0
AGS262	Irrigation Design, Installation, Operation, and Trouble Shooting	Design, installation, maintenance and troubleshooting of sprinklers, drip, and flood systems. Use of time clocks, pumps, filters, backflow devices, and other equipment to deliver water to the landscape. Types of	Prerequisites: None.	LEC 3.0 1.0 1.0 LAB 0.0 3.0 3.0
AGS264	Irrigation and Water Management	Irrigation and drainage problems relating to pumps, motors, pipe lines, ditches and wells in the Southwest. Installation of sprinkler, drip and subirrigation, time clock installation and repair. Land measurement and	Prerequisites: None.	LEC 3.0 2.0 2.0 LAB 0.0 3.0 3.0
AGS265	Sustainable Crop Production	Study of the importance of crops for food, feed, and fiber. Cultural practices for raising the major crops in the State of Arizona, including planting, environmental modifications, harvesting, handling and quality control	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: AGS164 or permission of Instructor.	LEC 4.0 3.0 3.0 LAB 0.0 3.0 3.0
AGS266	Urban Insect Control	The interrelationship of plant organisms, animals and environments with insects as affected by soils, temperature, water and agricultural chemicals	Prerequisites: None.	LEC 3.0 3.0 3.0
AGS267	Weeds and Plant Diseases of Arizona	Weed identification, relationship to competition, cultural practices, prevention and chemical usage for control. General outline of plant autonomy and physiology relating to chemical usage of selectivity. Diseases of plants, their life cycles, biological interrelationships,	Prerequisites: None.	L+L 3.0 5.0 5.0

AGS268	Integrated Pest Management in the Cultivated	Identification and management of pests of the garden, farm and landscape in the arid west. Special emphasis is given to safe handling of pesticides.	Prerequisites: None.	LEC 4.0 1.0 1.0 LAB 0.0 4.0 4.0
AGS280	Advanced Cannabis Cultivation	In-depth study of cannabis cultivation, including hands-on experience with full cycle cannabis cultivation from propagation to post harvest. Examines cannabis laws and regulations, plant biology, photoperiods, plant physiology, propagation techniques, nutrition, cultural practices, harvest and curing processes, pest identification and control. Also includes monitoring and	Prerequisites: A grade of C or better in AGS217.	LEC 4.0 6.0 5.4 LAB 0.0 6.0 6.0
AGS282AA	Service-Learning Experience in	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 1.0 1.0 0.0
AGS282AB	Service-Learning Experience in	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 2.0 2.0 0.0
AGS282AC	Service-Learning Experience in	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 3.0 3.0 0.0
AGS284	Lawn and Turf Care	Factors that affect the establishment and maintenance of turf grasses. Includes budgets, schedules and	Prerequisites: None.	LEC 3.0 3.0 3.0
AGS285	Propagation of Horticultural Plants	Principles and processes of propagation of crops using seed, budding, grafting, and cuttings in greenhouse	Prerequisites: None.	LEC 3.0 2.0 2.0 LAB 0.0 3.0 3.0
AGS285AA	Propagation of Horticultural Plants Structures Media and Management	Design, maintenance and repair of greenhouse structures. Principles of plant propagation media and procedures. The processes involved in nursery management, including plant care, display, and	Prerequisites: None.	LEC 1.0 0.67 0.67 LAB 0.0 1.0 1.0
AGS290	Internship	Supervised field training for Urban Horticulture students with local industry businesses.	Prerequisites: Student shall be in final semester before graduation and permission of Department or Division.	LAB 3.0 6.0 0.0
AGS296WA	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 1.0 5.0 0.0

AGS296WB	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 2.0 10.0 0.0
AGS296WC	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 3.0 15.0 0.0
AGS296WD	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 4.0 20.0 0.0
AGS298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0

AGS298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
AGS298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
AHU245	Arabic Culture and Islam	A survey of Arab heritage in the Arab world (Middle East). Cultural and social institutions and their contribution to the development of the region and its	Prerequisites: None.	LEC 3.0 3.0 3.0
AIM100	Introduction to Artificial Intelligence	Basic concepts and applications of artificial intelligence (AI), including AI project cycles. Focus on issues surrounding AI including ethics, bias, culture,	Prerequisites: None.	LEC 3.0 3.0 3.0
AIM110	Introduction to Machine Learning	Introduction to machine learning concepts and Python applications, including data acquisition, supervised and unsupervised learning, and data modeling.	Prerequisites: A grade of C or better in AIM100 and (CSC101 or CIS156) and MAT206.	L+L 3.0 4.0 4.0
AIM111	Introduction to Data Science	Introduction to the basics of data science, including data handling, problem framing in a data-centric context, the foundational techniques of exploratory data analysis (EDA), data visualization, and data ethics. Students will gain practical experience in using various	Prerequisites: A grade of C or better in (CSC101 and AIM100) or permission of Program Director.	LEC 3.0 3.0 3.0
AIM210	Natural Language Processing	Fundamental concepts in Natural Language Processing (NLP) and text processing. Focus on knowledge and skills necessary to create a language recognition	Prerequisites: A grade of C or better in AIM110.	L+L 3.0 4.0 4.0
AIM220	Artificial Intelligence for Computer Vision	Understand and apply the basic techniques to process images using OpenCV and Python libraries.	Prerequisites: A grade of C or better in AIM110.	L+L 3.0 4.0 4.0
AIM230	Artificial Intelligence for Business Solutions	Fundamentals of artificial intelligence (AI) and machine learning to support business solutions.	Prerequisites: A grade of C or better in AIM210 and AIM220.	L+L 3.0 4.0 4.0

AIM240	Artificial Intelligence Capstone Project	Focus on how a social issue is explored, brought through the Artificial Intelligence (AI) Project cycle, and delivered as a solution using the different domains of AI, including computer vision and natural language	Prerequisites: A grade of C or better in AIM210 and AIM220.	L+L 3.0 4.0 4.0
AIM250	Machine Learning I	Examination of statistical machine learning algorithms and Python applications with an introduction to deep learning. Emphasis on data input, algorithm selection, hyperparameter tuning, and model evaluation and	Prerequisites: A grade of C or better in [AIM111, (MAT230 or MAT231), MAT225, and MAT206] or permission of Program Director.	L+L 3.0 4.0 4.0
AIR160	Reservation/Booking Procedures	Overview of reservation/booking procedures. Includes use of availability displays, seating assignments, booking procedures, and fare rules as well as fare pricing and selling. Communication skills also covered.	Prerequisites: None.	LEC 3.0 3.0 3.0
AIR161	Airline Reservations Systems	Practical application of a travel booking procedures using a computerized reservations system. Covers codes, Passenger Name Record, booking, and	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: AIR160 or permission	L+L 2.0 3.0 3.0
AIR163	Advanced Airline Reservations	Rules, restrictions, and procedures for handling special reservations situations and managing codeshare accounts and award plans. Also includes international	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: AIR160 or permission	L+L 2.0 3.0 3.0
AIR165	Overview of Flight Schedules/Itineraries	Basic reservation information including flight schedules, itineraries, and fares. Handling travel agent calls also	Prerequisites: None.	LEC 3.0 3.0 3.0
AIR170	International Air Transport Association Geography	Overview of world geography according to the International Air Transport Association (IATA). Includes world traffic area divisions, sub areas and office responsibilities. Also covers atlas reading including location of countries, major cities and grids in addition to	Prerequisites: None.	LEC 1.0 1.0 1.0
AIR171	International Air Transport	International air reservations procedures. Includes Passenger Name Record (PNR) creation and modification as well as use of availability displays and international itineraries. Covers preferred programs and	Prerequisites: None.	LEC 3.0 3.0 3.0
AIR172	International Fares	Overview of international fares. Includes fare basis codes, combinability and construction. Also covers transpacific routing and electronic tickets as well as procedures for completing international reissues.	Prerequisites: None.	LEC 1.0 1.0 1.0
AIR173	International Air Transport Lab	Practical application of international air reservations procedures. Includes Passenger Name Record (PNR) creation and modification as well as use of availability	Prerequisites: None.	LAB 2.0 6.0 6.0

AIS101	Survey of American Indian Issues	Introduction to critical issues related to American Indian peoples. Examines cultural, political, economic, educational, social, and environmental issues. Focuses on contemporary issues and factors influencing	Prerequisites: None.	LEC 3.0 3.0 3.0
AIS103	Introduction to Indigenous Cultures	Introduction to political, economic and social structures of indigenous peoples. Examines the impact on indigenous peoples of contact with non-indigenous	Prerequisites: None.	LEC 1.0 1.0 1.0
AIS105	Introduction to American Indian Studies	Introduction to political, economic, and social structures of American Indian Nations. Provides overview of American Indian tribal cultures prior to contact, the impact of European contact, and the influence of	Prerequisites: None.	LEC 3.0 3.0 3.0
AIS110	Navajo Government	Addresses and examines major historical developments of the Navajo People with a focus on government, law, society, livelihood, tradition, and culture. Includes the major components and operation of Navajo government and related tribal laws, such as Title II and Title VII of the Navajo Nation Code, as well as the significance of the Treaty of 1868. Federal Indian policies and their impact on Navajo society and government, the importance of federal and tribal citizenship and related	Prerequisites: None.	LEC 3.0 3.0 3.0
AIS112	American Indian Policy	Reviews United States government policies and their impact on American Indian sovereignty. Examines historic, legal, economic, and social issues regarding Indian policies and how they impact Indian Nations and individual Indians. Studies historical as well as contemporary policies created by the Federal Government that define the trust relationship between	Prerequisites: None.	LEC 3.0 3.0 3.0
AIS113	Proposal Writing	Provides an overview of funding sources for grants. Reviews techniques and skills necessary to develop successful proposals. Focuses on the design and writing of a complete grant proposal related to a	Prerequisites: A grade of C or better in ENG101 or ENG107.	LEC 3.0 3.0 3.0
AIS140	American Indian History	Survey of American Indian history with emphasis on the last 200 years. Focuses on cultural, economic, political and social continuity and changes. Topics include how federal policies impacted and were shaped by Indigenous peoples and how Indigenous individuals, communities, and nations have maintained cultural	Prerequisites: None.	LEC 3.0 3.0 3.0

AIS141	Sovereign Indian Nations	Explores the sovereign status of American Indians as it relates to social relationships, traditions, and culture of American Indians. Reviews historic relations with non-Indian societies, the development of federal Indian law, tribal governments and their functions. Examines treaty rights, environmental issues, public policy, economic	Prerequisites: None.	LEC 3.0 3.0 3.0
AIS160	American Indian Law	Analyzes the legal system of the United States Government as it applies to American Indian Nations. Examines how United States legal institutions have impacted Indian sovereignty. Units of analysis include the development of Indian law, United States Supreme Court decisions, Congressional Acts, treaty rights and the development of tribal governments. Focuses on	Prerequisites: None.	LEC 3.0 3.0 3.0
AIS170	American Indian History of the Southwest	Covers history of American Indian Peoples of the Southwestern United States from pre-European contact era to the present. Includes historical events, the development and implementation of non-Indigenous policies and their impact on American Indian Peoples in	Prerequisites: None.	LEC 3.0 3.0 3.0
AIS201	Indigenous Nation Building	Discussion of the relationship between general management issues and their specific application to tribal government situations. Special consideration given to application of management theory and to the	Prerequisites: None.	LEC 3.0 3.0 3.0
AIS203	Fundamentals of Economic Development for Indigenous Nations	Provides a practical understanding of the economic development process. Examines ways in which development can be initiated and financed. Focuses on how budget systems can be used as management tools. Reviews fundamentals of proposal writing and	Prerequisites: None.	LEC 3.0 3.0 3.0
AIS210	Multicultural Representation in the History of STEM	Aims to fill a gap by exploring the perspectives, experiences, and contributions of individuals from various cultural backgrounds in the study of science, technology, engineering, and mathematics (STEM). Analyzes and synthesizes how different cultures have shaped scientific knowledge, examining the impact of diversity on innovation and problem-solving, and	Prerequisites: None.	LEC 3.0 3.0 3.0
AIS213	American Indian Religions	An examination of the historical and cultural background of diverse lifeways and worldviews belonging to the peoples indigenous to the North American continent over time, including a study of	Prerequisites: A grade of C or better in ENG101, or ENG107, or equivalent.	LEC 3.0 3.0 3.0

AIS261	Indigenous Women's Literature of the Americas	Explores contemporary voices of Indigenous women authors and artists in the Americas as expressed in poetry, fiction, nonfiction, drama, and oral traditions. Focuses on themes relevant to Indigenous women and examines the trends and movements within Indigenous peoples and women's literary history. Examines themes relevant to Indigenous women such as racial and	Prerequisites: A grade of C or better in ENG101 or ENG107.	LEC 3.0 3.0 3.0
AIS282AA	Volunteerism for Indigenous Studies	Service-learning field experience within private/public agencies, educational institutions, and citizen volunteer	Prerequisites: Permission of Instructor.	LAB 1.0 1.0 0.0
AIS282AB	Volunteerism for Indigenous Studies	Service-learning field experience within private/public agencies, educational institutions, and citizen volunteer	Prerequisites: Permission of Instructor.	LAB 2.0 2.0 0.0
AIS296WA	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits, minimum 2.6 grade point average, and be able to obtain a position related to student's academic or career goals (student's present job may qualify); or permission of instructor. Corequisites: Must be concurrently enrolled in at least one class which is related to student's major or career	LAB 1.0 5.0 0.0
AIS296WB	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits, minimum 2.6 grade point average, and be able to obtain a position related to student's academic or career goals (student's present job may qualify); or permission of instructor. Corequisites: Must be concurrently enrolled in at least one class which is related to student's major or career	LAB 2.0 10.0 0.0

AIS296WC	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits, minimum 2.6 grade point average, and be able to obtain a position related to student's academic or career goals (student's present job may qualify); or permission of instructor. Corequisites: Must be concurrently enrolled in at least one class which is related to student's major or career	LAB 3.0 15.0 0.0
AIS296WD	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits, minimum 2.6 grade point average, and be able to obtain a position related to student's academic or career goals (student's present job may qualify); or permission of instructor. Corequisites: Must be concurrently enrolled in at least one class which is related to student's major or career	LAB 4.0 20.0 0.0
AIS298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
AIS298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0

AIS298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
AIT100	Industrial Safety	Introductory course in workplace safety training, including an overview of critical safety policies, procedures, and practices that help prevent injuries and	Prerequisites: None.	LEC 1.0 1.0 1.0
AIT101	Introduction to Industrial Automation	Introductory course in manufacturing automation systems and technologies. Includes safety practices, quality measurement, print reading, machine operation, hand tool usage, and maintenance operations.	Prerequisites: None.	LEC 3.0 3.0 3.0 LAB 0.0 2.0 2.0
AIT105	Modern Maintenance Operations	Introductory course into the practice of modern maintenance operations. Includes: safely and correctly using maintenance tools (e.g., hand tools, power tools), measuring instrumentations (e.g., tape, caliper, micrometer) and reading various engineering documents (e.g., blueprints, flowcharts, parts diagrams). Use and convert units in System International (SI) and imperial. Basic discussion of industrial safety procedures, machine operations, troubleshooting,	Prerequisites: None.	LEC 3.0 2.0 2.0 LAB 0.0 3.0 3.0
AIT110	Mechanical Power Transmission Systems	Introductory course in how to transmit, measure, calculate, and work safely with rotational mechanical equipment. Hands-on assembly, alignment, maintenance, and troubleshooting of mechanical power transmission systems and components e.g., belts, bearings, chains, dynamometers, gears, pulleys, couplings, bushings, and sprockets. Introduction to	Prerequisites: None.	LEC 3.0 2.0 2.0 LAB 0.0 3.0 3.0
AIT112	Natural Gas Pipeline Operations	Introduction to the fundamentals of the natural gas pipeline operations. Includes topics such as damage prevention, emergency response, valve operation, and testing of facilities. This course prepares students for the Non-Joiner Operator Qualification in the natural gas	Prerequisites: None.	LEC 3.0 3.0 3.0

AIT113	Natural Gas Pipe Joiner	Principles and practices of plastic pipe joining in the natural gas industry. Includes pipe joining techniques such as solvent cements, heat fusions, mechanical saddle fittings, and compression couplings. This course prepares students for Pipe Joiner Qualification in the	Prerequisites: None.	LEC 3.0 3.0 3.0
AIT115	Hydraulic Systems	Introductory course in the principles of hydraulic system operation, components construction, maintenance, troubleshooting, and operation, as well as the role of the individual components in an operating hydraulic system. Includes hydraulic fitting and seals, accumulators, cylinders, directional control valves (DVC), relief valves, check valves, pumps, filters, hoses, and a	Prerequisites: None.	LEC 3.0 2.0 2.0 LAB 0.0 3.0 3.0
AIT117	Introduction to Data Center Operations	Provides the foundational aspects of data center fundamentals, data center compliance, operations, and physical infrastructure. Introduces mission critical operations (MCOs) as they apply to data centers. Includes an overview of the physical components of a	Prerequisites: None.	L+L 3.0 4.0 4.0
AIT120	Pneumatic Systems	Introductory course in the principles of pneumatic system operation, components construction, maintenance, troubleshooting, and operation, as well as the role of the individual components of an operating pneumatic system. Includes pneumatic fitting, seals, accumulators, actuator/cylinders, Directional Control Valves (DCV), manifolds, relief valves, check valves,	Prerequisites: None.	LEC 3.0 2.0 2.0 LAB 0.0 3.0 3.0
AIT121	Vacuum Technology and Maintenance	Overview of vacuum pumps used in high-vacuum industries such as advanced manufacturing, thin-film technology, optoelectronics, semiconductors, and more. Includes the operational methodology, components, and proper use of vacuum pumps. Focus on	Prerequisites: None.	LEC 3.0 2.0 2.0 LAB 0.0 3.0 3.0
AIT123	J-STD Soldering Certification	This course will prepare the successful student to receive the "Certified IPC Specialist" (CIS) certification from The Institute for Interconnecting and Packaging Electronic Circuits (IPC) in "Requirements for Soldered Electrical and Electronic Assemblies" (IPC J-STD-001). Topics covered and skills to be demonstrated are: soldered wires and terminals, through hole connections,	Prerequisites: Permission of Instructor.	L+L 3.0 4.0 4.0

AIT124	Composites	Basic composite materials, construction, and repair. Manufacturing methods and equipment. Assessment and repair of composite structures using vacuum bagging and other approved procedures. Corrosion control, electrical bonding, materials substitutions, machining of composite components, mold fabrication.	Prerequisites: None.	L+L 3.0 4.0 4.0
AIT125	DC and AC Components and Circuits	An introductory course in Alternating Current (AC) and Direct Current (DC) electric theory. Includes electric circuits using resistors, capacitors and inductors. Also includes solenoids, relays, transformers, basic DC and	Prerequisites: None.	LEC 3.0 2.0 2.0 LAB 0.0 3.0 3.0
AIT126	Energy Industry Fundamentals	Various types of energy and their conversion to useable energy such as electrical power. How generated electrical power is transmitted and distributed to the	Prerequisites: None.	LEC 3.0 3.0 3.0
AIT127	Power Plant Components	Theory, construction and application of basic power plant mechanical components. Basic concepts of electrical fundamentals and electronics discussed.	Prerequisites: None.	L+L 3.0 3.0 3.0
AIT128	A-620 Cable and Wire Harness Assembly Certification	This course will prepare the successful student to receive the "Certified IPC Specialist" (CIS) certification from The Institute for Interconnecting and Packaging Electronic Circuits (IPC)/Wire Harness Manufacturer's Association (WHMA) in "Requirements and Acceptance for Cable and Wire Harness Assemblies" (IPC/WHMA-A-620 Certification). Topics covered and skills to be demonstrated are: soldered terminations, crimp terminations, insulation displacement terminations (IDC), splices, connectorization, marking/labeling, coaxial	Prerequisites: None.	L+L 3.0 4.0 4.0
AIT130	Maintenance Piping	Overview of the area of maintenance of piping systems for manufacturing or industrial facilities. Preparation to sit for the NIMS Duty Area 9: Maintenance Piping	Prerequisites: None.	LEC 3.0 2.0 2.0 LAB 0.0 3.0 3.0
AIT132	Industrial Technology for the Semiconductor Industry	Introduction to semiconductor manufacturing concepts, processes, and hands-on application. Includes electrical theory, circuits, schematics, hand tools, safety, clean room protocols, model based problem solving, lean	Prerequisites: None.	L+L 3.0 4.0 4.0
AIT205	Power Electronics and Variable Frequency Drives	Introductory course in AC and DC power electronic theory. Includes power supplies, power conditioning, solid-state power devices, and power control circuits. Also includes proximity sensors, analog thermal sensors, control feedback loops, and the setup and	Prerequisites: A grade of C or better in AIT125, or permission of Instructor.	LEC 3.0 2.0 2.0 LAB 0.0 3.0 3.0

AIT210	Programmable Logic Controller Programming and Troubleshooting	Introductory course in Programmable Logic Controller (PLC) Ladder Logic programming and troubleshooting PLC connected components and systems. Also includes basic Human Machine Interface (HMI)	Prerequisites: A grade of C or better in AIT125, or permission of Instructor.	LEC 3.0 2.0 2.0 LAB 0.0 3.0 3.0
AIT212	Valve Maintenance II	Fundamentals of hand lapping. Dexter and Unislip resurfacing tools. Valve packing: purpose, components and specifications. Valve survey data sheet. Procedure for field manufacture of die-formed packing rings. Function of the Optical Flat. Valve inspection. Gaskets	Prerequisites: None.	LEC 3.0 3.0 3.0
AIT213	Pumps II	Rotary, reciprocating and centrifugal pump operation. Positive displacement and metering pump operation. Diaphragm pulsafeder operation. Disassembly, inspection and reassembly of radially and axially split	Prerequisites: None.	LEC 3.0 3.0 3.0
AIT215	Process Control Systems	Introductory course in Process Control Systems design, operation, and tuning of Proportional, Integral, Derivative (PID) controllers for regulating flow, temperature, pressure, and level of industrial process variables. Includes manual control, feedback control, automated controls, analysis process setup, operate, and troubleshooting processes of control systems. Also includes typical Pipe and Instrument Diagram (P&IDs)	Prerequisites: A grade of C or better in AIT125, or permission of Instructor.	LEC 4.0 2.0 2.0 LAB 0.0 4.0 4.0
AIT225	Industrial Motors and Motor Control	An introductory course in DC, single-phase AC, and 3-phase AC electric motors and motor control circuits. Includes electric motor control circuit components, motor control circuit applications, sequence circuits, and timer	Prerequisites: A grade of C or better in AIT125, or permission of Instructor.	LEC 3.0 2.0 2.0 LAB 0.0 3.0 3.0
AIT227	Power Distribution Systems	Introduces transmission and distribution of electrical power. Includes application of transformers, distribution and over-current protection devices, switchboards, feeders, bus-ways, motor control centers, generators, and troubleshooting techniques associated with these	Prerequisites: A grade of C or better in AIT125.	LEC 3.0 2.0 2.0 LAB 0.0 3.0 3.0
AIT250	Automated Industrial Technology Capstone	An examination of the integration of mechanical, hydraulic, pneumatic, electrical, piping, electronic control, and process control systems. Experience in designing, building, maintaining, troubleshooting, and	Prerequisites: A grade of C or better in AIT210, or permission of Instructor.	LEC 3.0 2.0 2.0 LAB 0.0 2.0 2.0
AIT270	Robotics I	Fundamental principles of working safely with robots, and applications and trends in industrial robotics. Includes types of robots, axes and coordinate systems, programming and operating robots. Incorporates end	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: AIT100 or permission of Instructor.	LEC 3.0 2.0 2.0 LAB 0.0 2.0 2.0

AIT275	Robotics II	Intermediate principles of working safely with robots; robot auxiliary, subsystems, and components. Includes robot maintenance, troubleshooting and repair.	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: AIT270.	LEC 3.0 2.0 2.0 LAB 0.0 2.0 2.0
AIT276	Robotics Operations and Programming	This course is intended for an operator, technician, or programmer who must setup, record and/or troubleshoot programs on a Handling Tool software package. The course covers the Robot Operations intermixed with the tasks required to set up the	Prerequisites: A grade of C or better in (ATP190, ATP201, and ATP205) or permission of Instructor.	L+L 3.0 6.0 6.0
AIT280	Industry 4.0 and Industrial Control Systems	Introductory course in Industry 4.0, physical processes within factories, and the virtualization techniques and intelligent decision making capabilities. Includes Cyber-Physical Systems (CPS), Supervisory Control and Data Acquisition (SCADA), Distributed Control Systems (DCS), Smart Factories, lean manufacturing, and the	Prerequisites: A grade of C or better in AIT125, or permission of Instructor.	LEC 3.0 2.0 2.0 LAB 0.0 3.0 3.0
AIT285	Sensors and Data Acquisition	Introductory course in sensors and data acquisition. Includes sensor types, function, installation, adjustment, and maintenance. Also includes a brief overview of sensor signal conditioning, data acquisition	Prerequisites: A grade of C or better in AIT125, or permission of Instructor.	LEC 3.0 2.0 2.0 LAB 0.0 3.0 3.0
AIT291	Automated Industrial Technology Internship	Supervised work experience in production environments. Includes experiences in maintenance, troubleshooting, repair of production environment and specific manufacturing processes. Also includes experiences in problem solving; working as a team; soft skills; time and resource management; and exposure to	Prerequisites: A grade of C or better in AIT225, or permission of Instructor or Corequisites: AIT225.	LAB 3.0 6.0 0.0
AIT298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
AIT298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0

AIT298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
AJS100	Police Academy Preparation	Preparation for individuals entering a police academy as well for those who are in the beginning stages of preparing for a career in law enforcement. Includes principles of policing and job responsibilities. Covers expectations of recruits in the areas of academics, physical fitness, mental and emotional preparation.	Prerequisites: None.	LEC 2.0 2.0 2.0
AJS101	Introduction to Criminal Justice	An introduction to crime and society's responses to it. Examines the nature and causes of crime, the criminal law, constitutional safeguards, and the organization and operation of the criminal justice system including the police, courts, jails, prisons, probation and parole departments, and community corrections agencies.	Prerequisites: None.	LEC 3.0 3.0 3.0
AJS107	Patrol Procedures	Specialized areas of the patrol function, including responding to crowds, riots, bomb threats, intoxication, hazardous materials, fires, and domestic disputes.	Prerequisites: None.	LEC 3.0 3.0 3.0
AJS109	Substantive Criminal Law	Covers philosophy of legal sanctions and historical development from the common law to modern American criminal law, classifications of crimes, elements of and parties to crimes, general definition of crimes, common defenses utilized. Includes specific offenses and the	Prerequisites: None.	LEC 3.0 3.0 3.0
AJS110	Law and Legal Review I	In-depth study of the Arizona laws governing arrest by peace officers, as well as, an intensive study of the Arizona substantive criminal law code (ARS Title 13). Focuses on specific sections of ARS Title 4 and ARS Title 8, as they apply to peace officers in Arizona. Partially fulfills the Arizona POST (Peace Officer	Prerequisites: None.	LEC 3.0 3.0 3.0
AJS112	Wellness for Law Enforcement Officers	The value of physical fitness in law enforcement and the basic elements of strength training, aerobic conditioning, flexibility, nutrition, and back injury	Prerequisites: None.	L+L 3.0 3.0 3.0

AJS113	Criminal Justice Crime Control Policies and Practices	Focus on changing the distribution of crime opportunities rather than offender motivation. Topics include application of situational crime prevention strategies, problem-oriented crime control approaches,	Prerequisites: None.	LEC 3.0 3.0 3.0
AJS115	Community Emergency Response Team (CERT): Level I	Basic skills, including instruction in teamwork and disaster simulations, needed to help oneself, family, and neighbors in the event of a community disaster in accordance with the Federal Emergency Management	Prerequisites: None.	LEC 1.5 1.5 1.5
AJS116	Crime Prevention	Examines the principles and skills associated with crime prevention. Analyzes the appropriate techniques and strategies police agencies use to operate crime	Prerequisites: None.	LEC 3.0 3.0 3.0
AJS119	Computer Applications in Justice Studies	Provides literacy in microcomputer applications in major areas of the criminal justice system. Examines availability and uses of current software packages in criminal justice work. Provides hands-on experience with appropriate integrated software packages pertaining to	Prerequisites: None.	L+L 3.0 4.0 4.0
AJS123	Ethics and the Administration of Justice	Introduces and explores ethical issues and the justice system. Focuses on ethics and the law, the police, courts and corrections. Reviews ethical theory, concepts and practices as they relate to administration of justice. Explores issues of how media/social media shape ethics. Encourages critical thinking and value decision	Prerequisites: None.	LEC 3.0 3.0 3.0
AJS124	Correctional Institutions	An examination of correctional institutions with an emphasis on security measures, inmate classification, culture, employment, education, treatment programs,	Prerequisites: None.	LEC 3.0 3.0 3.0
AJS131	Police Management Techniques I	Police supervisory techniques related to employee grievances, internal investigations, counseling personnel, discipline, organization, and coordination, as	Prerequisites: None.	LEC 3.0 3.0 3.0
AJS132	Police Management Techniques II	Supervision in a law enforcement organization including accountability, transparency, leadership and	Prerequisites: A grade of C or better in AJS131 or permission of	LEC 3.0 3.0 3.0
AJS137	Public Safety Dispatcher: Basic	Designed to provide in-depth orientation and standardized training of public safety dispatchers within the law enforcement community and familiarize the student with the skills and information important to	Prerequisites: None.	LEC 5.0 5.0 5.0
AJS139	Emergency Response to Terrorism	Fundamentals of emergency response to suspected terrorist events. Historical perspective of terrorist activities and methods by which responders can identify and protect themselves and the public from these	Prerequisites: None.	LEC 3.0 3.0 3.0

AJS140AA	Patrol Rifle Concepts	Pre-law enforcement employment course relating to how rifles are used in the patrol function	Prerequisites: None.	LEC 1.0 1.0 1.0
AJS146	Disaster Recovery Operations	Specialized knowledge and skills for the emergency manager in developing programs and activities associated with disaster recovery assistance and mitigation actions that reduce losses from future	Prerequisites: None.	LEC 3.0 3.0 3.0
AJS147	Emergency Preparedness	Emergency preparedness related to natural and manmade disasters. Planning concepts and the planning process; awareness and education programs and strategies for the general community as well as	Prerequisites: None.	LEC 3.0 3.0 3.0
AJS148	Fundamentals of Emergency Management	Emergency management systems including career opportunities, function, tasks and responsibilities of the emergency management program manager, role of the emergency manager in mitigation, preparedness, response, and recovery. Past civil defense and current	Prerequisites: None.	LEC 3.0 3.0 3.0
AJS149	Hazard Mitigation	Knowledge and skills required to develop programs to reduce losses from future disasters, emergencies, and other extreme events caused by natural and man-made	Prerequisites: None.	LEC 3.0 3.0 3.0
AJS150	Defensive Tactics	Skills in the protection against persons armed with dangerous and deadly weapons, demonstration and drill in a limited number of holds and come-alongs, and	Prerequisites: None.	LEC 1.0 1.0 1.0
AJS151	Firearms I	Moral aspects, legal provisions, safety precautions and restrictions covering the use of firearms, and the firing of	Prerequisites: None.	L+L 1.0 1.0 1.0
AJS153	Firearms II/Handguns	Advanced familiarization with handguns. Variations of basic shooting stance. Legal and moral repercussions of self-defense. Includes range practice.	Prerequisites: A grade of C or better in AJS151 or equivalent certified firearms training as reviewed by the	L+L 1.0 1.0 1.0
AJS154	Firearms III/Long Weapons	Familiarization with different types of long weapons and associated ammunition. Emphasis on safety techniques for use and storage of weapons. Limited use of range	Prerequisites: None.	L+L 1.0 1.0 1.0
AJS155	Concealed Weapons Carry	Training in safe handling and use of handguns. Examines legal provisions related to carrying a concealed weapon; legal and moral implications of self-	Prerequisites: None.	L+L 2.0 2.0 2.0
AJS156	Home and Vehicle Personal Defense	Development of personal safety plans, confrontation avoidance, and effective self-defense tactics. Legal and safe use of firearms. Includes range practice	Prerequisites: A grade of C or better in AJS151 or permission of Instructor.	L+L 1.0 1.0 1.0

AJS162	Domestic Violence	Explores domestic violence as a social problem within the United States from historical, cultural, political, legal, and law enforcement perspectives. Provides an overview of theories, definitions and causes of, and interventions for domestic violence involving spousal, elder and child abuse along with teen dating violence. Examines the dynamics and effects of domestic	Prerequisites: None.	LEC 3.0 3.0 3.0
AJS170	Fire and Arson Investigation for Law Enforcement	An examination of fire and arson investigative techniques along with the motives and pathology of the arsonist and the chemistry of fire. Other topics include documenting the scene, evidence, eliminating	Prerequisites: None.	LEC 3.0 3.0 3.0
AJS192	Serial Killers and Mass Murderers	The study of serial killers, mass murderers and their victims. Examines the history and frequency of these crimes, profiles the killers and their victims, explores theories of causation, and discusses the problems and techniques of investigation, prosecution, punishment,	Prerequisites: None.	LEC 3.0 3.0 3.0
AJS195	International and Domestic Terrorism	An overview of the history, structure, goals, and activities of domestic and international terrorist groups. Explores theories explaining terrorism and reviews	Prerequisites: None.	LEC 3.0 3.0 3.0
AJS198AB	Special Topics in the Administration of	Explores special topics related to the administration of justice with an emphasis on current issues.	Prerequisites: None.	LEC 1.0 1.0 1.0
AJS198AF	Special Topics in the Administration of	Explores special topics related to the administration of justice with an emphasis on current issues.	Prerequisites: None.	LEC 3.0 3.0 3.0
AJS200	Current Issues in Criminal Justice	Examines current issues, techniques and trends in the Criminal Justice System.	Prerequisites: None.	LEC 3.0 3.0 3.0
AJS201	Rules of Evidence	A practical insight into the rules of evidence. Examines the general rules governing admissibility of evidence. Explores types of evidence, the hearsay rule, witness testimony, the exclusionary rule, privileged communications, best evidence rule. Examination of	Prerequisites: None.	LEC 3.0 3.0 3.0
AJS205	Effective Communication and Report Writing in Criminal Justice	Overview of effective communication for criminal justice agencies. Covers the communication process and flow. Written communication emphasized with report writing, including characteristics of reports and field notes, and the importance and uses of each. Form, style, and procedures for writing various reports, including elements of composition, required substance, proper	Prerequisites: None.	LEC 3.0 3.0 3.0

AJS210	Constitutional Law	An examination of the U.S. Constitution as it relates to the law enforcement function. Includes statutory law and judicial decisions governing the areas of arrest, search and seizure, interrogations and confessions, self-incrimination and other constitutional guarantees.	Prerequisites: None.	LEC 3.0 3.0 3.0
AJS211	Police Planning	An analysis of the process of planning, and a descriptive study of logical and systematic approaches to strategic, short-range, operational, organizational and tactical planning within a law enforcement	Prerequisites: None.	LEC 3.0 3.0 3.0
AJS212	Juvenile Justice Procedures	Examines the nature and extent of juvenile delinquency to the present. Including but not limited to the history, jurisdictions, terminology, procedures, and institutions of	Prerequisites: None.	LEC 3.0 3.0 3.0
AJS213	Evidence Technology: Fingerprints	Covers the fundamental principles of fingerprints, including the history of fingerprint classification, the biology of friction ridge skin, pattern analysis, comparison, and identification as well as their application in significant court cases. Also includes	Prerequisites: None.	LEC 3.0 3.0 3.0
AJS213AB	Fingerprint Classification I	Identification of typelines, deltas, and cores. Rules for classification of loops, whorls, and arches.	Prerequisites: None.	LEC 1.0 1.0 1.0
AJS214	Evidence Technology/Photography	The use of photography and other aids in identification and preservation of evidence such as fingerprints, footprints, and impressions. Techniques in crime scene and traffic accident photography.	Prerequisites: None.	LEC 3.0 3.0 3.0
AJS215	Criminalistics: Physical Evidence	The scientific analysis and examination of physical evidence with emphasis on scientific investigation, recognition, collection, and preservation of evidence. Topics include fingerprints, shoe prints, tool marks,	Prerequisites: None.	LEC 3.0 3.0 3.0
AJS216	Criminalistics: Biological Evidence	The scientific analysis and examination of biological evidence with emphasis on collection and preservation of evidence. Topics discussed include blood, drugs, blood alcohol, hairs and fibers, and topics of special	Prerequisites: None.	LEC 3.0 3.0 3.0
AJS218	Special Investigations: Drugs	Advanced course in the specialized investigation area of drug enforcement. Emphasis on the pharmacological properties of abused drugs, field testing, evidence requirements and specialized investigation techniques utilized in narcotic and dangerous drug investigations	Prerequisites: None.	LEC 3.0 3.0 3.0

AJS219	Crime Scene Technology: Physical Evidence	Scientific analysis and examination of physical evidence with emphasis on scientific investigation, recognition, collection, and preservation of evidence. Fingerprints, shoe prints, tool marks, firearms identification, paint	Prerequisites: None.	L+L 3.0 3.0 3.0
AJS220	Transnational Organized Crime	The study of organized crime on a domestic and global scale. Examines the history, structure, and activities of domestic and transnational organized crime groups. Explores domestic and global responses to transnational organized crime, along with accompanying	Prerequisites: None.	LEC 3.0 3.0 3.0
AJS223	Forensic Pathology: Death Investigation	An examination of the medical investigation of sudden, unnatural, unexplained or violent deaths. Explains the legal and medical roles of death investigators and medical examiners. Additional topics include the autopsy, documenting and evaluating the body, routine	Prerequisites: None.	LEC 3.0 3.0 3.0
AJS225	Criminology	Study of deviance, society's role in defining behavior; theories of criminality and the economic, social, and psychological impact of crime; relationships between statistics and crime trends. Examines crime victimization and the various types of crime and categories of	Prerequisites: None.	LEC 3.0 3.0 3.0
AJS230	The Police Function	An examination of the history, organization, procedures, and methods of operation of public policing in the United States. Career opportunities and current	Prerequisites: None.	LEC 3.0 3.0 3.0
AJS240	The Correction Function	Examines the history and development of correctional theories and institutions.	Prerequisites: None.	LEC 3.0 3.0 3.0
AJS243	Crime Scene Reconstruction	Examines techniques used to reconstruct the physical actions that occurred at a crime or accident scene. Involves the use of physical, testimonial, and documentary evidence, knowledge of criminal modus operandi and the scientific method, including deductive	Prerequisites: A grade of C or better in AJS215 or AJS216 or AJS219 or AJS275 or FOR105 or permission of Instructor.	LEC 3.0 3.0 3.0
AJS255	Mental Health Conditions and the Criminal Justice System	An introduction to methods police, court, and correctional personnel employ specific to those with mental health conditions. Covers various types of mental health conditions and police emergency responses to persons in crisis. Examines how criminal and civil courts intersect with persons diagnosed with mental disorders; includes diversion programs and the	Prerequisites: None.	LEC 3.0 3.0 3.0

AJS256	Law Enforcement Firearm Instructor	A train the trainer course for police firearm instructors. Covers instructional techniques for the pistol, revolver, and shotgun.	Prerequisites: AzPost (Peace Officer Standard and Training) Certified Police General Instructor or permission of Department or Division.	LEC 5.0 5.0 5.0
AJS256AA	Law Enforcement Patrol Rifle Instructor	Techniques on proper manipulation and marksmanship skills needed by a patrol officer/deputy in the use of the patrol rifle, and techniques of teaching those skills to other officers/deputies.	Prerequisites: AzPOST (Peace Officer Standard and Training) certified law enforcement firearms instructor or permission of Instructor.	LEC 3.0 3.0 3.0
AJS258	Victimology and Crisis Management in Public Safety	Victimology, the criminal justice system, techniques of crisis intervention and management, and the importance of a multicultural and global perspective. Includes violent crimes, sexual assault, family violence, post-traumatic stress disorder, the role of substance abuse, developing effective coping skills of victims and responders, appropriate community resources, and the	Prerequisites: None.	LEC 3.0 3.0 3.0
AJS260	Procedural Criminal Law	Concerned with the understanding of procedural criminal law. Examines the processes and procedures followed by law enforcement, attorneys, and the courts in the apprehension and prosecution of criminal offenders. Examines the rationale underlying major court holdings impacting the criminal justice process, the procedural requirements that stem from these holdings	Prerequisites: None.	LEC 3.0 3.0 3.0
AJS269AA	Internship	Supervised field training for pre-service administration of justice students with an approved criminal justice agency.	Prerequisites: Student sponsored by criminal justice agency, permission of Program Director or Division Chair	LAB 1.0 1.25 0.0
AJS269AB	Internship	Supervised field training for pre-service administration of justice students with an approved criminal justice agency.	Prerequisites: Student sponsored by criminal justice agency, permission of Program Director or Division Chair	LAB 2.0 2.5 0.0
AJS269AC	Internship	Supervised field training for pre-service administration of justice students with an approved criminal justice agency.	Prerequisites: Student sponsored by criminal justice agency, permission of Program Director or Division Chair	LAB 3.0 4.0 0.0
AJS270	Community Relations	Examination of community problems; community action programs and trends; human behavior, conflict and communication; and the relationship between the	Prerequisites: None.	LEC 3.0 3.0 3.0
AJS275	Criminal Investigation I	Introduction to the theory of criminal investigation. Examines crime scene procedures, case preparation, interviewing, identification, and basic investigative	Prerequisites: None.	LEC 3.0 3.0 3.0

AJS276	Terrorism Liaison	Provides knowledge and skills required for the Terrorism Liaison Officer (TLO) role to coordinate and communicate with various fire, police, and military agencies in managing threat vulnerability and other	Prerequisites: Permission of Program Director.	L+L 4.0 4.0 4.0
AJS277	Threat Vulnerability Assessment	Provides a historical perspective of threats and the activities and methods used by first responders to identify and mitigate future threats. Introduces and examines threat vulnerability of critical infrastructure within jurisdictions. Provides assessment techniques for	Prerequisites: Permission of Program Director.	L+L 1.0 1.0 1.0
AJS278	Hostile Intent and Intervention Training	Provides knowledge and skills required to detect and anticipate terrorist activities as a member of a Hostile Intent and Intervention Team (HIIT).	Prerequisites: Permission of Program Director.	L+L 2.0 2.0 2.0
AJS279	Field Intelligence Team Training	Provides knowledge and skills required for situational awareness of suspicious activities and the deployment of first responders for mitigation and investigation for	Prerequisites: Permission of Program Director.	L+L 3.0 3.0 3.0
AJS280	Terrorism Hazmat First Responder Training	Provides knowledge and skills to understand the chemistry of reactive and unstable hazardous materials, the toxicology of dangerous chemicals, and the measures taken to protect the safety of responders, the community, and the environment of chemical accidents. Also includes an introduction to field sampling of unknown substances for the Field Intelligence Team	Prerequisites: Permission of Program Director.	L+L 4.0 4.0 4.0
AJS282AA	Service-Learning Experience in Administration of Justice Studies	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 1.0 1.0 0.0
AJS282AB	Service-Learning Experience in Administration of Justice Studies	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 2.0 2.0 0.0
AJS282AC	Service-Learning Experience in Administration of Justice Studies	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 3.0 3.0 0.0
AJS290AH	Use of Force	Examines issues related to the use of force by and against police officers. Explores police use of force decision-making options. Reviews recent changes in	Prerequisites: Permission of Department or Division.	L+L 0.5 0.5 0.5

AJS290AI	Theories of Criminal Behavior	Theories of human behavior and crime. Biological, sociological, and psychological approaches to the	Prerequisites: None.	LEC 1.0 1.0 1.0
AJS290AU	Child Abuse	Definition and investigation of the causes and effects of	Prerequisites: None.	LEC 1.0 1.0 1.0
AJS290AW	Narcotics and Dangerous Drugs	Pharmacological effects of the use and abuse of drugs, including a description of common abuse patterns and investigative techniques used in the enforcement of	Prerequisites: None.	LEC 1.0 1.0 1.0
AJS290AZ	Police Interrogation Techniques	Proper interview and interrogation techniques, including a discussion of the constitutional rights of the defendant and applicable court decisions	Prerequisites: None.	LEC 1.0 1.0 1.0
AJS290BB	Police Report Writing	Writing clear, concise, complete, and accurate reports with an emphasis on sentence structure, paragraph construction, grammar, punctuation, and spelling.	Prerequisites: None.	LEC 1.0 1.0 1.0
AJS290BE	Probation and Parole	Current issues in probation and parole, including sentencing, parole revocation, and administrative	Prerequisites: None.	LEC 1.0 1.0 1.0
AJS290BH	Sex Crimes Investigation	Investigative procedures employed by the police and courtroom procedures utilized by the prosecuting	Prerequisites: None.	LEC 1.0 1.0 1.0
AJS290BJ	Accident Investigation I	Skills and concepts necessary to conduct an adequate traffic accident investigation	Prerequisites: None.	LEC 1.0 1.0 1.0
AJS290BN	Courtroom Testimony Seminar	Courtroom demeanor and protocol. Role and primary functions of witness and legal counsels.	Prerequisites: None.	LEC 1.0 1.0 1.0
AJS290BU	Family Violence	Family violence issues as they relate to the criminal	Prerequisites: None.	LEC 1.0 1.0 1.0
AJS290BV	Victim Assistance	An overview of victim issues emphasizing strategies used to reduce the trauma associated with crime. Includes description of counseling methods, referral procedures, intervention techniques, and community	Prerequisites: None.	LEC 1.0 1.0 1.0
AJS296WA	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 1.0 5.0 0.0

AJS296WB	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 2.0 10.0 0.0
AJS296WC	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 3.0 15.0 0.0
AJS296WD	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 4.0 20.0 0.0
AJS298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0

AJS298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
AJS298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
ALT100	Academic Literacy Through Integrated Reading and Writing	Develops academic language skills and critical reading skills for organizing, analyzing, and retaining material through complementary reading and writing assignments. Prepares students for college level reading and writing intensive courses as well as career-	Prerequisites: An appropriate District placement.	LEC 4.0 4.0 4.0
AMS298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
AMS298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0

AMS298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
AMT124	Aircraft Forms, Regulations, Weight and Balance, Drawings and Ground Operations	Federal Aviation maintenance regulations, publications, forms, and records. Overview of technician's privileges and limitations. Perform aircraft weight and balance, aircraft ground operations, and fuel servicing techniques. Interpretation and production of drawings, symbols, and schematic diagrams. Emphasis on safety	Prerequisites: Appropriate District English, Reading, and Math placement into ENG101, RDG100 and MAT12+ or higher or a grade of C or better in ENG101 and RDG100 and (MAT120 or higher level	L+L 5.0 7.0 7.0
AMT126	Fundamentals of Mathematics and Electricity	Mathematical computation of fundamental electrical circuit parameters. Basic definitions, laws, and concepts. Schematics, wiring, and parts placement diagrams. Test and troubleshoot electrical and electronic components and circuits.	Prerequisites: Appropriate District English, Reading, and Math placement into ENG101, RDG100 and MAT12+ or higher or a grade of C or better in ENG101 and RDG100 and (MAT120 or higher level	L+L 9.0 11.0 11.0
AMT128	Physics for Aviation, Corrosion Control, Materials, Hardware, Processes, Fluid Lines and Fittings	General concepts of fluid lines and fittings, aircraft materials, hardware and processes, cleaning and corrosion control, physics for aviation, inspection concepts and techniques.	Prerequisites: Appropriate District English, Reading, and Math placement into ENG101, RDG100 and MAT12+, or higher or a grade of C or better in ENG101 and RDG100 and (MAT120 or higher level	L+L 5.0 7.0 7.0
AMT220	Fundamentals of Bonded Composite and Wooden Aircraft Structures, Fabric	Concepts of aircraft structural design and materials including bonded composites, wooden structures, fabric coverings, and protective finishing maintenance.	Prerequisites: A grade of C or better in (AMT124, AMT126, and AMT128) or permission of Program Director.	L+L 3.0 5.0 5.0
AMT222	Atmosphere Control, Fire Detection, Ice and Rain Protection	Operation and maintenance of aircraft auxiliary systems. Inspection, servicing, troubleshooting, and repair of environmental control, ice and rain control, fire	Prerequisites: A grade of C or better in (AMT124, AMT126, and AMT128) or permission of Program Director.	L+L 4.0 6.0 6.0
AMT224	Aircraft Metallic Structures	Inspection, fabrication, and repair techniques of aircraft metallic structures.	Prerequisites: A grade of C or better in (AMT124, AMT126, and AMT128) or permission of Program Director.	L+L 5.0 7.0 7.0

AMT226	Aircraft Hydraulics, Pneumatics, Fuel, Landing Gear, Positioning and Warning Systems	Identification, inspection, troubleshooting, and repair techniques of aircraft hydraulics, pneumatics, landing gear, positioning and warning, and fuel systems.	Prerequisites: A grade of C or better in (AMT124, AMT126, and AMT128) or permission of Program Director.	L+L 7.0 9.0 9.0
AMT228	Aircraft Electrical, Instruments, Communication and Navigation Systems	Operation, inspection, installation, servicing, and troubleshooting of aircraft electrical, Direct Current (DC), Alternating Current (AC), instruments, communication, navigation systems, and fuel indication systems.	Prerequisites: A grade of C or better in (AMT124, AMT126, and AMT128) or permission of Program Director.	L+L 7.0 9.0 9.0
AMT230	Airframe Assembly and Inspection	Airframe inspection and special inspection techniques, reporting, and documentation procedures.	Prerequisites: A grade of C or better in (AMT124, AMT126, and AMT128) or permission of Program Director.	L+L 6.0 8.0 8.0
AMT263	Aircraft Turbine Engines	Turbine engine theory and maintenance. Focuses on operational characteristics and engine test techniques on the aircraft and in test cells.	Prerequisites: A grade of C or better in (AMT124, AMT126, and AMT128) or permission of Program Director.	L+L 5.0 7.0 7.0
AMT264	Aircraft Reciprocating Engines	Reciprocating engines theory, design, and operations. Focusing on techniques used in troubleshooting, overhaul, inspection, and repair of opposed and radial	Prerequisites: A grade of C or better in (AMT124, AMT126, and AMT128) or permission of Program Director.	L+L 7.0 9.0 9.0
AMT266	Engine Fuel Systems, Fuel Metering and Induction System	Inspection, servicing, troubleshooting, overhaul, and repair of aircraft fuel delivery systems, fuel metering devices, turbochargers, superchargers, and induction system principles of operation and design.	Prerequisites: A grade of C or better in (AMT124, AMT126, and AMT128) or permission of Program Director.	L+L 6.0 8.0 8.0
AMT268	Engine Electrical, Ignition and Starter Systems	Maintain powerplant electrical systems including inspecting, servicing, troubleshooting, overhauling, and repairing engine electrical, ignition, starter systems, and	Prerequisites: A grade of C or better in (AMT124, AMT126, and AMT128) or permission of Program Director.	L+L 6.0 8.0 8.0
AMT270	Engine Instruments, Fire Protection, Lubrication, Cooling, and Exhaust Systems	Operation, inspection, and maintenance of engine instruments, fire detection and extinguishing, engine lubrication, cooling, and exhaust systems.	Prerequisites: A grade of C or better in (AMT124, AMT126, and AMT128) or permission of Program Director.	L+L 5.0 7.0 7.0
AMT272	Propeller Systems and Engine Inspections	Propeller systems operation, inspection, troubleshooting, servicing, repair, and maintenance. Reciprocating and turbine engine inspection and	Prerequisites: A grade of C or better in (AMT124, AMT126, and AMT128) or permission of Program Director.	L+L 4.0 6.0 6.0

AMT298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment are made available for student use. Allows the best aspects of independent study and individualized learning to be	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
AMT298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment are made available for student use. Allows the best aspects of independent study and individualized learning to be	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
AMT298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment are made available for student use. Allows the best aspects of independent study and individualized learning to be	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
APT101	Automotive Service Operations	Theory and operation of basic automotive systems. Basic principles of working in an automotive service area. Management-employee relations, resume writing, interviewing, shop practices, flat-rate system, equipment	Prerequisites: None.	LEC 3.0 3.0 3.0
APT111	Internal Combustion Engines Theory	Study of construction and operating principles of internal combustion engines and related lubrication,	Prerequisites: None.	LEC 3.0 3.0 3.0
APT131	Automotive Manual Power Trains	Designed for beginning automotive students. Operation, diagnosis, service, and repair of the automotive power train. Includes manual transmissions and transaxles, clutches, front and rear drive axles,	Prerequisites: None.	LEC 6.0 3.0 3.0 LAB 0.0 7.0 7.0
APT141	Alignment, Steering, and Suspension	Designed for beginning automotive students. Fundamental principles of steering and suspension systems. Includes two-wheel and four-wheel alignment procedures. Emphasis on diagnosis, testing, service,	Prerequisites: None.	LEC 6.0 3.0 3.0 LAB 0.0 7.0 7.0
APT151	Automotive Brake Systems	Designed for beginning automotive students. Fundamentals of drum, disc, ABS and hybrid regenerative braking theory. Includes training in	Prerequisites: None.	LEC 4.0 2.0 2.0 LAB 0.0 5.0 5.0

APT161	Auto Electrical/Electronic Systems I	Designed for beginning automotive students. The principles of electricity including Ohm's Law, circuit principles and wiring diagrams. Skill development will include diagnosis, testing, service and repair of batteries, starting systems, charging systems, lighting systems, horns, wipers, defoggers, door locks, power mirrors, power windows, power seats and the use of	Prerequisites: None.	LEC 4.0 2.0 2.0 LAB 0.0 5.0 5.0
APT171	Automotive Air Conditioning	Designed for beginning automotive students. Theory and principles of ventilation, heating, automotive refrigeration, vacuum-electric controls, and automatic temperature control systems. Includes training in	Prerequisites: None.	LEC 4.0 2.0 2.0 LAB 0.0 5.0 5.0
APT181	Engine Performance and Diagnosis I	Designed for beginning automotive students. Engine construction and operating principles, including lubrication, cooling, induction, exhaust, fuel, and ignition systems. Includes training in diagnosis, testing,	Prerequisites: None.	LEC 6.0 3.0 3.0 LAB 0.0 7.0 7.0
APT262	Auto Electrical/Electronic Systems II	Designed for experienced students. This course develops knowledge of body control modules including skill development, diagnosis, testing, service, and repair of the following systems - advanced lighting circuits, vehicle stability control, traction control, basic and advanced climate control systems, integrated safety systems, collision avoidance systems, start-stop	Prerequisites: A grade of C or better in APT161 or permission of Instructor.	LEC 4.0 2.0 2.0 LAB 0.0 5.0 5.0
APT282	Engine Performance and Diagnosis II	Designed for the experienced engine performance student. This course will include training in fuel systems, emission systems, ignition systems, turbocharging, computerized engine controls and engine driveability. Also, training in diagnosis, testing, service, repair, and documenting for customer understanding using the 3C's	Prerequisites: A grade of C or better in APT181 or permission of Instructor.	LEC 6.0 3.0 3.0 LAB 0.0 7.0 7.0
ARB101	Elementary Arabic I	Introduction to the basic alphabet, grammar, pronunciation and vocabulary of the Arabic language. Listening, speaking, reading and writing skills.	Prerequisites: None.	L+L 5.0 5.0 5.0
ARB102	Elementary Arabic II	A continuation of ARB101. Continued study of grammar and vocabulary, with emphasis on pronunciation and speaking skills.	Prerequisites: A grade of C or better in ARB101. Completion of prerequisites within the last three	L+L 5.0 5.0 5.0
ARB201	Intermediate Arabic I	Review of essential grammar of the Arabic language and study of the Arabic culture. Continued practice and development of reading, writing, and speaking skills. Emphasis on both fluency and accuracy in the spoken	Prerequisites: A grade of C or better in ARB102 or permission of Department or Division. Completion of prerequisites within the last three	L+L 5.0 5.0 5.0

ARB202	Intermediate Arabic II	Advanced grammatical structures in Arabic. Further development of language skills with emphasis on speaking the language.	Prerequisites: A grade of C or better in ARB201 or permission of Department or Division. Completion of prerequisites within the last three	L+L 5.0 5.0 5.0
ARB296WA	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of Instructor. Corequisites: Must be concurrent in at least one class which is related to student's major or career interest or	LAB 1.0 5.0 0.0
ARC100	Introduction to Architecture Technology	Survey of architectural technology profession and associated professions. Exploration of design through historical, technical, environmental, and theoretical movements. Principles, concepts, phases, and skills associated with designs of actual and rendered	Prerequisites: None.	L+L 3.0 4.0 4.0
ARC110	Revit - Introduction	Basic skills required to complete architectural drawings with Revit software; simplified overview of the software program and operations gained through completing typical plan, elevation, sectional, and 3D views, using	Prerequisites: None.	L+L 3.0 6.0 6.0
ARC111	Architectural Computer Aided Design I: Introduction	Introduction to Computer-aided drafting (CAD) for the creation of construction documents including: annotated plans, elevations, schedules and schematic section views. Dimensions, notes, and symbols to be	Prerequisites: None.	L+L 3.0 6.0 6.0
ARC112	Architectural Computer Aided Design II: Plans and Elevations	Computer-aided drafting (CAD). Creation of a fully annotated plan, elevation, and schematic section views including dimensions, notes, symbols, and schedule, using a computer aided drafting software such as AutoCAD. Includes an introduction to three-dimensional (3D) CAD using SketchUp and Building Information	Prerequisites: A grade of C or better in ARC/INT111. Completion of prerequisites within the last three years is required unless current work experience to override this time constraint is approved with	L+L 3.0 6.0 6.0
ARC120	Design Fundamentals I	An introduction to architectural drawing and graphic representation methods. Using architectural drawings and graphic representations as visualization, and problem-solving methods. Emphasis on visual communication, and the application and development	Prerequisites: None.	L+L 3.0 6.0 6.0

ARC121	Introduction to Architectural Drafting: Manual	Emphasis on basic techniques and principles of manual architectural drafting. Includes hand lettering, line work, dimensioning, multi-view projection, work in plan, section, and elevation views, design standards, wall	Prerequisites: None.	L+L 3.0 6.0 6.0
ARC140	Rendering and Portfolio Development	Two-dimensional and three-dimensional drawings and rendering methods, including freehand and/or use of drawing tools for presentation of ideas. Techniques for use of pencil, ink, and colors. Professional formatting of	Prerequisites: None.	L+L 3.0 6.0 6.0
ARC143	Architectural CAD: Extended Study	Reinforcement and extended study of basic two-dimensional computer aided drafting (CAD) skills for Architecture, Interior Design, and related professions using AutoCAD software. Includes sending/receiving drawing files on web; templates/set-ups; dimension/text formats; sheet management; external referencing,	Prerequisites: A grade of C or better in ARC141 or permission of Instructor.	L+L 3.0 6.0 6.0
ARC146	Architectural Print Reading	Analysis and interpretation of architectural working drawings including written specifications and drawings	Prerequisites: None.	L+L 3.0 3.0 3.0
ARC148	Methods and Materials of Construction	Modern methods of construction and materials for residential, multiple, and commercial building, including the four types of structures used: wood, concrete, steel and masonry. Methods of assembly and how different materials can be used to create desired designs.	Prerequisites: None.	LEC 3.0 3.0 3.0
ARC150	Architectural Desktop I	Residential construction drawing using Architectural Desktop (ADT). Includes preliminary workspace setups, configuration procedures, modules operations, and on screen menus applicable for producing components of	Prerequisites: A grade of C or better in CON130 or permission of Department or Division.	L+L 3.0 6.0 6.0
ARC160	Site Planning	Emphasis on the basic art of site planning, using professional design techniques and principles of architecture to develop site plans. Selection of materials, awareness of problems, and emphasis on the production of site plan drawings using board and/or	Prerequisites: A grade of C or better in DFT122 or permission of Program Director.	L+L 3.0 6.0 6.0
ARC161	Residential Architectural Drafting	Basics of residential drafting and documentation topics and techniques. Includes preliminary planning and preparation for residential documentation; use of the local building codes and standards; complete drawing and annotation of a floor plan, reflected ceiling plan, roof plan, a building sections, framing plan, and exterior	Prerequisites: A grade of C or better in CON130 or permission of Department or Division.	L+L 3.0 6.0 6.0

ARC162	Advanced Residential Architectural Drafting	Advanced residential drafting and documentation topics and techniques. Includes site orientation, layout and legal description; window and door schedules; interior elevation of kitchen and bath rooms; advanced instruction on framing and structural detail methods; foundation systems, support and layout; and other	Prerequisites: A grade of C or better in ARC161 and CON230 or permission of Department or Division.	L+L 3.0 6.0 6.0
ARC163	Commercial Architectural Drafting	Fundamental commercial drafting and documentation topics and techniques. Includes preliminary planning and preparation for commercial documentation; use of the local building codes and standards; building methods and materials of commercial structures; complete drawing and annotation of a floor plan,	Prerequisites: A grade of C or better in CON130 or permission of Department or Division.	L+L 3.0 6.0 6.0
ARC164	Advanced Commercial Architectural Drafting	Further development of advanced commercial drafting and documentation topics and techniques. Covers commercial building materials and methods, specifications, land drawings, foundation plans, interior elevations, and more details specific to commercial	Prerequisites: A grade of C or better in (ARC163 and CON130) or permission of Department or Division.	L+L 3.0 6.0 6.0
ARC165	Introduction to Architecture Professional Practice and Ethics	Professional, legal, and ethical issues in architecture practice and services. Includes marketing issues, communications, standards, insurance and bonds, agreements, contracts and contractors, standard American Institute of Architecture (AIA) forms and	Prerequisites: None.	LEC 3.0 3.0 3.0
ARC180	Architectural Technology: Applied Building Codes	Introduction to building codes and the American Disabilities Act (ADA) for the built environment. Explores permitting process. Includes application of building code	Prerequisites: None.	LEC 3.0 3.0 3.0
ARC225	Fundamentals of Architectural Detailing	Introduction to construction /architecture detailing. Examines functional, construction-related, and aesthetic applications of detailing.	Prerequisites: A grade of C or better in CON130 or CON252 or permission of Department or Division.	LEC 3.0 3.0 3.0
ARC226	Advanced Architectural Detailing	Advanced methods of detailing major construction materials such as wood, steel, and concrete, ranging from simple residential to more complicated commercial structures. Includes detailing foundations, exterior and	Prerequisites: A grade of C or better in CON130 or CON252 or permission of Department or Division.	LEC 3.0 3.0 3.0
ARC243	Architectural Drawings: Site Plans and Sections	Revit (or Building Information Modeling equivalent) instruction directed to the creation of fully annotated site plans and sectional views. Development of professional quality site plans, wall sections, and building sections working from given residential and commercial layouts. Assignments incorporate applicable	Prerequisites: A grade of C or better in (ARC100 and ARC/INT110), or permission of Department or Division.	LEC 3.0 3.0 3.0 LAB 0.0 3.0 3.0

ARC244	Architectural Drawings: Structural Systems	Revit (or BIM Equivalent)-based instruction for layout and completion of fully annotated structural drawings. Focuses on working from residential and commercial layouts to develop professional quality roof, roof framing, floor framing and foundation plans. Emphasis on the use of applicable codes, construction materials	Prerequisites: A grade of C or better in (ARC100 and ARC/INT110), or permission of Department or Division.	LEC 3.0 3.0 3.0, LAB 0.0 3.0 3.0
ARC245	Architectural Drawings: Mechanical and Electrical Systems	Revit (or BIM Equivalent)-based instruction for layout and completion of fully annotated building systems drawings. Focuses on working from residential and commercial layouts to develop professional quality Electrical, Mechanical(HVAC), Plumbing and Reflected Ceiling plans. Emphasis on the use of applicable codes,	Prerequisites: A grade of C or better in (ARC100 and ARC/INT110), or permission of Department or Division.	LEC 3.0 3.0 3.0 LAB 0.0 3.0 3.0
ARC246	Architectural CAD VI: Construction Details	Typical southwestern construction systems and details. Creation of personal standard detail files for wood frame, concrete masonry, and other specialized	Prerequisites: A grade of C or better in ARC243 or permission of Department or Division.	L+L 3.0 6.0 6.0
ARC251	Intermediate Revit	Comprehensive use of Revit Design Development tools through the development of 3-D model(s) in working drawing and rendered formats. Includes completing a set of construction documents from creating walls, incorporating doors, windows, floor, stairs, etc., to adding views and annotation to various sheets and	Prerequisites: None. ARC250 or previous architectural and CAD experience strongly recommended.	L+L 3.0 6.0 6.0
ARC252	Advanced Revit	Advanced applications and use of REVIT architectural software in completing assigned projects; focus on customization of the Revit environment and developing	Prerequisites: A grade of C or better in ARC251 or permission of Instructor.	L+L 3.0 6.0 6.0
ARC255	Introduction to Revit Structure	Introduction to Revit Structure software, addressing specialized options and processes used in structural engineering offices; includes project modeling, model analysis, reinforcement modeling, detailing, and	Prerequisites: None. Previous educational/professional experience in architecture or structural engineering strongly recommended.	L+L 3.0 6.0 6.0
ARC261	Architectural CAD 3D I: Introduction	Introduction to construction, manipulating, and rendering three-dimensional (3D) objects and architectural spaces on the computer using AutoCAD software.	Prerequisites: A grade of C or better in ARC/INT111 or equivalent or permission of Department or Division. ARC/INT112 suggested but not	L+L 3.0 6.0 6.0
ARC262	Architectural CAD 3D II: ADT and VIZ	Additional skill development in constructing, manipulating, and rendering three-dimensional (3D) architectural computer models using AutoCAD	Prerequisites: A grade of C or better in ARC261 or equivalent or permission of Department or Division.	L+L 3.0 6.0 6.0

ARC265	SketchUp - Introduction	Provides students with introductory level instruction utilizing Sketchup rendering software for school and workplace applications. Addresses basic drawing/rendering commands, accessing external drawing files, and plotting through the creation of both	Prerequisites: None. Previous CAD experience recommended but not required.	L+L 3.0 6.0 6.0
ARC266	Sketchup II: Advanced Rendering Techniques	Provides students with advanced instruction utilizing Sketchup, Google Earth, Sandbox and Podium rendering software for school and workplace applications. Creation of photo-realistic rendered three-	Prerequisites: A grade of C or better in ARC265/INT251 or permission of Instructor.	L+L 3.0 6.0 6.0
ARC270	Architectural Technology: Practicum	Provides students an opportunity to integrate and synthesize knowledge and skills acquired in prerequisite courses. Includes completion of a full set of working drawings using Building Information Modeling (BIM) under supervision comparable to workplace situations. Designed to provide practice in self-checking work,	Prerequisites: A grade of C or better in ARC243, ARC244 and ARC245, or permission of Program Director.	LEC 3.0 3.0 3.0 LAB 0.0 3.0 3.0
ARC282AA	Volunteerism for Architecture: A Service Learning Experience	Service-learning field experience within private/public agencies and citizen volunteer groups.	Prerequisites: Permission of Department or Division.	LAB 1.0 1.0 0.0
ARC282AB	Volunteerism for Architecture: A Service Learning Experience	Service-learning field experience within private/public agencies and citizen volunteer groups.	Prerequisites: Permission of Department or Division.	LAB 2.0 2.0 0.0
ARC282AC	Volunteerism for Architecture: A Service Learning Experience	Service-learning field experience within private/public agencies and citizen volunteer groups.	Prerequisites: Permission of Department or Division.	LAB 3.0 3.0 0.0
ARC290AA	Architecture Internship	Architecture internship office and field experience with private agencies, public agencies, or citizen volunteer groups.	Prerequisites: A grade of C or better in ARC282++ or permission of Department or Division.	LAB 1.0 1.0 0.0
ARC290AB	Architecture Internship	Architecture internship office and field experience with private agencies, public agencies, or citizen volunteer groups.	Prerequisites: A grade of C or better in ARC282++ or permission of Department or Division.	LAB 2.0 2.0 0.0
ARC290AC	Architecture Internship	Architecture internship office and field experience with private agencies, public agencies, or citizen volunteer groups.	Prerequisites: A grade of C or better in ARC282++ or permission of Department or Division.	LAB 3.0 3.0 0.0

ARC296WA	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 1.0 5.0 0.0
ARC296WB	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 2.0 10.0 0.0
ARC296WC	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 3.0 15.0 0.0

ARC296WD	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 4.0 20.0 0.0
ARC298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
ARC298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
ARC298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
ARH100	Introduction to Art	Understanding and enjoyment of visual art through the study of art media, design elements, techniques and processes, and cultural contexts. Building awareness of the meaning, functions, and significance of art.	Prerequisites: None.	LEC 3.0 3.0 3.0
ARH101	Art from Prehistory Through Middle Ages	History of art from the Paleolithic period through the Middle Ages.	Prerequisites: None.	LEC 3.0 3.0 3.0

ARH102	Art from Renaissance to Modernism	History of art from the Renaissance through Modernism.	Prerequisites: None.	LEC 3.0 3.0 3.0
ARH109	History of American Art	Study of the major art historical developments and traditions in the United States from pre-colonial times to the present, including the changing nature of American art and identity in the age of globalization. Consideration of major genres and stylistic characteristics with emphasis on the sociocultural	Prerequisites: None.	LEC 3.0 3.0 3.0
ARH110	History of Graphic Design	Survey of the history of graphic design from its origins to the present. Traces the characteristics, aesthetics, and relationships between graphic design and society. Includes movements, individual artists, and interpretation. Emphasizes the function of graphic	Prerequisites: None.	LEC 3.0 3.0 3.0
ARH112	Introduction to Modern and Contemporary Art	Study of art and theory from the mid-nineteenth century to the present. Focus on European and American modern and contemporary art while considering other regions of the world. Examination of the historical, social, and cultural contexts of artistic developments.	Prerequisites: None.	LEC 3.0 3.0 3.0
ARH115	History of Photography	Survey of history of photography from beginning to present. Emphasizes the reciprocal relationship between the medium's development and reception, society, and other visual arts. Technical developments, photographic practices, and sociocultural themes are	Prerequisites: None.	LEC 3.0 3.0 3.0
ARH118	Introduction to Chinese Art	Introduction to Chinese Art. Exploring the influence of philosophy, symbolism, history, and religions that underlie the choice of subject matter and styles, and the development of new techniques and media in	Prerequisites: None.	LEC 3.0 3.0 3.0
ARH145	History of Native American Art	Survey of Native American Art from pre-contact to present focusing on the United States and Canada. Explores characteristics, socio-political and cultural	Prerequisites: None.	LEC 3.0 3.0 3.0
ARH201	Art of Asia	Introduction to the origins and historical development of art in Asia, with emphasis on Asia's major sub-regions including West, Central, East, South, and Southeast.	Prerequisites: None.	LEC 3.0 3.0 3.0
ARH202	Art of Africa, Oceania, and Americas	Study of the material cultures of Africa, America, and Oceania, with an emphasis on diverse worldviews and their expression within a contemporary global context.	Prerequisites: None.	LEC 3.0 3.0 3.0
ARH203	Art of Ancient Egypt	The art and culture of ancient Egypt from prehistoric through the Greco-Roman period	Prerequisites: None.	LEC 3.0 3.0 3.0

ARH204	Roman Art and Architecture	Detailed examination of the art and architecture of ancient Rome from the monarchical period to the late empire, with emphasis on the visual culture and artifacts	Prerequisites: None.	LEC 3.0 3.0 3.0
ARH216	Pre-Columbian Art History	Art of the Americas prior to European contact, focusing on Mesoamerica and the Central Andean region and their respective adjoining areas, with some attention to the U.S. Southwest and Eastern Woodlands Mound	Prerequisites: None.	LEC 3.0 3.0 3.0
ARH217	Mexican Art History	Art of Mexico and related cultures, from the prehistoric to the contemporary period	Prerequisites: None.	LEC 3.0 3.0 3.0
ARH240	Art and Architecture of the Islamic World to 1800	Introduction to the principal achievements in art and architecture of the Islamic world circa 650-1800 CE and placing them in social and cultural contexts and consideration of the historical evolution of Western	Prerequisites: None.	LEC 3.0 3.0 3.0
ARH250	Visual Language and Interpretation	Examines the communication of concepts through visual interpretation and expression.	Prerequisites: A grade of C or better in (ART111, ART112, ART131, ART167 and ARH100) or permission	LEC 1.0 1.0 1.0
ARH298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
ARH298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
ARH298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0

ART105	Art Beyond the Classroom	Visual arts experience. Includes field trips to galleries, museums, and collections as well as art lectures, demonstrations, and varied studio experiences.	Prerequisites: None.	L+L 1.0 2.0 2.0
ART106	Gallery Operations	Operation of an art gallery. Includes organization, publicity, evaluation of artwork, selection and installation	Prerequisites: Permission of Instructor.	L+L 3.0 6.0 6.0
ART110	Experimental Chinese Painting	Explores ancient Chinese techniques with rice paper and Chinese ink to create traditional and nontraditional designs. Emphasis on use of Chinese techniques in	Prerequisites: None.	L+L 1.0 2.0 2.0
ART111	Drawing I	Fundamental principles of drawing. Emphasis on composition and facility in objective and expressive representation, using variety of drawing media	Prerequisites: None.	L+L 3.0 6.0 6.0
ART112	Two-Dimensional Design	Study of fundamental elements and principles of two-dimensional design.	Prerequisites: None.	L+L 3.0 6.0 6.0
ART113	Color	Investigation seeking visual solutions to a variety of problems concerning color in two and three dimensions and modes of color appearances, including light and effects in design and theory of design.	Prerequisites: None.	L+L 3.0 6.0 6.0
ART115	Three-Dimensional Design	Fundamental principles of three-dimensional design.	Prerequisites: None.	L+L 3.0 6.0 6.0
ART116	Life Drawing I	Use of form, structure and anatomy of draped and undraped human figure to develop basic principles of	Prerequisites: None.	L+L 3.0 6.0 6.0
ART117	Life Drawing II	Further study of form, structure, and anatomy of the draped and undraped human figure with emphasis on	Prerequisites: A grade of C or better in ART116.	L+L 3.0 6.0 6.0
ART118	Art Anatomy	Artistic study of the concept of anatomical unity. Principle skeletal and muscular structures affecting surface form of the human figure. Includes drawing	Prerequisites: A grade of C or better in ART116 or permission of Instructor.	L+L 3.0 6.0 6.0
ART122	Drawing and Composition II	Emphasis on composition and exploration of drawing media	Prerequisites: A grade of C or better in ART111.	L+L 3.0 6.0 6.0
ART131	Photography I	Basic photographic principles and techniques. Basic camera functions and controls. Experience in the image-making process by creating and editing photographs for various display environments. Introduction to the	Prerequisites: None.	L+L 3.0 6.0 6.0
ART132	Photography II	Advanced camera and darkroom techniques. Aesthetic awareness with personal expression	Prerequisites: A grade of C or better in ART131 or permission of	L+L 3.0 6.0 6.0
ART133	Photography III	Refinement of aesthetic and technical aspects producing convincing images of highest quality	Prerequisites: A grade of C or better in ART132 or permission of	L+L 3.0 6.0 6.0
ART134	Photography IV	Emphasis on personal statement and style. Related graphic art forms explored. Development of portfolio	Prerequisites: A grade of C or better in ART133 or permission of	L+L 3.0 6.0 6.0

ART136	Documentary Photography	Explore the history and contemporary trends of documentary photography. Students will learn how to research and define a topic, ethics of documentary photography, storytelling, production and post production techniques and distribution methods.	Prerequisites: A grade of C or better in ART131, or ART142, or permission of Instructor.	L+L 3.0 6.0 6.0
ART137	Alternative Photographic Processes	This course focuses on the 19th-century photographic processes including new picture-making technologies. Discussing the history of photography in relation with techniques taught in class. Students encouraged to explore historical processes in combination with contemporary technologies. Through technical demonstrations, hands-on workshops, and technical assignments, students develop a working knowledge of	Prerequisites: None.	L+L 3.0 6.0 6.0
ART151	Sculpture I	Exploration of sculptural form and expression in clay, plaster, stone, wood and metal.	Prerequisites: None.	L+L 3.0 6.0 6.0
ART152	Sculpture II	Emphasis on control of sculptural media	Prerequisites: A grade of C or better in ART151.	L+L 3.0 6.0 6.0
ART153	Woodworking I	Fundamental woodworking techniques to produce creative functional and sculptural, three-dimensional	Prerequisites: None.	L+L 3.0 6.0 6.0
ART154	Woodworking II	Advanced design, joinery, fixture building, and woodworking techniques. Application of design	Prerequisites: A grade of C or better in ART153.	L+L 3.0 6.0 6.0
ART155	Glass Fusing and Slumping I	Introduction to the basics involved in glass fusing and slumping. The concepts of glass, glass fusing, and glass slumping will be covered with hands-on experience using a variety of techniques to create	Prerequisites: None.	L+L 3.0 6.0 6.0
ART156	Glass Fusing and Slumping II	Further study in the area of glass fusing and slumping. Advanced techniques including Pate-de-Verre, Pattern Bars, watchbands, bracelets, and patterned dishes.	Prerequisites: A grade of C or better in ART155.	L+L 3.0 6.0 6.0
ART158	Introduction to Glass Blowing	Introduction to the basics involved in free hand blowing glass. The concepts of hot glass, glass shaping, and glass blowing will be covered with hands-on experience using a variety of techniques to create finished glass projects such as spheres, cones, cups, and other	Prerequisites: None.	L+L 3.0 6.0 6.0
ART159	Intermediate Glass Blowing	Further study in the area of glass blowing. Advanced techniques including traditional techniques as well as further investigation into color, form, and scale.	Prerequisites: A grade of C or better in ART158.	L+L 3.0 6.0 6.0

ART160	Advanced Glass Blowing	Further study in the area of glass blowing with emphasis on advanced techniques and design considerations, such as sculpting, larger scale projects, working in	Prerequisites: A grade of C or better in ART159.	L+L 3.0 6.0 6.0
ART161	Ceramics I	Introduction to ceramic materials and techniques of hand construction, decorating, glazing and throwing on	Prerequisites: None.	L+L 3.0 6.0 6.0
ART162	Ceramics II	Major emphasis on wheel throwing, glaze making and decorating techniques	Prerequisites: A grade of C or better in ART161.	L+L 3.0 6.0 6.0
ART165	Watercolor Painting I	Transparent and Gouache watercolor painting.	Prerequisites: A grade of C or better in (ART111 and ART112) or permission of Instructor.	L+L 3.0 6.0 6.0
ART166	Watercolor Painting II	Painting in water soluble media. Emphasis on individual techniques and design.	Prerequisites: A grade of C or better in ART165.	L+L 3.0 6.0 6.0
ART167	Painting I	Exploration of technical and expressive possibilities of various media in painting.	Prerequisites: A grade of C or better in (ART111 and ART112) or permission of Instructor.	L+L 3.0 6.0 6.0
ART168	Painting II	Continued refinement of painting skills and investigation of new possibilities in painting	Prerequisites: A grade of C or better in ART167 or permission of	L+L 3.0 6.0 6.0
ART171	Jewelry I	Fundamentals of jewelry making. Covers hand formed methods, including cutting, shaping, forging, soldering,	Prerequisites: None.	L+L 3.0 6.0 6.0
ART172	Jewelry II	Further refinement of personal expression using techniques and design concepts of ART171	Prerequisites: A grade of C or better in ART171.	L+L 3.0 6.0 6.0
ART211	Drawing and Composition III	Advanced development of drawing skill with emphasis on compositional theory	Prerequisites: A grade of C or better in ART122 or permission of	L+L 3.0 6.0 6.0
ART216	Life Drawing III	Advanced creative study from model in various painting and drawing media	Prerequisites: A grade of C or better in ART117 or permission of	L+L 3.0 6.0 6.0
ART217	Life Drawing IV	Further development of skills in expressive drawing materials and techniques as applied to finished	Prerequisites: A grade of C or better in ART216 or permission of	L+L 3.0 6.0 6.0
ART222	Drawing and Composition IV	Further study of drawing techniques with emphasis on individual problems and techniques	Prerequisites: A grade of C or better in ART211 or permission of	L+L 3.0 6.0 6.0
ART234	Color Photography	Basic principles of color theory, camera and input and output techniques using analog or digital photography.	Prerequisites: A grade of C or better in ART131, or AVC142, or permission of Instructor.	L+L 3.0 6.0 6.0
ART241	Intaglio	Introduction to traditional concepts and techniques for Intaglio printmaking. Deals with black and white printing; includes brief introduction to color printing. Covers various tools and materials used in Intaglio	Prerequisites: A grade of C or better in ART111 and ART113.	L+L 3.0 6.0 6.0
ART250	Introduction to Printmaking	Introduction to concepts and techniques involved in the Fine Art field of Printmaking.	Prerequisites: A grade of C or better in ART111 or ART112.	L+L 3.0 6.0 6.0

ART251	Sculpture III	With emphasis on attention to individual problems and techniques	Prerequisites: A grade of C or better in ART152.	L+L 3.0 6.0 6.0
ART252	Sculpture IV	Advanced sculpture problems and professional practices	Prerequisites: A grade of C or better in ART251.	L+L 3.0 6.0 6.0
ART253	Woodcut	Focuses on relief method of printing, utilizing the techniques of Woodcut. Deals specifically with black and white images. Study of printing materials and tools, papers and printing methods. Relief printing in color introduced. Traditional forms of Woodcut, also an	Prerequisites: A grade of C or better in ART111 and ART113.	L+L 3.0 6.0 6.0
ART255	Art Marketing	Career goals, presentation of artist and art work (portfolio, resume, business cards, catalog), pricing and selling works, networking, establishing a studio, promotion and publicity, writing press releases, proposal writing, business ethics, artist rights, copyright law,	Prerequisites: None.	LEC 3.0 3.0 3.0
ART255AB	The Portfolio	Choosing the right pieces to include, presenting art work, developing the portfolio.	Prerequisites: None.	LEC 1.0 1.0 1.0
ART255AC	Marketing Fine Art	Exhibitions and galleries, establishing a studio, alternative markets	Prerequisites: A grade of C or better in ART255AB or permission of	LEC 1.0 1.0 1.0
ART256	Glass Fusing and Slumping III	Further study in the area of glass fusing and slumping with emphasis on advanced techniques and design considerations, such as, plates designed using different techniques, weaving or strip glass, and combining	Prerequisites: A grade of C or better in ART156.	L+L 3.0 6.0 6.0
ART257	Glass Fusing and Slumping IV	Further study of advanced glass fusing and slumping including problems, professional practices, personal expression and experimental research into various	Prerequisites: A grade of C or better in ART256.	L+L 3.0 6.0 6.0
ART258	Papermaking	Introduction to concepts and techniques of Fine Art Papermaking. Basic overview of historical origins of craft and importance of modern papermaking to fine arts	Prerequisites: A grade of C or better in ART111 and ART113.	L+L 3.0 6.0 6.0
ART259	Monoprinting	Introduction to concepts and techniques for Monoprintmaking. Deals with la prima technique used in painting in first part of course. Multi-plate printing and how method of printing relates to use of color and	Prerequisites: A grade of C or better in ART111 and ART113.	L+L 3.0 6.0 6.0
ART261	Ceramics III	Emphasis on wheel throwing skill and individual style development	Prerequisites: A grade of C or better in ART162.	L+L 3.0 6.0 6.0
ART262	Ceramics IV	Experimental work in clays and glazes	Prerequisites: A grade of C or better in ART261.	L+L 3.0 6.0 6.0

ART263	Figure Painting	Study of the nude and clothed figure in painting with special attention upon relevant color palettes, direct and indirect figurative painting techniques, and development of anatomical knowledge and compositional structure. Students will draw upon both historical and contemporary modes of depicting the figure to develop a personalized approach to figure painting. Live models, photographs, drawings, "Planes	Prerequisites: A grade of C or better in ART167 or permission of Instructor.	L+L 3.0 6.0 6.0
ART264	Glass Casting	Further study of glass art with a focus on casting and kiln working, including problems, professional practices, personal expression and experimental application of	Prerequisites: A grade of C or better in ART160.	L+L 3.0 6.0 6.0
ART265	Watercolor Painting III	Continuation of watercolor painting with emphasis on control and expression	Prerequisites: A grade of C or better in ART166.	L+L 3.0 6.0 6.0
ART266	Watercolor Painting IV	Advanced problems directed toward more personal expression	Prerequisites: A grade of C or better in ART265.	L+L 3.0 6.0 6.0
ART267	Painting III	Development of materials and techniques of painting. Individual problem-solving	Prerequisites: A grade of C or better in ART168 or permission of	L+L 3.0 6.0 6.0
ART268	Painting IV	Advanced problem in painting. Study with greater emphasis on personal expression	Prerequisites: A grade of C or better in ART267 or permission of	L+L 3.0 6.0 6.0
ART271	Jewelry III	Emphasis on advanced jewelry design techniques and practices.	Prerequisites: A grade of C or better in ART172.	L+L 3.0 6.0 6.0
ART272	Jewelry IV	Emphasis on expanding repertoire of advanced jewelry design techniques and practices.	Prerequisites: A grade of C or better in ART271.	L+L 3.0 6.0 6.0
ART275	Lost Wax Casting I	Introduction to lost wax casting techniques for jewelry and small sculptures. Emphasis on design concepts as related to three-dimensional forms	Prerequisites: None.	L+L 3.0 6.0 6.0
ART276	Lost Wax Casting II	Advanced course in lost wax casting techniques for jewelry and small sculptures. Emphasis on the continuation of individual expression using the lost wax	Prerequisites: A grade of C or better in ART275.	L+L 3.0 6.0 6.0
ART277	Textiles I	Introduction to exploration of textile media.	Prerequisites: A grade of C or better in ART112 or permission of	L+L 3.0 6.0 6.0
ART290AA	Studio Art	Studio course for art majors allowing continuation in a	Prerequisites: Permission of	L+L 1.0 2.0 2.0
ART290AB	Studio Art	Studio course for art majors allowing continuation in a	Prerequisites: Permission of	L+L 2.0 4.0 4.0
ART290AC	Studio Art	Studio course for art majors allowing continuation in a	Prerequisites: Permission of	L+L 3.0 6.0 6.0
ART290BC	Studio Art: Drawing	Studio course for art majors allowing continuation in a subject field.	Prerequisites: A grade of C or better in ART111 or permission of	L+L 3.0 6.0 6.0
ART290CC	Studio Art: Mixed Media	Studio course for art majors allowing continuation in a subject field.	Prerequisites: A grade of C or better in ART112 or permission of	L+L 3.0 6.0 6.0

ART290DC	Studio Art: Life Drawing	Studio course for art majors allowing continuation in a subject field.	Prerequisites: A grade of C or better in ART117 or permission of	L+L 3.0 6.0 6.0
ART290EC	Studio Art: Photography	Studio course for art majors allowing continuation in a subject field.	Prerequisites: A grade of C or better in ART132 or permission of	L+L 3.0 6.0 6.0
ART290FF	Studio Art: Sculpture	Studio course for art majors allowing continuation in a subject field.	Prerequisites: A grade of C or better in ART252 or permission of	L+L 3.0 6.0 6.0
ART290GC	Studio Art: Ceramics	Studio course for art majors allowing continuation in a subject field.	Prerequisites: A grade of C or better in ART162 or permission of	L+L 3.0 6.0 6.0
ART290HC	Studio Art: Watercolor	Studio course for art majors allowing continuation in a subject field.	Prerequisites: A grade of C or better in ART166 or permission of	L+L 3.0 6.0 6.0
ART290JC	Studio Art: Color	Studio course for art majors allowing continuation in a subject field.	Prerequisites: A grade of C or better in ART113 or permission of	L+L 3.0 6.0 6.0
ART290KC	Studio Art: Glazing Techniques	Studio course for art majors allowing continuation in a subject field.	Prerequisites: A grade of C or better in ART162 or permission of	L+L 3.0 6.0 6.0
ART290LC	Studio Art: Clay Bodies	Studio course for art majors allowing continuation in a subject field.	Prerequisites: A grade of C or better in ART162 or permission of	L+L 3.0 6.0 6.0
ART290MC	Studio Art: Digital Photography	Studio course for art majors allowing continuation in a subject field.	Prerequisites: A grade of C or better in AVC143 or permission of	L+L 3.0 6.0 6.0
ART290PC	Studio Art: Painting	Studio course for art majors allowing continuation in a subject field.	Prerequisites: A grade of C or better in ART168 or permission of	L+L 3.0 6.0 6.0
ART290WC	Studio Art: Woodworking	Studio course for art majors allowing continuation in a subject field.	Prerequisites: A grade of C or better in ART154 or permission of	L+L 3.0 6.0 6.0
ART295AC	Art Workshop/Seminar: Drawing	Advanced level workshop seminar in art disciplines.	Prerequisites: Minimum of three (3) credits introductory and three (3) credits intermediate level courses in specific field or permission of	L+L 3.0 6.0 6.0
ART295BC	Art Workshop/Seminar: Sculpture	Advanced level workshop seminar in art disciplines.	Prerequisites: Minimum of three (3) credits introductory and three (3) credits intermediate level courses in specific field or permission of	L+L 3.0 6.0 6.0
ART295DA	Art Workshop/Seminar: Photography	Advanced level workshop seminar in art disciplines.	Prerequisites: Minimum of three (3) credits introductory and three (3) credits intermediate level courses in specific field or permission of	L+L 1.0 2.0 2.0
ART295DB	Art Workshop/Seminar: Photography	Advanced level workshop seminar in art disciplines.	Prerequisites: Minimum of three (3) credits introductory and three (3) credits intermediate level courses in specific field or permission of	L+L 2.0 4.0 4.0

ART295DC	Art Workshop/Seminar: Photography	Advanced-level workshop seminar in art disciplines.	Prerequisites: Minimum of three (3) credits introductory and three (3) credits intermediate level courses in specific field or permission of	L+L 3.0 6.0 6.0
ART295EA	Art Workshop/Seminar: Painting	Advanced level workshop seminar in art disciplines.	Prerequisites: Minimum of three (3) credits introductory and three (3) credits intermediate level courses in specific field or permission of	L+L 1.0 2.0 2.0
ART295EC	Art Workshop/Seminar: Painting	Advanced level workshop seminar in art disciplines.	Prerequisites: Minimum of three (3) credits introductory and three (3) credits intermediate level courses in specific field or permission of	L+L 3.0 6.0 6.0
ART295GB	Art Workshop/Seminar: Ceramics	Advanced level workshop seminar in art disciplines.	Prerequisites: Minimum of three (3) credits introductory and three (3) credits intermediate level courses in specific field or permission of	L+L 2.0 4.0 4.0
ART295HC	Art Workshop/Seminar: Mixed Media	Advanced level workshop seminar in art disciplines.	Prerequisites: Minimum of three (3) credits introductory and three (3) credits intermediate level courses in specific field or permission of	L+L 3.0 6.0 6.0
ART295LB	Art Workshop/Seminar: Glazing Techniques	Advanced level workshop seminar in art disciplines	Prerequisites: Permission of Instructor.	L+L 2.0 4.0 4.0
ASB100	Introduction to Global Health	Examination of the field of global health from an anthropological perspective, including but not limited to understanding health systems, diverse medical practices, and ideas about health, illness, and the body in cross-cultural contexts. Focus on using critical frameworks to understand the relationships between	Prerequisites: None.	LEC 3.0 3.0 3.0
ASB102	Introduction to Cultural Anthropology	Introduces concepts and methods of cultural anthropology, with illustrative materials from a variety of communities in a globalizing world. Explores the concept of culture and examines a variety of cultural and social practices such as subsistence, economics,	Prerequisites: None.	LEC 3.0 3.0 3.0

ASB202	Ethnic Relations in the United States	Basic concepts and processes, including historic overview, of interethnic relations in the United States: culture, race, ethnicity, ethnocentrism, prejudice, discrimination, racism, assimilation, acculturation, and individual and group responses to interethnic contact. Cultural knowledge and intercultural communication skills and perspectives as fundamental tools for	Prerequisites: None.	LEC 3.0 3.0 3.0
ASB211	Women Across Cultures	Cross-cultural analysis of the economic, social, political, and religious factors that affect women's status in	Prerequisites: None.	LEC 3.0 3.0 3.0
ASB214	Magic, Witchcraft and Healing: An Introduction to Comparative Religion	Origins, elements, and forms of religion; a comparative survey of religious beliefs, myths, rituals and symbolism including magic, witchcraft and healing as practiced in selected regions of the world; the place of religion in the	Prerequisites: None.	LEC 3.0 3.0 3.0
ASB220	Anthropology Goes to the Movies	Archaeology and anthropology through the lens of popular films of the 20th and 21st Century. Explores the popularity of ancient humans as a topic for film ventures and how accurately they are portrayed. Provides the student with a basic knowledge of anthropology and offers film images of anthropologists and archaeologists and the practice of archaeology and anthropology.	Prerequisites: None.	LEC 3.0 3.0 3.0
ASB222	Buried Cities and Lost Tribes: Old World	Introduction to archaeology through discoveries and the researchers who made them. Emphasis on methods of archaeological fieldwork and what these discoveries reveal about humanity, including the nature of archaeological inquiry, the development of human social groups, the changing role of religion in evolving societies, the origins of agriculture, the origins of settled lifeways, the rise of cities and complex societies, political strife across different cultures and the forces which tend	Prerequisites: None.	LEC 3.0 3.0 3.0
ASB223	Buried Cities and Lost Tribes: New World	Introduction to archaeology through discoveries and the researchers who made them. Emphasis on methods of archaeological fieldwork and what these discoveries reveal about humanity, including the nature of archaeological inquiry, the development of human social groups, the changing role of religion in evolving societies, the origins of agriculture, the origins of settled lifeways, the rise of cities and complex societies, political strife across different cultures and the forces which	Prerequisites: None.	LEC 3.0 3.0 3.0

ASB226	Human Impacts on Ancient Environments	Interrelationship between humans and their environments, using archaeological data and case studies beginning with early hominids. Uses of research to identify environmental change and distinguish between climatic and human-induced global change. Explores ways in which prehistoric people caused and	Prerequisites: None.	LEC 3.0 3.0 3.0
ASB230	Principles of	Introduction to archaeological methods and theory	Prerequisites: None.	LEC 3.0 3.0 3.0
ASB231	Archaeological Field Methods	Excavation of an archaeological site; recording and interpreting data collected during the field experience. Overview of the cultures concerned; contemporary	Prerequisites: None.	L+L 4.0 6.0 6.0
ASB234	Art and Archaeology of Ancient Egypt	Introduction to the major social, political, religious and economic institutions of Ancient Egypt. The historical events and people that shaped Egyptian civilization.	Prerequisites: None.	LEC 3.0 3.0 3.0
ASB235	Southwest Archaeology	Anthropological perspective and comparative study of the cultures of prehistoric native peoples of the North	Prerequisites: None.	LEC 3.0 3.0 3.0
ASB245	American Indians of the Southwest	Comparative study of the cultures, including the histories and present status, of American Indians of the	Prerequisites: None.	LEC 3.0 3.0 3.0
ASB252	Sports and Culture	Cross-cultural examination of symbolic and social dimensions of sports, past and present.	Prerequisites: None.	LEC 3.0 3.0 3.0
ASB253	Death and Dying Across Cultures	Responses to death and dying in cultures around the world. Explanations for particular cultural responses to death and dying. Examples drawn from ancient and	Prerequisites: None. ASB102 suggested but not required.	LEC 3.0 3.0 3.0
ASB282AA	Service-Learning Experience in Anthropology	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 1.0 1.0 0.0
ASB282AB	Service-Learning Experience in Anthropology	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 2.0 2.0 0.0
ASB282AC	Service-Learning Experience in Anthropology	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 3.0 3.0 0.0
ASB298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0

ASB298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
ASB298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
ASD100	Foundations of Addictions and Substance Use Disorders	Introduction to the foundations of the alcohol and drug abuse rehabilitation field. Emphasis on the roles and responsibilities of the addictions counselor, ethical issues, pharmacology, family dynamics, dual diagnosis, intervention techniques, self-help groups, levels of care, symptom identification, and conducting alcohol/drug	Prerequisites: None.	LEC 3.0 3.0 3.0
ASD102	Communication Skills in Treating Addiction	Further examination and refinement of communication and beginning professional counseling skills as they relate to the addicted client and family members. Emphasis on practicing the application of these skills to various situations associated with treatment planning.	Prerequisites: None.	LEC 3.0 3.0 3.0
ASD110	Pharmacology of Substances of Abuse and Dependency	Exploration of the pharmacology of substance of abuse and dependency. Examines the effects of psychopharmacological chemicals on human physiology. Emphasis on identification and	Prerequisites: None.	LEC 3.0 3.0 3.0
ASD120	Professional Ethics in Addictions and Substance Use Disorders	Exploration of topics relative to the professional and ethical development of the addictions and substance use disorders counselor, including codes of ethics, confidentiality laws, professionalism and boundary issues, and the meeting of individual counselor needs	Prerequisites: None.	LEC 1.0 1.0 1.0
ASD145	AIDS and Addiction	Exploration of AIDS and its relationship to addiction. Emphasis on myths and realities of AIDS, personal values, feelings, and limitations and treatment goals.	Prerequisites: None.	LEC 1.0 1.0 1.0

ASD146	Peer Support Specialist	Introduction to the role and foundational responsibilities of a peer support specialist in the field of addictions and substance use. Explores basic pharmacology, ethics, case management, and crisis management. Recovery-Oriented Systems of Care (ROSC) is emphasized.	Prerequisites: None. Corequisites: ASD147.	LEC 4.0 4.0 4.0
ASD147	Peer Support Specialist Practicum	Peer support specialist preparation related to addictions and substance use disorders. Opportunity for students to use their developed knowledge and skills in an	Prerequisites: None. Corequisites: ASD146.	LAB 3.0 5.0 0.0
ASD148	Introduction to the Science of Prevention	Overview of the science underlying evidence-based prevention interventions and strategies and the effective application of these approaches in prevention	Prerequisites: None.	LEC 1.0 1.0 1.0
ASD149	Physiology and Pharmacology for Prevention	Overview of the physiology and pharmacology of psychoactive substances and their effects on the brain to affect mood, cognition, and behavior and the consequences of such use on the individual, family,	Prerequisites: None.	LEC 1.0 1.0 1.0
ASD150	Principles of Self-Help Groups	Overview of the fundamental principles, concepts and historical antecedents of the various self-help groups. Emphasis on the self-help groups of Alcoholics Anonymous, Al-anon, Alateen, Narcotics Anonymous, Co-dependents Anonymous, and Adult Children of	Prerequisites: None.	LEC 2.0 2.0 2.0
ASD151	Prevention Interventions and Policies	Overview of primary evaluation methods used to measure evidence-based prevention interventions and gives guidance in applying them to "real-world"	Prerequisites: None.	LEC 1.0 1.0 1.0
ASD152	Family-Based Prevention Interventions	Overview of the family as the primary socialization agent of children, the science behind family-based prevention interventions, and the application of such evidence-based approaches to help prevent the onset of	Prerequisites: None.	LEC 1.0 1.0 1.0
ASD153	School-Based Prevention Interventions	Overview of the role of the school in society, the science behind school-based prevention interventions, and the application of such evidence-based	Prerequisites: None.	LEC 1.0 1.0 1.0
ASD154	Workplace-Based Prevention Interventions	Overview of the role of work and the workplace in society, how stressors and other work-related influences affect risk of substance use, the science behind workplace prevention interventions, and the application of such evidence-based approaches in work settings	Prerequisites: None.	LEC 1.0 1.0 1.0
ASD155	Environment-Based Prevention Interventions	Overview of the science underlying evidence-based substance use prevention using environmental interventions, involving policy, and community-wide	Prerequisites: None.	LEC 1.0 1.0 1.0

ASD156	Media-Based Prevention	Overview of the science underlying the use of media for substance use prevention interventions.	Prerequisites: None.	LEC 1.0 1.0 1.0
ASD157	Community-Based Prevention Implementation Systems	Overview of the science underlying the systems approach to prevention interventions and guidance for developing such approaches, as well as exemplars of evidence-based drug use prevention systems.	Prerequisites: None.	LEC 1.0 1.0 1.0
ASD158	Gambling Disorders Prevention	Overview of gambling disorders prevention. Emphasis on current prevention research. Also includes information on gambling prevention resources.	Prerequisites: None.	LEC 1.0 1.0 1.0
ASD159	Adolescent Substance Use Prevention	Adolescent substance use prevention issues. Emphasis on current and developing adolescent prevention information. Covers common adolescent substance use	Prerequisites: None.	LEC 1.0 1.0 1.0
ASD160	Behavioral Addictions Prevention	Overview of behavioral addictions prevention issues. Emphasis on current research. Also includes community	Prerequisites: None.	LEC 1.0 1.0 1.0
ASD161	Beginning Clinical Documentation Skills	Overview of addictions and substance use disorders counseling, interviewing, and documentation. Includes record keeping and documentation skills. Alcohol and drug abuse counselor core functions emphasized.	Prerequisites: None.	LEC 3.0 3.0 3.0
ASD165	Theories and Techniques in the Treatment of	Overview of counseling theories including the application to addictions and substance use disorders groups. Recordkeeping skills and beginning counseling	Prerequisites: None.	LEC 2.0 2.0 2.0
ASD220	Family Dynamics and Addiction	Analysis of the impact of addictions on all the members of a family. Interviewing, assessment and therapeutic approaches particularly useful for these family members	Prerequisites: None.	LEC 3.0 3.0 3.0
ASD226	Counseling Multicultural and	Exploration of influences of culture and diversity on addictions and substance abuse. Emphasis on recovery	Prerequisites: None.	LEC 3.0 3.0 3.0
ASD236	Relapse, Recovery, and Addiction	Review of the bio-psycho-social processes of recovery and relapse in addictions. Exploration into those factors that both contribute to and inhibit recovery and relapse.	Prerequisites: None.	LEC 2.0 2.0 2.0
ASD245	Co-Occurring Disorders	Examines co-occurring disorders from the bio-psycho-social model. Includes causes, consequences, assessment, and treatment, emphasizing the	Prerequisites: None.	LEC 2.0 2.0 2.0
ASD250	Group Interventions	Focus on group dynamics and group process as they relate to addictions and substance use disorders. Exploration of group developmental stages, family intervention models, various counseling approaches/techniques and their application to	Prerequisites: None.	LEC 3.0 3.0 3.0

ASD275	Advanced Theory and Techniques in the Treatment of Addiction Disorders	Capstone course for level two certificate in addictions and substance use disorders program. Focus on counseling theories and techniques used by counselors as they relate to the client and family members.	Prerequisites: A grade of C or better in ASD220, ASD226, ASD245 and ASD250 or permission of Instructor.	LEC 3.0 3.0 3.0
ASD280	Addictions and Substance Use Disorders Practicum	Opportunity for advanced students to use his/her developed knowledge and skills in an applied setting with supervision.	Prerequisites: A grade of C or better in ASD275 or permission of Department or Division.	LAB 6.0 18.0 0.0
ASD285	Addictions Seminar	Special topics in addictions and substance use disorders with an emphasis on current issues not covered in other addictions and substance use	Prerequisites: None.	LEC 1.0 1.0 1.0
ASD285AA	Treatment for Stimulant Use Disorders Seminar	Stimulant use disorder treatment issues. Emphasis on current and developing treatment information. Covers common stimulant abuse characteristics and treatment strategies. Also includes community resource	Prerequisites: None.	LEC 1.0 1.0 1.0
ASD285BB	Adolescent Substance Abuse Treatment Seminar	Adolescent substance abuse treatment issues. Emphasis on current and developing treatment information. Covers common adolescent substance abuse characteristics and treatment strategies. Also	Prerequisites: None.	LEC 1.0 1.0 1.0
ASD285CC	Addiction Review Seminar	A brief review of current addiction issues. Emphasis on current and developing treatment information. Covers common alcohol and drug addiction characteristics and treatment strategies. Also includes community resource	Prerequisites: None.	LEC 1.0 1.0 1.0
ASD285DD	Motivation for Change in Substance Abuse Treatment Seminar	Issues regarding motivational change in substance abuse treatment. Emphasis on current and developing treatment information. Covers common motivational change techniques. Also includes community resource	Prerequisites: None.	LEC 1.0 1.0 1.0
ASD285EE	Domestic Violence and Substance Abuse Seminar	Domestic violence and substance abuse treatment issues. Emphasis on current and developing domestic violence and substance abuse information. Covers techniques, strategies, and treatment modalities for domestic violence and substance abuse patients. Also	Prerequisites: None.	LEC 1.0 1.0 1.0
ASD285FF	Street Drugs Seminar	Street drug issues. Emphasis on current and developing street drug information. Covers techniques strategies and treatment modalities for street drug abuse patients. Also includes community resource	Prerequisites: None.	LEC 1.0 1.0 1.0

ASD285GG	Addictive and Medical Plants Seminar	Addictive and medical plant issues. Emphasis on current and developing addictive and medical plant information. Covers addictive and medical plant typology. Also includes community resource information.	Prerequisites: None.	LEC 1.0 1.0 1.0
ASD285HH	Intervention and Treatment for Addictions and Substance Use Disorders Seminar	Brief interventions and treatment for addictions and substance use disorders. Emphasis on current and developing intervention and treatment information. Covers treatment and intervention techniques for use with addictions and substance use disorders. Also	Prerequisites: None.	LEC 1.0 1.0 1.0
ASD285II	Multicultural Aspects	Multicultural aspects of counseling in addictions and substance use disorders. Emphasis on current and developing treatment information. Covers common aspects of multicultural characteristics and treatment	Prerequisites: None.	LEC 1.0 1.0 1.0
ASD285JJ	Clinical Supervision Training of Supervisors	Clinical supervision training of supervisor issues. Emphasis on current and developing treatment information. Also includes community resource	Prerequisites: None.	LEC 1.0 1.0 1.0
ASD285KK	Recovery-Oriented Systems of Care Seminar	Overview of recovery-oriented systems of care programs. Covers research, development, and characteristics of programs in addition to applicable	Prerequisites: None.	LEC 1.0 1.0 1.0
ASD285LL	Gambling Addiction Seminar	A brief review of gambling addiction issues. Emphasis on current research, intervention, and treatments in the field. Also includes community resources information.	Prerequisites: None.	LEC 1.0 1.0 1.0
ASD285MM	Sexual Addiction Seminar	A brief review of sexual addiction issues. Emphasis on current research, intervention, and treatments in the field. Also includes community resources information.	Prerequisites: Student must be 18 years or older.	LEC 1.0 1.0 1.0
ASD285NN	Eating Disorders Seminar	An overview of issues associated with eating disorders. Emphasis on current research, intervention, prevention, and treatments in the field. Also includes community	Prerequisites: None.	LEC 1.0 1.0 1.0
ASD285OO	Eating Disorders: Special Considerations and Populations Seminar	A review of issues associated with eating disorders within diverse populations. Emphasis on multicultural populations, current research, intervention, prevention, and treatments in the field. Also includes community	Prerequisites: None.	LEC 1.0 1.0 1.0
ASD285PP	Eating Disorders: Conceptualization and Treatment Seminar	A review of issues associated with eating disorders. Emphasis on current research, intervention, prevention, and treatments in the field. Also includes community	Prerequisites: None.	LEC 1.0 1.0 1.0
ASD285QQ	Behavioral Addictions Seminar	A review of issues associated with behavioral addictions. Emphasis on current research, intervention, prevention, and treatments in the field. Also includes	Prerequisites: None.	LEC 1.0 1.0 1.0

ASD285RR	Behavioral Addictions Seminar: Internet-Related Addictions	A review of issues associated with internet-based behavioral addictions. Emphasis on diagnostic descriptions and considerations for internet-based addictions including current research, intervention, prevention, and treatments in the field. Also includes	Prerequisites: None.	LEC 1.0 1.0 1.0
ASD285SS	Marijuana Addiction Seminar	An overview of issues associated with marijuana addiction. Emphasis on current research, intervention, prevention, and treatments in the field. Also includes	Prerequisites: None.	LEC 1.0 1.0 1.0
ASD285TT	Opioid Addiction Seminar	An overview of issues associated with opioid addiction. Emphasis on current research, intervention, prevention, and treatments in the field. Also includes community	Prerequisites: None.	LEC 1.0 1.0 1.0
ASD295	Advanced Foundations: Addictions and Substance Use Disorders Counselor Licensing/Certification	Review for individuals preparing for addictions and substance use disorders counselor licensing and/or certification exams. Emphasis on ethics, treatment, pharmacology, family issues, and self-help groups.	Prerequisites: None.	LEC 3.0 3.0 3.0
ASE100	Introduction to Automotive Service	Introduction to the standards of the automotive industry. Includes an overview of the major automotive systems, safety practices, workplace habits, tools, and	Prerequisites: None.	L+L 2.0 4.0 4.0
ASE102	Automotive Express Service	Use of standard service publications; performance of commonly used service operations following published service procedures; emphasis on good attitude development and safety habits about automotive	Prerequisites: None.	L+L 2.0 4.0 4.0
ASE102AU	Automotive Express Service	Use of standard service publications; performance of commonly used service operations following published service procedures; emphasis on good attitude development and safety habits about automotive	Prerequisites: None.	LEC 2.0 1.0 1.0 LAB 0.0 3.0 3.0
ASE110	Engine Fundamentals	Diagnosis, disassembly, repair and reassembly of automotive internal combustion engines.	Prerequisites: None.	L+L 4.0 7.5 7.5
ASE110AU	Engine Fundamentals	Diagnosis, disassembly, repair and reassembly of automotive internal combustion engines.	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: ASE100.	LEC 4.0 2.0 2.0 LAB 0.0 5.5 5.5
ASE111	Engine Diagnosis and Inspection	Diagnosis and inspection of automotive internal combustion engines.	Prerequisites: None.	L+L 2.0 4.0 4.0
ASE111AU	Engine Diagnosis and Inspection	Diagnosis and inspection of automotive internal combustion engines.	Prerequisites: None.	LEC 2.0 1.0 1.0 LAB 0.0 3.0 3.0

ASE120	Automatic Transmission and Transaxle	Principles of automotive operation, servicing and repair procedures for automatic transmissions/transaxles; includes diagnostics and testing of mechanical,	Prerequisites: None.	L+L 4.0 7.5 7.5
ASE120AU	Automatic Transmission and Transaxle	Principles of automotive operation, servicing and repair procedures for automatic transmissions/transaxles; includes diagnostics and testing of mechanical,	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: ASE100.	LEC 4.0 2.0 2.0 LAB 0.0 5.5 5.5
ASE130	Manual Drive Trains and Axles	Operation, diagnosis, service, and repair of the automotive powertrain. Includes manual transmissions/transaxles, clutches, drive axles,	Prerequisites: None.	L+L 4.0 7.5 7.5
ASE130AU	Manual Drive Trains and Axles	Operation, diagnosis, service, and repair of the automotive powertrain. Includes manual transmissions/transaxles, clutches, drive axles,	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: ASE100.	LEC 4.0 2.0 2.0 LAB 0.0 5.5 5.5
ASE140	Automotive Steering, Suspension and Alignment	Principles of automotive suspension and steering systems. Diagnosis, service, and repair procedures emphasis on four-wheel alignment.	Prerequisites: None.	L+L 4.0 7.5 7.5
ASE140AU	Automotive Steering, Suspension and Alignment	Principles of automotive suspension and steering systems. Diagnosis, service, and repair procedures emphasis on four-wheel alignment.	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: ASE100.	LEC 4.0 2.0 2.0 LAB 0.0 5.5 5.5
ASE141	Steering, Suspension and Pre-Alignment	Principles and operation of automotive suspension and steering systems.	Prerequisites: None.	L+L 2.0 4.0 4.0
ASE141AU	Steering, Suspension and Pre-Alignment	Principles and operation of automotive suspension and steering systems.	Prerequisites: None.	LEC 2.0 1.0 1.0 LAB 0.0 3.0 3.0
ASE150	Automotive Brake Systems	Operation, diagnosis, service, and repair of automotive brake systems.	Prerequisites: None.	L+L 4.0 7.5 7.5
ASE150AU	Automotive Brake Systems	Operation, diagnosis, service, and repair of automotive brake systems.	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: ASE100.	LEC 4.0 2.0 2.0 LAB 0.0 5.5 5.5
ASE151	Introduction to Brake Systems	Fundamentals and operation of automotive braking systems. Includes training in service, testing, and repair of basic brake and brake-related components.	Prerequisites: None.	L+L 2.0 4.0 4.0
ASE151AU	Introduction to Brake Systems	Fundamentals and operation of automotive braking systems. Includes training in service, testing, and repair of basic brake and brake-related components.	Prerequisites: None.	LEC 2.0 1.0 1.0 LAB 0.0 3.0 3.0
ASE160	Introduction to Automotive Electrical	Automotive electrical systems foundations. Emphasis on testing and diagnosis of automotive battery, starting,	Prerequisites: None.	L+L 4.0 7.5 7.5
ASE160AU	Introduction to Automotive Electrical	Automotive electrical systems foundations. Emphasis on testing and diagnosis of automotive battery, starting, and charging systems.	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: ASE100.	LEC 4.0 2.0 2.0 LAB 0.0 5.5 5.5

ASE161	Basic Automotive Electrical/Electronics	The basic principles of automotive electricity and electrical systems.	Prerequisites: None.	L+L 2.0 3.0 3.0
ASE161AU	Basic Automotive Electrical/Electronics	The basic principles of automotive electricity and electrical systems.	Prerequisites: None.	LEC 2.0 1.0 1.0 LAB 0.0 2.0 2.0
ASE162	Automotive Battery, Starting and Charging Systems	The principles of operation, testing and diagnosis of automotive battery, starting and charging systems.	Prerequisites: A grade of C or better in ASE161, or permission of Instructor.	L+L 2.0 3.0 3.0
ASE162AU	Automotive Battery, Starting and Charging Systems	The principles of operation, testing and diagnosis of automotive battery, starting and charging systems.	Prerequisites: A grade of C or better in ASE161, or permission of Instructor.	LEC 2.0 1.0 1.0 LAB 0.0 2.0 2.0
ASE170	Automotive Heating, Ventilation and Air Conditioning Systems	Theory and operation of automotive heating, ventilation and air conditioning systems. Includes diagnosis, service and repair of these systems.	Prerequisites: None.	L+L 4.0 7.5 7.5
ASE170AU	Automotive Heating, Ventilation and Air Conditioning Systems	Theory and operation of automotive heating, ventilation and air conditioning systems. Diagnosis, service and repair of these systems.	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: ASE100.	LEC 4.0 2.0 2.0 LAB 0.0 5.5 5.5
ASE180	Introduction to Engine Management	Introduction to automotive engine management. Includes the construction and operating principles of automotive internal combustion engines. Focus on operation and diagnosis of fuel systems, ignition	Prerequisites: None.	L+L 4.0 7.5 7.5
ASE180AU	Introduction to Engine Management	Introduction to automotive engine management. Includes the construction and operating principles of automotive internal combustion engines. Focus on operation and diagnosis of fuel systems, ignition	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: ASE100.	LEC 4.0 2.0 2.0 LAB 0.0 5.5 5.5
ASE181	Introduction to Engine Performance	An introductory course in automotive engine performance as it relates to the construction and operating principles of automotive internal combustion engines, fuel systems, ignition systems, and the related	Prerequisites: None.	L+L 2.0 4.0 4.0
ASE181AU	Introduction to Engine Performance	An introductory course in automotive engine performance as it relates to the construction and operating principles of automotive internal combustion engines, fuel systems, ignition systems, and the related	Prerequisites: None.	LEC 2.0 1.0 1.0 LAB 0.0 3.0 3.0
ASE182	Fundamentals of Automotive Fuel/Air and Ignition Systems	The theory and fundamentals of automotive fuel/air delivery and ignition systems. The proper diagnosis and repair of the fuel/air delivery and ignition systems.	Prerequisites: A grade of C or better in ASE181, or permission of Instructor.	L+L 2.0 4.0 4.0
ASE182AU	Fundamentals of Automotive Fuel/Air and Ignition Systems	The theory and fundamentals of automotive fuel/air delivery and ignition systems. The proper diagnosis and repair of the fuel/air delivery and ignition systems.	Prerequisites: A grade of C or better in ASE181, or permission of Instructor.	LEC 2.0 1.0 1.0 LAB 0.0 3.0 3.0

ASE240	Advanced Driver Assistance Systems	Principles of Advanced Driver Assistance Systems (ADAS). Diagnosis, service, and repair procedures.	Prerequisites: A grade of C or better in ASE140, or ASE140AU, or permission of Instructor.	L+L 2.0 4.0 4.0
ASE241	Advanced Steering, Suspension and Alignment	Advanced automotive principles of suspension and steering systems. Diagnosis, service and repair procedures, with emphasis on four-wheel alignment.	Prerequisites: A grade of C or better in ASE141, or permission of Instructor.	L+L 2.0 4.0 4.0
ASE241AU	Advanced Steering, Suspension and Alignment	Advanced automotive principles of suspension and steering systems. Diagnosis, service and repair procedures, with emphasis on four-wheel alignment.	Prerequisites: A grade of C or better in ASE141, or permission of Instructor.	LEC 2.0 1.0 1.0 LAB 0.0 3.0 3.0
ASE251	Advanced Brake Systems	The operation, diagnosis, service and repair of advanced automotive brake systems.	Prerequisites: A grade of C or better in ASE151, or permission of	L+L 2.0 4.0 4.0
ASE251AU	Advanced Brake Systems	The operation, diagnosis, service and repair of advanced automotive brake systems.	Prerequisites: A grade of C or better in ASE151, or permission of	LEC 2.0 1.0 1.0 LAB 0.0 3.0 3.0
ASE260	Advanced Automotive Electrical	Advanced principles of automotive electronics.	Prerequisites: A grade of C or better in ASE160, or ASE160AU, or permission of Instructor.	L+L 4.0 7.5 7.5
ASE260AU	Advanced Automotive Electrical	Advanced principles of automotive electronics.	Prerequisites: A grade of C or better in ASE160, or ASE160AU, or permission of Instructor.	LEC 4.0 2.0 2.0 LAB 0.0 5.5 5.5
ASE261	Automotive Electrical Diagnostics and	Principles of automotive electrical diagnostics and repair.	Prerequisites: A grade of C or better in ASE162, or permission of	L+L 2.0 4.0 4.0
ASE261AU	Automotive Electrical Diagnostics and	Principles of automotive electrical diagnostics and repair.	Prerequisites: A grade of C or better in ASE162, or permission of	LEC 2.0 1.0 1.0 LAB 0.0 3.0 3.0
ASE262	Automotive Electronic Control Systems	Principles and operation of automotive electronics and electronic control systems.	Prerequisites: A grade of C or better in ASE261, or permission of	L+L 2.0 4.0 4.0
ASE262AU	Automotive Electronic Control Systems	Principles and operation of automotive electronics and electronic control systems.	Prerequisites: A grade of C or better in ASE261, or permission of	LEC 2.0 1.0 1.0 LAB 0.0 3.0 3.0
ASE263	Hybrid Vehicle Overview	Automotive hybrid vehicle design and operation. Safety practices as suggested by manufacturers for servicing	Prerequisites: A grade of C or better in ASE100.	L+L 2.0 4.0 4.0
ASE264	Automotive Electrical/Electronic Systems III	Designed for the advanced automotive student, this course covers the automotive computer, multiple computer systems, and automotive computer networks.	Prerequisites: A grade of C or better in ASE161 and ASE162, or permission of Instructor.	L+L 3.0 5.0 5.0
ASE265	Introduction to Electric and Hybrid Vehicles	Principles of electric drive vehicles, including electric drive, hybrid, and fuel cell electric vehicles.	Prerequisites: A grade of C or better in ASE260, or permission of	L+L 2.0 4.0 4.0
ASE266	Electric/Hybrid Vehicle High Voltage Batteries	This course covers the safety, operation, testing, diagnosis, and repair of electrical and hybrid high voltage batteries.	Prerequisites: A grade of C or better in ASE161 and ASE162, or permission of Instructor.	L+L 1.0 2.0 2.0

ASE267	Electric Vehicle Operation and Diagnosis	Covers the operation and diagnosis of electric/hybrid vehicles.	Prerequisites: A grade of C or better in ASE161 and ASE162, or permission of Instructor.	L+L 3.0 5.0 5.0
ASE280	Engine Management	Diagnostic concepts of advanced engine management. Operation and diagnosis of engine management control systems, communication networks, and vehicle	Prerequisites: A grade of C or better in ASE180, or ASE180AU, or permission of Instructor.	L+L 4.0 7.5 7.5
ASE280AU	Engine Management	Diagnostic concepts of advanced engine management. Operation and diagnosis of engine management control systems, communication networks, and vehicle	Prerequisites: A grade of C or better in ASE180, or ASE180AU, or permission of Instructor.	LEC 4.0 2.0 2.0 LAB 0.0 5.5 5.5
ASE281	Computerized Automotive Engine Control Systems	The theory of computerized engine control systems as they relate to engine performance and emissions control.	Prerequisites: A grade of C or better in ASE261 and ASE182, or permission of Instructor.	L+L 2.0 4.0 4.0
ASE281AU	Computerized Automotive Engine	The theory of computerized engine control systems as they relate to engine performance and emissions	Prerequisites: A grade of C or better in ASE182, or permission of	LEC 2.0 1.0 1.0 LAB 0.0 3.0 3.0
ASE282	Advanced Engine Performance Diagnosis	Diagnosis and repair of emission and engine control systems. Emphasizes the proper diagnosis, documentation, and repair of systems faults.	Prerequisites: A grade of C or better in ASE261 and ASE281, or permission of Instructor.	L+L 2.0 4.0 4.0
ASE282AU	Advanced Engine Performance Diagnosis	Diagnosis and repair of emission and engine control systems. Emphasizes the proper diagnosis, documentation, and repair of systems faults.	Prerequisites: A grade of C or better in ASE261 and ASE281, or permission of Instructor.	LEC 2.0 1.0 1.0 LAB 0.0 3.0 3.0
ASE290AA	Automotive Service Internship	Automotive work experience in the automotive service industry.	Prerequisites: Permission of Department or Division.	L+L 1.0 1.0 0.0
ASE290AB	Automotive Service Internship	Automotive work experience in the automotive service industry.	Prerequisites: Permission of Department or Division.	L+L 2.0 2.0 0.0
ASE290AC	Automotive Service Internship	Automotive work experience in the automotive service industry.	Prerequisites: Permission of Department or Division.	L+L 3.0 3.0 0.0
ASE296WA	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits, minimum 2.6 grade point average and be able to obtain a position related to student's academic or career goals (student's present job may qualify) or permission of instructor. Corequisites: Must be concurrent in at least one class which is related to student's major or career interest or with	LAB 1.0 5.0 0.0

ASE296WB	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits, minimum 2.6 grade point average and be able to obtain a position related to student's academic or career goals (student's present job may qualify) or permission of instructor. Corequisites: Must be concurrent in at least one class which is related to student's major or career interest or with	LAB 2.0 10.0 0.0
ASE296WC	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits, minimum 2.6 grade point average and be able to obtain a position related to student's academic or career goals (student's present job may qualify) or permission of instructor. Corequisites: Must be concurrent in at least one class which is related to student's major or career interest or with	LAB 3.0 15.0 0.0
ASE296WD	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits, minimum 2.6 grade point average and be able to obtain a position related to student's academic or career goals (student's present job may qualify) or permission of instructor. Corequisites: Must be concurrent in at least one class which is related to student's major or career interest or with	LAB 4.0 20.0 0.0
ASE298AA	Special Projects	An organized and tailored activity around the interests and needs of the individual student. Allows the best aspects of independent study and individualized learning to be combined to maximize student	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
ASE298AB	Special Projects	An organized and tailored activity around the interests and needs of the individual student. Allows the best aspects of independent study and individualized learning to be combined to maximize student	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0

ASE298AC	Special Projects	An organized and tailored activity around the interests and needs of the individual student. Allows the best aspects of independent study and individualized learning to be combined to maximize student	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
ASL090AA	Speedy American Sign Language I	Introduction of techniques for communicating with deaf people using American Sign Language (A.S.L.). Expressive and receptive sign skills, manual alphabet,	Prerequisites: None. ASL103 suggested but not required.	LEC 1.0 1.0 1.0
ASL101	American Sign Language I	Introduction of principles, methods, and techniques for communicating with deaf people who sign. Development of expressive and receptive sign skills, manual alphabet, numbers, and sign vocabulary. Overview of syntax, grammar, and culture related to	Prerequisites: None. ASL103 suggested as a corequisite but not required.	LEC 4.0 4.0 4.0
ASL102	American Sign Language II	Continued development of knowledge and language skills for communicating with deaf people who sign. Includes numbers, fingerspelling, and culture. Emphasis on enhancement of receptive sign skills and continued development of expressive sign skills. Application of rudimentary, syntactical, and grammatical structure	Prerequisites: A grade of C or better in ASL101 or permission of Department or Division. Completion of prerequisites within the last three years is required.	LEC 4.0 4.0 4.0
ASL103	Introduction to the Deaf Community	History and development of American Sign Language (ASL) and English codes. Overview of education for Deaf and Hard of Hearing children. Legal rights and common adaptive devices used by Deaf and Hard of	Prerequisites: None.	LEC 1.0 1.0 1.0
ASL110	Fingerspelling	Introduction to fingerspelling techniques. Focus on methods, theory, and applications on receptive and expressive skills including manual alphabet production and numbers. In addition, skill development in speed, dexterity, clarity, and lexicalized fingerspelling, numeric	Prerequisites: A grade of C or better in ASL101 or permission of Department or Division. Completion of prerequisites within the last three years is required.	LEC 3.0 3.0 3.0
ASL200	Issues and Resources	Implications of laws pertaining to educational choices and rights of deaf, deaf-blind, and hard of hearing individuals. Local, state, and national organizations, activities, and agencies affecting the deaf community.	Prerequisites: A grade of C or better in ASL102 or permission of Department or Division. Completion of prerequisites within the last three	LEC 3.0 3.0 3.0
ASL201	American Sign Language III	Linguistics of American Sign Language (A.S.L.) including non-manual behaviors and signing English idioms with conceptual accuracy. Emphasis on practical application of A.S.L. skills, expanded vocabulary, and cross-cultural communication.	Prerequisites: A grade of C or better in ASL102 or permission of Department or Division. (ENG101 or ENG107) and (CRE101 or equivalent as indicated by assessment) suggested but not required. Completion of prerequisites within	LEC 4.0 4.0 4.0

ASL202	American Sign Language IV	Advanced American Sign Language skills including continued vocabulary. Emphasis on conversational techniques in a cross-cultural framework. Continued work on conceptual accurate signing of English idioms and words with multiple meanings.	Prerequisites: A grade of C or better in ASL201 or permission of Department or Division. (ENG101 or ENG107), ASL200, and (CRE101 or equivalent as indicated by assessment) suggested but not required. Completion of prerequisites	LEC 4.0 4.0 4.0
ASL203	American Sign Language V	Advanced study of vocabulary, classifiers, use of space, and grammatical features of American Sign Language (ASL). Includes evaluation of changes that occur in ASL as a living language. Advanced use of ASL in	Prerequisites: A grade of C or better in ASL202. Completion of prerequisites within the last three years is required.	LEC 4.0 4.0 4.0
ASL204	Comparative Linguistics: ASL/English	A variety of topics about linguistics of American Sign Language (ASL) and English including phonology, morphology, lexicon, syntax, discourse, and language acquisition. Aspects of using sign language and how	Prerequisites: A grade of C or better in ASL202. Corequisites: ASL203. Completion of prerequisites within the last three years is required.	LEC 3.0 3.0 3.0
ASL212	Deaf Culture	Linguistic, social, educational, and political issues in deaf culture. Values and group identity issues as related to heritage and literature. Special emphasis on the cultural and philosophical attitudes shared with	Prerequisites: A grade of C or better in ASL202 or permission of Department or Division. Completion of prerequisites within the last three	LEC 3.0 3.0 3.0
ASL296WC	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits, minimum 2.6 grade point average, and be able to obtain a position related to student's academic or career goals (student's present job may qualify), or permission of Instructor. Corequisites: Concurrent in at least one class related to student's major	LAB 3.0 15.0 0.0
ASL298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0

ASL298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
ASL298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
ASM104	Bones, Stones, and Human Evolution	Study of human evolution and variation; including fossil hominids and their tools, primate anatomy and behavior, human genetics, and the environment and	Prerequisites: None.	L+L 4.0 5.0 5.0
ASM265	Laboratory Methods in Archaeology	Techniques of artifact. Basic archaeological research techniques; methods of report writing.	Prerequisites: None.	L+L 4.0 4.0 4.0
ASM275	Forensic Anthropology	Survey of the role of forensic anthropologists, from the crime scene to the courtroom. Course focuses on how skeletal analysis can aid in medicolegal investigations, especially by identifying aspects of the life history of unknown individuals and by reconstructing events that took place at crime scenes. Covers both the legal aspects of forensic practice and the underlying biological basis for evidence obtained from skeletal remains. Examines applications of forensic anthropology in mass disasters, human rights	Prerequisites: None.	L+L 4.0 5.0 5.0
ASM282AA	Service-Learning Experience in Anthropology	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 1.0 1.0 0.0
ASM282AB	Service-Learning Experience in Anthropology	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 2.0 2.0 0.0
ASM282AC	Service-Learning Experience in Anthropology	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 3.0 3.0 0.0

ASM298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
ASM298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
ASM298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
AST101	Survey of Astronomy	Survey of astronomy for the nontechnical student. The history, content, and evolution of the solar system and the universe in general. Astronomical principles and instrumentation. The planets, moons, sun, comets, stars	Prerequisites: None.	LEC 4.0 3.0 3.0 LAB 0.0 3.0 3.0
AST106	Life in the Universe	Introduction to the search for life in the universe for the non-science major. Earth's location in space and time, nature of life, light and the spectrum, origin and history of the universe, origin of life on Earth and the possibility of life on other planets.	Prerequisites: A grade of C or better in MAT090 or MAT091 or MAT092 or completion of higher level mathematics course, or satisfactory score on placement exam.	LEC 4.0 3.0 3.0 LAB 0.0 3.0 3.0
AST111	Introduction to Solar System Astronomy	Introduction to astronomy for the non-science major. The scientific method, properties of light, astronomical instruments, our Solar System and solar systems around other stars. Includes hands-on astronomical	Prerequisites: A grade of C or better in MAT092 or higher, or satisfactory district placement.	LEC 4.0 3.0 3.0 LAB 0.0 3.0 3.0
AST112	Introduction to Stars, Galaxies, and Cosmology	Introduction to astronomy for the non-science major. Structure and evolution of stars; supernovae, black holes, and quasars; nebulae; star clusters; galaxies; cosmology, including the birth and death of the	Prerequisites: A grade of C or better in MAT092 or higher, or satisfactory score on district placement exam.	LEC 4.0 3.0 3.0 LAB 0.0 3.0 3.0

AST282AA	Service-Learning Experience in	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 1.0 1.0 0.0
AST294	Special Topics in Astronomy	Conceptual, experimental, and computational aspects of a special topic in astronomy.	Prerequisites: Permission of Department or Division.	LEC 3.0 3.0 3.0
AST294AB	Special Topics in Astronomy	Conceptual, experimental, and computational aspects of a special topic in astronomy.	Prerequisites: Permission of Department or Division.	LEC 1.0 1.0 1.0
AST294AC	Special Topics in Astronomy	Conceptual, experimental, and computational aspects of a special topic in astronomy.	Prerequisites: Permission of Department or Division.	LEC 0.5 0.5 0.5
AST298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
AVC100	Introduction to Digital Arts	Foundation course in digital arts and design, with emphasis in the production of art using the computer.	Prerequisites: None.	L+L 1.0 2.0 2.0
AVC103	Typography in the Digital Age	Survey of the history of typography and individual designers. Emphasis on the function of typography as an integral part of effective visual communication. Study of type anatomy, mechanics, characteristics, structure, and the principles of effective selection and the relation of copy and image in graphic design. Evaluate fonts	Prerequisites: A grade of C or better in AVC100 or permission of Instructor.	L+L 3.0 6.0 6.0
AVC104	Cross-Media Marketing for Designers	Role of graphic designer in business with an emphasis on using graphic design to achieve marketing and sales objectives. Variety of communication channels explored, such as print and digital and including social media,	Prerequisites: None.	L+L 3.0 6.0 6.0
AVC110	Survey of Graphic Design and Visual Communication	A survey of graphic design and visual communication with an emphasis on application, history, and design processes. Tracing connections between contemporary and historical design. Apply knowledge to assemble	Prerequisites: None.	LEC 3.0 3.0 3.0
AVC114	Digital Color	Overview of how color is perceived and utilized in a digital environment and how to ensure consistent color from capture to final output in print or online. Investigate visual solutions utilizing electronic devices for color	Prerequisites: None.	L+L 3.0 6.0 6.0

AVC119	Penciling for Sequential Art	Development of observational skills as they apply to sequential art. Emphasis on techniques that showcase how characters interact with their environment and manipulate props and cartooning anatomy. Includes techniques on composing page layouts, adapting	Prerequisites: None. ART111, or ART116, or previous drawing experience strongly recommended.	L+L 3.0 6.0 6.0
AVC120	Inking for Sequential Art	Development of inking materials and techniques used in sequential art. Emphasis on the types of tools used in the industry and the various means of employing them. Understanding the duties of the inker and the process	Prerequisites: None.	L+L 3.0 6.0 6.0
AVC135	Foundations of Photojournalism	Basic technical knowledge of photographic process as applied by mass media.	Prerequisites: A grade of C or better in ART131 or permission of	L+L 3.0 6.0 6.0
AVC138	Commercial Photography I	Basic techniques of lighting, camera work, and reproduction of commercial photography. Cooperation with commercial art community.	Prerequisites: A grade of C or better in (ART131 or AVC142) or permission of Instructor.	L+L 3.0 6.0 6.0
AVC139	Commercial Photography II	Advanced techniques with portfolio organization and presentation.	Prerequisites: A grade of C or better in AVC138.	L+L 3.0 6.0 6.0
AVC140	Portrait Photography	Fundamentals of portrait photography. Basic techniques of lighting, posing, design, and digital workflows applicable to the industry. Theory and	Prerequisites: A grade of C or better in ART131, or AVC142, or permission of Instructor.	L+L 3.0 6.0 6.0
AVC142	Introduction to Digital Photography	Fundamentals of digital photography. Includes camera operations, exposure techniques, introduction to digital output, and theory of digital photography.	Prerequisites: None.	L+L 3.0 6.0 6.0
AVC143	Intermediate Digital Photography	Intermediate theory and techniques of digital photography. Aesthetic awareness and personal expression from image capture through intermediate techniques in the digital darkroom. Introduction to high-	Prerequisites: A grade of C or better in AVC142 or permission of Instructor.	L+L 3.0 6.0 6.0
AVC150	Multimedia Storytelling	Enables students to find and develop their personal stories. Emphasis on the use of digital technology to create, edit, produce and archive a multimedia story.	Prerequisites: None.	L+L 3.0 6.0 6.0
AVC169	2D Media Design	Generation of two-dimensional (2D) images, designs, and media using digital and traditional methods of visual problem solving. Understanding digital and	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: AVC100 or permission	L+L 3.0 6.0 6.0
AVC170	3D Computer Design	Artistic manipulation of computer images. Emphasis on color and three-dimensional (3D) design in production of these images. Existing software used to generate three-	Prerequisites: A grade of C or better in AVC100 or AVC169 or permission of Instructor.	L+L 3.0 6.0 6.0

AVC173	Computer Art	Introduction to the multiple elements of paint software programs using the microcomputer. Basic foundation in the use of computer techniques including color paint programs for the production of computer images. Use of	Prerequisites: A grade of C or better in AVC100 or permission of Instructor.	L+L 3.0 6.0 6.0
AVC174	Electronic Color Principles	Interactive use of color for graphic communication. Color theory, color relationships and electronic color manipulation for computer graphic art, animation and	A grade of C or better required in all prerequisites. Prerequisites or Corequisites: AVC100.	L+L 1.0 2.0 2.0
AVC175	Electronic Publishing Design I	Introduction to the multiple elements of commercial publishing using the microcomputer. Basic foundation in the use of electronic page layout techniques. Emphasis on publication design layout and concepts.	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: AVC100 or permission of Instructor.	L+L 3.0 6.0 6.0
AVC177	Digital Photographic Imaging I	Introduction to multiple elements of digital imaging. Basic foundation in photographic manipulation of images, with special attention to aesthetic foundations	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: AVC100 or permission	L+L 3.0 6.0 6.0
AVC178	Digital Arts Studies	Designed for broad overview of the digital arts. Experience in digital based media, creative problem	Prerequisites: A grade of C or better in AVC100 or permission of	L+L 3.0 6.0 6.0
AVC180AD	Designer's Tools: Adobe Illustrator	Introduction to the multiple elements of Adobe Illustrator, a visual art adaptation software package using the Macintosh microcomputer. Basic foundation course in the use of electronic techniques, including	Prerequisites: A grade of C or better in AVC100 or permission of Instructor.	L+L 1.0 2.0 2.0
AVC180AE	Designer's Tools: Adobe Photoshop	Introduction to the multiple elements of Photoshop software package using the microcomputer. Basic foundation in the use of electronic techniques including	Prerequisites: A grade of C or better in AVC100 or permission of Instructor.	L+L 1.0 2.0 2.0
AVC180AK	Designer's Tools: Adobe Premiere	Basic functions and use of Adobe Premiere video editing software. Applications for computer animation, multimedia, and digital video production.	Prerequisites: A grade of C or better in AVC100. AVC/MMT184 is strongly recommended but not required. Xref: AVC184	L+L 1.0 2.0 2.0
AVC180AS	Designer's Tools: Adobe InDesign	Basic functions and operations of Adobe InDesign software. Application for graphic design, publishing, digital pre- press production and web layout.	Prerequisites: A grade of C or better in AVC100 or permission of Instructor.	L+L 1.0 2.0 2.0
AVC181	Graphic Design I	Basic understanding of design principles and the stages of graphic design, with an emphasis on final	Prerequisites: A grade of C or better in AVC100 or permission of	L+L 3.0 6.0 6.0
AVC182	Graphic Design II	Utilizing graphic design essentials of typography, contrast and layout to develop design solutions to problems in consumer advertising, typography and	Prerequisites: A grade of C or better in AVC181 or permission of Instructor.	L+L 3.0 6.0 6.0

AVC183	Digital Graphic Arts I	Graphic design use in microcomputer; black and white graphics, standard and color brushes, lines, shapes, area fills and fonts. Application to illustration, advertising graphics, typography, and video interaction.	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: AVC100 or permission of Instructor.	L+L 3.0 6.0 6.0
AVC184	Digital Animation I	The art of animation (animated sequences, special effects, titles, etc.) using the computer. Construction characters, background graphics, color, scaling, storyboard, cells, timing, editing, and surface rendering.	Prerequisites: A grade of C or better in (ART111 or ART116) or permission of Instructor. Corequisites: AVC100 or permission of Instructor.	L+L 3.0 6.0 6.0
AVC185	3D Modeling and Animation I	Basic concepts of 3D modeling. Anatomy of computer geometry; basic elements that make computer models- curves, surfaces, non-uniform rational basis spline (NURBS), and polygons. 3D translation, shading,	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: AVC100 or permission of Instructor.	L+L 3.0 6.0 6.0
AVC190	Art of Web Site Design	Introduction to design production for websites. Layout, typography and presentation style for HTML (Hyper Text Markup Language). Design of mock-ups using digital design software to produce artistic form and content for the Web using Hyper Text Markup Language (HTML), digital text, and graphics. Discussion of color, proportion, typography and Web-specific design principles. Emphasizes design of cross-browser	Prerequisites: A grade of C or better in AVC100, or permission of Instructor.	L+L 3.0 6.0 6.0
AVC190AA	Art of Website Design I	Introduction to design production for websites. Layout, typography and presentation style for HTML (Hyper Text Markup Language). Design of mock-ups using digital design software to produce artistic form and content for the Web using Hyper Text Markup Language, digital	Prerequisites: A grade of C or better in AVC100, or permission of Instructor.	L+L 1.0 2.0 2.0
AVC190AB	Art of Website Design II	Producing Web site pages, using design and Hyper Text digital text and graphics. Discussion of color, proportion, typography and Web-specific design	Prerequisites: A grade of C or better in AVC100 and AVC190AA, or permission of Instructor.	L+L 1.0 2.0 2.0
AVC190AC	Art of Website Design III	Producing Web sites using artistic form and content. Emphasizes design of cross-browser compatible interfaces that optimize usability, accessibility and	Prerequisites: A grade of C or better in AVC100 and AVC190AB, or permission of Instructor.	L+L 1.0 2.0 2.0
AVC191	Storyboarding and Layout	Introduction to storyboarding, including film storytelling and scene presentation.	Prerequisites: A grade of C or better in ART111.	L+L 3.0 6.0 6.0
AVC192	Advanced Web Presentation Design	Advanced interactive application and training for Web designers and graphic artists using Quark, Illustrator, Photoshop, HTML Flash, Dreamweaver and Digital Video site optimization techniques. Development of design concepts for web pages that communicate and	Prerequisites: A grade of C or better in AVC/MMT190 or permission of instructor.	L+L 3.0 6.0 6.0

AVC200	Animation and Interactivity	Animation and object-oriented programming concepts and techniques using industry standard authoring tools applied by the creative industry to animation productions, and interactive media. Introduction to animation and object- oriented programming concepts and techniques using industry standard authorizing	Prerequisites: A grade of C or better in AVC100 or permission of Instructor.	L+L 3.0 6.0 6.0
AVC201	Variable Data Printing	Understanding variable data and all areas including: design, utilizing data, cleaning and creating a database, file setup, prepress and press setup.	Prerequisites: A grade of C or better in AVC175, or permission of Instructor.	L+L 3.0 6.0 6.0
AVC202	Media Productions I	Introduction to digital media production tools, equipment, and broadcast applications. Pre-production including script writing, storyboards, budgeting and copyright; studio and mobile production including the use of cameras, lighting, audio recording, and new media tools; post-production including media editing,	Prerequisites: A grade of C or better in AVC100 or permission of Instructor.	L+L 3.0 6.0 6.0
AVC204	Creative Design for Advertising	Focuses on the design and production of advertisement layouts and visual marketing campaigns for digital, mobile, and social channels which drive business objectives. Emphasis on terminology, analysis, and critique of advertising design, campaign methods,	Prerequisites: None.	L+L 3.0 6.0 6.0
AVC210	Design Tools for Imagery, Production, and Publishing	Industry standard development of image manipulation, digital production, digital negatives, typography, and desktop publishing. New techniques using integrated software with multiple platform applications. Emphasis on alternative processes including: technique,	Prerequisites: A grade of C or better in AVC100 and [AVC169 or (AVC180AD, AVC180AE, and ART180AS)] and AVC181, or permission of Instructor.	L+L 3.0 6.0 6.0
AVC215	Advanced Electronic Publishing	Advanced use of electronic page layout techniques including in-depth styles; typography; technical documents and digital publishing interactivity.	Prerequisites: A grade of C or better in AVC175.	L+L 3.0 6.0 6.0
AVC219	Coloring, Toning and Lettering for Sequential Art	Understanding of the digital rules and programs used in coloring, toning and lettering comics, and the problems presented therein within the sequential narrative. Emphasis on rules and guidelines within the industry,	Prerequisites: A grade of C or better in (AVC100 and AVC119) or permission of Instructor. AVC120 recommended.	L+L 3.0 6.0 6.0
AVC220	Publishing for the Comic Industry	Understanding of the comics industry. Includes researching, marketing, packaging, and distributing comics. Emphasis on selling and submitting to comic publishers, how to develop comics for self-publishing, promotional materials, and understanding contracts and	Prerequisites: A grade of C or better in AVC100 or permission of Instructor.	L+L 3.0 6.0 6.0

AVC221	Comics Creation	Development of a complete sequential comic, using all comics skills from beginning to end. Process includes scripting, penciling, inking, coloring or toning, lettering,	Prerequisites: A grade of C or better in (AVC100 and AVC219) or permission of Instructor.	L+L 3.0 3.0 3.0
AVC227	Estimating for Digital Output	Introduction to estimating for digital output including job costing, labor/time, material and equipment costs. Focus on layout and imposition for press. Learn outside purchasing and vendor relationship management.	Prerequisites: None.	L+L 3.0 6.0 6.0
AVC230	Visual Brand Design	Simulates an actual working environment which exposes students to the challenges and advantages of working in cross-functional teams. Topics include preparation for collaborative work environments, critical thinking and communication, messaging, and effectively employing marketing and design principles. Reviews logo creation and implementation, preparing online and offline collateral, creating marketing messaging and	Prerequisites: A grade of C or better in (AVC100 and MKT110) or permission of Instructor.	L+L 3.0 6.0 6.0
AVC232	Studio Lighting	This course covers the fundamentals of lighting techniques with studio strobes, speed lights, and continuous lighting systems. Teaches students to use different light modifiers according to situation, subject	Prerequisites: A grade of C or better in ART131, or AVC142, or permission of Instructor.	L+L 3.0 6.0 6.0
AVC236	Photography Location Shooting	Practical application of camera techniques, use of lighting, and on-location shooting for post-production printing.	Prerequisites: A grade of C or better in (ART131 or AVC142) or permission of Instructor.	L+L 3.0 6.0 6.0
AVC237	Fashion Photography	Practical application of photographic techniques within the fashion industry. Includes the photographing of models, garments, and accessories.	Prerequisites: A grade of C or better in (ART131 or AVC142) or permission of instructor.	L+L 3.0 6.0 6.0
AVC240	Cinematography and Directing for 2D/3D Animation	Essential skills, concepts and the use of virtual cameras in 2D and 3D animation environments: planning, pre-production, storyboards and pre-visualization using real-world camera principles is combined with rendering,	Prerequisites: A grade of C or better in (AVC/MMT184 or AVC/MMT185 or FMP108) or permission of Instructor. Xref: AVC184 AVC185	L+L 3.0 6.0 6.0
AVC246	Digital Fabrication	Introduction to concepts and application of computer visualization, modeling, and rapid prototyping for interdisciplinary arts. Students will design sculptures applying 3D computer modeling techniques, rapid prototyping, and other available digital output devices	Prerequisites: None.	L+L 3.0 6.0 6.0
AVC247	High Resolution Digital Model Making through 3D Laser Scanning and Photogrammetry	This course introduces students to the cutting-edge world of 3D laser scanning and photogrammetry, focusing on creating high-resolution digital models of various objects.	Prerequisites: None.	L+L 3.0 6.0 6.0

AVC248	Design Self Promotion	Defining career goals, and developing a self-promotional marketing plan to enter the workplace, including a resume, business card, leave behind, social media presence, interactive portfolio and printed portfolio. Understand business ethics and etiquette, artist's rights, copyright laws and contractual	Prerequisites: None.	L+L 3.0 6.0 6.0
AVC249	Visual Communication Project Management and Workflow	Communication and coordination of digital projects from inception through completion. Emphasis on job workflow including professional communication, time management, detailed follow through and conflict	Prerequisites: A grade of C or better in AVC100 or permission of Instructor.	L+L 3.0 6.0 6.0
AVC269AC	Digital Studio	Continued development of digital studio media with emphasis on advanced use of media techniques within a digital environment.	Prerequisites: A grade of C or better in (AVC169 or AVC170 or AVC173 or AVC192 or AVC274 or AVC284 or AVC289 or AVC291) or permission of	L+L 3.0 6.0 6.0
AVC270	Digital Photographic Imaging II	Intermediate digital photographic imaging techniques. Refinement of aesthetic awareness and personal expression.	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: AVC177.	L+L 3.0 6.0 6.0
AVC274	Digital Photographic Imaging III	Advanced digital photographic imaging techniques. Advanced manipulation techniques of photographic images and time-based media. Continued development of aesthetic awareness and personal expression.	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: AVC270.	L+L 3.0 6.0 6.0
AVC279	Media Productions II	Intermediate digital media production techniques. Continued pre-production, production, and post-production skills. Exploration of types of productions including interviews, informational/how-to, marketing/product, and documentary/artistic media	Prerequisites: A grade of C or better in AVC202 or permission of Instructor.	L+L 3.0 6.0 6.0
AVC280AA	Digital Media Arts and Design Capstone	Focus on design, art, and development skills for a problem taken from business or industry. Includes practice-based capstone project focusing on a specific	Prerequisites: Permission of Program Director or Instructor.	L+L 1.0 2.0 2.0
AVC280AB	Digital Media Arts and Design Capstone	Focus on design, art, and development skills for a problem taken from business or industry. Includes practice-based capstone project focusing on a specific	Prerequisites: Permission of Program Director or Instructor.	L+L 2.0 4.0 4.0
AVC280AC	Digital Media Arts and Design Capstone	Focus on design, art, and development skills for a problem taken from business or industry. Includes practice-based capstone project focusing on a specific	Prerequisites: Permission of Program Director or Instructor.	L+L 3.0 6.0 6.0
AVC281	Graphic Design III	Advanced course in the process of graphic design and problem solving to meet customer specifications. Emphasis on steps needed to create and promote	Prerequisites: A grade of C or better in AVC182 or permission of Instructor.	L+L 3.0 6.0 6.0

AVC283	Digital Graphic Arts II	Advanced skill development of graphic design through use of microcomputer. Emphasis on computer design and techniques for producing all types of camera-ready advertising art for printed matter and package design. Includes illustration, typography, photo imaging, and	Prerequisites: A grade of C or better in AVC183 or permission of Instructor.	L+L 3.0 6.0 6.0
AVC284	Digital Animation II	Elements of electronic animation with interactive text graphics, photography, sound, film, and video construction.	Prerequisites: A grade of C or better in AVC/MMT184 or permission of Instructor. Xref: AVC184	L+L 3.0 6.0 6.0
AVC285	3D Modeling and Animation II	Advanced techniques for 3D modeling and computer animation. Creating and applying 2D background and 3D model textures, creating and applying special effects to models and animation, designing, modeling, and	Prerequisites: A grade of C or better in AVC/MMT185. Xref: AVC185	L+L 3.0 6.0 6.0
AVC286	Graphic Design IV	Continuing advanced course in the process of graphic design and problem solving to meet customer specifications. Emphasis on creating complex graphic	Prerequisites: A grade of C or better in AVC281 or permission of Instructor.	L+L 3.0 6.0 6.0
AVC287	3D Character Animation	3D-Character modeling and animation for multimedia, film, broadcast, video games and interactive entertainment. Character motion, editing, and blending	Prerequisites: A grade of C or better in AVC/MMT184. Corequisites: ART116 or permission of Instructor.	L+L 3.0 6.0 6.0
AVC288	PDF Portable Document Format	Focuses on complexity, versatility and creation of a PDF file. Emphasis on the importance of the settings regarding color management, compression, and output. Includes fillable forms and interactive files with audio and video capabilities, editing functions, preflight	Prerequisites: A grade of C or better in AVC175 or permission of Instructor.	L+L 3.0 6.0 6.0
AVC289	Computer Illustration	Introduction to the multiple elements of commercial illustration using the microcomputer. Basic foundation in the use of computer techniques including color paint and draw programs for the production of commercial illustrations for publications and printed matter. Use of	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: AVC100 or permission of Instructor.	L+L 3.0 6.0 6.0
AVC290AN	Art Studio: Animation	Practical course that draws on previous knowledge of Animation.	Prerequisites: A grade of C or better in AVC284, or AVC/MMT285, or permission of Instructor. Xref:	L+L 3.0 6.0 6.0
AVC290DP	Art Studio: Digital Photography	Practical course that draws on previous knowledge of Digital Photography.	Prerequisites: A grade of C or better in AVC274 or permission of	L+L 3.0 6.0 6.0
AVC290GD	Art Studio: Graphic Design	Practical course that draws on previous knowledge of Graphic Design.	Prerequisites: A grade of C or better in AVC280AC, or AVC283, or permission of Instructor.	L+L 3.0 6.0 6.0

AVC290IL	Art Studio: Illustration	Practical course that draws on previous knowledge of Illustration.	Prerequisites: A grade of C or better in AVC280AC, or AVC289, or permission of Instructor.	L+L 3.0 6.0 6.0
AVC291	Digital Prepress	Introduction to fundamental concepts of digital prepress necessary for the designer to create digital documents for accurate output and reproduction.	Prerequisites: A grade of C or better in AVC100 or permission of Instructor.	L+L 3.0 6.0 6.0
AVC292	Digital Output Prepress	Introduction to prepress for digital output. Foundation of job costing and the functions of a job ticket for proper file preparation including trapping, color management, file transfers, workflow, RIPping, imposition and file	Prerequisites: A grade of C or better in AVC291 or permission of Instructor.	L+L 3.0 6.0 6.0
AVC293	Digital Output	Emphasis on setup, operation, and maintenance of a digital press. Introduction to specialty and common substrates and inks. Instruction on quality control, troubleshooting techniques, and proper safety	Prerequisites: Permission of Instructor.	L+L 3.0 6.0 6.0
AVC295XC	Art Workshop/Seminar: Digital Photography	Advanced level workshop seminar in digital photography disciplines.	Prerequisites: A grade of C or better in AVC143 or permission of	L+L 3.0 6.0 6.0
AVC296WA	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to student's major or career interest or	LAB 1.0 5.0 0.0
AVC296WB	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to student's major or career interest or	LAB 2.0 10.0 0.0
AVC297AA	Commercial Art Internship	Digital design, development, and photographic imaging work experience in a business or industry. 80 hours of	Prerequisites: Permission of Department or Division.	L+L 1.0 1.0 0.0

AVC297AB	Commercial Art Internship	Digital design, development, and photographic imaging work experience in a business or industry. 160 hours of	Prerequisites: Permission of Department or Division.	L+L 2.0 2.0 0.0
AVC297AC	Commercial Art Internship	Digital design, development, and photographic imaging work experience in a business or industry. 240 hours of	Prerequisites: Permission of Department or Division.	L+L 3.0 3.0 0.0
AVC298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
AVC298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
AVC298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
BAM305	Mathematics for Machine Learning	Advanced mathematical concepts essential for understanding and applying techniques in machine learning using Python programming language. Focus on vector-based calculus, probability distributions,	Prerequisites: A grade of C or better in (AIM250 and MAT227) or permission of Program Director.	L+L 3.0 4.0 4.0
BAM310	Machine Learning II: Deep Learning	Examination of deep learning algorithms and Python applications. Emphasis on data input, algorithm selection, hyperparameter tuning, and deep learning	Prerequisites: A grade of C or better in AIM250 or permission of Program Director.	L+L 3.0 4.0 4.0
BAM320	Computer Vision	Examination of vision with computers utilizing Python tools and libraries. Emphasis on image processing and feature detection as it applies to various computer vision tasks, utilizing visualizations for transparency. Includes statistical and deep computer vision	Prerequisites: A grade of C or better in (BAM310 and BAM/MAT305) or permission of Program Director. Xref: BAM305	L+L 3.0 4.0 4.0

BAM330	Natural Language Processing for Machine Learning	Examination of natural language processing utilizing Python tools and libraries. Emphasis on computer linguistic understanding as it applies to various natural language tasks. Statistical and deep natural language	Prerequisites: A grade of C or better in (BAM310 and BAM/MAT305) or permission of Program Director. Xref: BAM305	L+L 3.0 4.0 4.0
BAM440	Hardware Optimization for Machine Learning	Explores advanced techniques in parallel computing for optimizing performance in machine learning applications. Focus on design, implementation, and evaluation of parallel algorithms across various hardware architectures, including CPUs, GPUs, and custom artificial intelligence accelerators. Includes hands-on projects and real-world case studies to	Prerequisites: A grade of C or better in CSC/EEE230, CSC240++, BAM/MAT305, and BAM310. Xref: CSC230 BAM305	L+L 3.0 4.0 4.0
BAM450	Planning and Optimization for Automation	Explores optimization path for automation. Covers a diverse array of techniques including evolutionary algorithms, reinforcement learning, and swarm intelligence to navigate complex environments. Emphasis on hands-on projects and theoretical	Prerequisites: A grade of C or better in CSC310, BAM/MAT305, and BAM310. Xref: BAM305	L+L 3.0 4.0 4.0
BAM490	Artificial Intelligence Capstone I	Capstone project with opportunities for research and application of artificial intelligence and machine learning knowledge and skills obtained throughout the student's program of study. Focus on project research, selection, design, and implementation with emphasis on	Prerequisites: A grade of C or better in BAM320, BAM330, and CSC310.	L+L 3.0 4.0 4.0
BAM499	Artificial Intelligence Capstone II	Completion of capstone project using research and application of artificial intelligence and machine learning knowledge and skills obtained throughout the student's program of study. Focus on project testing, enhancement, and evaluation. Emphasis on self-assessment, development of a written report, project	Prerequisites: A grade of C or better in BAM490.	L+L 3.0 4.0 4.0
BAW100	Nail Technology I	Introduction to basic nail services, general sciences, safety, and infection control practices in the nail care	Prerequisites: None.	L+L 4.0 8.0 8.0
BAW102	Aesthetics Essentials	Effective client communication, interpersonal skills, and how to deliver an effective skin care facial treatment and client pre and post consultations. Topics also include sanitation, Arizona laws, client care, and facial	Prerequisites: None.	L+L 4.0 8.0 8.0
BAW104	Hair Essentials I	Introduction to the basic theory and procedures in cosmetology hair essentials.	Prerequisites: None.	L+L 4.0 8.0 8.0
BAW105	Nail Technology II	Apply advanced techniques and continue to build on previous concepts learned in nail services, general sciences, safety, and infection control in the nail	Prerequisites: A grade of C or better in BAW100 or permission of Program Director.	L+L 4.0 8.0 8.0

BAW106	Hair Essentials II	Hair-shaping techniques and chemical application procedures in cosmetology hair essentials.	Prerequisites: A grade of C or better in BAW104.	L+L 4.0 8.0 8.0
BAW110	Advanced Aesthetics	Theory and application of advanced skin care modalities, resurfacing, and cosmetic chemistry. Hair removal techniques, makeup application, and an introduction to body treatments are also included. Application of theory and skills through treatment services provided to the public. Focus on communication and documentation to create customized treatment plans and product	Prerequisites: A grade of C or better in BAW102.	L+L 4.0 8.0 8.0
BAW111	Nail Technology III	Preparation for the written and practical examinations for Arizona Barbering and Cosmetology Board licensure. Includes concepts related to nail services, general sciences, and business skills in the nail care	Prerequisites: A grade of C or better in BAW105 or permission of Program Director.	L+L 4.0 8.0 8.0
BAW112	Hair Essentials	Focus on the competencies of the Cosmetologist and the Hair Stylist certificate programs and the Arizona Barbering & Cosmetology Board as an introduction to the basic theory and procedures in cosmetology hair	Prerequisites: None.	L+L 7.0 17.0 17.0
BAW114	Student Salon I	Continuation of cosmetology theory and practical concepts at an intermediate level. Theory will be focusing on professional development, salon ecology, anatomy and hair decisions. Practical skills will be demonstrated daily on clients and manikins. Rubrics on procedures are done monthly. One day a month on	Prerequisites: A grade of C or better in BAW106.	L+L 4.0 8.0 8.0
BAW115	Aesthetics Mastery	Focus on theories and performance of comprehensive professional aesthetics treatments for the public including communication and documentation to create customized treatment plans and product recommendations for clients that follow all safety and infection control procedures in compliance with the Arizona Barbering and Cosmetology Board (BCB). Overview of business planning and employment in the field including marketing, job search strategies,	Prerequisites: A grade of C or better in BAW110.	L+L 4.0 8.0 8.0
BAW116	Student Salon II	Apply concepts learned in the classroom and the student salon to develop real life scenarios while servicing a client and/or becoming a future business	Prerequisites: A grade of C or better in BAW114.	L+L 4.0 8.0 8.0

BAW118	Hair Stylist State Licensure	Preparation for the written and practical examinations for Arizona Barbering & Cosmetology Board (BCB) licensure as related to hairstyling. Focus on BCB testing procedures for the written and practical examinations, as well as applicable Arizona State laws for a Hairstylist.	Prerequisites: A grade of C or better in BAW114.	L+L 4.0 8.0 8.0
BAW119	Nail Essentials	Introduction to nail services in the beauty industry. Focus on knowledge and skills of providing nail services on actual clients in a salon setting.	Prerequisites: A grade of C or better in BAW116.	L+L 4.0 8.0 8.0
BAW120	Massage Therapy Basics	Introduction to massage therapy. Includes sanitation, hygiene, safety, contraindications, ethics, healthy therapeutic relationships, professional communication, overview of the human body (integumentary, muscular, and skeletal systems), healthcare terminology, muscle theory, client care, self-care, and Swedish massage.	Prerequisites: None.	L+L 3.5 7.0 7.0
BAW121	Massage Therapy Advanced	A massage basics course covering: sanitation, hygiene, safety, contraindications, ethics, healthy therapeutic relationships, professional communication, overview of the human body (integumentary, muscular, and skeletal systems), healthcare terminology, muscle theory, client care, self-care, and Swedish massage.	Prerequisites: None.	L+L 3.5 7.0 7.0
BAW212	Skin Essentials	Introduction to skin services in the beauty industry. Focus on knowledge and skills of providing skin services on actual clients in a salon setting.	Prerequisites: A grade of C or better in BAW119.	L+L 4.0 8.0 8.0
BAW214	Student Salon III	Prepares cosmetology students to be industry ready and prepared to perform services in their chosen field of expertise after licensure with the Arizona Barbering and	Prerequisites: A grade of C or better in BAW212.	L+L 4.0 8.0 8.0
BAW218	Cosmetology State Licensure	Prepares cosmetology students for the written and practical examinations for Arizona Barbering and	Prerequisites: A grade of C or better in BAW214.	L+L 2.0 4.0 4.0
BAW220	Massage Therapy Mastery I	Advanced anatomy and massage. Focuses in detail on the skeletal and muscular components and manipulations of the upper body. Includes review of bones and muscles of the upper body and the kinesiology that develops from their interactions. Practical application of advanced anatomy in deep-tissue massage for the upper body. Emphasis on the integration of deep tissue, Thai massage, myofascial,	Prerequisites: A grade of C or better in BAW121 or permission of Program Director.	L+L 3.5 7.0 7.0

BAW221	Massage Therapy Mastery II	Advanced anatomy and massage. Focus on the skeletal and muscular components and manipulations of the lower body. Review all of the bones and muscles of the lower body and the kinesiology that develops from their interactions. Practical application of advanced anatomy in deep-tissue massage for the lower body. Includes client assessment, treatment planning, and documentation for clients with common needs and clients with unique needs (such as athletes, expecting mothers, infants, older adults, obese individuals, people	Prerequisites: A grade of C or better in BAW220 or permission of Program Director.	L+L 3.5 7.0 7.0
BAW298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
BAW298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
BAW298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
BHS150	Introduction to Behavioral Health and Social Services	Survey of the behavioral health and social services professions, including scope of practice and training requirements. Exploration of employment opportunities in the field and self-assessment/academic planning for a career in mental health. Overview of mental health	Prerequisites: None.	LEC 3.0 3.0 3.0

BHS155	Professional Resiliency and Well-Being	Exploration of building human resilience and well-being to prevent burnout, traumatic stress, and compassion fatigue for social services and mental health professionals, healthcare providers, emergency first responders, and other relationship-intense occupations. Causes, symptoms, and effects of traumatic stress, burnout compassion fatigue and other work-related stress. Focus on enhancing quality of life and improving a healthy lifestyle by incorporating evidenced-based practices in psychological and emotional resilience	Prerequisites: None.	LEC 3.0 3.0 3.0
BHS160	Ethical, Legal, and Professional Issues in Counseling Services	Explores relevant ethical, legal, and professional issues inherent in the behavioral health and social services field, including expectations of and limitations on providers. Key areas of inquiry include boundaries and dual relationships, mandated reporting, confidentiality, scope of practice, beneficence and non-maleficence,	Prerequisites: None.	LEC 3.0 3.0 3.0
BHS165	Applied Therapeutic Communication Skills	Theory and practice of communication skills to establish and maintain effective helping relationships and enhance the therapeutic alliance. Emphasis on verbal communication, nonverbal communication, paraverbal communication, rapport building, empathetic and active listening skills, resolving interpersonal conflicts, appropriate feedback, and developing and maintaining	Prerequisites: None.	LEC 3.0 3.0 3.0
BHS170	Case Management and Clinical Documentation	Overview and application of the principles, practices, and function of case management in human services. Case management service delivery and coordination for clients with psychological, developmental, and psychiatric and comorbid medical conditions. Documentation techniques necessary to maintain	Prerequisites: None.	LEC 3.0 3.0 3.0
BHS175	Trauma-Informed Care and Recovery Treatment	Comprehensive overview of various types of trauma, neurobiological effects of traumatic stress, and ethics associated in working with a trauma survivor. Concepts and skills needed to become a fully functioning trauma-informed caregiver professional in the mental health	Prerequisites: None.	LEC 3.0 3.0 3.0

BHS180	Child, Family, and Adult Advocacy	The role of advocacy in relation to multiple systems affecting children, families, and adults. Emphasis on identifying appropriate supports, community resources, and "wrap-around" services to help foster healthy family and child development, adult recovery, and social	Prerequisites: None.	LEC 3.0 3.0 3.0
BHS185	Cultural Competence in Behavioral Health	Exploration of cultural diversity and its potential impact on behaviors, emotions, cognitions and perceptions, relationships, and values. Intercultural communication skills through the examination of cultural and racial diversity, sexual and gender identity, social justice, and religious and spiritual diversity. Consideration of its implications for the therapeutic process and the importance of self-awareness and effective	Prerequisites: None.	LEC 3.0 3.0 3.0
BHS190	Supervised Practice in Behavioral Health and Human Services	Supervised, entry-level work-based experience in mental health, social service, or a related behavioral health care provider setting. 80 hours of designated	Prerequisites: A grade of C or better in BHS150, or BHS155, or BHS160, or permission of Department or	LAB 1.0 1.0 0.0
BHS205	Introduction to Individual Counseling Theories	Introduction to the major evidence-based therapeutic models and interventions in social and behavioral sciences. Defines the key concepts, techniques and	Prerequisites: None.	LEC 3.0 3.0 3.0
BHS210	Addictions, Substance Use Disorders, and Recovery	Introduction to the historical and current developments in the field of addiction, as well as sociological, psychological, and physiological aspects of addictive behaviors and substance use. Introduces contemporary treatment methods within addiction practice, including self-help groups, levels of care, symptom identification, and models of prevention, and intervention. Examines	Prerequisites: None.	LEC 3.0 3.0 3.0
BHS215	Introduction to Group Therapy	Overview of the methods and techniques for influencing change in group settings. Examination of theories and concepts essential to provision of group counseling in behavioral health and addiction settings.	Prerequisites: None.	LEC 3.0 3.0 3.0
BHS216	Group Process	Evaluate and demonstrate the methods and techniques for influencing change in group settings.	Prerequisites: A grade of C or better in BHS151 or permission of Department or Division.	LEC 3.0 3.0 3.0

BHS220	Introduction to Integrated Behavioral Healthcare	Introduction to key concepts related to the provision of integrated health care services, as well as role of wellness and prevention in community health services. The course will introduce students to the theory and clinical practice of integrated behavioral health in primary care, as well as evidence-based approaches to	Prerequisites: None.	LEC 3.0 3.0 3.0
BHS230	Crisis and Trauma Stabilization	Theoretical and applied foundation designed for behavioral health service providers working with people in crisis. Examines the phenomena and dynamics of crises and emergencies, as well as the related	Prerequisites: None.	LEC 3.0 3.0 3.0
BHS235	Emergency Mental Health Crisis Response and Recovery	Comprehensive study of natural and human-caused disasters and their effects on the trauma survivor. Introduction to basic emergency mental health interventions to help stabilize those experiencing crisis	Prerequisites: None.	LEC 3.0 3.0 3.0
BHS251	Harm Reduction in Addiction, Substance Use, and Social Services	Introduction to harm reduction principles, policies, programs, and practices that aim to reduce the adverse health, social and economic consequences of the use of legal and illegal drugs. This course will introduce behavioral health and social service providers as well as paraprofessional counselors to the theory and practice of harm reduction strategies in addiction, social service,	Prerequisites: None.	LEC 3.0 3.0 3.0
BHS255	Health and Wellness Coaching in Professional Resiliency	Comprehensive overview of the art, science, and role of coaching and teaching resiliency for the following issues: personal and work-related stress, burnout, traumatic stress, and compassion fatigue. Develop pedagogical techniques and practical application of evidence-based interventions in biobehavioral self-regulation, mindfulness, cognitive restructuring, positive psychology, peer support, and holistic self-care.	Prerequisites: A grade of C or better in BHS155.	LEC 3.0 3.0 3.0
BHS262	Behavioral Health Service Techniques for the Elderly	Specific counseling skills and appropriate intervention strategies for working with the elderly. Focus on the particular psychological, sociological and physical	Prerequisites: None.	LEC 3.0 3.0 3.0
BHS266	Violence and Abuse Services	Techniques, strategies, and treatment modalities necessary for the helping professional working with the victims and perpetrators of violence and abuse.	Prerequisites: None.	LEC 3.0 3.0 3.0
BHS267	Introduction to Play Therapy	Exploration and application of therapeutic play techniques and strategies for the helping professional	Prerequisites: None.	LEC 3.0 3.0 3.0

BHS269	Grief Support Techniques	Techniques, strategies, and treatment modalities necessary for the helping professional working with the bereaved and others affected by traumatic loss.	Prerequisites: None.	LEC 3.0 3.0 3.0
BHS271	Developmental Disabilities Assistance Training	Introduction to the field of developmental disability assistance. Also includes common causes of developmental disabilities, treatments and other	Prerequisites: None.	LEC 3.0 3.0 3.0
BHS272	Child and Adolescent Mental Health and Interventions	Strategies for training and reinforcing positive interaction with children. Covers behavior management strategies and techniques to prevent behavioral	Prerequisites: None.	LEC 3.0 3.0 3.0
BHS275	Infant and Early Childhood Mental Health	Foundational knowledge of mental health during infancy and early childhood. Exploration of social-emotional development and relational influences on mental health. Emphasis on identifying early warning signs, making appropriate referrals, and employing a	Prerequisites: None.	LEC 3.0 3.0 3.0
BHS281	Introduction to Art Therapy	Exploration of the process, dynamics and objectives of the therapeutic art experience. Emphasis on Art Therapy from both the psychological and artistic perspectives. Highlights topics in the history, theory and	Prerequisites: None.	LEC 3.0 3.0 3.0
BHS300	Research Methods for Evidence-Based Practice	Overview of the uses, limitations, and ethics of research methodology in the behavioral sciences, and the qualitative and quantitative methods associated with common research designs. Prepares students to conduct evaluations of literature published research, use empirical evidence as the basis for interventions, and evaluate the effectiveness of their own	Prerequisites: A grade of C or better in MAT206, or PSY230, or (PSY230 and PSY231), or PSY230WL, or SWU225, or GBS221.	L+L 4.0 4.0 4.0
BHS310	Fundamentals of Family Systems Counseling	Study of the family as a system and the concepts and principles applicable to helping individuals from a systemic perspective. Examines family processes, including functional and dysfunctional patterns, difficulties that families may experience as they move through their developmental stages, and the family's interactions with individuals and communities.	Prerequisites: A grade of C or better in BHS205, or permission of Instructor or Department.	LEC 3.0 3.0 3.0

BHS320	Behavioral Development Across the Lifespan	Critical analysis of human development throughout the lifespan, including physical, cognitive, emotional, and social development. Prepares students in the behavioral sciences to conceptualize clients through a developmental perspective. Overview of both normal human development and developmental psychopathology. Focus on child, adolescent, and adult	Prerequisites: A grade of C or better in PSY101.	LEC 3.0 3.0 3.0
BHS340	Psychopathology Across Cultures	Overview of the scientific study of mental illness and substance use disorders (psychopathology). Evaluates theories of psychopathology from sociological, psychological, and behavioral perspectives. Examines the most prevalent categories of mental disorders from several different theoretical and treatment perspectives. Focus on diagnostic features, etiology, epidemiology, prognosis, and treatment issues related to various psychiatric disorders. Legal, ethical, and cultural issues	Prerequisites: A grade of C or better in (BHS150 and BHS185), or permission of Instructor.	LEC 3.0 3.0 3.0
BHS385	Multicultural Approaches to Behavioral Health Care	Advanced application of multicultural competencies, focusing on necessary awareness, knowledge, and skills needed in behavioral health settings. Examination of the dimensions of personal identities and intersectionality in the conceptualization, planning, and	Prerequisites: A grade of C or better in BHS185, or permission of Instructor.	LEC 3.0 3.0 3.0
BHS400	Biological and Environmental Bases of Behavior	Examination of human behavior from biophysiological, psychosocial-cognitive, and social-cultural perspectives using relevant theories. Focuses on the nervous system, brain function, and cognition, as well as the role	Prerequisites: A grade of C or better in BIO160, or (BIO201 and BIO202).	LEC 3.0 3.0 3.0
BHS410	Co-Occurring Substance Use and Mental Disorders	Advanced instruction in co-occurring behavioral health and substance use disorders from the bio-psycho-social model for application in the behavioral health field. Includes philosophies and practices of empirically supported models. Emphasis on causes,	Prerequisites: A grade of C or better in (BHS210 and BHS340), or permission of Instructor.	LEC 3.0 3.0 3.0
BHS420	Relational Approach to Trauma	Exploration of the science of trauma and recovery within the family context. Includes the dynamic elements of trauma treatment with the integration of systemic and family treatment models. Examines the lifelong impact of traumatic stress and complex trauma during the early years of life. Focus on evidence-based treatment and interventions from a family theory perspective for	Prerequisites: A grade of C or better in BHS175, or permission of Instructor or Department.	LEC 3.0 3.0 3.0

BHS430	Concepts and Principles of Applied Behavior Analysis	An in-depth consideration of the scientific theories, concepts, and principles of understanding and modifying behavior. Focus on applying behavior analysis for data-based decisions to resolve challenging behaviors and foster prosocial behaviors. Students will learn basic principles and procedures, such as functional behavior assessment, assessment of	Prerequisites: A Grade of C or better in (BHS205 and BHS320), or permission of Instructor or Department.	LEC 3.0 3.0 3.0
BHS490	Advanced Supervised Practice in Behavioral Health and Human Services	Advanced, supervised work experience in mental health, social service, or a related behavioral health care provider setting. 160 hours of designated volunteer or paid work-based learning.	Prerequisites: A grade of C or better in BHS410 and BHS430.	LAB 2.0 2.0 0.0
BIO100	Biology Concepts	This course will introduce students to the basic principles and concepts of biology, from the smallest molecules to the largest ecosystems. Students will learn about the methods of scientific inquiry that biologists	Prerequisites: None.	LEC 4.0 3.0 3.0 LAB 0.0 3.0 3.0
BIO100CM	Biology Concepts	This course will introduce students to the basic principles and concepts of biology, from the smallest molecules to the largest ecosystems. Students will learn about the methods of scientific inquiry that biologists	Prerequisites: None.	L+L 4.0 6.0 6.0
BIO101	Introduction to Human Genetics for Non-Majors	Study of inheritance in humans, at the organismal, cellular and molecular levels. Includes exploration of gene expression, isolation and manipulation of DNA, Mendelian genetics, pedigree analysis, as well as	Prerequisites: None.	LEC 4.0 3.0 3.0 LAB 0.0 3.0 3.0
BIO101CM	Introduction to Human Genetics for Non-Majors	Study of inheritance in humans, at the organismal, cellular and molecular levels. Includes exploration of gene expression, isolation and manipulation of DNA, Mendelian genetics, pedigree analysis, as well as	Prerequisites: None.	L+L 4.0 6.0 6.0
BIO102	Cells to Systems: An Introduction to Biology for Non-Majors	Study of living things. Builds from basic molecular components to structure and physiology of cells and organ systems of animals and plants.	Prerequisites: None.	LEC 4.0 3.0 3.0 LAB 0.0 3.0 3.0
BIO102CM	Cells to Systems: An Introduction to Biology for Non-Majors	Study of living things. Builds from basic molecular components to structure and physiology of cells and organ systems of animals and plants.	Prerequisites: None.	L+L 4.0 6.0 6.0
BIO105	Environmental Biology	Fundamentals of ecology and their relevance to human impact on natural ecosystems.	Prerequisites: None.	LEC 4.0 3.0 3.0 LAB 0.0 3.0 3.0
BIO105CM	Environmental Biology	Fundamentals of ecology and their relevance to human impact on natural ecosystems.	Prerequisites: None.	L+L 4.0 6.0 6.0

BIO107	Introduction to Biotechnology	An introduction to laboratory techniques and their applications in biotechnology. Students will explore the broad impact of biotechnology on society including its global economic potential, medical, forensic, environmental and military applications, as well as the	Prerequisites: None.	LEC 4.0 3.0 3.0 LAB 0.0 3.0 3.0
BIO107CM	Introduction to Biotechnology	An introduction to laboratory techniques and their applications in biotechnology. Students will explore the broad impact of biotechnology on society including its global economic potential, medical, forensic, environmental and military applications, as well as the	Prerequisites: None.	L+L 4.0 6.0 6.0
BIO108	Plants and Society	A global study of plants in relation to humans; as a source of food, fiber, drugs, and other products; for aesthetic value, survival, and energy.	Prerequisites: None.	LEC 4.0 3.0 3.0 LAB 0.0 3.0 3.0
BIO109	Natural History of the Southwest	Study of the common plants and animals of the Southwest including their distribution, adaptation, behavior, and ecology. Introduction to basic field and laboratory techniques used in the study of natural history. Specific field problems presented dealing with	Prerequisites: None.	LEC 4.0 3.0 3.0 LAB 0.0 3.0 3.0
BIO109CM	Natural History of the Southwest	Study of the common plants and animals of the Southwest including their distribution, adaptation, behavior, and ecology. Introduction to basic field and laboratory techniques used in the study of natural history. Specific field problems presented dealing with	Prerequisites: None.	L+L 4.0 6.0 6.0
BIO111	Microbes and Society	A study of microorganisms and the roles they play in everyday life.	Prerequisites: None.	LEC 4.0 3.0 3.0 LAB 0.0 3.0 3.0
BIO111CM	Microbes and Society	A study of microorganisms and the roles they play in	Prerequisites: None.	L+L 4.0 6.0 6.0
BIO116	Introduction to Animal Behavior	Scientific study of animal behavior for non-majors. Includes experimental exploration of current hypotheses for genetic and environmental influences, communication, reproductive strategies, habitat	Prerequisites: None.	LEC 4.0 3.0 3.0 LAB 0.0 3.0 3.0
BIO116CM	Introduction to Animal Behavior	Scientific study of animal behavior for non-majors. Includes experimental exploration of current hypotheses for genetic and environmental influences, communication, reproductive strategies, habitat	Prerequisites: None.	L+L 4.0 6.0 6.0
BIO145	Marine Biology	A survey of marine environments and their biotic communities with emphasis on the natural history of	Prerequisites: None.	LEC 4.0 3.0 3.0 LAB 0.0 3.0 3.0
BIO145CM	Marine Biology	A survey of marine environments and their biotic communities with emphasis on the natural history of	Prerequisites: None.	L+L 4.0 6.0 6.0

BIO149AK	Field Biology: Ecological and Environmental Field	Field expeditions in which ecological and environmental principles and concepts are observed and studied.	Prerequisites: None.	LAB 1.0 7.0 0.0
BIO149AL	Field Biology: Ecological and Environmental Field	Field expeditions in which ecological and environmental principles and concepts are observed and studied.	Prerequisites: None.	LAB 2.0 14.0 2.0
BIO149AM	Field Biology: Ecological and Environmental Field	Field expeditions in which ecological and environmental principles and concepts are observed and studied	Prerequisites: None.	LAB 3.0 21.0 0.0
BIO149AN	Field Biology: Ecological and Environmental Field	Field expeditions in which ecological and environmental principles and concepts are observed and studied	Prerequisites: None.	LAB 4.0 28.0 0.0
BIO149SV	Field Biology: Ecological and Environmental Field	Field expeditions in which ecological and environmental principles and concepts are observed and studied.	Prerequisites: None.	L+L 1.0 1.34 0.0
BIO156	Introductory Biology for Allied Health	An introductory biology course for allied health majors with an emphasis on humans. Topics include fundamental concepts of cell biology, histology, microbiology, and genetics.	Prerequisites: A grade of C or better in RDG100 or RDG100LL or higher or eligibility for CRE101 as indicated by appropriate reading placement test score. One year of high school or one-semester of college level chemistry is strongly recommended.	LEC 4.0 3.0 3.0 LAB 0.0 3.0 3.0
BIO156CM	Introductory Biology for Allied Health	An introductory biology course for allied health majors with an emphasis on humans. Topics include fundamental concepts of cell biology, histology, microbiology, and genetics.	Prerequisites: A grade of C or better in RDG100, or RDG100LL, or higher, or eligibility for CRE101. One year of high school or one semester of college level chemistry is strongly	L+L 4.0 6.0 6.0
BIO156XT	Introductory Biology for Allied Health	An introductory biology course for allied health majors with an emphasis on humans. Topics include fundamental concepts of cell biology, histology, microbiology, and genetics.	Prerequisites: A grade of C or better in RDG100 or RDG100LL or higher or eligibility for CRE101. One year of high school or one-semester of college level chemistry is strongly	LEC 4.0 3.0 3.0 LAB 0.0 4.0 4.0
BIO160	Introduction to Human Anatomy and Physiology	Principles of scientific method. Structural organization, homeostasis and control mechanisms of the body. Specific chemistry concepts. Structure and function of	Prerequisites: None.	LEC 4.0 3.0 3.0 LAB 0.0 3.0 3.0
BIO160CM	Introduction to Human Anatomy and Physiology	Principles of scientific method. Structural organization, homeostasis and control mechanisms of the body. Specific chemistry concepts. Structure and function of	Prerequisites: None.	L+L 4.0 6.0 6.0

BIO181	General Biology (Majors) I	The study and principles of structure and function of organisms at the molecular and cellular levels. A detailed exploration of the chemistry of life, the cell, and genetics.	Prerequisites: A grade of C or better in RDG100, or RDG100LL, or higher, or eligibility for CRE101. One year of high school or one semester of college-level biology and chemistry is strongly recommended.	LEC 4.0 3.0 3.0 LAB 0.0 3.0 3.0
BIO181CM	General Biology (Majors) I	The study and principles of structure and function of organisms at the molecular and cellular levels. A detailed exploration of the chemistry of life, the cell, and genetics.	Prerequisites: A grade of C or better in RDG100, or RDG100LL, or higher, or eligibility for CRE101. One year of high school or one semester of college-level biology and chemistry is strongly recommended.	L+L 4.0 6.0 6.0
BIO181XT	General Biology (Majors) I	The study and principles of structure and function of organisms at the molecular and cellular levels. A detailed exploration of the chemistry of life, the cell, and genetics.	Prerequisites: A grade of C or better in RDG100, or RDG100LL, or higher, or eligibility for CRE101. One year of high school or one semester of college-level biology and chemistry is strongly recommended.	LEC 4.0 3.0 3.0 LAB 0.0 4.0 4.0
BIO182	General Biology (Majors) II	The study and principles of structure and function of living things at cellular, organismic, and higher levels of organization. A detailed exploration of the mechanisms of evolution, biological diversity, biology of organisms,	Prerequisites: A grade of C or better in BIO181, or BIO181CM, or BIO181XT, or permission of Department or Division.	LEC 4.0 3.0 3.0 LAB 0.0 3.0 3.0
BIO182CM	General Biology (Majors) II	The study and principles of structure and function of living things at cellular, organismic, and higher levels of organization. A detailed exploration of the mechanisms of evolution, biological diversity, biology of organisms,	Prerequisites: A grade of C or better in BIO181, or BIO181CM, or BIO181XT, or permission of Department or Division.	L+L 4.0 6.0 6.0
BIO182XT	General Biology (Majors) II	The study and principles of structure and function of living things at cellular, organismic, and higher levels of organization. A detailed exploration of the mechanisms of evolution, biological diversity, biology of organisms,	Prerequisites: A grade of C or better in BIO181, or BIO181CM, or BIO181XT, or permission of Department or Division.	LEC 4.0 3.0 3.0 LAB 0.0 4.0 4.0
BIO192	Recitation in Biology	Discussion, guided practice and problem solving related to a topically focused area of biology.	Prerequisites: None. Corequisites: Any 100-level BIO Biology course or permission of Instructor.	L+L 1.0 1.0 1.0
BIO194AA	Special Topics in	Conceptual and research basis of a current topic in	Prerequisites: Permission of	LEC 1.0 1.0 1.0
BIO194AB	Special Topics in Biology	Conceptual and research basis of a current topic in biology. Includes integrated laboratory and/or field applications of related methodologies.	Prerequisites: Permission of Instructor.	L+L 1.0 2.0 2.0

BIO194AC	Special Topics in Biology	Conceptual and research basis of a current topic in biology. Includes laboratory and/or field applications of	Prerequisites: Permission of Instructor.	LEC 2.0 1.0 1.0 LAB 0.0 3.0 3.0
BIO195AA	Principles and Practice of Scientific Research	Students will learn the use of the scientific method; how, why and where research is conducted; the ethical protocol in the scientific process; how peer review works, and how to formulate scientifically testable hypotheses and design supporting experiments. Students will apply the scientific method in laboratory and/or field research projects, will learn and use appropriate laboratory techniques, and will	Prerequisites: A grade of C or better in (BIO181 or CHM151 or PHY111) or permission of Instructor.	L+L 1.0 2.0 2.0
BIO195AB	Principles and Practice of Scientific Research	Students will learn the use of the scientific method; how, why and where research is conducted; the ethical protocol in the scientific process; how peer review works, and how to formulate scientifically testable hypotheses and design supporting experiments. Students will apply the scientific method in laboratory and/or field research projects, will learn and use appropriate laboratory techniques, and will	Prerequisites: A grade of C or better in (BIO181 or CHM151 or PHY111) or permission of Instructor.	L+L 2.0 4.0 4.0
BIO195AC	Principles and Practice of Scientific Research	Students will learn the use of the scientific method; how, why and where research is conducted; the ethical protocol in the scientific process; how peer review works, and how to formulate scientifically testable hypotheses and design supporting experiments. Students will apply the scientific method in laboratory and/or field research projects, will learn and use appropriate laboratory techniques, and will	Prerequisites: A grade of C or better in (BIO181 or CHM151 or PHY111) or permission of Instructor.	L+L 3.0 6.0 6.0
BIO201	Human Anatomy and Physiology I	Study of structure and function of the human body. Topics include cells, tissues, integumentary system, skeletal system, muscular system, and nervous system.	Prerequisites: A grade of C or better in (BIO156++, or BIO181++, or one year of high school biology) and (RDG100, or RDG100LL, or higher, or eligibility for CRE101). CHM130 or higher or one year of high school chemistry suggested but not	LEC 4.0 3.0 3.0 LAB 0.0 3.0 3.0

BIO201CM	Human Anatomy and Physiology I	Study of structure and function of the human body. Topics include cells, tissues, integumentary system, skeletal system, muscular system, and nervous system.	Prerequisites: A grade of C or better in (BIO156++, or BIO181++, or one year of high school biology) and (RDG100, or RDG100LL, or higher, or eligibility for CRE101). CHM130 or higher or one year of high school chemistry suggested but not	L+L 4.0 6.0 6.0
BIO201XT	Human Anatomy and Physiology I	Study of structure and function of the human body. Topics include cells, tissues, integumentary system, skeletal system, muscular system, and nervous system.	Prerequisites: A grade of C or better in (BIO156++, or BIO181++, or one year of high school biology) and (RDG100, or RDG100LL, or higher, or eligibility for CRE101). CHM130 or higher or one year of high school chemistry suggested but not	LEC 4.0 3.0 3.0 LAB 0.0 4.0 4.0
BIO202	Human Anatomy and Physiology II	Continuation of structure and function of the human body. Topics include endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary, and reproductive systems, pregnancy and development,	Prerequisites: A grade of C or better in BIO201 or BIO201XT.	LEC 4.0 3.0 3.0 LAB 0.0 3.0 3.0
BIO202CM	Human Anatomy and Physiology II	Continuation of structure and function of the human body. Topics include endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary, and reproductive systems, pregnancy and development,	Prerequisites: A grade of C or better in BIO201 or BIO201CM or BIO201XT.	L+L 4.0 6.0 6.0
BIO205	Microbiology	Study of microorganisms and their relationship to health, ecology, and related fields.	Prerequisites: A grade of C or better in (BIO156++, or BIO181++, or one year of high school biology) and (RDG100, or RDG100LL, or higher, or eligibility for CRE101). CHM130 or higher or one year of high school chemistry suggested but not	LEC 4.0 3.0 3.0 LAB 0.0 3.0 3.0
BIO205CM	Microbiology	Study of microorganisms and their relationship to health, ecology, and related fields.	Prerequisites: A grade of C or better in (BIO156++, or BIO181++, or one year of high school biology) and (RDG100, or RDG100LL, or higher, or eligibility for CRE101). CHM130 or higher or one year of high school chemistry suggested but not	L+L 4.0 6.0 6.0

BIO208	Nucleic Acid Methods	Intensive introduction to laboratory methods for the isolation, purification, manipulation analysis and quantification of nucleic acids.	Prerequisites: A grade of C or better in [ABS173 and ABS175 and (BIO156 or BIO181)] or permission of	L+L 3.0 6.0 6.0
BIO209	Biomolecular Separation	Introduction to industrial laboratory biotechnology with intensive focus on the recovery of heterologous proteins and other biomolecules from cultivated cells and the subsequent recovery, purification and	Prerequisites: A grade of C or better in [ABS173 and ABS175 and (BIO156 or BIO181)] or permission of Instructor.	L+L 3.0 6.0 6.0
BIO210	Advanced Lab Instrumentation	Provides training in the principles, operation and interpretation of data from laboratory instrumentation.	Prerequisites: A grade of C or better in BIO208, or BIO209, or permission of Instructor.	L+L 3.0 6.0 6.0
BIO211AA	Biotechnology Seminar: Biomedical	Special topics in biotechnology with an emphasis on current issues not covered in other life science courses	Prerequisites: None.	LEC 1.0 1.0 1.0
BIO211AB	Biotechnology Seminar: Laboratory	Special topics in biotechnology with an emphasis on current issues not covered in other life science courses	Prerequisites: A grade of C or better in BIO211AA or permission of	LEC 1.0 1.0 1.0
BIO211AE	Biotechnology Seminar: Business and Regulatory Issues	Selected topics in biotechnology with an emphasis on current issues not covered in other life science courses.	Prerequisites: None.	LEC 1.0 1.0 1.0
BIO215AB	Biotechnology Internship	Internship experience in a biotechnology laboratory. Setting, achieving, and evaluating goals for hands-on learning experience in a biotechnology laboratory. Development of skills and knowledge needed to work in	Prerequisites: A grade of C or better in (BIO208 or BIO209) and permission of Program Director.	LAB 2.0 2.0 0.0
BIO215AC	Biotechnology Internship	Internship experience in a biotechnology laboratory. Setting, achieving, and evaluating goals for hands-on learning experience in a biotechnology laboratory. Development of skills and knowledge needed to work in	Prerequisites: A grade of C or better in (BIO208 or BIO209) and permission of Program Director.	LAB 3.0 3.0 0.0
BIO220	Biology of Microorganisms	Detailed study of microbial cells, their structure, genetics, physiology and taxonomy.	Prerequisites: A grade of C or better in BIO181. Corequisites: (CHM152 and CHM152LL) or (CHM154 and	LEC 4.0 3.0 3.0 LAB 0.0 3.0 3.0
BIO220CM	Biology of Microorganisms	Detailed study of microbial cells, their structure, genetics, physiology and taxonomy.	Prerequisites: A grade of C or better in BIO181, or BIO181CM, or BIO181XT. Corequisites: (CHM152 and CHM152LL) or (CHM154 and	L+L 4.0 6.0 6.0
BIO234	Fundamental Evolutionary Biology	Fundamentals of evolutionary theory including natural selection, adaptation, species concepts, speciation, extinction, basics of phylogenetics, molecular and population genetics, and the evolution of sex and	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: BIO182 or permission of Instructor.	LEC 3.0 3.0 3.0

BIO240	General Genetics	In depth examination of the field of genetics.	Prerequisites: A grade of C or better in BIO181, or BIO181XT, or permission of Instructor.	LEC 4.0 4.0 4.0
BIO249	Applied Biosciences: Biotechnology Internship	Internship/work experience in a biotechnology laboratory. Setting, achieving, and evaluating goals for hands-on learning experiences in a biotechnology laboratory. Development of skills and knowledge	Prerequisites: Permission of Instructor.	LAB 4.0 4.0 0.0
BIO270	Sustainable Biological Systems	Course to introduce concepts in Ecology covering abiotic and biotic systems, population biology and ecology, community ecology, biotic communities, disturbance and succession, biogeography, fire ecology, evolution in changing environments, human	Prerequisites: A grade of C or better in BIO181.	LEC 3.0 3.0 3.0
BIO282AA	Service-Learning Experience in Biology	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 1.0 1.0 0.0
BIO282AB	Service-Learning Experience in Biology	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 2.0 2.0 0.0
BIO282AC	Service-Learning Experience in Biology	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 3.0 3.0 0.0
BIO290AA	Biology Internship	Internship experience with a public or private agency, non-profit organization or special interest group related to some aspect or application of biology.	Prerequisites: Permission of Instructor.	LAB 1.0 1.0 0.0
BIO290AB	Biology Internship	Internship experience with a public or private agency, non-profit organization or special interest group related to some aspect or application of biology.	Prerequisites: Permission of Instructor.	LAB 2.0 2.0 0.0
BIO290AC	Biology Internship	Internship experience with a public or private agency, non-profit organization or special interest group related to some aspect or application of biology.	Prerequisites: Permission of Instructor.	LAB 3.0 3.0 0.0
BIO292	Advanced Recitation in Biology	Discussion, guided practice and problem solving related to advanced topics in biology.	Prerequisites: None. Corequisites: Any 200-level BIO Biology course or permission of Instructor.	L+L 1.0 1.0 1.0
BIO292UR	Biology Undergraduate Research	Provides students with group and/or individualized undergraduate research opportunities under faculty supervision in order to maximize student development. Appropriate research facilities and equipment are made	Prerequisites: Permission of Instructor, or Department or Division Chair.	LAB 1.0 1.0 0.0
BIO294AA	Special Topics in Biology- Advanced	Advanced evidence-based study of a current topic in biology from a research and theoretical perspective.	Prerequisites: Permission of Instructor.	LEC 1.0 1.0 1.0

BIO294AB	Special Topics in Biology-Advanced	Advanced evidence-based study of a current topic in biology from a research and theoretical perspective. Includes integrated laboratory and/or field applications	Prerequisites: Permission of Instructor.	L+L 1.0 2.0 2.0
BIO294AC	Special Topics in Biology-Advanced	Advanced evidence-based study of a current topic in biology from a research and theoretical perspective. Includes integrated laboratory and/or field applications	Prerequisites: Permission of Instructor.	LEC 2.0 1.0 1.0 LAB 0.0 3.0 3.0
BIO295AA	Independent Research in Biology	Original scientific investigation of biological phenomenon.	Prerequisites: A grade of C or better in (BIO156++ or BIO181++ or BIO195AA) and permission of	LAB 1.0 1.0 0.0
BIO295AB	Independent Research in Biology	Original scientific investigation of biological phenomenon.	Prerequisites: A grade of C or better in (BIO156 or BIO181) and permission of Instructor.	LAB 2.0 2.0 0.0
BIO295AC	Independent Research in Biology	Original scientific investigation of biological phenomenon.	Prerequisites: A grade of C or better in (BIO156 or BIO181) and permission of Instructor.	LAB 3.0 3.0 0.0
BIO296WA	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify) or permission of Instructor. Corequisites: Must be concurrent in at least one class which is related to student's major or career interest or	LAB 1.0 5.0 0.0
BIO296WB	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify) or permission of Instructor. Corequisites: Must be concurrent in at least one class which is related to student's major or career interest or	LAB 2.0 10.0 0.0

BIO296WC	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify) or permission of Instructor. Corequisites: Must be concurrent in at least one class which is related to student's major or career interest or	LAB 3.0 15.0 0.0
BIO296WD	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify) or permission of Instructor. Corequisites: Must be concurrent in at least one class which is related to student's major or career interest or	LAB 4.0 20.0 0.0
BIO298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
BIO298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0

BIO298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
BLT101	Introduction to Construction Trades	Introduction to trade and craft apprenticeships in Arizona, including concrete, carpentry, millwright, pipefitting, steamfitting and plumbing, sheet metal, painter, decorator and drywall taper, electrician and	Prerequisites: None.	LEC 1.0 1.0 1.0
BLT120	Techniques of Building Inspection	Theory and practice of zoning, foundation, structural, mechanical and electrical inspection in modern	Prerequisites: None.	LEC 3.0 3.0 3.0
BLT121	Electrical Codes	Principles of safe electrical installations and proper inspection procedures. Topics include conduit installation, transformer service, raceways, control circuits, grounding and bonding, hazardous	Prerequisites: None.	LEC 3.0 3.0 3.0
BLT122	Basic Engineering for Building Inspectors and Contractors I	Basic engineering mechanics, gravity loads, shears, bending moments, wood frame construction, deck joints, beams, columns, bracing and shear walls.	Prerequisites: A grade of C or better in BLT120 and (MAT187 or MAT188) or equivalent or permission of Department or Division.	LEC 3.0 3.0 3.0
BLT124	Designing for the Americans with Disabilities Act(ADA)	In-depth analysis of federal standards described in the Americans with Disabilities Act (ADA). Reviews the state of Arizona's enforcement document (AzDAAG). Focuses on helping designers, architects, and building officials	Prerequisites: None.	LEC 3.0 3.0 3.0
BLT125	Residential Electrical Codes	National Electrical Code requirements for safe electrical installations and proper inspection procedures in residential buildings. Topics include branch circuitry, feeder calculations, services grounding, overcurrent protection, wiring methods, types and proper usage of	Prerequisites: None.	LEC 3.0 3.0 3.0
BLT126	Soil Mechanics	Soil conditions as related to modern building requirements. Topics include bearing value, classification and identification, exploration and samplings, behavior of fills, compaction, subsurface	Prerequisites: A grade of C or better in MAT150 or MAT151 or MAT152 or satisfactory score on District placement exam.	LEC 3.0 3.0 3.0
BLT127	Plumbing Codes	Code requirements and construction practices. Topics include underground and above ground plumbing,	Prerequisites: None.	LEC 3.0 3.0 3.0
BLT128	Mechanical Codes	Code requirements and construction practices. Topics include duct work, conductors and fuel supply,	Prerequisites: None.	LEC 3.0 3.0 3.0

BLT129	Materials of Construction	Fundamental characteristics of modern construction materials and the effective use of these materials in	Prerequisites: None.	LEC 3.0 3.0 3.0
BLT131	Applied Electric Codes	National Electric Code (NEC) administration and application. NEC requirements for safe installation of system control equipment and design of electric utilization systems. Identification of wiring systems and permitted uses. Application of NEC requirements for	Prerequisites: None.	LEC 4.0 4.0 4.0
BLT132	Applied Plumbing Codes	Plumbing code administration. Application, design and installation of drainage/waste and venting systems in private and public buildings. Application of plumbing codes for design and installation of water systems	Prerequisites: None.	LEC 4.0 4.0 4.0
BLT140	Environmentally Responsible Building	An overview of environmentally responsible building and a historical survey of building methodologies. Introduces design concepts and strategies related to the mitigation of environmental impacts. Examines building processes, environmental issues and the interdependent nature of our built environment. Topics include human impacts, climate and geography, sustainability, renewable energies, water use and energy, resource efficiency,	Prerequisites: None.	LEC 3.0 3.0 3.0
BLT142	Green Building Codes, Standards and Rating Systems	Surveys green building rating systems, environmental building standards and green construction codes; addresses the broader scope of public health, safety and general welfare in the context of regulations and the natural environment; examines site development and land use, material resource conservation, energy efficiency, water resource conservation, indoor environmental quality, building commissioning, operation and maintenance; includes exercises	Prerequisites: None.	LEC 3.0 3.0 3.0
BLT191	Applied Plumbing Codes	Uniform plumbing code and plumbing systems installation requirements. Code administration as well as requirements relative to the installation and	Prerequisites: None.	LEC 3.0 3.0 3.0
BLT200	Construction Management: Field Operations	Skills and techniques necessary for management of construction field operations. Includes job scheduling, inspection techniques, personnel relations, safety, and the scope and supervision of the overall construction	Prerequisites: A grade of C or better in DFT126 and GTC121 or departmental permission.	LEC 3.0 3.0 3.0

BLT201	Construction Management: Office Operations	Develops the skills and techniques necessary for successful management of construction office operations. Includes establishing and financing the business, marketing, office operations, and	Prerequisites: A grade of C or better in DFT122 or DFT126 or GTC121 or permission of Instructor.	LEC 3.0 3.0 3.0
BLT263AK	Building Codes: IBC	Designed specifically to acquaint students with safety principles of building construction under the International Building Code (IBC), including structural requirements for wood, masonry and concrete, fire resistance of building construction, fire resistant	Prerequisites: None.	LEC 3.0 3.0 3.0
BLT263AL	Building Codes: IRC	Designed specifically to acquaint students with safety principles of building construction under the International Residential Code, including structural requirements for wood, masonry and concrete, fire resistance of building construction, fire resistant	Prerequisites: None.	LEC 3.0 3.0 3.0
BLT296WA	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 1.0 5.0 0.0
BLT296WB	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 2.0 10.0 0.0

BLT296WC	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 3.0 15.0 0.0
BLT296WD	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 4.0 20.0 0.0
BLT298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
BLT298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0

BLT298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
BME101	Introduction to Biomedical Equipment Technology	Introduces fundamental concepts of the field of biomedical equipment technology. Emphasis on the responsibilities of the technician, electrical safety, and knowledge of devices and their functions, maintenance,	Prerequisites: A grade of C or better in ELE111, BIO160 and (HCC145 or HCC145AA).	LEC 3.0 3.0 3.0
BPC100AA	Business-Personal Computers I	Introduction to the use of personal computers in the business environment. Computer hardware components, operating system functions and concepts.	Prerequisites: None.	LEC 0.5 0.5 0.5
BPC100AB	Business-Personal Computers II	Use the personal computer to create, store and retrieve information. Procedures for running and using business application software to produce documents and	Prerequisites: A grade of C or better in BPC100AA or permission of Instructor.	LEC 0.5 0.5 0.5
BPC100AD	Computing Fundamentals	Fundamental computer concepts and terminology for business and personal computers	Prerequisites: None.	L+L 1.0 2.0 2.0
BPC100BD	Key Software Applications	Covers basic features of software applications for business and personal computers	Prerequisites: None.	L+L 1.0 1.0 1.0
BPC100CD	Living Online	Fundamental network and Internet concepts and terminology for business and personal computers. Covers basic features of electronic mail applications	Prerequisites: None.	L+L 1.0 1.0 1.0
BPC100DD	Internet and Computing Fundamentals	Fundamental computer and Internet concepts and terminology for business and personal computers. Covers basic features of software applications	Prerequisites: None.	L+L 3.0 4.0 4.0
BPC101	Introduction to Computers	Computer software applications for the personal computer, including electronic spreadsheet and word processing, keyboarding review, a desktop environment, database management, computer graphics and operating system commands.	Prerequisites: None.	L+L 3.0 4.0 4.0
BPC101AA	Introduction to Computers I	Computer software applications for the personal computer, including electronic spreadsheet and word processing, keyboarding review, and a desktop	Prerequisites: None.	L+L 1.0 2.0 2.0

BPC110	Computer Usage and Applications	Introduction to business and personal computer operations and usage. Software applications for analyzing and solving business problems including word processing, spreadsheet, database, and presentation	Prerequisites: None.	L+L 3.0 4.0 4.0
BPC111AA	Computer Keyboarding I	Mastery of essential microcomputer keyboarding skills. Emphasis on touch typing of alphabetic and numeric	Prerequisites: None.	L+L 1.0 1.7 1.7
BPC125	Microcomputer Set Up and Maintenance	How to install and maintain a microcomputer (personal computer). Steps used to set up a new or add options to a previously installed microcomputer. Installation of internal options (memory, graphics, modems, etc.), as well as external options and devices (printers, monitors, communications, etc.). Troubleshoot (identify and repair	Prerequisites: None.	L+L 1.0 1.0 1.0
BPC170	A+ Exam Prep: Computer Hardware Configuration and Support	Explore technical aspects of personal computers, including system components, installation, system configuration, peripheral devices, and notebooks. Emphasis placed on hardware installation, maintenance, mobile devices, and hardware	Prerequisites: None.	L+L 3.0 4.0 4.0
BPC171	Recycling Used Computer Technology	Use of hardware maintenance knowledge and skills to refurbish used computers.	Prerequisites: A grade of C or better in BPC170 or Corequisites: BPC170 or permission of Instructor.	L+L 1.0 2.0 2.0
BPC260	AppleCare Exam Prep: iOS Device Repair	Prepares students for AppleCare Hardware Certification exams for iOS devices and to perform warranty-level	Prerequisites: None.	L+L 3.0 4.0 4.0
BPC262	AppleCare Exam Prep: Mac Computer Models Repair	Prepares students for AppleCare Hardware Certification exams for MacOS computer models and to perform warranty-level hardware repairs.	Prerequisites: None.	L+L 3.0 4.0 4.0
BPC265	Jamf Training Foundation	The Jamf Training Foundation offers a core understanding of Jamf Pro and Jamf Protect as well as an enterprise-focused examination of the macOS, iOS, and iPadOS platforms. The hands-on and example-based environment provides experience in the configuration of Jamf Pro, Jamf Protect, device enrollment, distributing App Store apps, building and managing packages to deploy to computers, configuration and settings for computers and mobile devices, device security, a scripting overview (Bash),	Prerequisites: None.	L+L 3.0 4.0 4.0

BPC270	A+ Exam Prep: Operating System Configuration and Support	Explore advanced technical aspects of maintaining and servicing computers. Emphasis placed on OS installation, maintenance, mobile devices, security, software troubleshooting, and on proper usage of tools, safety procedures, and professionalism. Helps prepare	Prerequisites: A grade of C or better in CIS105 or permission of Instructor.	L+L 3.0 4.0 4.0
BPC274	Advanced Server Computer Maintenance: Server+ Prep	Explores the technical aspects of computer servers, including hardware installation and management; operating system configuration, access control and virtualization; and overall diagnostic and resolution of system hardware, software, connectivity, storage and security issues. Includes an emphasis on physical and network data security techniques and implementation of backup techniques to remediate disaster recoveries.	Prerequisites: A grade of C or better in (CIS126++ and MST150++), or BPC270, or permission of Instructor.	L+L 3.0 4.0 4.0
BPC275	CompTIA Exam Prep	Focuses on reviewing key concepts, practicing skills and preparing to successfully demonstrate existing knowledge on CompTIA certification exams. The course is designed to provide an overview of exam topics, study and test-taking strategies. It also will include structured study time, group discussions, and the use of	Prerequisites: A grade of C or better in BPC170 or BPC270 or permission of Instructor.	L+L 2.0 3.0 3.0
BUS305	Business Analytics	Overview of quantitative and qualitative data analysis concepts and practices that assist with the decision-making process of managers in business. Topics include how data is used in different industries and functional areas of business; the collection, analysis and interpretation of data; internal and external	Prerequisites: A grade of C or better in (ACC212, CIS105, GBS205, GBS221, and GBS233), or permission of Instructor.	LEC 3.0 3.0 3.0
BUS310	Finance Principles	Overview of the principles and practices of financial management in a business environment. Topics include financial analysis and financial risk, capital investment analysis and decision making, and the capital structure of the firm. Focus on analyzing financial information, identifying issues, and solving business problems to make sound business decisions. Emphasis on the ethical application of financial principles and methods	Prerequisites: A grade of C or better in ACC212, or permission of Program Director.	LEC 3.0 3.0 3.0

CAD100	Fundamentals of 2D AutoCAD	Utilize AutoCAD software to generate two-dimensional (2-D) drawings and components in a generic installation. Apply basic AutoCAD commands and properties to format, draw, edit, layer, dimension, import/export, and manage drawing files. Creation, manipulation, and hardcopy production of 2-D drawing files from major	Prerequisites: None.	L+L 3.0 6.0 6.0
CAD101	Elements of CAD Graphics (AutoCAD)	Computer generation of drafting and design components using pure elements and basic geometric procedures. Incorporates concept illustration based on standard pictorial methods and develops multi-view projection techniques and presentation methods. Introduction to the fundamentals of three-dimensional	Prerequisites: A grade of C or better in CAD100 or Corequisites: CAD100 or permission of Instructor.	L+L 3.0 6.0 6.0
CAD105	Fundamentals of Revit Architecture	Introduction to Revit Architecture. Utilize Revit software to develop and generate basic 3-D models and components. Create, edit, dimension, and manage 2-D and 3-D drawing views and projects. Produce drawing files and plots using various display environments and	Prerequisites: A grade of C or better in CAD100 or (previous architectural and CAD experience, and permission of Department or Division).	L+L 3.0 6.0 6.0
CAD106	Fundamentals of Civil 3D	Introduction to Civil 3D. Utilize Civil 3D software to develop and generate basic 3D models and components. Create, edit, dimension, and manage 2D and 3D drawing views and projects. Produce drawing	Prerequisites: A grade of C or better in CAD100 or (previous civil and CAD experience, and permission of Department or Division).	L+L 3.0 6.0 6.0
CAD120AH	Getting Started with CAD: Microstation	Basic Commands; drawing aids; input devices; use of default settings	Prerequisites: None.	L+L 1.0 2.0 2.0
CAD125AH	Drawing Database Management: Microstation	Operating the system file manager. Establishing, updating, managing, and maintaining a CAD drawing database	Prerequisites: A grade of C or better in CAD120AH or permission of Instructor.	L+L 1.0 2.0 2.0
CAD145	Design Principles for Industry	Survey of the basic standards and procedures for drawing setups and design documentation in the fields of architecture, manufacturing, and civil technology.	Prerequisites: A grade of C or better in (CAD100 and CAD101) or permission of Instructor.	L+L 3.0 6.0 6.0
CAD150AH	Two-Dimensional CAD: Microstation	Constructing scaled two-dimensional drawing using CAD.	Prerequisites: A grade of C or better in CAD125AH or permission of	L+L 1.0 2.0 2.0
CAD160	Residential Architectural Drafting	Basic skills associated with board drafting in the architectural field	Prerequisites: A grade of C or better in (CAD105 CAD110 and CAD115) or permission of Instructor.	L+L 2.0 4.0 4.0
CAD164	Residential Working Drawings	Team projects in the development of a set of architectural working drawings for a residence.	Prerequisites: A grade of C or better in CAD145 or permission of	L+L 3.0 6.0 6.0

CAD165	Architectural Software (AutoCAD Architecture)	Introduction to AutoCAD Architecture, a modeling software used by architecture professionals. Procedures unique to advanced software and pertinent to architectural documentation. Emphasis on residential	Prerequisites: A grade of C or better in CAD145 or permission of Instructor.	L+L 3.0 6.0 6.0
CAD167	Architectural Drawings I (Revit): Residential CAD	Use of Revit architectural modeling software to develop 3-D architectural models, working drawings, construction documentation, and renderings. Emphasis on	Prerequisites: A grade of C or better in CAD105 or permission of Department or Division.	L+L 3.0 6.0 6.0
CAD186	Site Development I	Use coordinate geometry and survey point databases to create topographic maps utilizing civil engineering/surveying application software. Volumetric analysis of earthwork (cut and fills) utilizing civil engineering/surveying application software. Production of base mapping, earthwork, grading, and drainage	Prerequisites: A grade of C or better in CAD106 or permission of Instructor.	L+L 3.0 6.0 6.0
CAD201	Three-Dimensional (3D) Modeling and Advanced CAD Techniques	Advanced Computer Aided Drafting (CAD) techniques including the automation and semi-automation of design documentation, external referencing and attribute creation and manipulation. Development of three-dimensional (3D) models including construction,	Prerequisites: A grade of C or better in (CAD100 and CAD101) or permission of Instructor.	L+L 3.0 6.0 6.0
CAD235	Modeling, Rendering and Animation for Technical Presentations	Entry level course in technical modeling, visualization, and animation. Uses 3D modeling software, rendering, and animation tools to visualize and solve design issues. Development of professional quality	Prerequisites: A grade of C or better in CAD201 or Corequisites: CAD201 or permission of Department or Division.	L+L 3.0 6.0 6.0
CAD256	CAD Customization and Management	Emphasis on developing customized user interfaces and basic programming skills. Installation and configuration of software processes. File management techniques; file archival, batch plotting, file conversion,	Prerequisites: A grade of C or better in DFT254AA or permission of Department or Division.	L+L 3.0 6.0 6.0
CAD265	Architectural Software (AutoCAD Architecture) II: Commercial CAD	Use of AutoCAD Architecture, an architectural modeling software to generate features associated with commercial building design. CAD treatment of selected details and other structural practices common to nonresidential buildings. Emphasis on the practices and	Prerequisites: A grade of C or better in CAD165.	L+L 3.0 6.0 6.0
CAD267	Architectural Drawings (REVIT) II: Commercial CAD	Use of REVIT architectural modeling software utilized by the architectural industry to generate plans and features associated with commercial building design. Focus on CAD development of selected plans, details, and structural practices common to nonresidential	Prerequisites: A grade of C or better in CAD167 or permission of Department or Division.	L+L 3.0 6.0 6.0

CAD269	Computer Aided Landscape Design	Using AutoCAD to create landscape design drawings and wire frames in Sketchup for elevations, sections and perspective sketches.	Prerequisites: A grade of C or better in (AGB139 or CAD100 or CAD101) and AGL189 or permission of	L+L 3.0 6.0 6.0
CAD274	Residential Design CAD	Developing designs with plans and details based on current design vogues. CAD problem solving associated with design	Prerequisites: A grade of C or better in (CAD152 and CAD164) or permission of Instructor.	L+L 3.0 6.0 6.0
CAD282	HVAC and Sheet Metal Design	Drawing, design, and specification of heating, ventilating, and air conditioning (HVAC) systems. Basic types of heating and cooling systems, heat loss calculations, sheet metal development, and solar	Prerequisites: A grade of C or better in (CAD150 and [two of CAD262 CAD264 CAD266 CAD268]) or permission of Instructor.	L+L 1.0 2.0 2.0
CAD286	Site Development II	Use a coordinate geometry and survey point database to create construction drawings utilizing civil	Prerequisites: A grade of C or better in CAD186.	L+L 3.0 6.0 6.0
CAD287	Advanced Revit Techniques	Advanced use of Revit architectural modeling software utilized by the architectural industry. Develop custom families with parameters and formulas, generate conceptual mass plans, prepare design phasing for renovation and tenant improvement projects, and work	Prerequisites: A grade of C or better in CAD167 or permission of Department or Division.	L+L 3.0 6.0 6.0
CAD292	Current Developments in CAD Technology	The exploration and analysis of the newest software packages and/or plug-ins on the market designed to enhance or replace existing Computer Aided Drafting (CAD) software. Designed to introduce and develop skills in the latest state-of-the-art tools pertinent to	Prerequisites: A grade of C or better in CAD100 or permission of Department or Division.	L+L 1.0 2.0 2.0
CAN101	Introduction to Cannabis Industry	Introductory overview of the cannabis industry. Explores the historical, legal, social, and political aspects of cannabis use, cannabis careers and business management, including business plans, for the cannabis industry. Includes how industry trends and	Prerequisites: None.	LEC 3.0 3.0 3.0
CAN105	Accounting, Finance and Funding in the Cannabis Industry	Overview of the cannabis industry's financing, funding, accounting, and tax practices. Includes capital ventures and accounting procedures unique to the cannabis	Prerequisites: A grade of C or better in CAN101.	LEC 2.0 2.0 2.0
CAN110	Social Equity and Current Issues in the Cannabis Industry	Social equity programs, trends, current issues and the societal impact in the cannabis industry.	Prerequisites: None.	LEC 1.0 1.0 1.0
CAN115	Human Resources and Operations Management in the	Overview of the human, facilities and capital management of the cannabis industry. Includes workforce development trends and best practices	Prerequisites: A grade of C or better in CAN101.	LEC 1.0 1.0 1.0

CAN120	Legal and Regulatory Environment in the Cannabis Industry	Study of cannabis industry laws, policies, regulations and ethics in non-use, medicinal-use, and adult-use U.S. states and territories.	Prerequisites: A grade of C or better in CAN101.	LEC 3.0 3.0 3.0
CAN125	Supply Chain Management in the Cannabis Industry	Management of cannabis supply chain stages including: growing, extracting, laboratory testing, product development and manufacturing, shipping and distributing, and dispensary and retailing across all legislative environments (federal, medicinal-use, and	Prerequisites: A grade of C or better in CAN101.	LEC 2.0 2.0 2.0
CAP120	Introduction to Counseling	Introduction to the field of counseling with a focus on skills and competencies needed as a mental health practitioner. Foundations of counseling including counseling theories, ethical considerations, prevention and intervention topics, and multicultural counseling	Prerequisites: None.	LEC 3.0 3.0 3.0
CAP220	The Counselor in a Multicultural Society	Current theories and research on culture, race and ethnicity, gender and other aspects of cultural diversity in a multicultural society through the lens of counseling. Focus on personal perspectives, will explore themes, theories, topics and research related to power, privilege	Prerequisites: None.	LEC 3.0 3.0 3.0
CAP240	Introduction to Counseling Skills	Introduction to basic skills and techniques used in the counseling field. Focuses on active listening, self-	Prerequisites: A grade of C or better in CAP120.	LEC 3.0 3.0 3.0
CAP260	Career and Professional Preparation for the Helping Professions	Overview of the process of career and life planning through self-awareness for students interested in helping fields. Focus on current occupational trends and outlook, the learning models of the individual, the world of work, and decision-making. Emphasis on individual application and workplace diversity. Design	Prerequisites: A grade of C or better in ENG101.	LEC 3.0 3.0 3.0
CCS101	Chicana and Chicano Studies	Introduction to the wealth and diversity of Chicana and Chicano Studies research from a variety of disciplinary perspectives through the use of a series of historical and social scientific studies, novels, testimonios, and	Prerequisites: A grade of C or better in ENG101 or ENG107 or equivalent.	LEC 3.0 3.0 3.0
CCS202	Ethnic Relations in the United States	Basic concepts and processes, including historic overview, of interethnic relations in the United States: culture, race, ethnicity, ethnocentrism, prejudice, discrimination, racism, assimilation, acculturation, and individual and group responses to interethnic contact. Cultural knowledge and intercultural communication skills and perspectives as fundamental tools for	Prerequisites: None.	LEC 3.0 3.0 3.0

CCS210	Multicultural Representation in the History of STEM	Aims to fill a gap by exploring the perspectives, experiences, and contributions of individuals from various cultural backgrounds in the study of science, technology, engineering, and mathematics (STEM). Analyzes and synthesizes how different cultures have shaped scientific knowledge, examining the impact of diversity on innovation and problem-solving, and	Prerequisites: None.	LEC 3.0 3.0 3.0
CCS212	The Mexican American Novel	A study of the social, historical, and cultural backgrounds as well as the form and content of the	Prerequisites: None. ENG101 and ENH112 suggested but not required.	LEC 3.0 3.0 3.0
CET102	Surveying II	Surveying principles including triangulation, munipule and land surveys, topographic surveys, earthwork, state plane coordinate systems, stadia methods, practical astronomy, highway curves, superelevations and	Prerequisites: A grade of C or better in CON241 or permission of Department or Division.	LEC 3.0 2.0 2.0 LAB 0.0 3.0 3.0
CET103	Construction Methods	Modern construction techniques: planning methods, critical path method (CPM), excavation and earthmoving practices, estimating and work scheduling, concrete design and placement practices. Includes reinforced concrete, prestressed concrete, carpentry, asphalt characteristics, proper proportioning of aggregate and	Prerequisites: None.	LEC 3.0 3.0 3.0
CET104	Community Planning and Development	Provides a comprehensive overview of the urban planning and development process. Introduces planning theories, methodologies, and strategies with practical applications from local and other urban communities. Topics include municipal planning, land use and zoning, circulation, water and waste water management, storm drainage and public utility services. Examines the economic development process,	Prerequisites: None.	LEC 3.0 3.0 3.0
CET105	Highway Technology	Economics of highway locations, rights-of-way, curves, drainage problems, bridge structures, road building equipment, highway financing, and administrative problems at the state, county and city levels	Prerequisites: None.	LEC 3.0 3.0 3.0
CET150	Introduction to Geodesy and Map Projections	Coordinate frames used in geodesy, photogrammetry, surveying, and mapping. Cartesian, spherical, and ellipsoidal coordinates. Introduction to kinematics, gravity field, and size and shape of earth. Positioning in three dimensions. Introduction to map projections and associated coordinate systems. Theory and application of the plane coordinate systems with emphasis on	Prerequisites: A grade of C or better in (CET102 and MAT182) or permission of Department or Division.	LEC 3.0 3.0 3.0

CET171	Construction Contracts	Legal aspects of construction contracts, writing and interpretation of specifications, prequalifications, and	Prerequisites: None.	LEC 3.0 3.0 3.0
CET201	Boundary Control and Legal Principles	Principles of land surveying, boundary controls, ethical and legal principles, and office practices.	Prerequisites: A grade of C or better in CON241 or permission of Department or Division.	LEC 3.0 3.0 3.0
CET202	Writing Legal Descriptions	Application of principles to actual case studies. Emphasis on proper form and clarity in legal description writing. Procedure for filing subdivision plats and preparation for land surveyors' registration	Prerequisites: A grade of C or better in CON241 or permission of Department or Division.	LEC 3.0 3.0 3.0
CET205	Photogrammetry	An introduction to the study of aerial cameras, equipment, flight procedures, and interpretation of aerial photographs, including stereoscopic principles used in planimetric and topographic maps, map projections, grids, and forms. Practical applications of	Prerequisites: A grade of C or better in CET102 or permission of Department or Division.	LEC 3.0 3.0 3.0
CET211	Strength of Materials	A study of strength and application of the materials of engineering construction, including the mechanics of beams, shafts, and bolted and welded connections under various loading conditions.	Prerequisites: A grade of C or better in DFT107 or ELT102 or (MAT151 and MAT182) or (MAT187 or MAT188) or equivalent or permission of Department or Division.	LEC 3.0 3.0 3.0
CET241	Fundamentals of Traffic Engineering	Basic study of traffic movement, ordinances, mechanical controls, planning, street and highway design, parking, and traffic engineering organization. Training for	Prerequisites: None.	LEC 3.0 3.0 3.0
CET250	Public Land Survey System	Overview of unique requirements to determine land boundaries according to the Manual of Instructions for the Survey of Public Lands of the United States, including history of the system, lotted sections, proportioning, subdividing, and evidence analysis.	Prerequisites: A grade of C or better in CET102 and CET201.	LEC 3.0 3.0 3.0
CET257	Route and Construction Surveying	Principles and field practice of route and construction surveying, including route control surveys, construction control, topographic mapping, highway curves, and computations for roadways, utilities, bridges, buildings,	Prerequisites: A grade of C or better in CET102 or permission of Department or Division.	L+L 3.0 5.0 5.0

CET296WA	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 1.0 5.0 0.0
CET296WB	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 2.0 10.0 0.0
CET296WC	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 3.0 15.0 0.0

CET296WD	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 4.0 20.0 0.0
CET298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
CET298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
CET298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
CFS101AH	Visual Art Experiences for Young Children	The creative use of visual art media and techniques with children between the ages of birth and age eight.	Prerequisites: None.	LEC 1.0 1.0 1.0
CFS101AJ	Music Activities for the Young Child	Experiences with music in singing, rhythm instruments, creative movements, and games, as well as the development of music appreciation and basic listening	Prerequisites: None.	LEC 1.0 1.0 1.0

CFS101AP	Science Activities for the Young Child	Interpreting the study of science in early childhood education as a part of a dynamic growth process offered by the child's daily life experiences.	Prerequisites: None.	LEC 1.0 1.0 1.0
CFS101AR	Learning With Toys	Use of creative imagination with toys to enable the child alone or with others to explore the world. Includes evaluating proper use of toys and appropriate	Prerequisites: None.	LEC 1.0 1.0 1.0
CFS106	Stress Management in the Family	Impact of stress factors on the family. Managing time and stress in the home. Options for coping with anxiety.	Prerequisites: None.	LEC 1.0 1.0 1.0
CFS107	Men and Children: Strengthening the Bond	Overview of the relationship between fathers or significant male figures and children from the role perspective of the involved, nurturing male. Strategies for assessing and organizing successful male	Prerequisites: None.	LEC 1.0 1.0 1.0
CFS109	Parent/Child Communication	Communication between parents and children. Developing self-esteem, responsibility and empathic	Prerequisites: None.	LEC 1.0 1.0 1.0
CFS111	Relationships to Promote Learning in Young Children: Birth to Age Three	Overview of the relationship between the teacher/caregiver and child from the perspective of a reflective teacher. Students will learn the importance of assessing, understanding, and enhancing the development of emotional skills of young children to help guide and develop a child's self-image. Student will	Prerequisites: None. CFS/ECH176 recommended. Xref: CFS176	LEC 1.0 1.0 1.0
CFS112	Personal Growth and Family Relations	Personal development as related to the individual, the family, and their relations. Emphasis on interpersonal family relationships. Skills and techniques to facilitate and strengthen the individual and family relationships.	Prerequisites: None.	LEC 3.0 3.0 3.0
CFS114	Working with the Hyperactive Child	Causes of hyperactivity in children; focus on the family's role in identification, treatment and school/community	Prerequisites: None.	LEC 1.0 1.0 1.0
CFS116	Discipline and Guidance	Age appropriate principles for disciplining and guiding young children's behavior in child care settings, including interpersonal and environmental strategies.	Prerequisites: None.	LEC 3.0 3.0 3.0
CFS120	Contemporary Issues In Early Childhood	Designed to develop understanding of a broad range of contemporary issues that impact the child in today's society. Course directed at pre-service and in-service	Prerequisites: None.	LEC 1.0 1.0 1.0
CFS121AA	Single Parent Family-Adjustment	Overview of issues facing single parent families. Examination of adjustment issues with emphasis on relationships. Methods of adapting family life to meet the needs and variations of one-parent families.	Prerequisites: None.	LEC 1.0 1.0 1.0

CFS123	Health and Nutrition In Early Childhood Settings	Creating and maintaining healthy environments and practices in programs serving young children. Emphasis on assessing the child's health status, nutrition and food service, communicable disease recognition, transmission, and prevention, infection control, regulations and regulatory agencies, current topics,	Prerequisites: None.	LEC 1.0 1.0 1.0
CFS125	Safety in Early Childhood Settings	Fundamental concepts of promoting a safe, but challenging learning environments. Establishing and maintaining safety procedures in the early childhood setting. Emphasis on indoor and outdoor equipment and activities, risk analysis, accident, evacuation, and emergency plans, regulations, regulatory agencies and	Prerequisites: None.	LEC 1.0 1.0 1.0
CFS130	Demystifying Adolescence	A holistic overview of the physical, social, and emotional development of adolescents. Emphasis on effective skills necessary for working with adolescents and their	Prerequisites: None.	LEC 1.0 1.0 1.0
CFS140	Special Topics: Child and Family Studies	Explores special topics related to child and family studies. Topics vary and include concepts relevant to those pursuing careers in or employed in early childhood care or to those working with families in programs, agencies, organizations, and resource	Prerequisites: None.	LEC 0.5 0.5 0.5
CFS157	Marriage and Family Life	Study of marriage and the family as a social system, including models of family analysis, intrapersonal and interpersonal relations, including intimacy, sexuality, and	Prerequisites: None.	LEC 3.0 3.0 3.0
CFS159	The Modern Family	An examination of the modern American family. An emphasis on the changing functions and roles of individuals within today's society and an analysis of the basic challenges confronting the family, including	Prerequisites: None.	LEC 3.0 3.0 3.0
CFS160	Using Music, Speech, and Movement with Children's Literature	Using elements of music, speech, and movement with children's literature, including rhymes, chants, songs, and books to enhance children's social, physical,	Prerequisites: None.	LEC 1.0 1.0 1.0
CFS163	Family Child Care: Introduction to Business Management	Emphasis on small business management and effective policies and procedures for family child care providers. Licensing, legal, and regulatory issues in a home	Prerequisites: None.	LEC 3.0 3.0 3.0

CFS164	Family Child Care: Curriculum and Environment	Family child care planning for multi-age groupings of children through age eight. Role of the environment as well as various curriculum programs will be explored and evaluated. Exploration of culturally rich, inclusive and child-centered environment in his/her own child care setting. Issues of professionalism, family partnerships,	Prerequisites: None.	LEC 3.0 3.0 3.0
CFS164AA	Family Child Care: The Environment	Family child care environments for multi-age groupings of children through age eight. Exploration of culturally rich, inclusive, and child-centered environment in his/her own child care setting. Issues of health/safety practices	Prerequisites: None.	LEC 1.0 1.0 1.0
CFS164AB	Family Child Care: Programming, Guidance and	Family child care programming for multi-age groupings of children through age eight. Various curriculum programs will be explored and evaluated. Issues of	Prerequisites: None.	LEC 1.0 1.0 1.0
CFS164AC	Family Child Care: Family Partnerships and Professionalism	Issues of professionalism, family partnerships, communication, and ethical practices are examined	Prerequisites: None.	LEC 1.0 1.0 1.0
CFS167	School-Age Child Care Provider	Issues related to school-age child care. Past, current, and future trends; regulations, insurance liabilities and coverage, shared facilities, and community resources. Techniques for managing/administering services and personnel, communicating with parents, and evaluating the care/program. Planning and scheduling the school-age program. Includes overview of child growth and	Prerequisites: None.	LEC 3.0 3.0 3.0
CFS176	Child Development	Study of the science of human development from conception through adolescence. Includes observation skills, parent and adult roles in the lives of children, and	Prerequisites: None.	LEC 3.0 3.0 3.0
CFS177	Parent-Child Relationships	Methods to strengthen relationships and negotiate conflicts with children. Focus on effective interpersonal skills and guidance techniques.	Prerequisites: None.	LEC 3.0 3.0 3.0
CFS178	Survey of Early Childhood Education	Orientation to basic concepts of day care and nursery programs. History and philosophy of child care services including state regulations governing those services.	Prerequisites: None.	LEC 3.0 3.0 3.0
CFS179	Child Care: A Multifaceted Career	Overview of the child care field. Focus on enhancing children's self esteem, providing for children's nutritional needs, and developing adequate safety and sanitation	Prerequisites: None.	LEC 1.0 1.0 1.0
CFS181	Enhancing Infant and Toddler Development	Principles of development in children from birth through 30 months. Emphasis on individuality of child and the adult role in providing a safe and stimulating	Prerequisites: None.	LEC 3.0 3.0 3.0

CFS182	Parenting the Early Adolescent: Ages Ten to Fourteen	Emphasis on the early adolescent developmental period, ages ten to fourteen, and the importance of the parent-child relationship, as well as strategies to ensure	Prerequisites: None.	LEC 1.0 1.0 1.0
CFS183	Contemporary Issues in Adolescence	Current issues that impact adolescent development and behavior explored. Comprehensive and specific strategies for addressing these issues as parents or professionals working with teens emphasized. Issues related to adolescent sexuality, abuse, mental health,	Prerequisites: None.	LEC 3.0 3.0 3.0
CFS190	Home-Based Visitation	Emphasis on development of skills needed to successfully complete home-based client visitation. Opportunities for field-based observations provided.	Prerequisites: None.	L+L 3.0 4.0 4.0
CFS192	Child Care Center Staff Development	Presents strategies to administrators and supervisors in child care centers for developing the personal and professional growth of child care staff.	Prerequisites: None.	LEC 1.0 1.0 1.0
CFS193	Financial Management in Child Care Centers	Provides strategies for financial management and administration of finances in a child care center. Specific concerns of participants addressed.	Prerequisites: None.	LEC 1.0 1.0 1.0
CFS194AA	Early Childhood Program Management: Staffing and Managing	Methods and techniques for recruiting, staffing, and managing in early childhood programs.	Prerequisites: None.	LEC 1.0 1.0 1.0
CFS194AB	Early Childhood Program Management: Human Relations	Basic human relations in early childhood organizations and the influence of the individual's personal needs on the overall needs and objectives of the organization.	Prerequisites: None.	LEC 1.0 1.0 1.0
CFS194AC	Early Childhood Program Management: Organizational	Provides a broad perspective of the organizational life of an early childhood environment.	Prerequisites: None.	LEC 1.0 1.0 1.0
CFS195	Early Childhood Personnel Supervision	Covers supervision concepts and applications for early childhood programs.	Prerequisites: None.	LEC 1.0 1.0 1.0
CFS196	Ethics and the Early Childhood Educator	Ethical issues in the early childhood field.	Prerequisites: None.	LEC 1.0 1.0 1.0
CFS197	Leadership in Early Childhood Education	Provides concepts for understanding and managing leadership roles and responsibilities in the early	Prerequisites: None.	LEC 1.0 1.0 1.0
CFS204	Reflective Supervision	Reflective supervisory processes to enhance learning and professional development. Includes professional development stages to provide supervisors with tools to support professional growth. Also covers challenges and barriers to the supervisor and employee/practitioner	Prerequisites: None.	LEC 1.0 1.0 1.0

CFS205	Human Development	Explores the growth and development process over the human life span. Research and theoretical approaches; physical, cognitive, social, and personality development	Prerequisites: None.	LEC 3.0 3.0 3.0
CFS206	Child and Family Organizations: Management and Administration	Examination of management and administration of community- based child and family organizations within the context of organizational behaviors. Focus on attributes of effective organizations: the impact of organizational culture and learning, work-place diversity	Prerequisites: None.	LEC 3.0 3.0 3.0
CFS207	Organization and Community Leadership in Child and Family Organizations	Examination of organization and community leadership as it applies to the management and administration of community- based child and family services organizations. Provides overview of leadership styles	Prerequisites: None.	LEC 3.0 3.0 3.0
CFS208	Child and Family Organizations: Fiscal Management and Grant Writing	Examination of fiscal accountability and resource development as it applies to the management and administration of community-based child and family social service organizations. Provides overview of grant development processes beginning with research into governmental and private funding sources through fiscal and grant audit processes. Includes budget	Prerequisites: None.	LEC 3.0 3.0 3.0
CFS209	Child and Family Organizations: Project Management	Focuses on concepts and strategies associated with effective project management in community-based child and family organizations. Emphasis on planning,	Prerequisites: None.	LEC 3.0 3.0 3.0
CFS210	Family Life Education	Provides an overview of the professional work within the field of family life education. Emphasis on developing flexible, culturally sensitive, and effective professional	Prerequisites: None.	LEC 3.0 3.0 3.0
CFS220	Introduction to Parenting and Family Development	Overview of the field of family and parent development. Focuses on parenthood as a developmental process and cultural influences on child rearing. A family systems perspective introduced and applied to	Prerequisites: None.	LEC 3.0 3.0 3.0
CFS225	Foundations of Parent Education	Professional development as related to work with parents. Emphasis on developing effective skills with parents, professionals and paraprofessionals involved with the child. Skills and techniques to facilitate and	Prerequisites: None.	LEC 3.0 3.0 3.0

CFS235	Developing Child: Theory into Practice, Prenatal to Age Eight	Understanding and working with young children, birth through age eight. Analysis of young children's physical, social, emotional, cognitive and linguistic development within their home, school, and cultural contexts. Typical and atypical development. Implications for teachers and parents. Emphasis on observations	Prerequisites: None.	LEC 3.0 3.0 3.0
CFS240	Human Behavior in Context	Considers the influences of physical and social environments in which human behavior occurs. Includes multiple roles and perspectives of the individual, the	Prerequisites: None.	LEC 3.0 3.0 3.0
CFS242	Curriculum Planning for Diversity	Practical early childhood classroom applications for a diverse population, including integration of cultures, generations, genders, and races into the classroom, facilitation of second language acquisition, and practical teaching strategies which are also developmentally	Prerequisites: A grade of C or better in CFS/ECH176. Xref: CFS176	LEC 3.0 3.0 3.0
CFS243	Cross-Cultural Parenting	Focus on the study of parents and children from a cross-cultural position. Emphasis on parenting styles and practices from a cultural directive and expectation perspective. Course designed for those seeking careers in Family Studies, Parent Education, Psychology, Social	Prerequisites: None.	LEC 3.0 3.0 3.0
CFS247	Family Ties and Aging	Identification and examination of facets of family relationships and aging. Emphasis on study of central family connections for older people, unique family situations, and implications of family transitions. Course designed for those seeking careers in Family Studies,	Prerequisites: None.	LEC 3.0 3.0 3.0
CFS249	Transition to Adulthood	Emphasis on major elements of the transition to adulthood and key links to changes in family relationships. Focus on the realignment of intergenerational relationships and reassessment of family priorities. Course designed for those seeking	Prerequisites: None.	LEC 3.0 3.0 3.0
CFS250	Social Policy and Families	Examines the impact of social policy on family systems and the implications for professional roles and practice.	Prerequisites: None.	LEC 3.0 3.0 3.0
CFS251	Transitions: Work to Retirement	Explores the work to retirement transitional issues that impact individuals and families. Emphasis on physical, cognitive and psychosocial dimensions of retirement.	Prerequisites: None.	LEC 3.0 3.0 3.0
CFS252	Contemporary Issues in Aging	Current issues that impact aging development and behavior explored. Comprehensive and specific strategies for addressing these issues for professionals	Prerequisites: None.	LEC 3.0 3.0 3.0

CFS256	Management in the Family	Management as a means to the realization of individual and family values and goals; creation, allocation, and use of resources. Focus on decision making	Prerequisites: None.	LEC 3.0 3.0 3.0
CFS257	Working with Families with Diverse Needs	A collaborative approach to working with families with diverse needs. Examines the effect of specific challenges on the family system. Presents techniques for those working with families to facilitate stress management, conflict resolution, and utilization of	Prerequisites: None.	LEC 3.0 3.0 3.0
CFS258	Families in Society	Areas of concentration include family transition, diversity in structure and culture faced by contemporary families, problems, crisis and change affecting the stress on families as our society progresses into a more complicated future. The study of change as an integral part of all family's day-to-day experiences while recognizing that family ancestral and cultural dimensions are fundamental for all family groupings.	Prerequisites: A grade of C or better in CFS157 and CFS259 or permission of Instructor.	LEC 3.0 3.0 3.0
CFS259	Sexuality over the Life Span	Examination of the physical, psychological, social, and cultural contributions to human sexuality. Emphasis on family life and cultural variation. Examination of facts and myths, current literature, and changing mores regarding human sexuality. Sexuality of males and females in contemporary society; impact of sexual	Prerequisites: Permission of Department or Division. Student must be 18 years or older.	LEC 3.0 3.0 3.0
CFS263	Child and Family Studies Seminar	Classroom portion of Child and Family Studies Internship. Emphasizes the blend of job-related activities including career exploration, employment procedures, human relations, and on-the-job problems.	Prerequisites: Permission of Department or Division. Corequisites: CFS264AA or CFS264AB or CFS264AC initial enrollment in	LEC 1.0 1.0 1.0
CFS264AA	Child and Family Studies Internship	Laboratory portion of Child and Family Studies Seminar. Five hours of work weekly. Supervision and evaluation by a coordinator.	Prerequisites: Permission of Department or Division Corequisites: CFS263 when initially enrolled in CFS264AA or CFS264AB or	LAB 1.0 5.0 0.0
CFS264AB	Child and Family Studies Internship	Laboratory portion of Child and Family Studies Seminar. Ten hours of work weekly. Supervision and evaluation by a coordinator.	Prerequisites: Permission of Department or Division Corequisites: CFS263 when initially enrolled in CFS264AA or CFS264AB or	LAB 2.0 10.0 0.0
CFS264AC	Child and Family Studies Internship	Laboratory portion of Child and Family Studies Seminar. Fifteen hours of work weekly. Supervision and evaluation by a coordinator.	Prerequisites: Permission of Department or Division Corequisites: CFS263 when initially enrolled in CFS264AA or CFS264AB or	LAB 3.0 15.0 0.0

CFS269	Early Childhood Education Seminar	Emphasizes professional experiences including employment procedures, human relations, employment related issues, and career exploration.	Prerequisites: Permission of Department or Division.	LEC 1.0 1.0 1.0
CFS271	Arranging the Environment	Exploration of the influence of the environment on the behavior and development of young children. Considers indoor and outdoor spaces from the perspective of safety, age-related needs, spatial requirements, and	Prerequisites: None.	LEC 1.0 1.0 1.0
CFS277	Adult-Adolescent Interaction	Prepares social service workers, teachers, and parents to interact effectively with teenagers. Develops understanding of the interaction between adolescents and their families. Teaches practical strategies to deal	Prerequisites: None.	LEC 3.0 3.0 3.0
CFS281	Adolescent School Success	An overview of factors that contribute to adolescent school success, including family-school interactions, special needs adolescents, and problem areas. Emphasis on strategies and resources to facilitate	Prerequisites: None.	LEC 1.0 1.0 1.0
CFS282	Inclusion of Young Children with Special Needs	An exploration of the educational, social, and behavioral concerns involved in the successful inclusion of children with special needs into typical preschool classrooms. Includes discussion of strategies for adaptations and modifications of the environment and	Prerequisites: None.	LEC 1.0 1.0 1.0
CFS283	Multicultural Early Child Education	Practical early childhood classroom applications for a diverse ethnic population, including integration of multiculturalism into the classroom, facilitation of second language acquisition, and practical teaching strategies	Prerequisites: A grade of C or better in CFS/ECH176. Xref: CFS176	LEC 1.0 1.0 1.0
CFS284AA	Early Childhood Teaching Internship	Work experience in child care centers. 80 hours of designated work per credit.	Prerequisites: A grade of C or better in CFS/ECH176 and permission of Department or Division. Xref:	L+L 1.0 1.0 0.0
CFS284AB	Early Childhood Teaching Internship	Work experience in early care and education settings centers. 80 hours of designated work per credit.	Prerequisites: Permission of Department or Division.	L+L 3.0 3.0 0.0
CFS285	Family-School Interaction	Interaction among parents, teachers and the school. Emphasis on methods used cooperatively by parents and teachers to provide for education and	Prerequisites: A grade of C or better in CFS/ECH176 or CFS278 or permission of Instructor. Xref:	LEC 3.0 3.0 3.0
CFS285AA	Family-School Interaction: Preschool	Interaction among parents, teachers and the preschool. Emphasis on methods used cooperatively by parents and preschool teachers to provide for education and	Prerequisites: A grade of C or better in CFS/ECH176 or CFS278 or permission of Instructor. Xref:	LEC 1.0 1.0 1.0
CFS287	Professional Development in Early Childhood Education	Emerging professionalism within the field of early childhood education. Consideration of job responsibilities, rewards, ethics and current issues	Prerequisites: None.	LEC 1.0 1.0 1.0

CFS290AA	Child Abuse: Identification and Reporting in Child Care Settings	Identification, recording, and reporting by child care providers of sexual abuse, physical abuse, or neglect of young children.	Prerequisites: None.	LEC 1.0 1.0 1.0
CHA104	Community Health Work	Preparation of Community Health workers for outreach health prevention, advocacy, education, referral, and intervention working with individuals, communities and families. Includes history of community health work programs, community systems, and resources for clients	Prerequisites: None.	LEC 3.0 3.0 3.0
CHI101	Elementary Chinese (Mandarin) I	Introduction to the basic grammar, pronunciation and vocabulary of the Mandarin Chinese language. Includes the study of Chinese culture, practice of listening,	Prerequisites: None.	L+L 5.0 6.0 6.0
CHI102	Elementary Chinese (Mandarin) II	Study of grammar and vocabulary along with the study of Chinese culture. Emphasis on pronunciation and speaking skills.	Prerequisites: A grade of C or better in CHI101 or permission of Department or Division. Completion of prerequisites within the last three	L+L 5.0 6.0 6.0
CHI115	Beginning Chinese Conversation I	Introduction to Chinese sound system, basic grammar, and vocabulary necessary to develop speaking ability in Mandarin Chinese. Designed for students seeking speaking and listening ability with little emphasis on	Prerequisites: None.	LEC 3.0 3.0 3.0
CHI116	Beginning Chinese Conversation II	Continued development of speaking and listening skills for effective communication in Mandarin Chinese. Includes elements of Chinese culture	Prerequisites: A grade of C or better in CHI115 or permission of Department or Division. Completion of prerequisites within the last three	LEC 3.0 3.0 3.0
CHI201	Intermediate Chinese I	Continued development of speaking, reading, and writing proficiency in Mandarin Chinese through building vocabulary, phrases, idioms, and grammatical patterns. Includes study of Chinese culture	Prerequisites: A grade of C or better in CHI102 or permission of Department or Division. Completion of prerequisites within the last three	L+L 5.0 6.0 6.0
CHI202	Intermediate Chinese II	Advanced development of speaking, reading, and writing skills in Mandarin Chinese, and continued exploration of Chinese culture	Prerequisites: A grade of C or better in CHI201 or permission of Department or Division. Completion of prerequisites within the last three	L+L 5.0 6.0 6.0
CHI225	Intermediate Chinese Conversation I	Continued development of oral and aural skills for effective communication in Mandarin Chinese	Prerequisites: A grade of C or better in CHI116 or permission of Department or Division. Completion of prerequisites within the last three	LEC 3.0 3.0 3.0

CHI226	Intermediate Chinese Conversation II	A continuation of conversational skills for effective communication in Mandarin Chinese	Prerequisites: A grade of C or better in CHI225 or permission of Department or Division. Completion of prerequisites within the last three	LEC 3.0 3.0 3.0
CHM100	Preparation for Fundamental Chemistry	A preparatory course designed to review fundamental math and chemistry principles for students inexperienced or insecure with these concepts. Stresses individualized instruction. Designed to prepare	Prerequisites: None.	LEC 1.0 1.0 1.0
CHM107	Chemistry and Society	A survey of chemistry and its impact on society and the	Prerequisites: None.	LEC 3.0 3.0 3.0
CHM107LL	Chemistry and Society Laboratory	Laboratory experience in support of CHM107.	Prerequisites: A grade of C or better in CHM107 or Corequisites: CHM107.	LAB 1.0 3.0 3.0
CHM130	Fundamental Chemistry	A survey of the fundamentals of general chemistry. Emphasis on essential concepts and problem solving techniques. Basic principles of measurement, chemical bonding, structure and reactions, nomenclature, and the chemistry of acids and bases. Preparation for students taking more advanced courses in chemistry.	Prerequisites: A grade of C or better in [(CHM100 or high school algebra, or MAT140 or higher or an EdReady-Quantitative Reasoning, Algebra and Statistics score of 70 or higher or an EdReady-College Algebra score of 80 or higher) and (RDG100 or RDG100LL or higher or eligibility for CRE101 as indicated by appropriate reading placement)] or permission of Instructor or Department or Division	LEC 3.0 3.0 3.0
CHM130AA	Fundamental Chemistry with Lab	A survey of the fundamentals of general chemistry. Emphasis on essential concepts and problem solving techniques. Basic principles of measurement, chemical bonding, structure and reactions, nomenclature, and the chemistry of acids and bases. Preparation for students taking more advanced courses in chemistry.	Prerequisites: A grade of C or better in [(CHM100, or high school algebra, or MAT140 or higher, or an EdReady-Quantitative Reasoning, Algebra and Statistics score of 70 or higher, or an EdReady-College Algebra score of 80 or higher) and (RDG100, or RDG100LL, or higher, or eligibility for CRE101 as indicated by appropriate reading placement)] or permission of Instructor or Department or Division	LEC 4.0 3.0 3.0 LAB 0.0 3.0 3.0
CHM130LL	Fundamental Chemistry Laboratory	Laboratory experience in support of CHM130.	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: CHM130.	LAB 1.0 3.0 3.0

CHM138	Chemistry for Allied Health	Elements of fundamental and organic chemistry. Includes the general chemical behavior of inorganic matter and the structure of organic and biochemical systems. Course designed for specific allied health programs at MCCC. May not be applicable to other allied health programs or transferable.	Prerequisites: A grade of C or better in [CHM100 or MAT090 or MAT091 or MAT092 or (MAT103AA and MAT103AB) or higher or satisfactory score on math placement exam] or one year of high school chemistry taken within the last five years with a grade of C or better or permission of Instructor or Department or Division	LEC 3.0 3.0 3.0
CHM138LL	Chemistry for Allied Health Laboratory	Laboratory experience in support of CHM138, Chemistry for Allied Health.	Prerequisites: None. Corequisites: CHM138.	LAB 1.0 3.0 3.0
CHM140AA	General Chemistry for Engineers with Lab	Generalized study of the principles of chemistry as they relate to fields of engineering.	Prerequisites: A grade of C or better in [(CHM130 and CHM130LL), or CHM130AA, or one year of high school chemistry taken within the last five years] and (a grade of C or better in MAT151 or higher level mathematics course, or satisfactory placement), or permission of Instructor, or Department or Division Chair. Completion of prerequisites	L+L 6.0 9.0 9.0
CHM150	General Chemistry I	Detailed study of principles of chemistry for science majors and students in pre-professional curricula.	Prerequisites: A grade of C or better in [(CHM130 and CHM130LL) or CHM130AA or one year of high school chemistry taken within the last five years] and (a grade of C or better in MAT151 or higher level mathematics course or satisfactory placement) or permission of	LEC 4.0 4.0 4.0
CHM150AA	General Chemistry I with Lab	Detailed study of principles of chemistry for science majors and students in pre-professional curricula.	Prerequisites: A grade of C or better in [(CHM130 and CHM130LL) or CHM130AA or one year of high school chemistry taken within the last five years] and (a grade of C or better in MAT151 or higher level mathematics course or satisfactory placement) or permission of	LEC 5.0 4.0 4.0 LAB 0.0 3.0 3.0

CHM151	General Chemistry I	Detailed study of principles of chemistry for science majors and students in pre-professional curricula.	Prerequisites: A grade of C or better in [(CHM130 and CHM130LL) or CHM130AA or one year of high school chemistry taken within the last five years] and (a grade of C or better in MAT151 or higher level mathematics course or satisfactory placement) or permission of	LEC 3.0 3.0 3.0
CHM151AA	General Chemistry I with Lab	Detailed study of principles of chemistry for science majors and students in pre-professional curricula.	Prerequisites: A grade of C or better in [(CHM130 and CHM130LL), or CHM130AA, or one year of high school chemistry taken within the last five years] and (a grade of C or better in MAT151 or higher level mathematics course or satisfactory placement) or permission of	LEC 4.0 3.0 3.0 LAB 0.0 3.0 3.0
CHM151LL	General Chemistry I Laboratory	Laboratory experience in support of CHM150 or CHM151.	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: CHM150 or CHM151.	LAB 1.0 3.0 3.0
CHM152	General Chemistry II	A study of the chemical properties of the major groups of elements, equilibrium theory, thermodynamics, electrochemistry, and other selected topics.	Prerequisites: A grade of C or better in [(CHM150 or CHM151) and CHM151LL] or CHM150AA or CHM151AA or permission of	LEC 3.0 3.0 3.0
CHM152AA	General Chemistry II with Lab	A study of the chemical properties of the major groups of elements, equilibrium theory, thermodynamics, electrochemistry, and other selected topics.	Prerequisites: A grade of C or better in [(CHM150 or CHM151) and CHM151LL] or CHM150AA or CHM151AA or permission of	LEC 4.0 3.0 3.0 LAB 0.0 3.0 3.0
CHM152LL	General Chemistry II Laboratory	Laboratory experience in support of CHM152.	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: CHM152.	LAB 1.0 3.0 3.0
CHM230	Fundamental Organic Chemistry	Chemistry of representative groups of organic compounds, emphasizing biological applications.	Prerequisites: A grade of C or better in (CHM130 and CHM130LL) or [(CHM150 or CHM151) and CHM151LL], or permission of	LEC 3.0 3.0 3.0

CHM230AA	Fundamental Organic Chemistry with Lab	Chemistry of representative groups of organic compounds, emphasizing biological applications.	Prerequisites: A grade of C or better in [(CHM130 and CHM130LL), or CHM130AA], or [(CHM150 or CHM151) and CHM151LL), or CHM151AA)], or permission of Instructor, or Department, or Division	LEC 4.0 3.0 3.0 LAB 0.0 3.0 3.0
CHM230LL	Fundamental Organic Chemistry Laboratory	Laboratory experience in support of CHM230.	Prerequisites: A grade of C or better in CHM130LL or CHM151LL or equivalent or Corequisites: CHM230.	LAB 1.0 3.0 3.0
CHM235	General Organic Chemistry I	Rigorous introduction to chemistry of carbon-containing compounds. Reaction mechanisms and recent methods of synthesis emphasized.	Prerequisites: A grade of C or better in (CHM152 and CHM152LL), or CHM152AA, or permission of the Instructor, or Department or Division	LEC 3.0 3.0 3.0
CHM235AA	General Organic Chemistry I with Lab	Rigorous introduction to chemistry of carbon-containing compounds. Reaction mechanisms and recent methods of synthesis emphasized.	Prerequisites: A grade of C or better in (CHM152 and CHM152LL), or CHM152AA, or permission of the Instructor, or Department or Division	LEC 4.0 3.0 3.0 LAB 0.0 4.0 4.0
CHM235LL	General Organic Chemistry I Laboratory	Laboratory experience in support of CHM235.	Prerequisites: A grade of C or better in CHM235 or Corequisites: CHM235. Completion of prerequisites within the last two years recommended.	LAB 1.0 4.0 4.0
CHM236	General Organic Chemistry II	Study of chemistry of carbon-containing compounds continued. Structural determination and additional reaction mechanisms and modern methods of synthesis emphasized.	Prerequisites: A grade of C or better in (CHM235 and CHM235LL) or CHM235AA, or permission of the Instructor, or Department or Division	LEC 3.0 3.0 3.0
CHM236AA	General Organic Chemistry II with Lab	Study of chemistry of carbon-containing compounds continued. Structural determination and additional reaction mechanisms and modern methods of synthesis emphasized.	Prerequisites: A grade of C or better in (CHM235 and CHM235LL) or CHM235AA, or permission of the Instructor, or Department or Division	LEC 4.0 3.0 3.0 LAB 0.0 4.0 4.0
CHM236LL	General Organic Chemistry II Laboratory	Laboratory experience in support of CHM236.	Prerequisites: A grade of C or better in CHM236 or Corequisites: CHM236. Completion of prerequisites within the last two years recommended.	LAB 1.0 4.0 4.0
CHM260	Fundamental Biochemistry	Structures, properties, and functions of proteins, enzymes, nucleic acids, carbohydrates and lipids; the utilization and synthesis of these materials by living systems and the relationship of the processes to energy production and utilization.	Prerequisites: A grade of C or better in [(CHM230 and CHM230LL) or CHM230AA] or [(CHM235 and CHM235LL) or CHM235AA] or permission of Instructor or	LEC 3.0 3.0 3.0

CHM260LL	Fundamental Biochemistry Laboratory	Laboratory experience in support of CHM260.	Prerequisites: A grade of C or better in CHM260 or Corequisites: CHM260. Completion of prerequisites within the last two years recommended.	LAB 1.0 3.0 3.0
CHM282AA	Service-Learning Experience in	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 1.0 1.0 0.0
CHM282AB	Service-Learning Experience in	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 2.0 2.0 0.0
CHM282AC	Service-Learning Experience in	Unpaid Service-Learning experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 3.0 3.0 0.0
CHM295AA	Special Topics in Chemistry	Specialized chemistry-related content not represented in the main curriculum.	Prerequisites: None.	L+L 1.0 1.0 1.0
CHM295AB	Special Topics in Chemistry	Specialized chemistry-related content not represented in the main curriculum.	Prerequisites: None.	L+L 2.0 2.0 2.0
CHM295AC	Special Topics in Chemistry	Specialized chemistry-related content not represented in the main curriculum.	Prerequisites: None.	L+L 3.0 3.0 3.0
CHM296WA	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify) or permission of Instructor. Corequisites: Must be concurrent in at least one class which is related to student's major or career interest or	LAB 1.0 5.0 0.0
CHM296WB	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify) or permission of Instructor. Corequisites: Must be concurrent in at least one class which is related to student's major or career interest or	LAB 2.0 10.0 0.0

CHM296WC	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify) or permission of Instructor. Corequisites: Must be concurrent in at least one class which is related to student's major or career interest or	LAB 3.0 15.0 0.0
CHM296WD	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify) or permission of Instructor. Corequisites: Must be concurrent in at least one class which is related to student's major or career interest or	LAB 4.0 20.0 0.0
CHM298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
CHM298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0

CHM298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
CHS104	Hair Essentials I	Introduction to the basic theory and procedures in cosmetology hair essentials.	Prerequisites: Admission to the Cosmetologist (High School)	230
CHS106	Hair Essentials II	Hair-shaping techniques and chemical application procedures in cosmetology hair essentials.	Prerequisites: CHS104 or Program Manager's permission.	165
CHS114	Student Salon I	Continuation of cosmetology theory and practical concepts at an intermediate level. Theory will be focusing on professional development, salon ecology, anatomy and hair decisions. Practical skills will be demonstrated daily on clients and manikins. Rubrics on procedures are done monthly. One day a month on	Prerequisites: A grade of C or better in CHS106, or permission of Program Manager.	225
CHS116	Student Salon II	Apply concepts learned in the classroom and the student salon to develop real life scenarios while servicing a client and/or becoming a future business	Prerequisites: CHS114 or Program Manager's permission.	130
CHS119	Nail Essentials	Introduction to nail services in the beauty industry.	Prerequisites: CHS116 or Program Manager's permission.	230
CHS212	Skin Essentials	Introduction to skin services in the beauty industry.	Prerequisites: CHS119 or Program Manager's permission.	165
CHS214	Student Salon III	Prepares cosmetology students to be industry ready and prepared to perform services in their chosen field of expertise after licensure with the Arizona Barbering and	Prerequisites: CHS212 or Program Manager's permission.	225
CHS218	Cosmetology State Licensure Focus	This course is designed to prepare cosmetology students for the written and practical examinations for Arizona Barbering and Cosmetology Board licensure.	Prerequisites: CHS214 or Program Manager's permission.	130
CIS101	Technician IT Fundamentals	Survey of computer fundamentals. Focus on basic knowledge and skills, including components and hardware, word processing, presentations, spreadsheets, and email. Helps prepare students for	Prerequisites: None.	L+L 3.0 3.0 3.0
CIS102	Interpersonal and Customer Service Skills for IT Professionals	Examines behaviors necessary to develop and support an effective client service organization. Focuses on methods of increasing the effectiveness of help-desk professionals when responding to a range of customer	Prerequisites: None.	LEC 1.0 1.0 1.0

CIS102DA	IT Customer Support	Examines skills, tools and strategies necessary for becoming a computer help-desk or end-user support	Prerequisites: None.	L+L 3.0 4.0 4.0
CIS103	Introduction to Social Media	Identify and explain social media and Web 2.0 technologies for personal, academic, professional, and business applications. Create and maintain accounts on various sites to socialize, write, and share multimedia, while understanding the related ethics, privacy and	Prerequisites: None.	L+L 3.0 4.0 4.0
CIS105	Survey of Computer Information Systems	Overview of computer technology, concepts, terminology, and the role of computers in business and society. Discussion of social and ethical issues related to computers. Use of word processing, spreadsheet, database, and presentation software. Includes uses of application software and the Internet for efficient and	Prerequisites: None.	L+L 3.0 4.0 4.0
CIS107	The Electronic Game Industry	Introduction to the electronic game industry, including history, market, distribution and publishing channels, business models, team roles, and career landscape. Technical topics covered include software engineering, artificial intelligence, game physics, computer graphics,	Prerequisites: A grade of C or better in CIS105 or permission of Instructor.	L+L 3.0 4.0 4.0
CIS108	Electronic Portfolio Development	Compile, reflect on, and select prior learning experiences and artifacts. Design, produce, and publish an online portfolio that documents prior learning. Includes techniques for presenting the electronic	Prerequisites: A grade of C or better in (CIS105 or BPC110) or permission of Instructor.	L+L 1.0 2.0 2.0
CIS111	Ethics in Information Technology	Ethical issues that arise as a result of increasing use of computers, and the responsibilities of those who work with computers, either as computer science professionals or end users. Critical inquiry and review of ethical challenges in information technology business, including professional and corporate responsibility, government regulation, fiduciary responsibilities of information, infringement of intellectual property, security risk assessment, Internet crime, identity theft,	Prerequisites: None.	LEC 3.0 3.0 3.0
CIS113AE	Microsoft Word: Word Processing Level I	Using word processing software to create, name and manage files, edit text, and do basic formatting of	Prerequisites: None.	L+L 1.0 2.0 2.0
CIS113BE	Microsoft Word: Word Processing Level II	Using more advanced features of word processing software to format documents, create lists, mail-merged documents, and documents with themes and styles.	Prerequisites: A grade of C or better in CIS113AE or permission of Instructor.	L+L 1.0 1.0 1.0

CIS113CE	Microsoft Word: Word Processing Level III	Utilizing more advanced features of word processing software to incorporate style and theme elements, use desktop publishing capabilities, and insert tables.	Prerequisites: A grade of C or better in CIS113BE or permission of Instructor.	L+L 1.0 1.0 1.0
CIS113DE	Microsoft Word: Word Processing	Using word processing software to create, name and manage files, edit text, format, apply themes and styles, create and modify tables, apply desktop publishing	Prerequisites: None.	L+L 3.0 4.0 4.0
CIS114AE	Excel: Level I	Computer spreadsheet skills for solving business problems using Excel, including calculations,	Prerequisites: None.	L+L 1.0 2.0 2.0
CIS114BE	Excel: Level II	Additional Excel spreadsheet techniques, including macro programming, database searching, extraction, and linking to obtain prescribed reports and graphs.	Prerequisites: A grade of C or better in CIS114AE or permission of Instructor.	L+L 1.0 1.0 1.0
CIS114CE	Excel: Level III	Additional Excel spreadsheet techniques, including complex macros, statistics, and matrix manipulation. Project design using multiple, integrated spreadsheets	Prerequisites: A grade of C or better in CIS114BE or permission of Instructor.	LEC 1.0 1.0 1.0
CIS114DE	Excel Spreadsheet	Computer spreadsheet skills for solving business problems using Excel, including calculations, forecasting, projections, macro programming, database searching, extraction, linking, statistics, and matrix manipulation. Production of graphs and reports. Project	Prerequisites: None.	L+L 3.0 4.0 4.0
CIS116	Computer Graphics: Introduction to Microsoft Visio	Introduction to use of Visio graphics software to create and edit drawings using predefined shapes and templates. Use of Visio tools to create simple drawings	Prerequisites: None.	L+L 1.0 2.0 2.0
CIS117DM	Microsoft Access: Database	Introduction to Microsoft Access. Emphasis on features, design, and database management.	Prerequisites: None.	L+L 3.0 4.0 4.0
CIS118AB	PowerPoint: Level I	Use of PowerPoint software to produce professional-quality presentation visuals	Prerequisites: None.	L+L 1.0 2.0 2.0
CIS118BB	PowerPoint: Level II	Use of PowerPoint software to add movement and sound to desktop presentations to enhance audience	Prerequisites: A grade of C or better in CIS118AB.	L+L 1.0 1.0 1.0
CIS118DB	Desktop Presentation: PowerPoint	Use of PowerPoint to produce professional-quality presentation visuals with animation and sound.	Prerequisites: None.	L+L 3.0 4.0 4.0
CIS119DO	Introduction to Oracle: SQL	Use of Oracle tools and methodologies to fulfill real-world business information requirements. Hands-on exercises for designing, creating, and maintaining database structures to store, retrieve, update, and display data in a relational database using the SQL programming language. Creating and maintaining	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: CIS105 or permission of Instructor.	L+L 3.0 4.0 4.0

CIS119DP	Oracle: Database Administration	Basic administrative tasks performed by a database administrator (DBA). Conceptual understanding and hands-on applications of the Oracle database	Prerequisites: A grade of C or better in CIS119DO, or permission of Instructor. CIS126++ or CIS121++ is	L+L 3.0 4.0 4.0
CIS120DA	Introduction to Adobe Premiere	Foundations of video import, export, and editing. Includes parts and function of a video camera, preproduction and production, incorporating photographs, titles, graphics, animation and audio, capturing, editing, rendering and outputting digital	Prerequisites: None.	L+L 3.0 4.0 4.0
CIS120DB	Introduction to Adobe Illustrator	Provides students with the knowledge and skills to use Adobe Illustrator graphics software on a computer. Basic foundation course in the use of electronic techniques to create, manipulate, and edit images, text, abstract art, graphics design, color graphics and business charts; determine file formats appropriate for	Prerequisites: None.	L+L 3.0 4.0 4.0
CIS120DC	Introduction to Adobe Animate	Focuses on entry-level skill expectations for digital animation using Adobe Animate. Covers basic animation techniques used in the creation, manipulation, and editing of animation graphics.	Prerequisites: None.	L+L 3.0 4.0 4.0
CIS120DF	Introduction to Adobe Photoshop	Focuses on entry-level skills and knowledge for digital imaging using Adobe Photoshop. Prepares students for the Adobe Certifications related to Photoshop.	Prerequisites: None.	L+L 3.0 4.0 4.0
CIS120DK	Introduction to Digital Video Editing	Introduction to digital video editing comprises of a foundation for video import, export, and editing functions. Includes parts and function of a video camera, preproduction and production, incorporating photographs, titles, graphics, animation and audio,	Prerequisites: None.	L+L 3.0 4.0 4.0
CIS120DL	Introduction to Adobe After Effects	Includes creating visual effects for video projects. Explores techniques and methodologies used to create shots for big budget special effects. Topics include color and light matching, keying, motion tracking, rotoscoping	Prerequisites: A grade of C or better in CIS120DA or CIS120DK, or permission of Instructor.	L+L 3.0 4.0 4.0
CIS120DO	Introduction to Adobe Audition	Introduction to editing audio files in a multitrack editing environment using Adobe Audition. Includes the import of files in a variety of formats that were generated using other software and how to export files.	Prerequisites: None.	L+L 3.0 4.0 4.0
CIS121AB	Microsoft Command Line Operations	Use of the Microsoft command line interface: basic concepts, internal and external commands,	Prerequisites: None.	L+L 1.0 2.0 2.0

CIS121AE	Windows Operating System: Level I	Specific topics include Windows basics, navigating and customizing the desktop, maintaining hardware and software, improving performance, configurations, securing your computer, taskbar, organizing, searching and managing folders and files, installing and uninstalling applications, Internet Explorer fine tuning,	Prerequisites: None.	L+L 1.0 2.0 2.0
CIS121AH	Microsoft PowerShell/Command Line Operations	Day-to-day command line administration tasks of Microsoft Windows. PowerShell used to create scripts to administer Microsoft windows environment.	Prerequisites: None. MST150++ suggested but not required.	L+L 3.0 4.0 4.0
CIS121AI	Mac Operating System	Specific topics include getting started with Mac OS; working with disks, folders, and files; installing and using applications; setting system preferences; printing, faxing, and scanning; getting and living online; using iLife; sharing a Mac with other users; creating a home	Prerequisites: None.	L+L 1.0 2.0 2.0
CIS122AE	Windows Operating System: Level II	Additional capabilities of the Windows program that configure devices and customize the presentation of the operating system. System tools, control panel utilities, the My Computer, Network Neighborhood, and	Prerequisites: A grade of C or better in CIS121AE or permission of Instructor.	L+L 1.0 2.0 2.0
CIS124AA	Project Management Software: Level I	Utilization of project management software packages by managers and advanced business students to solve critical management planning tasks. Evaluation of management opportunities utilizing software packages to monitor project progress and resource allocation.	Prerequisites: None.	L+L 1.0 1.7 1.7
CIS124BA	Project Management Software: Level II	Advanced use of project management software. Covers features and functions to solve critical management planning tasks. Project communications, scheduling, resource allocation, tracking processes and importing and exporting data also covered. Project consolidation	Prerequisites: A grade of C or better in CIS124AA or permission of Instructor.	L+L 1.0 1.7 1.7
CIS126DL	Linux Operating System	Introduction to the Linux Operating system. Develop knowledge and skills required to install, configure and troubleshoot a Linux-based workstation including basic network functions. Learn basic command line and Graphical User Interface (GUI) desktop environment utilities and applications. Fundamental abilities to	Prerequisites: None.	L+L 3.0 4.0 4.0
CIS126RH	Red Hat System Administration I	Introduction to core administration skills needed to manage a Red Hat Enterprise Linux system. This Red Hat Academy course helps prepare for the Red Hat certification exams using a hands-on, task-focused	Prerequisites: None.	L+L 3.0 4.0 4.0

CIS130DA	3D Studio Max: Modeling	Introduction to 3D modeling using 3D Studio Max. Emphasis will be placed on Polygonal, Solid, and Surface modeling tools. Students will also understand concepts such as modifiers, sub-object editing, extruding, Booleans, lofting, lathing and compound	Prerequisites: A grade of C or better in CIS105.	L+L 3.0 4.0 4.0
CIS130DB	3D Studio Max: Animation	Introduction to three-dimensional animation tools and principles, with an emphasis on character construction and animation. 3D Studio Max will be the primary	Prerequisites: A grade of C or better in CIS105.	L+L 3.0 4.0 4.0
CIS131AA	Doing Business on the Internet	Overview of different ways businesses are taking advantage of and using the Internet. Includes how companies are selling items and services over the Internet; techniques used to expand customer contacts; marketing strategies; availability of government and financial information; future potential and disadvantages; using the Internet for customer service;	Prerequisites: None.	LEC 1.0 1.0 1.0
CIS132	HTML/CSS	Overview of foundational HyperText Markup Language (HTML) and Cascading Style Sheets (CSS) coding. Create web pages and sites that adhere to web standards and best practices using current web coding	Prerequisites: None.	L+L 3.0 4.0 4.0
CIS133AA	Internet/Web Development Level I-A	Overview of the Internet and its resources. Hands-on experience with various Internet communication tools	Prerequisites: None.	L+L 1.0 2.0 2.0
CIS133DA	Internet/Web Development Level I	Overview of the Internet/World Wide Web (WWW) and its resources. Hands-on experience with various Internet/WWW resource discovery, information retrieval, and social media tools. Design and Development of multi-page websites using current Hyper Text Markup	Prerequisites: None.	L+L 3.0 4.0 4.0
CIS136	Content Management Systems: WordPress	Overview of WordPress Content Management System. Includes hands-on design and creation of web pages and blogs for the World Wide Web. Designed to cover	Prerequisites: None.	L+L 3.0 4.0 4.0
CIS138DA	Desktop Design and Publishing Using Adobe InDesign	Use of Adobe InDesign to compose and print textual and graphic materials of high quality. Includes word processing of copy, use of graphics programs, layout of design elements, printing alternatives, and file formats.	Prerequisites: None.	L+L 3.0 4.0 4.0
CIS140	Survey of Multimedia Technology	Introduction to multimedia technology and its uses. Overview of the various hardware and software used in developing and delivering multimedia. Emphasis on how multimedia is used in education and training. Provides a basic understanding of the process used to define and	Prerequisites: A grade of C or better in CIS105 or permission of Instructor.	L+L 2.0 3.0 3.0

CIS143	Introduction to Critical Infrastructure Protection	History and overview of critical infrastructure protection and its ties within the Department of Homeland Security prior to and after September 11, 2001. Focus on risk management associated with sectors specific industries and provides an overview of the public and private partnerships, along with laws and standards developed	Prerequisites: None.	LEC 3.0 3.0 3.0
CIS150	Programming Fundamentals	Structured program design and logic tools. Use of computer problems to demonstrate and teach concepts using appropriate programming language.	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: CIS105 or permission	L+L 3.0 4.0 4.0
CIS150AB	Object-Oriented Programming Fundamentals	Structured and Object-Oriented design and logic tools. Use of computer problems to demonstrate and teach concepts using an appropriate programming language.	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: CIS105 or permission	L+L 3.0 4.0 4.0
CIS151	Computer Game Development -Level I	Introduction to object-oriented game development, game design, and game theory. Use of computer software to demonstrate and teach concepts using an appropriate game development platform to model real-time simulations and create computer games using object oriented tools. Introduction to developing PC games, educational software, and training software	Prerequisites: A grade of C or better in CIS105 or permission of Instructor.	L+L 3.0 4.0 4.0
CIS154	Database Modeling and Design	Top-down, systematic approach to defining a database design based on analysis of business information and requirements. Identifying and evaluating standard data model and design patterns. Developing an entity-relationship (ER) diagram that accurately reflects the business. Mapping the ER diagram to an initial	Prerequisites: A grade of C or better in CIS105 or permission of Instructor.	L+L 3.0 4.0 4.0
CIS156	Python Programming: Level I	Introduction to Python programming. Includes general concepts, program design, development, data types, operators, expressions, flow control, functions, classes, input and output operations, debugging, structured	Prerequisites: A grade of C or better in CIS105 or permission of Instructor.	L+L 3.0 4.0 4.0
CIS159	Visual Basic Programming I	Use of the Visual Basic programming language to solve problems using suitable examples from business or	Prerequisites: A grade of C or better in CIS105 or permission of Instructor.	L+L 3.0 4.0 4.0
CIS162	C Programming I	Beginning C programming. Includes features needed to construct programs, functions, pointers, input and output options, data types, structures, and unions, and	Prerequisites: A grade of C or better in CIS105 or permission of Instructor.	L+L 3.0 4.0 4.0
CIS162AB	C++: Level I	Introduction to C++ programming including general concepts, program design, development, data types, operators, expressions, flow control, functions, classes, input and output operations, debugging, structured	Prerequisites: A grade of C or better in CIS105 or permission of Instructor.	L+L 3.0 4.0 4.0

CIS162AD	C#: Level I	Introduction to C# programming including general concepts, program design, development, data types, operators, expressions, flow control, functions, classes, input and output operations, debugging, structured	Prerequisites: A grade of C or better in CIS105 or permission of Instructor.	L+L 3.0 4.0 4.0
CIS162RS	Rust Programming	Beginning Rust programming. Includes features needed to construct programs, functions, pointers, input and output options, data types, structures, unions, and disk	Prerequisites: A grade of C or better in CIS105 or permission of Instructor.	L+L 3.0 4.0 4.0
CIS163AA	Java Programming: Level I	Introduction to Java programming. Includes features needed to construct Java Applets, Java Applications, control structures, methods, arrays, character and string manipulation, graphics, and object-oriented	Prerequisites: A grade of C or better in CIS105 or permission of Instructor.	L+L 3.0 4.0 4.0
CIS164AB	Oracle: PL/SQL Programming	Writing PL/SQL procedures, functions, and packages. Creating and managing PL/SQL program units and database triggers in Oracle development environment. Managing dependencies and manipulating large	Prerequisites: A grade of C or better in CIS119DO or permission of Instructor.	L+L 3.0 4.0 4.0
CIS165	Introduction to iOS Application Development	Introduction to iOS device programming utilizing appropriate software, programming languages, and iOS frameworks. Understand iOS hardware and feature basics. Go through the entire design process from	Prerequisites: A grade of C or better in CIS150++, or CIS156, or CIS159, or CIS162++, or CIS163AA, or permission of Instructor.	L+L 3.0 4.0 4.0
CIS165DA	Introduction to Android Application Development	Beginning with an overview of Android features, this class explores the required software tools and programming techniques for developing Android device applications from creating the user interface, working with activities, intents and views, to using databases, providing data persistence, accessing device services,	Prerequisites: A grade of C or better in CIS150++, or CIS156, or CIS159, or CIS162++, or CIS163AA, or permission of Instructor.	L+L 3.0 4.0 4.0
CIS165DB	C#/VB.NET: Windows 8 App Development	Building upon desktop application development with Visual Studio using VB.NET or C# languages, developing apps for Windows 8 utilizes Extensible Application Markup Language (XAML) for interface design. Windows 8 utilizes UI design standards that are unique from previous versions. Develop apps for Windows 8 smartphones and tablets that utilize touch input methods, translate into different resolutions, states, and orientations, and can tap into mobile	Prerequisites: A grade of C or better in CIS159 or CIS162AD or permission of Instructor.	L+L 3.0 4.0 4.0

CIS165DC	Xamarin/C# Cross-Platform Development	Develop cross-platform mobile apps for iOS, Android, and Windows devices using the Xamarin.Forms Platform and C#, utilizing the Visual Studio IDE. Focusing on Xamarin.Forms projects, the course includes PCL and SAP approaches to shared code, developing interfaces with XAML or in C# code, emulator testing, data binding, backgrounding, packaging for deployment. Coding techniques include Layouts and shared controls	Prerequisites: A grade of C or better in CIS162AD, or permission of Instructor.	L+L 3.0 4.0 4.0
CIS166AA	Introduction to JavaScript	Introduction to basic JavaScript programming concepts including syntax. Covers Hypertext Markup Language (HTML), programming logic and debugging, as well as	Prerequisites: A grade of C or better in CIS133DA or permission of Instructor.	L+L 3.0 4.0 4.0
CIS166AC	Web Scripting with Active Server Pages (ASP).NET	Introduction to web scripting using Microsoft's ASP.Net (Active Server Pages). Web application development using Hypertext Markup Language (HTML), ASP.Net Web Forms, programming logic, and Structured Query	Prerequisites: A grade of C or better in CIS133DA and (CIS159 or CIS162AD) or permission of Instructor.	L+L 3.0 4.0 4.0
CIS166AE	Web Scripting with PHP: Hypertext Preprocessor (PHP)	Introduction to web scripting with PHP (PHP: Hypertext Preprocessor). Web application development using Hypertext Markup Language (HTML), PHP, programming logic, and Structured Query Language	Prerequisites: A grade of C or better in CIS133DA or permission of Instructor.	L+L 3.0 4.0 4.0
CIS171	Survey of Blockchain Technology	This survey class will introduce you to the exciting world of distributed ledger technology (i.e. the blockchain), cryptocurrencies such as Bitcoin and Ether as well as smart contracts. The emphasis is on the blockchain's role in revolutionizing business. Basic knowledge of computer operation and the ability to browse the	Prerequisites: None.	L+L 3.0 4.0 4.0
CIS190	Introduction to Networking	Overview of networks. Emphasis on the elements of a network, current issues and products, and use of a network. Includes terminology, hardware and software components, connectivity, resource monitoring and sharing, electronic mail and messaging, and security	Prerequisites: None. Corequisites: CIS105 or permission of Instructor.	L+L 3.0 4.0 4.0
CIS201	Introduction to Operational Technology	Differences between Operational Technology (OT) and Information Technology (IT). Focus on the components and their uses within an OT system. Addresses the inherent threats, physical and cyber related, to an OT system when connected to an IT system needed to be	Prerequisites: A grade of C or better in CIS270, or ITS110, or permission of Instructor.	L+L 3.0 4.0 4.0

CIS202	Introduction to Smart Grid Security	Focus on differences between control systems, used to control physical and computer information systems, used to process data, in the Power and Utility industry. Power Systems industry, system elements, functions	Prerequisites: A grade of C or better in CIS270 or ITS110, or permission of Instructor.	LEC 3.0 3.0 3.0
CIS203	Principles of the Risk Management Framework	History and overview of the Federal Information Security Modernization Act (FISMA) and its effect on cybersecurity management and oversight. Focuses on the National Institute of Standards and Technology (NIST) Risk Management Framework (RMF) and its use in the process of authorizing information systems to	Prerequisites: A grade of C or better in CIS270 or ITS110, or permission of Instructor.	L+L 3.0 4.0 4.0
CIS213DE	Advanced Microsoft Word: Word Processing	Using advanced word processing software features to perform tasks such as mail merge, collaboration, web pages, math functions, macros, photo enhancements, graphics, tables, forms and manage long documents.	Prerequisites: A grade of C or better in CIS113DE or (CIS113AE and CIS113BE and CIS113CE) or permission of Instructor.	L+L 3.0 4.0 4.0
CIS214DA	Advanced Excel for Data Analytics	Advanced Excel spreadsheet features for data analytics including advanced functions, PivotTables, Data Modelling, Dashboard creation and forecasting for Business Intelligence (BI). Includes capstone project of an interactive dashboard using a multi-table Excel Data	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: [CIS114DE and (CIS117DM or CIS276DA or CIS276DB)], or permission of	L+L 3.0 4.0 4.0
CIS214DE	Advanced Excel Spreadsheet: Level II	Advanced Excel spreadsheet features including formatting techniques, macros and Visual Basic for applications. Templates, built-in functions and lists as well as analysis tools including Pivot Tables and Goal Seek covered. Import and export data, workgroup	Prerequisites: A grade of C or better in CIS114DE or permission of Instructor.	L+L 3.0 4.0 4.0
CIS215	Foundations of Data Analytics and Programming	Overview of data analytics and programming, concepts, terminology, and how analytics and programming are used professionally in business. Use of office application software, dashboards and Integrated Development Environments (IDEs). Includes exploration	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: CIS105 or permission of Instructor.	L+L 3.0 4.0 4.0
CIS216	Data Governance, Management, and Quality	Overview of data governance, data management, and data quality concepts and terminology, and the roles of individuals and businesses with respect to data governance, data management and data quality in analytics. Use of word processing, spreadsheet, database and presentation software. Will demonstrate	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: CIS215 or permission of Instructor.	L+L 3.0 4.0 4.0

CIS217AM	Advanced Microsoft Access: Database Management	Advanced database concepts including database design, primary and secondary key selection and relationships between tables. Queries, sub forms, macros, events, Visual Basic modules and Access	Prerequisites: A grade of C or better in CIS117DM.	L+L 3.0 4.0 4.0
CIS220DF	Adobe Photoshop Level II: Advanced Digital Imaging	Goes beyond the basic use of palettes, selections, layers, menus, and tool options, and focuses on using Photoshop software's advanced features to manipulate and correct digital and digitally produced images.	Prerequisites: A grade of C or better in CIS120DF or permission of Instructor.	L+L 3.0 4.0 4.0
CIS224	Project Management Microsoft Project for Windows	Introduction to project management concepts while working with MS Project to solve complex project management networks, including creating Gantt and PERT charts, tracking project progress, planning for restrictions, and integrating MS Project with other	Prerequisites: None.	L+L 3.0 4.0 4.0
CIS225AB	Object-Oriented Analysis and Design	Methodologies and notations for fundamental object-oriented analysis and design including use cases, objects, classes, stereotypes, and relationships. Object-oriented iterative process for system development. A continuous application development exercise for	Prerequisites: Any programming language or permission of Instructor.	L+L 3.0 4.0 4.0
CIS227	Assembly Language	Concepts and use of the Assembly programming language, including basic arithmetic operations, flow	Prerequisites: A grade of C or better in CIS162++ or permission of	L+L 3.0 4.0 4.0
CIS230DA	3D Studio Max: Materials	Emphasis on creating and applying materials and textures to three-dimensional environments. Techniques for creating skins, surfaces, and shading types for objects, environments and characters will be explored. Original textures, both life-like and imaginary, will be	Prerequisites: A grade of C or better in CIS130DA or CIS120DF or permission of Instructor.	L+L 3.0 4.0 4.0
CIS230DB	3D Studio Max: Lighting and Rendering	Emphasis on lighting and rendering for three-dimensional environments. Techniques for illuminating scenes and characters will be explored. Prepare scenes for rendering to video, film and real-time rendering using	Prerequisites: A grade of C or better in CIS130DA or permission of instructor.	L+L 3.0 4.0 4.0
CIS233DA	Internet/Web Development Level II	Plan, design and create web sites using HTML and Advanced Cascading Style Sheets (CSS). Expedite the development process using CSS frameworks and libraries. Enhance user experience and web site functionality using supporting technologies. Exploration of User Interface (UI) and User Experience (UX), best	Prerequisites: A grade of C or better in CIS133DA or permission of Instructor.	L+L 3.0 4.0 4.0

CIS235	e-Commerce	Introduction to Electronic Commerce on the Internet. Designing an electronic storefront including web page content and development, e-commerce site marketing, advertisement, legal and security considerations, credit card and other debit transaction covered. Also includes	Prerequisites: A grade of C or better in CIS133DA or permission of Instructor.	L+L 3.0 4.0 4.0
CIS238DL	Linux System Administration	Managing Linux Operating Systems including sophisticated manipulation of file structures, backup systems, printing processes, troubleshooting, user account management, hard disk maintenance and configuration, process monitoring and prioritizing, kernel customization, and system resource control. Preparation for industry certifications such as the CompTIA Linux+, the Red Hat Certified System Administrator (RHCSA),	Prerequisites: A grade of C or better in CIS126DL or CIS126RH or permission of Instructor.	L+L 3.0 4.0 4.0
CIS238RH	Red Hat System Administration II	Continue to develop core administration skills needed to manage a Red Hat Enterprise Linux system. This Red Hat Academy course helps to prepare students for the Red Hat certification exams using a hands-on, task-	Prerequisites: A grade of C or better in CIS126RH, or permission of Instructor.	L+L 3.0 4.0 4.0
CIS239DL	Linux Shell Scripting	Linux Shell Scripting syntax and methods including the automation of system tasks as well as interpreted user-level programming. Course includes the Linux Borne Again Shell (BASH) as well as a variety of industry	Prerequisites: A grade of C or better in CIS238DL or CIS238RH or permission of Instructor.	L+L 3.0 4.0 4.0
CIS240DL	Linux Network Administration	In depth networking based on Linux servers and the Transmission Control Protocol/Internet Protocol (TCP/IP) protocol suite. Integrating Linux servers and workstations into a network environment with multi-platform network operating systems including a variety of open-standard and proprietary protocols. Preparation for industry certifications such as the CompTIA Linux+, the Red Hat Certified System Administrator (RHCSA),	Prerequisites: A grade of C or better in CIS238DL or permission of Instructor.	L+L 3.0 4.0 4.0
CIS240RH	Red Hat System Administration III	Provides solid understanding of how to automate services on a Linux system. Covers use of Ansible to automate provisioning, configuration, application deployment, and orchestration on Red Hat Enterprise Linux 8. Content aligns with the Red Hat Certified	Prerequisites: A grade of C or better in CIS238RH or permission of Instructor.	L+L 3.0 4.0 4.0
CIS243	Internet/Web Development Level III	Development of interactive websites with graphics, video, and sound using advanced web design techniques and tools. Design theory for maximizing web readership, interactive and multimedia elements, speed	Prerequisites: A grade of C or better in CIS233DA or permission of Instructor.	L+L 3.0 4.0 4.0

CIS250	Management of Information Systems	The study of business information systems and its management, communication, e-business strategies, emerging technologies, database concepts, and project management. Overview of systems analysis and design. Learn about the competitive and strategic uses of information systems and how they are transforming	Prerequisites: A grade of C or better in CIS105.	L+L 3.0 4.0 4.0
CIS251	Computer Game Development -Level II	Advanced object-oriented game development, advanced game design, and advanced game theory. Use of game development software tools to demonstrate advanced concepts for modeling real-time simulations and creating computer games using object oriented development tools. In depth coverage of game	Prerequisites: A grade of C or better in CIS151 or permission of Instructor.	L+L 3.0 4.0 4.0
CIS252	Introduction to Kubernetes Administration	Provides students skills and knowledge to perform the responsibilities of a Kubernetes administrator. Includes covering the cluster architecture, installation, configuration, workloads, scheduling, services, networking, storage and troubleshooting. Helps	Prerequisites: A grade of C or better in CIS238DL or CIS238RH or permission of Instructor.	L+L 4.0 5.0 5.0
CIS254	Introduction to Kubernetes Application	Provides students skills and knowledge to perform the responsibilities of a Kubernetes application developer. Helps students prepare for the Certified Kubernetes	Prerequisites: A grade of C or better in CIS126DL or CIS126RH or permission of Instructor.	L+L 3.0 4.0 4.0
CIS255	Introduction to Kubernetes Security	Provide students with skills and knowledge on a broad range of best practices for securing container-based applications and Kubernetes platforms during build, deployment, and runtime. Helps students prepare for	Prerequisites: A grade of C or better in CIS252 or permission of Instructor.	L+L 3.0 4.0 4.0
CIS256	Python Programming Level II	Advanced Python object-oriented programming concepts and applications. Emphasis on code documenting, versioning, unit testing strategies, and security practices for Python project/package development. Includes Python applications for data	Prerequisites: A grade of C or better in CIS156 or permission of Instructor.	L+L 3.0 4.0 4.0
CIS256CN	Python for Cybersecurity and Networking	Focus on practical applications of Python frameworks and libraries to support offensive and defensive cybersecurity operations and the management of	Prerequisites: A grade of C or better in (CIS156 and CNT140AB), or permission of Instructor.	L+L 3.0 4.0 4.0
CIS256DA	Python for Data Analysis	Introduction to data analysis concepts using Python's rich set of tools, libraries, and packages. Includes basic data analysis, creation of meaningful data visualizations, and advanced topics such as supervised	Prerequisites: A grade of C or better in CIS156 or permission of Instructor.	L+L 3.0 4.0 4.0

CIS259	Visual Basic Programming II	Use of the Visual Basic programming language to identify and solve advanced problems using suitable examples from business or other disciplines.	Prerequisites: A grade of C or better in CIS159 or permission of Instructor.	LEC 3.0 4.0 3.7
CIS260BI	Data Visualization: Power Business Intelligence (BI)	This data visualization course covers the graphic representation of data and how to effectively and efficiently communicate it from singular and disparate data sources using Power Business Intelligence (BI). Helps students prepare for the Microsoft Power BI Data	Prerequisites: A grade of C or better in CIS114DE and (CIS215 or CIS214DA) and (CIS276DA or CIS276DB) or permission of Instructor.	L+L 3.0 4.0 4.0
CIS260TB	Data Visualization: Tableau	This data visualization course covers the graphic representation of data and how to effectively and efficiently communicate it from singular and disparate data sources using Tableau. Helps students prepare for	Prerequisites: A grade of C or better in CIS114DE and (CIS215 or CIS214DA) and (CIS276DA or CIS276DB) or permission of	L+L 3.0 4.0 4.0
CIS262AD	C# Level II	Advanced C# programming with emphasis on data structures, dynamic memory allocation, object-oriented programming, user interfaces, and database processing. Overview of web applications, network	Prerequisites: A grade of C or better in CIS162AD or permission of Instructor.	L+L 3.0 4.0 4.0
CIS263AA	Java Programming: Level II	Intermediate Java programming. Includes features needed to construct object-oriented programming, multithreading, multimedia, files, streams and data	Prerequisites: A grade of C or better in CIS163AA or permission of Instructor.	L+L 3.0 4.0 4.0
CIS265	Advanced iOS Application Development	Advanced iOS device programming utilizing the Swift/XCode application, and the programming languages Objective-C and/or Swift, utilizing various iOS frameworks. Understand iOS hardware and feature basics. Go through entire design process from concept	Prerequisites: A grade of C or better in CIS150++ and CIS165, or permission of Instructor.	L+L 3.0 4.0 4.0
CIS265DA	Advanced Android Application Development	Advanced Android device programming utilizing an Android Integrated Development Environment, and an Android-focused programming language such as Java or Kotlin, utilizing various advanced activity layouts, views, and intents. Covers advanced Object Oriented Programming (OOP) practices, local and cloud-based database backends, threading, incorporating device	Prerequisites: A grade of C or better in CIS165DA or permission of Instructor.	L+L 3.0 4.0 4.0
CIS266	Network Integration Capstone	Application of project management, installation and troubleshooting to integrate multiple operating systems. Topics include: diagnostic and troubleshooting procedures, security vulnerability and penetration software to installation.	Prerequisites: A grade of C or better in [(CIS238DL or CIS238RH) and (CIS240DL or CIS240RH)], or CNT160AB, or [(MST155DC and MST157DC) and (CIS270 or CIS271DL or CIS271RH or CNT205)], or associated industry	L+L 4.0 5.0 5.0

CIS267	Pega System Architect Essentials	An overview of the Pegasystems low-code platform for Artificial Intelligence (AI)-powered decisioning and workflow automation. Topics covered will include case management, data and integration, security, Dev-Ops, the user experience, application development, reporting, and mobility. The course will prepare you to take the Certified Pega System Architect (CPSA) exam.	Prerequisites: A grade of C or better in (CIS126DL or CIS126RH), CIS133DA, CIS263AA, and CIS276DA or permission of Instructor.	L+L 4.0 5.0 5.0
CIS270	Essentials of Network and Information Security	The intent of the Essentials of Network and Information Security is to provide students with a basic understanding of the fundamental concepts of cybersecurity and security design. Students will explore the threats to security of information systems; responsibilities and basic tools for information security, including communication security, infrastructure security, organizational security and basic cryptography. Introduces the language of network security and hardware, software and firmware components of an	Prerequisites: A grade of C or better in BPC270 or BPC274 or CIS126++ or MST150++, and CIS190 or CNT140++, or permission of Instructor.	L+L 3.0 4.0 4.0
CIS271DL	Linux Security	Implementing in-depth security methods and techniques in a Linux-based network environment. Utilize programs, utilities and configuration techniques to provide user-level, file system, and network security. Gain knowledge in a variety of security cracking techniques and how to guard against them. In all aspects of security, the standard of practicing professional ethics seriously emphasized. Preparation for industry certifications such	Prerequisites: A grade of C or better in CIS240DL or Permission of Instructor.	L+L 3.0 4.0 4.0
CIS271RH	Red Hat System Administration IV	Provides solid understanding on containers, containerized applications, and orchestration of containers using Kubernetes and Red Hat OpenShift	Prerequisites: A grade of C or better in CIS238RH or permission of Instructor.	L+L 3.0 4.0 4.0
CIS275DL	Linux Capstone	The Linux Capstone course aggregates the skills, knowledge, communication, and critical thinking skills from the Linux Program. This course is to emulate a production environment that prepares students to work as a Linux Systems Administrator. The course helps to	Prerequisites: A grade of C or better in CIS240DL, or CIS240RH, or permission of Instructor.	L+L 3.0 4.0 4.0

CIS276DA	MySQL Database	A broad overview of the MySQL database. Includes Structured Query Language (SQL) instruction for data definition, data manipulation, and data retrieval. Develops knowledge and skills required to install MySQL, model and create new databases, manage users, authentication, and stored procedures, and	Prerequisites: A grade of C or better in CIS105, or CIS117DM, or permission of Instructor.	L+L 3.0 4.0 4.0
CIS276DB	SQL Server Database	A broad overview of the Microsoft Structured Query Language (SQL) Server database. Includes SQL instruction for data definition, data manipulation, and data retrieval. Develops knowledge and skills required to install SQL Server, model and create new databases, manage users, authentication, and stored procedures,	Prerequisites: A grade of C or better in CIS105, or CIS117DM, or permission of Instructor.	L+L 3.0 4.0 4.0
CIS276DC	NoSQL	A broad overview of Not Only SQL (NoSQL) databases. Contrast NoSQL databases to the Structured Query Language (SQL) databases. Includes NoSQL instruction for data definition, data manipulation, and data retrieval. Develops knowledge and skills required to install NoSQL Servers, model and create NoSQL databases, manage users, authentication, and stored	Prerequisites: A grade of C or better in CIS215 and (CIS276DA or CIS276DB), or permission of Instructor.	L+L 3.0 4.0 4.0
CIS280	Current Topics in Computing	Critical inquiry of current topics in computing. Application of industry trends to solve problems and/or investigate	Prerequisites: None.	L+L 3.0 4.0 4.0
CIS280AA	Current Topics in Computing	Critical inquiry of current topics in computing. Application of industry trends to solve problems and/or investigate	Prerequisites: None.	L+L 1.0 2.0 2.0
CIS280AB	Current Topics in Computing	Critical inquiry of current topics in computing. Application of industry trends to solve problems and/or investigate	Prerequisites: None.	L+L 2.0 3.0 3.0
CIS285	Computer Information Systems Capstone Project	Students will create a capstone project with opportunities for individualized research and application of aggregate technology and professional knowledge and skills obtained throughout the student's program of study. Focus on communication, problem solving, critical	Prerequisites: Permission of Program Director or Instructor.	L+L 3.0 4.0 0.0

CIS286	Technology Team Peer Mentorship	Students will have an opportunity to mentor other students and work as a team to develop and support a technology project related to their program of study paralleled by professional expertise and guidance from team members, faculty, and/or industry mentor. Focus on application of technology knowledge to the development of a team project to solve real world technology problems/needs with an innovative technology focus. Focus on the team experience and project and workforce development, management and	Prerequisites: A grade of C or better in EPS151. Corequisites: CIS285.	L+L 3.0 4.0 4.0
CIS288	Digital Design Portfolio	Procedures for compiling, evaluating, and selecting prior learning experiences and artifacts for a digital portfolio. Covers techniques for the design, production, and publishing of an online portfolio documenting prior learning. Includes techniques for presenting the digital	Prerequisites: A grade of C or better in CIS133DA and (CIS120DB or CIS120DF or CIS138DA) or permission of Instructor.	L+L 2.0 3.0 3.0
CIS290AA	Computer Information Systems Internship	Work experience in business or industry	Prerequisites: Permission of Instructor.	LAB 1.0 6.0 0.0
CIS290AB	Computer Information Systems Internship	Work experience in business or industry	Prerequisites: Permission of Instructor.	LAB 2.0 12.0 0.0
CIS290AC	Computer Information Systems Internship	Work experience in business or industry	Prerequisites: Permission of Instructor.	LAB 3.0 18.0 0.0
CIS293	VMware ESXI Server Enterprise	Introduction to vSphere, vCenter and VMware ESXI server in the enterprise. Covers many aspects of virtualization for VMware ESXI server administration. Designed to develop knowledge and skills required to install, configure, and troubleshoot a VMware ESXI Server (vSphere) including basic network functions. Helps prepare you for the VMware Certified Professional	Prerequisites: A grade of C or better in BPC270, or CIS126DL, or CIS126RH, or CIS190, or CNT140AB, or MST150++, or permission of Instructor.	L+L 4.0 5.0 5.0
CIS294	VMware vSphere Operate, Scale and Secure	Designed for experienced VMware vSphere users. Teaches advanced skills for configuring and maintaining a highly available and scalable virtual infrastructure. Addresses advanced features of vSphere and vCenter	Prerequisites: A grade of C or better in CIS293, or permission of Instructor.	L+L 4.0 5.0 5.0
CIS295	VMware NSX: Install, Configure, Manage	Focuses on installing, configuring, and managing VMware NSX. Covers NSX as a part of software-defined networking and implementation of NSX features and functionality. Uses accompanying lecture and hands-on	Prerequisites: A grade of C or better in CIS293, or permission of Instructor.	L+L 4.0 5.0 5.0

CIS296WB	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 2.0 10.0 0.0
CIS296WC	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 3.0 15.0 0.0
CIS298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
CIS298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0

CIS298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
CIS314	Data Privacy and Integrity	Overview of data privacy and data integrity, history, concepts, and terminology, and the importance of each in the analytics and programming professions. Discussion of international, national, state and local regulations and guidelines pertaining to data privacy and data integrity. Use of office application software and current technology. Exploration of relevant and	Prerequisites: A grade of C or better in CIS215 or permission of Instructor.	L+L 3.0 4.0 4.0
CIS315	Data Protection	Overview of data protection concepts and terminology, and the roles of individuals and businesses with respect to the safeguarding of data and the mitigation of data corruption, data compromise and data loss. Use of word processing, spreadsheet, database and presentation software. Will demonstrate and use data protection	Prerequisites: A grade of C or better in CIS156, CIS162AD, CIS215, and (CIS276DA or CIS276DB), or permission of Instructor.	L+L 3.0 4.0 4.0
CIS316	Descriptive Analytics	Study of descriptive analytics and how to apply statistical tools and methods on historical and current datasets and multi-domain cases. Interpret current data, identify changes, trends and commonalities in data, and how to ascertain differences in performance over time	Prerequisites: A grade of C or better in CIS114DE, CIS215, CIS256DA, and (CIS276DA or CIS276DB), or permission of Instructor. Prerequisites or Corequisites:	L+L 3.0 4.0 4.0
CIS317	Data Complexity	Intricacies of enterprise data and how to apply knowledge (background, concepts and experiences from prior courses) and skills (Integrated Development Environment (IDE) tools, and programming languages) on complex integrated and non-integrated disparate datasets, by testing, designing, and creating algorithms	Prerequisites: A grade of C or better in CIS214DA, CIS215, CIS256DA, CIS260BI, CIS260TB, CIS262AD, and (CIS276DA or CIS276DB), or permission of Instructor.	L+L 3.0 4.0 4.0

CIS318	Predictive Analytics	Study of predictive analytics and how to apply statistical tools and methods on historical and current datasets and multi-domain cases previously analyzed for the purposes of yielding accurate inferential and predictive analytic results. Apply advanced and emergent statistical tools and methods, while modeling practices and processes, that facilitate the maturation of organizational analytic capabilities toward a desired future state. Predict analytical outcomes that are	Prerequisites: A grade of C or better in CIS215, CIS256, CIS256DA, CIS316 and GBS220, or permission of Instructor.	L+L 3.0 4.0 4.0
CIS324	Information Technology Project Management	Covers the general aspects of project management and emphasizes the important special considerations which apply to information technology projects. Covers principles for managing multiple IT projects and project portfolios, including use of waterfall and agile methodologies. Explores best practices for project management in information technology departments.	Prerequisites: A grade of C or better in CIS224.	LEC 3.0 3.0 3.0
CIS350	Advanced Information Technology Management	Course expands upon fundamental concepts and focuses on management of information technology systems in organizations. Explores management processes and procedures for planning, implementation, and operation of information systems with an emphasis on operational management. Examines real world successes and failures of technology management. Equips students with	Prerequisites: A grade of C or better in CIS250.	LEC 4.0 4.0 4.0
CIS360	Data Analysis	Introduces processes of obtaining, preparing, analyzing and presenting visualized data using appropriate software. Provides an understanding of data interpretation and its practical application in a business. Introduces data governance strategies ensuring data quality throughout the complete lifecycle of the data. Covers data analytics and mining techniques within the	Prerequisites: A grade of C or better in CIS156, CIS215, and ((MAT140 or MAT141 or MAT142 or MAT145 or MAT146), or higher level mathematics course, or appropriate district placement).	LEC 4.0 4.0 4.0
CIS376	Database Management and Security	Overview of the functional areas, concepts and techniques of database management and security. Topics include business and regulatory requirements, database architecture and design, access control, retrieval concepts, data auditing, incident response and optimal database system performance, security and	Prerequisites: A grade of C or better in CIS119DO, or CIS276DA, or CIS276DB.	LEC 4.0 4.0 4.0

CIS390	Network Management	Course explores principles of network management architecture within the Information Technology (IT) life cycle, including network management principles; network design and optimal performance; network maintenance, common problems and solutions; business practices in network management; and effective stakeholder communication. Students will work individually and in teams to evaluate and design	Prerequisites: A grade of C or better in CIS105, and (CNT140AB or CIS190).	LEC 4.0 4.0 4.0
CIS411	Ethics, Regulations, and Legal Issues in Information Technology	Covers ethical and regulatory issues in information technology (IT) and creates a foundation for analyzing and addressing evolving legal concerns. Provides an overview of laws concerning computer and network security, business policy, and legal boundaries for systems authorization. Examines ethical, legal, and	Prerequisites: A grade of C or better in CIS111 or ITS120.	LEC 3.0 3.0 3.0
CIS415	Big Data	Study of the fundamentals and characteristics of Big Data. Evaluation of existing Big Data processing platforms and tools. Developing skills to handle and implement Big Data projects, including machine learning	Prerequisites: A grade of C or better in CIS256, CIS256DA, CIS262AD and CIS318, or permission of Instructor.	L+L 3.0 4.0 4.0
CIS416	Presentation of Analytics and Programming Results and Solutions	Use of data analytic tools, programming methods, nominal (components/elements), and ordered steps to proficiently and effectively deliver comprehensive results and understanding, ranging from simple to complex data. Guide technical and non-technical audiences in understanding data and establish opportunities for the audience to believe it. Mitigate the problems that can be caused by poor decision making due to mis-understandings, mis-interpretations, mis-representations	Prerequisites: A grade of C or better in CIS256, CIS260BI, CIS260TB, CIS262AD, (CIS276DA or CIS276DB), CIS317, and CIS318, or permission of Instructor.	L+L 3.0 4.0 4.0
CIS470	Enterprise Cyber Security	Provides overview of various concepts and principles in information technology (IT) security and the management of IT security plans to mitigate information security (IS/IT) related security risks. Covers evaluation of cybersecurity plans and policies and the impact of laws, regulations, and codes of professional behavior with respect to cybersecurity. Includes preparation of	Prerequisites: A grade of C or better in CIS270.	LEC 4.0 4.0 4.0

CIS475	Emerging Trends in Information Technology	Course focuses on identification of and research in the emerging trends in Information Technology (IT). Selected topics could be within the areas of Kubernetes, Edge Computing, Ethics in Artificial Intelligence (AI), Blockchain, Automation and AI, Telehealth Solutions, Internet of Things (IoT), Augmented Reality, Hyperautomation, Development Operations (DevOp), 5G, and/or other emerging issues.	Prerequisites: A grade of C or better in (CIS190 or CNT140AB) and CIS270.	LEC 4.0 4.0 4.0
CIS480	Data Analytics and Programming Capstone	Capstone project with opportunities for individualized research and application of aggregate technology and professional knowledge and skills obtained throughout the student's program of study. Focus on communication, problem solving, critical thinking, and project management skills.	Prerequisites: A grade of C or better in CLD120, CIS216, CIS224, CIS256, CIS262AD, CIS260BI, CIS260TB, (CIS276DA or CIS276DB), CIS315, CIS317, and CIS318, or permission of Instructor.	L+L 3.0 4.0 4.0
CIS490	Applied Data Analytics and Programming Internship	Work experience in business or industry with an emphasis on data analytics and programming for business, not-for-profit, or industry. Application and aggregate of technical knowledge, communication, problem solving, and critical thinking with a data	Prerequisites: Enrollment in final semester before award completion and permission of Department/Division Chair, or Program Director or Instructor.	LAB 3.0 3.0 0.0
CLD110	Amazon Web Services Cloud Foundations	Provides a detailed overview of cloud concepts, Amazon Web Services (AWS) core services, security, architecture, pricing, and support. Intended for students who seek an overall understanding of cloud computing concepts, independent of specific technical roles. Helps	Prerequisites: None. CIS105 suggested but not required.	L+L 3.0 4.0 4.0
CLD120	Amazon Web Services Cloud Architect Associate	Fundamentals of building IT infrastructure on Amazon Web Services (AWS). Focus on how to optimize use of the AWS Cloud by understanding AWS services and best practices for the AWS Cloud and how they fit into cloud-based solutions. Covers design patterns for architecting optimal IT solutions on AWS, as well as	Prerequisites: A grade of C or better in CLD110 or permission of Instructor.	L+L 3.0 4.0 4.0
CLD130	Amazon Web Services Cloud Developing	Designed to provide technical knowledge and skills in cloud technology that can be developed with Amazon Web Services (AWS) software development kit (SDK). Focus on best practices for building and deploying secure applications in the AWS Cloud. Helps to prepare	Prerequisites: A grade of C or better in CLD120 or equivalent AAWS Certified Solutions Architect - Associate certification. CLD110 and CNT140AB recommended.	L+L 3.0 4.0 4.0

CLD140	Amazon Web Services Cloud Operations	Designed to provide technical information and skills required to implement automatable and repeatable deployments of networks and systems on Amazon Web Services (AWS). Describes specific AWS features and tools related to configuration and deployment. Emphasis on best practices in the AWS Cloud and recommended design patterns, problem-solving and	Prerequisites: A grade of C or better in CLD120 or equivalent AAWS Certified Solutions Architect - Associate certification. CLD110 and CNT140AB recommended.	L+L 3.0 4.0 4.0
CLD417	Cloud Analytics	Conduct cloud analysis with practical, real-world examples. Analyze data sets and create visual representation of that data, using a case-study approach. Hands-on experience working with cloud	Prerequisites: A grade of C or better in CLD120, CIS215, CIS156, CIS162AD, CIS260BI, CIS260TB, and (CIS276DA or CIS276DB), or	L+L 3.0 4.0 4.0
CNS102	Foundations for Apprenticeship	The demographics and industry projections of the building and construction trades. Structure and purpose of registered apprenticeship. Apprenticeship roles and responsibilities. Overview of fluctuation in employment and finances inherent to the construction trades. Emphasis on preparation for periods of high and low	Prerequisites: None.	LEC 1.0 1.0 1.0
CNS110	Green Construction Overview	Overview of 'green construction'. Green energy vs. green building, U.S. Green Building Council (USGBC) and the building life cycle, five main areas of green building standards, Leadership in Energy and	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	LEC 0.5 0.5 0.5
CNS182	Construction Estimating and Print Reading	Analysis and interpretation of construction drawings (blueprint reading); interpretation of symbols, annotations, conventions, and terms of trade. Emphasizes learning quantities of material, equipment, and labor for a construction project. Includes a focus on procedures used to apply timely unit costs. Covers Occupational Safety and Health Administration (OSHA)	Prerequisites: None.	LEC 3.0 3.0 3.0
CNS200	Construction Management: Field Operation	Procedures and methods used by construction contractors to manage field operation during various phases of a project. Includes project team, job scheduling, personnel relations, use of the construction documentation on site, inspection techniques, safety	Prerequisites: A grade of C or better in CON181 and CON244, or permission of Department or Division.	LEC 3.0 3.0 3.0
CNS201	Construction Management: Office Operation	Skills and techniques required to manage construction office operations. Includes establishing and financing the business, marketing, office operations, and maintaining relationships with other construction	Prerequisites: A grade of C or better in (CON130, CON181, and CON244), or permission of Department or Division.	LEC 3.0 3.0 3.0

CNS205	Sustainable Construction/LEED Certification	Fundamentals of major components of sustainable design and construction, including energy, health care facilities, cultural and natural resources, and other environmental and economic issues of sustainable built environments. Importance of a collaborative team effort with owner, developers, architects, engineers, and constructors will be integrated into the course. Issues impacting schedule and budgets of sustainable construction projects will be analyzed. Prepares student	Prerequisites: None.	LEC 3.0 3.0 3.0
CNS230	Computer Aided Design and Drafting (CADD) 3D for Construction &	Design, construction, and annotation of three-dimensional objects for construction and architecture industries using AutoCAD software.	Prerequisites: A grade of C or better in COM130 or permission of Department or Division.	L+L 3.0 6.0 6.0
CNS240	Advanced Computer Aided Design and Drafting (CADD) for Construction & Architecture (CADD III)	Use of advanced AutoCAD two- and three-dimensional commands along with various customization codes and techniques specific to architecture and construction industries	Prerequisites: A grade of C or better in CNS230 or permission of Department or Division.	L+L 3.0 6.0 6.0
CNS250	Civil Drafting I: Civil 3D	Application of civil drafting software (Civil 3D) for civil drafting and surveying. Use of coordinating geometry and survey point databases to create topographical maps. Interpreting and delineating topographical data and maps for site and route work. Applying the basics	Prerequisites: A grade of C or better in CON130 or permission of Department or Division.	L+L 3.0 6.0 6.0
CNS251	Civil Drafting II: Civil 3D	Advanced knowledge and skill in using civil drafting software (Civil 3D) in right-of-way improvement. Use of base maps in utility and street improvement; use of street improvements in creation of maps and profiles;	Prerequisites: A grade of C or better in CNS250, or permission of Department or Division.	L+L 3.0 6.0 6.0
CNS252	Civil Drafting III: Civil 3D	Use of civil drafting software (Civil 3D) for site development. Includes use of engineering and surveying software in analysis and computation of	Prerequisites: A grade of C or better in CNS251, or permission of Department or Division.	L+L 3.0 6.0 6.0
CNS271	Home Inspection Structure	Home inspection practices for foundation, footings, roof, and framework, including floor, wall, and ceiling. Covers structural considerations and reporting practices.	Prerequisites: A grade of C or better in (CON244 and CON262) or permission of Department or Division.	LEC 3.0 3.0 3.0
CNS272	Home Inspection Plumbing, Electrical and HVAC	Home inspection practices for plumbing, electrical, heating, cooling, and air conditioning, and defects of exposed parts of these systems in a house structure. Includes components of systems and reporting	Prerequisites: A grade of C or better in CON244 and CON262, or permission of Department or Division.	LEC 3.0 3.0 3.0

CNS273	Home Inspection: Insulation and Interiors	Home inspection practices for insulation and interiors, including walls, ceilings, floors, windows, and doors, and their possible defects. Covers reporting practices.	Prerequisites: A grade of C or better in CON244 and CON272, or permission of Department or Division.	LEC 3.0 3.0 3.0
CNS274	Home Inspection: Roofing and Exteriors	Home inspection practices for roofing and exteriors of a house, and their defects. Covers reporting practices.	Prerequisites: A grade of C or better in (CON244 and CON262) or permission of Department or Division.	LEC 3.0 3.0 3.0
CNS282AA	Volunteerism for Construction: A Service Learning	Service-learning field experience within private/public agencies and citizen volunteer groups.	Prerequisites: Permission of Department or Division.	LAB 1.0 1.0 0.0
CNS282AB	Volunteerism for Construction: A Service Learning	Service-learning field experience within private/public agencies and citizen volunteer groups.	Prerequisites: Permission of Department or Division.	LAB 2.0 2.0 0.0
CNS282AC	Volunteerism for Construction: A Service Learning	Service-learning field experience within private/public agencies and citizen volunteer groups.	Prerequisites: Permission of Department or Division.	LAB 3.0 3.0 0.0
CNS285	Introduction to Residential Plan Review	Application of international model code (building, mechanical, plumbing, and electrical) to contract documents for one- and two-family dwelling residential	Prerequisites: A grade of C or better in (CON244 and CON262) or permission of Department or Division.	LEC 3.0 3.0 3.0
CNS286	Introduction to Commercial Plan Review	Application of international model codes (building, mechanical, plumbing, and electrical) to contract documents for commercial construction.	Prerequisites: A grade of C or better in (CON244 and CON263) or permission of Department or Division.	LEC 3.0 3.0 3.0
CNS290AA	Construction Internship	Construction internship office/field experience with private/public agencies or citizen volunteer groups. Eighty (80) hours of designated work experience.	Prerequisites: Permission of Department or Division.	LAB 1.0 6.0 0.0
CNS290AB	Construction Internship	Construction internship office/field experience with private/public agencies or citizen volunteer groups. One hundred and sixty (160) hours of designated work	Prerequisites: Permission of Department or Division.	LAB 2.0 12.0 0.0
CNS290AC	Construction Internship	Construction internship office/field experience with private/public agencies or citizen volunteer groups. Two hundred and forty (240) hours of designated work.	Prerequisites: Permission of Department or Division.	LAB 3.0 18.0 0.0
CNS290AE	Construction Internship	Construction internship office/field experience with private / public agencies or citizen volunteer groups.	Prerequisites: Permission of Department or Division.	LAB 5.0 25.0 0.0

CNS296WA	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and ability to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 1.0 5.0 0.0
CNS296WB	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and ability to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 2.0 10.0 0.0
CNS296WC	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and ability to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 3.0 15.0 0.0

CNS296WD	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and ability to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 4.0 20.0 0.0
CNS298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
CNS298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
CNS298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
CNT140AB	Introduction to Networks	Focus on the architecture, structure, functions, components, and models of the Internet and other computer networks. Principles and structure of IP addressing and the fundamentals of Ethernet concepts, media, and operations are introduced. Students will build simple LANs, perform basic configurations for	Prerequisites: None.	L+L 4.0 6.0 6.0

CNT150AB	Switching, Routing, and Wireless Essentials	Focus on configuring switches and routers for use in small and medium size networks. Including Virtual Local Area Networks (VLANs), VLAN trunking, Inter-VLAN routing, Spanning Tree Protocol (STP), EtherChannel, Dynamic Host Configuration Protocol (DHCP), First Hop Redundancy, Local area Network (LAN) and Switch security, and Static routing. Knowledge and skills needed to implement a Wireless Local Area Network	Prerequisites: A grade of C or better in CNT140AB or permission of Instructor.	L+L 4.0 6.0 6.0
CNT160AB	Enterprise Networking, Security, and Automation	Focus on the configuration of routers and switches within small and medium size networks for advanced functionality including Open Shortest Path First (OSPF), Network security, Access Control Lists (ACLs), Network Address Translation (NAT), Wide Area Network (WAN) concepts, Virtual Private Networks (VPNs), Quality of Service (QOS), network management, design,	Prerequisites: A grade of C or better in CNT150AB or permission of Instructor.	L+L 4.0 6.0 6.0
CNT168	CCNA Discovery - Designing and Supporting Computer Networks	Networking design and customer support including gathering requirements, designing basic networks, establishing proof- of-concept, and performing project management tasks. Lifecycle services, including upgrades, competitive analyses, and system	Prerequisites: A grade of C or better in CNT158.	L+L 4.0 6.0 6.0
CNT171	CCNA Exam Prep	Preparation for renewal of CCNA certification by reviewing the Open Systems Interconnection (OSI) model and industry standards including network topologies, IP addressing, subnet masks, access control list, basic network design and cable installation. Practice the skills to configure, customize, maintain and troubleshoot Cisco routers and switches for Local Areas Networks (LANs) and Wide Area Networks (WANs) using	Prerequisites: A grade of C or better in CNT160AB, or Cisco Certified Network Associate (CCNA) certification, or permission of Instructor.	L+L 1.0 2.0 2.0
CNT202	Cisco Secure Firewall Appliance Configuration	Applications of Cisco Networking technologies in designing and implementing security solutions to reduce risk of revenue loss and vulnerability. Hands-on experience and skills in security policy design and management, security technologies, products and solutions, secure firewall design, installation, configuration and maintenance, Authentication,	Prerequisites: A grade of C or better in CNT160AB or permission of Instructor.	L+L 4.0 5.0 5.0

CNT203	CCNA Cybersecurity Operations	Uses virtual environments to simulate real-world cybersecurity threat scenarios and create opportunities for practice with ethical hacking, security monitoring, analysis and resolution. Introduces current technical concepts, such as classification of network attacks, monitoring, analysis of network intrusion data, cryptography, prevention and mitigation of network	Prerequisites: A grade of C or better in CNT150AB or permission of Instructor.	L+L 4.0 6.0 6.0
CNT205	Cisco Certified Network Associate Security	Associate-level knowledge and skills required to secure Cisco networks. Development of a security infrastructure, identification of threats and vulnerabilities to networks. Mitigation of security threats. Core security technologies. Installation, troubleshooting and monitoring of network devices to maintain integrity, confidentiality and availability of data and devices.	Prerequisites: A grade of C or better in CNT160AB, or Cisco Certified Network Associate (CCNA) certification, or permission of Instructor.	L+L 4.0 6.0 6.0
CNT206	Cisco Certified Network Associate Wireless	Associate-level knowledge and skills required in Cisco wireless networks. Includes comprehensive hands-on labs to design, plan, implement, operate, secure, and	Prerequisites: A grade of C or better in CNT160AB or permission of Instructor.	L+L 4.0 6.0 6.0
CNT240	Cisco Certified Network Professional: Enterprise Core	Provides Cisco Certified Network Professional (CCNP) Enterprise knowledge and skills needed for professional-level networking technologies and architecture. Topics include virtualization, network assurance, security, and automation. Helps to prepare students to take the Cisco Enterprise Network Core Technologies (ENCOR) certification exam aligned with the CCNP Enterprise, CCIE Enterprise Infrastructure, CCIE Enterprise	Prerequisites: A grade of C or better in CNT160AB, or Cisco Certified Network Associate (CCNA) industry certification, or permission of Instructor.	L+L 8.0 12.0 12.0
CNT240AA	Cisco Certified Network Professional: Enterprise Core I	Provides Cisco Certified Network Professional (CCNP) Enterprise knowledge and skills needed for professional-level networking technologies and architecture. Topics include virtualization, network assurance, security, and automation. Helps to prepare students to take the Cisco Enterprise Network Core Technologies (ENCOR) certification exam aligned with the CCNP Enterprise, CCIE Enterprise Infrastructure, CCIE Enterprise	Prerequisites: A grade of C or better in CNT160AB, or Cisco Certified Network Associate (CCNA) industry certification, or permission of Instructor.	L+L 4.0 6.0 6.0

CNT240AB	Cisco Certified Network Professional: Enterprise Core II	Provides Cisco Certified Network Professional (CCNP) Enterprise knowledge and skills needed for professional-level networking technologies and architecture. Topics include virtualization, network assurance, security, and automation. Helps to prepare students to take the Cisco Enterprise Network Core Technologies (ENCOR) certification exam aligned with the CCNP Enterprise, CCIE Enterprise Infrastructure, CCIE Enterprise	Prerequisites: A grade of C or better in CNT240AA.	L+L 4.0 6.0 6.0
CNT250	Cisco Certified Network Professional: Enterprise Advanced Routing and Services	Provides Cisco Certified Network Professional (CCNP) Enterprise advanced knowledge and skills needed for professional-level networking technologies and architecture. Covers the implementation and troubleshooting of advanced routing technologies and services including Layer 3 VPN services, infrastructure security, and infrastructure services. Helps to prepare students to take the Implementing Cisco Enterprise Network Advanced Routing and Services (ENARSI) certification exam aligned with the CCNP Enterprise,	Prerequisites: A grade of C or better in CNT160AB, or Cisco Certified Network Associate (CCNA) industry certification, or permission of Instructor.	L+L 8.0 12.0 12.0
CNT250AA	Cisco Certified Network Professional: Enterprise Advanced Routing and Services I	Provides Cisco Certified Network Professional (CCNP) Enterprise advanced knowledge and skills needed for professional-level networking technologies and architecture. Covers the implementation and troubleshooting of advanced routing technologies and services including Layer 3 VPN services, infrastructure security, and infrastructure services. Helps to prepare students to take the Implementing Cisco Enterprise Network Advanced Routing and Services (ENARSI) certification exam aligned with the CCNP Enterprise,	Prerequisites: A grade of C or better in CNT160AB, or Cisco Certified Network Associate (CCNA) industry certification, or permission of Instructor.	L+L 4.0 6.0 6.0
CNT250AB	Cisco Certified Network Professional: Enterprise Advanced Routing and Services II	Provides Cisco Certified Network Professional (CCNP) Enterprise advanced knowledge and skills needed for professional-level networking technologies and architecture. Covers the implementation and troubleshooting of advanced routing technologies and services including Layer 3 VPN services, infrastructure security, and infrastructure services. Helps to prepare students to take the Implementing Cisco Enterprise Network Advanced Routing and Services (ENARSI) certification exam aligned with the CCNP Enterprise,	Prerequisites: A grade of C or better in CNT250AA.	L+L 4.0 6.0 6.0

COM080	Conversation Circles	Practice in conversing in English for non-native speakers. Emphasis in developing conversational techniques to facilitate building and maintaining	Prerequisites: None.	LEC 3.0 3.0 3.0
COM095	Basic Oral Communication Skills	Listening, speaking, and related academic performance skills, including note taking. Emphasis on activities designed to improve and synthesize these skills	Prerequisites: None.	LEC 3.0 3.0 3.0
COM100	Introduction to Human Communication	Introduces the theory and practice of human communication. Surveys communication topics related to interpersonal, small group, and public	Prerequisites: None.	LEC 3.0 3.0 3.0
COM100AA	Introduction to Human Communication Part I	Introduces the theory and practice of human communication. Surveys communication topics related to interpersonal, small group, and public	Prerequisites: None.	LEC 1.0 1.0 1.0
COM100AB	Introduction to Human Communication Part II	Introduces the theory and practice of human communication. Surveys communication topics related to interpersonal, small group, and public	Prerequisites: None.	LEC 1.0 1.0 1.0
COM100AC	Introduction to Human Communication Part III	Introduces the theory and practice of human communication. Surveys communication topics related to interpersonal, small group, and public	Prerequisites: None.	LEC 1.0 1.0 1.0
COM101	Interpersonal Communication in the Workplace	Elements and functions of communication; perception of self and others; verbal and nonverbal communication; listening skills; effective verbal responses; communicating ideas and feelings; role of	Prerequisites: None.	LEC 1.0 1.0 1.0
COM102	Group Discussion in the Workplace	Concept of a decision-making group; role requirements in group discussion; characteristics and responsibilities of small-group leaders; tools for problem solving in a group; presenting proposals to management.	Prerequisites: None.	LEC 1.0 1.0 1.0
COM105	Relational Communication/ Senior Adults	Communication skills as they apply to personal relationships of older adults. Student's assessment of their individual communication skills in relations with family members, social and business acquaintances,	Prerequisites: None.	LEC 1.0 1.0 1.0
COM110	Interpersonal Communication	Theory and practice of interpersonal communication skills which affect day-to-day social interactions with other persons. May include using verbal and nonverbal symbols, active listening, resolving interpersonal conflict, understanding cultural perspectives, and developing	Prerequisites: None.	LEC 3.0 3.0 3.0

COM110AA	Interpersonal Communication Part I	Theory and practice of interpersonal communication skills which affect day-to-day social interactions with other persons. May include using verbal and nonverbal symbols, active listening, resolving interpersonal conflict, understanding cultural perspectives, and developing	Prerequisites: None.	LEC 1.0 1.0 1.0
COM110AB	Interpersonal Communication Part II	Theory and practice of interpersonal communication skills which affect day-to-day social interactions with other persons. May include using verbal and nonverbal symbols, active listening, resolving interpersonal conflict, understanding cultural perspectives, and developing	Prerequisites: None.	LEC 1.0 1.0 1.0
COM110AC	Interpersonal Communication Part III	Theory and practice of interpersonal communication skills which affect day-to-day social interactions with other persons. May include using verbal and nonverbal symbols, active listening, resolving interpersonal conflict, understanding cultural perspectives, and developing	Prerequisites: None.	LEC 1.0 1.0 1.0
COM120	Articulation and Pronunciation for Effective Communication	Analysis of speech production problems due to misarticulated speech sounds, critical listening to sound production, understanding speech patterns, practicing idioms and expressions, applying dialectic considerations, and preparing and delivering group and	Prerequisites: None.	LEC 3.0 3.0 3.0
COM125	Presentational Speaking	Techniques for developing oral presentations which include visual media. Principles of verbal message development and related visual design stressed. Techniques of managing the presentational environment including question and answer periods and	Prerequisites: None.	LEC 3.0 3.0 3.0
COM150	Communicating Through Digital Narratives	Focuses on the intersection of communication theory and personal narrative. Leveraging digital tools to enhance human communication and human experience to create, edit, produce, and preserve digital narratives.	Prerequisites: None.	L+L 3.0 3.0 3.0
COM163	Intercultural Communication in Everyday Life	Provides knowledge to promote greater understanding and application of intercultural communication in social and organizational interactions. For advanced non-native English speakers.	Prerequisites: Appropriate English placement test score at the ENG101 or ENG107 level or a grade of C or better in ESL097 or permission of	LEC 3.0 3.0 3.0
COM177	Experiential Group Activities Facilitation	Communication skills, tools, and strategies used to lead experiential learning activities. Designed to enhance the student's ability to facilitate experiential group learning	Prerequisites: None.	LEC 3.0 3.0 3.0

COM181	Conflict Mediation	Develop communication skills necessary to conduct mediation in formal and informal settings. Applies principles and theories of message production and responding, listening, questioning, source and receiver factors, and emotion to conflict management communication. Emphasis on respecting diversity and	Prerequisites: None.	LEC 3.0 3.0 3.0
COM207	Introduction to Communication Inquiry	Overview of theory and methodological practice in communication with particular attention to scholarly writing skills. Emphasis on development of critical thinking skills through active participation in the	Prerequisites: A grade of C or better in ENG101 or ENG107 or equivalent and COM100 or equivalent or permission of Instructor.	LEC 3.0 3.0 3.0
COM215	Listening	Emphasis on diagnosis of individual listening, corrective procedures, and reinforcement of improved habits through normal and speeded listening drills. Includes	Prerequisites: None.	LEC 3.0 3.0 3.0
COM221	Oral Fluency in American Speech	Designed for English Language Learner (ELL) students to develop greater oral fluency in spontaneous speaking contexts and presentational speaking. Emphasis on development of speech, language, and vocal clarity; basic skills in presentational speaking; and	Prerequisites: A grade of C or better in COM120 or permission of Instructor.	LEC 3.0 3.0 3.0
COM222	Argumentation	Discussion and practice of the use of evidence, applied reasoning, recognition of fallacies, selection of arguments, and methods of analyzing issues	Prerequisites: A grade of C or better in ENG101 or ENG107 or equivalent.	LEC 3.0 3.0 3.0
COM225	Public Speaking	Designed to enhance the student's ability to present public speeches confidently and competently. Also designed to improve information literacy and critical	Prerequisites: A grade of C or better in ENG101 or ENG107 or equivalent.	LEC 3.0 3.0 3.0
COM230	Small Group Communication	Principles and processes of small groups and development of skills for participation and leadership in small group settings. Practice in problem solving,	Prerequisites: None.	LEC 3.0 3.0 3.0
COM241	Oral Interpretation of Literature	The study, analysis, and preparation for performance of prose, poetry, and dramatic literature. Preparation of	Prerequisites: A grade of C or better in ENG101 or ENG107.	LEC 3.0 3.0 3.0
COM250	Introduction to Organizational Communication	Introduction to the study of communication in organizations including identification of variables, roles and patterns influencing communication in	Prerequisites: None.	LEC 3.0 3.0 3.0
COM251	Interviewing	Principles and techniques of interviewing, including practice through real and simulated interviews in informational, persuasive, and employee-related	Prerequisites: None.	LEC 3.0 3.0 3.0

COM259	Communication in Business and Professions	Interpersonal, organizational, intercultural, group, and public communication in business and professional organizations. Emphasis on oral communication and the effective use of technology and new media.	Prerequisites: A grade of C or better in ENG101, or ENG107, or equivalent.	LEC 3.0 3.0 3.0
COM263	Elements of Intercultural Communication	Diverse cultural contexts are explored through basic concepts, principles, and theories of intercultural communication. Discovering effective interaction and appropriate communication in a global community is	Prerequisites: None.	LEC 3.0 3.0 3.0
COM270	Health Communication	Theory and practice of interpersonal, intercultural, public, and team communication skills in a healthcare	Prerequisites: None.	LEC 3.0 3.0 3.0
COM271	Voice and Diction	Exercises and techniques to free the voice and improve projection, resonance, and articulation. Covers international phonetic alphabet and standard stage	Prerequisites: None.	LEC 3.0 3.0 3.0
COM275	Nonverbal Communication	Effects of space, time, body movements, environment, objects, and voice quality on human communication	Prerequisites: None.	LEC 3.0 3.0 3.0
COM277	Group Facilitation Theory and Practice	Theory and practice of group facilitation skills. Emphasis on leading organizational groups in problem solving and decision-making.	Prerequisites: Associates degree or equivalent or 3 to 5 years work experience or permission of	LEC 2.0 2.0 2.0
COM281	Communication Activities	Designed to provide students with competence and confidence in a variety of speech situations beyond the classroom setting. May include presentations at speech	Prerequisites: None.	L+L 3.0 3.0 3.0
COM281AA	Communication Activities	Designed to provide students with competence and confidence in a variety of speech situations beyond the classroom setting. May include presentations at speech	Prerequisites: None.	L+L 1.0 1.0 1.0
COM281AB	Communication Activities	Designed to provide students with competence and confidence in a variety of speech situations beyond the classroom setting. May include presentations at speech	Prerequisites: None.	L+L 2.0 2.0 2.0
COM282AA	Service-Learning Experience in Communication	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 1.0 1.0 0.0
COM282AB	Service-Learning Experience in Communication	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 2.0 2.0 0.0
COM282AC	Service-Learning Experience in Communication	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 3.0 3.0 0.0

COM296WA	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify) or permission of instructor. Corequisites: Must be concurrent in at least one class which is related to student's major or career interest or with	LAB 1.0 5.0 0.0
COM296WB	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify) or permission of instructor. Corequisites: Must be concurrent in at least one class which is related to student's major or career interest or with	LAB 2.0 10.0 0.0
COM296WC	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify) or permission of instructor. Corequisites: Must be concurrent in at least one class which is related to student's major or career interest or with	LAB 3.0 15.0 0.0

COM296WD	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify) or permission of instructor. Corequisites: Must be concurrent in at least one class which is related to student's major or career interest or with	LAB 4.0 20.0 0.0
COM298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
COM298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
COM298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
CON100	Introduction to Construction	Introduces students to all aspects of the construction industry such as how projects are delivered, reviewing the procurement process and how they are estimated, scheduled, and contracted. Introduces students to the individual roles that constructors fill in the delivery of a	Prerequisites: None.	LEC 2.0 2.0 2.0

CON101	Construction and Culture	The cultural context of construction, emphasizing the evolution and expansion of constructed environments as expressions of ethical and historical value systems.	Prerequisites: None.	LEC 3.0 3.0 3.0
CON102	Foundations of Construction Trades	Introduction to construction trades with an overview of standard practices in the construction profession, including safety, construction drawings, tools, and material handling. Includes workspace maintenance according to professional standards and basic calculation skills in the construction environment, including primary operations. Examines the United States standard and metric units of measurement, orthographic figures, and area and volume calculations for two and three-dimensional objects. Provides	Prerequisites: None.	LEC 6.0 6.0 6.0
CON102AA	Foundations of Construction Trades: Tools, Equipment, and Workspace	Introduction to construction trades with an overview of common practices in the construction profession including safety, reading blueprints, tools and equipment. Includes maintenance of workspace according to professional standards and basic calculation skills in the construction environment including the primary operations. Examines the United States standard and metric units of measurement, orthographic figures, and area and volume calculations	Prerequisites: None.	LEC 2.0 2.0 2.0
CON102AB	Foundations of Construction Trades: Construction Calculations	Introduction to construction trades with an overview of common practices in the construction profession including maintenance of workspace according to professional standards and basic calculation skills in the construction environment including the primary operations. Examines the United States standard and metric units of measurement, orthographic figures, and	Prerequisites: None.	LEC 2.0 2.0 2.0
CON102AC	Foundations of Construction Trades: Construction Drawings and Materials	Introduction to construction trades with an overview of standard practices in the construction profession including safety, reading blueprints, tools and equipment. Provides students with the information and skills needed to read and understand construction	Prerequisites: None.	LEC 2.0 2.0 2.0

CON103	Foundation of Construction Safety	Occupational Safety and Health Act (OSHA). Common causes for accidents and fatalities in construction. Abatement techniques for construction-specific hazards. Use of personal protection and lifesaving equipment. Specific types of health hazards related to the	Prerequisites: None.	L+L 1.0 1.0 1.0
CON104	Hand and Power Tools, Equipment, and Workspace	Overview of the selection, use, maintenance and safety procedures for common hand tools, power tools and equipment used in the construction industry. Overview of the maintenance of workspace according to	Prerequisites: None.	L+L 1.5 1.5 1.5
CON105	Construction Calculations	Introduction to basic calculation skills in the construction environment including the four primary operations. United States standard and metric units of measure, geometric figures, and area and volume calculations for	Prerequisites: None.	L+L 1.5 1.5 1.5
CON106	Foundations of Concrete	Examines the effects of concrete-making materials (aggregates, cements, admixtures, etc.) on the properties of fresh and hardened concrete. Concrete mixture proportioning is discussed along with the	Prerequisites: None.	LEC 4.0 2.0 2.0 LAB 0.0 4.0 4.0
CON107	Construction Drawings Introduction	Provides students with the information and skills needed to read and understand construction drawings.	Prerequisites: None.	L+L 1.0 1.0 1.0
CON110	Construction: Carpentry	Examines the layout and construction procedures for floor systems, including: interpretation of construction drawings and specifications, selection of appropriate types of floor and wall system components; and application of floor and wall system materials. Provides an overview of ceiling and roof construction methods, the different types of roofs used in residential	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: [(CON103 or CON271) and (CON102 or (CON102AA, CON102AB, and CON102AC))], or permission of Instructor.	L+L 9.0 12.0 12.0
CON110AA	Construction: Carpentry/Floor Systems	Examines the layout and construction procedures for floor systems, including: interpretation of construction drawings and specifications, selection of appropriate types of floor system components and application of floor system materials. Includes estimation of materials.	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: [(CON103 or CON271) and (CON102 or (CON102AA, CON102AB, and CON102AC))], or	L+L 3.0 4.0 4.0
CON110AB	Construction: Carpentry/Wall Systems	Examines the layout and construction procedures for wall systems, including: interpretation of construction drawings and specifications, selection of appropriate types of wall system components; and application of wall system materials. Includes estimation of materials.	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: [(CON103 or CON271) and (CON102 or (CON102AA, CON102AB, and CON102AC))], or	L+L 3.0 4.0 4.0

CON110AC	Construction: Carpentry/Ceiling and Roof Systems	Examines the layout and construction procedures for roof and ceiling systems, including: interpretation of construction drawings and specifications, selection of appropriate types of roof and ceiling system components; and application of roof and ceiling system materials. Provides an overview of ceiling and roof construction methods, the different types of roofs used in residential construction and materials, and the use of	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: [(CON103 or CON271) and (CON102 or (CON102AA, CON102AB, and CON102AC))], or permission of Instructor	L+L 3.0 4.0 4.0
CON111	Carpentry: Wall Systems	Examines the layout and construction procedures for wall systems, including: interpretation of construction drawings and specifications; selection of appropriate types of wall system components; and application of wall system materials. Emphasis of the estimation of the amount of materials needed for a wall assembly and	Prerequisites: None.	L+L 3.5 4.0 4.0
CON112	Carpentry Ceiling Joist and Roof Framing	Covers the layout and construction procedures for roof systems, including interpretation of construction drawings and specifications. Provides an overview of ceiling and roof construction methods, the different types of roofs used in residential construction, materials,	Prerequisites: None.	L+L 4.0 5.0 5.0
CON117	Interpersonal Skills, Issues and Resolutions in Construction	Information about communication and human relations skills, the expectations of today's diverse workforce, and relationships with stakeholders. Leadership style, interview techniques, and professional development plans. Management skills in problem solving and	Prerequisites: None.	LEC 2.0 2.0 2.0
CON122	Construction: Plumbing	Introduces students to materials, hardware, and systems related to the plumbing profession. Provides instruction in drain, waste, and vent (DWV) systems as well as installation, maintenance, and repair of plumbing systems, fixtures and appliances.	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: [(CON103 or CON271) and (CON102 or (CON102AA, CON102AB, and CON102AC))], or	L+L 9.0 12.0 12.0
CON122AA	Construction: Plumbing/Pipes and Fittings	Introduces students to materials, hardware, and systems related to the plumbing profession. Provides instruction in installation, maintenance, and repair of plumbing systems, fixtures and appliances.	Prerequisites: None. Corequisites: (CON103 OR CON271) and CON102 OR (CON102AA AND CON102AB AND CON102AC) or Permission of	L+L 3.0 4.0 4.0
CON122AB	Construction: Plumbing/Drain, Waste and Vent	Introduces students to materials, hardware, and systems related to the plumbing profession. Provides instruction in drain, waste, and vent (DWV) systems as well as installation, maintenance, and repair.	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: [(CON103 or CON271) and (CON102 or (CON102AA, CON102AB, and CON102AC))], or	L+L 3.0 4.0 4.0

CON122AC	Construction: Plumbing/Fixtures, Faucets and Water Distribution Systems	Introduces students to materials, hardware, and systems related to the plumbing profession. Provides instruction in water distribution systems as well as installation, maintenance, and repair of fixtures and appliances.	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: [(CON103 or CON271) and (CON102 or (CON102AA, CON102AB, and CON102AC))], or	L+L 3.0 4.0 4.0
CON124	Plumbing: Pipes and Fittings	Introduces the various types of plumbing materials, pipe schedules and material properties, and applications of piping. Trainees will learn how to determine the appropriate types of fittings, valves, hangers, and supports needed for piping jobs. Trainees will learn to	Prerequisites: None.	L+L 3.5 4.0 4.0
CON125	Plumbing: Fixtures	Introduces commonly used fixtures in plumbing systems. Select and operate each type of fixture for a variety of installations. Provides an overview of plumbing system installation, maintenance and water heating systems.	Prerequisites: None.	L+L 2.0 3.0 3.0
CON126	Plumbing: Drain, Waste, and Vent	Examine the drainage, waste movement and ventilation for construction application. Provides instruction in locating, installing, connecting, and testing a complete drain, waste, and vent (DWV) system.	Prerequisites: None.	L+L 3.5 4.0 4.0
CON127	Plumbing: Water Distribution Systems	Discuss the processes through which potable water is distributed. Examine the identification of the components and functions of a water distribution system and explains the relationships among the components. Includes installation and testing of water	Prerequisites: None.	L+L 2.0 3.0 3.0
CON130	Computer Aided Design and Drafting	Fundamental drafting and documentation topics and techniques related to construction, using both board and computer as tools. Concentration on various methods of two-dimensional and three-dimensional drawing, sketching, scaling, and dimensioning with	Prerequisites: None.	L+L 3.0 6.0 6.0
CON131	Electrical Systems	Electricity related to residential and light commercial applications, to include common electrical components, AC and DC circuits, and electrical safety. Provides an introduction to reading, interpreting, and creating wiring diagrams and the application of electrical power. Operation and use of specific meters, tools, and an	Prerequisites: None.	L+L 3.5 4.0 4.0

CON132	Construction: Electrical Systems	An overview of electricity related to residential, commercial, and aspects of industrial applications. Introduction to reading and interpreting construction drawings and wiring diagrams and tools specific to the electrical trade. Use of appropriate wire sizes and material to install electrical distribution systems,	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: [(CON103 or CON271) and (CON102 or (CON102AA, CON102AB, and CON102AC))], or permission of Instructor.	L+L 9.0 12.0 12.0
CON132AA	Construction: Electrical Systems/Introduction to Electrical	An overview of electricity related to residential, commercial, and aspects of industrial applications. Introduction to reading and interpreting construction drawings specific to the electrical trade.	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: [(CON103 or CON271) and (CON102 or (CON102AA, CON102AB, and CON102AC))], or	L+L 3.0 4.0 4.0
CON132AB	Construction: Electrical Systems/Electrical Power Generation	An overview of electricity related to residential, commercial, and aspects of industrial applications. Introduction to wiring diagrams and tools specific to the electrical trade.	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: [(CON103 or CON271) and (CON102 or (CON102AA, CON102AB, and CON102AC))], or	L+L 3.0 4.0 4.0
CON132AC	Construction: Electrical Systems/Raceways and Wireways	An overview of electricity related to residential, commercial, and aspects of industrial applications. Use of appropriate wire sizes and material to install electrical distribution systems, raceways, and terminations.	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: [(CON103 or CON271) and (CON102 or (CON102AA, CON102AB, and CON102AC))], or	L+L 3.0 4.0 4.0
CON133	Conduit, Raceways, and Termination in Electrical Systems	Termination and implementation of electricity in a facility. Considers topics related to box capacities, raceways, conduit sizes, termination practices, wire trays, and	Prerequisites: None.	L+L 4.0 5.0 5.0
CON138	Introduction to Project Management and Resource Control	Technical and management skills such as preconstruction planning, cost and risk control and policy development. Criteria for project layout purchasing, subcontractor management, project layout. Preparation process for project start up, close out and alternate project delivery methods. Major factors which	Prerequisites: None.	LEC 1.0 1.0 1.0
CON140	Construction Trades: Introduction to Masonry	Fundamentals of masonry including materials, tools, and techniques. Topics include mortar hand tools, power tools, and masonry vertical and horizontal work.	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: [(CON103 or CON271) and (CON102 or (CON102AA, CON102AB, and CON102AC))], or	L+L 9.0 12.0 12.0

CON140AA	Construction Trades: Masonry Fundamentals	Fundamentals of masonry including materials, tools, and techniques. Topics include mortar hand tools, power tools, and masonry calculations.	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: [(CON103 or CON271) and (CON102 or (CON102AA, CON102AB, and CON102AC))], or	L+L 4.5 6.0 6.0
CON140AB	Construction Trades: Masonry Systems	Fundamentals of masonry including materials, tools, and techniques. Topics include mortar hand tools, power tools, and masonry vertical and horizontal work.	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: [(CON103 or CON271) and (CON102 or (CON102AA, CON102AB, and CON102AC))], or	L+L 4.5 6.0 6.0
CON150	Construction Trades: Solar Energy Technology	Examination of solar energy technology including thermal energy, electrical energy, and energy storage.	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: [(CON103 or CON271) and (CON102 or (CON102AA, CON102AB, and CON102AC))], or	L+L 9.0 12.0 12.0
CON150AA	Construction Trades: Introduction to Solar Energy Systems	Fundamentals of solar energy technology including thermal energy, electrical energy, and energy storage.	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: [(CON103 or CON271) and (CON102 or (CON102AA, CON102AB, and CON102AC))], or	L+L 3.0 4.0 4.0
CON150AB	Construction Trades: Solar System Design, Maintenance and Troubleshooting	Fundamentals of solar energy technology including thermal energy, electrical energy, and energy storage. Includes maintenance and troubleshooting of solar systems.	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: [(CON103 or CON271) and (CON102 or (CON102AA, CON102AB, and CON102AC))], or	L+L 3.0 4.0 4.0
CON150AC	Construction Trades: Solar Energy System Installation and Inspection	Examination of solar energy technology including thermal energy, electrical energy, and energy storage. Includes inspection and installation of solar systems.	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: [(CON103 or CON271) and (CON102 or (CON102AA, CON102AB, and CON102AC))], or	L+L 3.0 4.0 4.0

CON170	Construction Trades: H.V.A.C.r	Introduction to major components and functions of residential heating, ventilation, air conditioning, and refrigeration (H.V.A.C.r) systems, including heat flow and basic electrical concepts. Introduction to installation of residential heating, ventilation, air conditioning, and refrigeration (H.V.A.C.r) systems. Includes startup and verification of proper equipment operation. Includes installations, diagnostics, preventative and predictive maintenance, and customer service. Introduction to troubleshooting the components of residential heating, ventilation, air conditioning, and refrigeration (H.V.A.C.r) systems to ensure proper equipment operation.	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: [(CON103 or CON271) and (CON102 or (CON102AA, CON102AB, and CON102AC))], or permission of Instructor.	L+L 9.0 12.0 12.0
CON170AA	Construction Trades: Introduction to H.V.A.C.r for Residential Systems	Introduction to major components and functions of residential heating, ventilation, air conditioning, and refrigeration (H.V.A.C.r) systems, to include heat flow and basic electrical concepts. Examines federal laws, standards and procedures for the preparation to complete the certification for the Environmental	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: [(CON103 or CON271) and (CON102 or (CON102AA, CON102AB, and CON102AC))], or permission of Instructor.	L+L 3.0 4.0 4.0
CON170AB	Construction Trades: H.V.A.C.r Installation	Installation of residential heating, ventilation, air conditioning, and refrigeration (H.V.A.C.r) systems. Includes startup and verification of proper equipment operation. Includes installations, diagnostics, preventative and predictive maintenance, and customer	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: [(CON103 or CON271) and (CON102 or (CON102AA, CON102AB, and CON102AC))], or	L+L 4.0 3.0 3.0
CON170AC	Construction Trades: H.V.A.C.r Troubleshooting	Introduction to troubleshooting the components of residential heating, ventilation, air conditioning, and refrigeration (H.V.A.C.r) systems, to assure proper equipment operation.	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: [(CON103 or CON271) and (CON102 or (CON102AA, CON102AB, and CON102AC))], or	L+L 4.0 3.0 3.0
CON181	Cost Estimating	Determining quantities of material, equipment, and labor for a construction project. Includes procedures used to apply unit costs to these items in a minimum of time. Occupational Safety and Health Administration Safety	Prerequisites: None.	LEC 3.0 3.0 3.0
CON210	Carpentry: Commercial and Residential	Safety, codes, layout, and construction procedures for carpentry commercial and residential aspects. Includes commercial drawings, steel framing, exterior and interior finishes, roofing applications, door hardware installation, drywall, drywall finishing, suspended ceilings, window, door, floor, and ceiling trim. Students construct, erect,	Prerequisites: A grade of C or better in CON110, or (CON110AA, CON110AB, and CON110AC), or permission of Instructor.	L+L 9.0 12.0 12.0

CON213	Carpentry: Steel Framing	The layout and construction procedures for steel framing, including: interpretation of construction drawings and specifications; selection of appropriate types of steel framing components; and application of materials. Includes estimation of the amount of	Prerequisites: None.	L+L 1.0 2.0 2.0
CON214	Carpentry: Roof Systems and Building Envelopes	Safety, codes, and construction procedures for roof systems and building envelopes, including interpretation of construction drawings and specifications. Students construct conventional roof structures and ceilings, and	Prerequisites: None.	L+L 3.0 4.0 4.0
CON215	Carpentry: Interior Finishes	The layout and construction procedures for interior finishes such as: drywall, trim, doors, cabinetry and stairs, including interpretation of construction drawings and specifications. Provides an overview of construction methods, the different types of materials, and	Prerequisites: None.	L+L 4.0 5.0 5.0
CON216	Carpentry: Concrete Forms	Safety, codes, and construction procedures for layout and construction of concrete footers and post-tensioned slabs, wall forms, and columns. Includes interpretation of construction drawings and estimation of	Prerequisites: None.	L+L 3.0 4.0 4.0
CON220	Statics Application for Construction	Emphasis on response of bodies to the action of forces. Elementary analytical and practical approach to the principles and physical concepts of statics. Focus on mastery of basic principles of trigonometry, application of vectors and forces, and moments, with analysis of basic structures and structural components, and statics	Prerequisites: None.	LEC 3.0 3.0 3.0
CON221	Applied Statics	Emphasis on response of bodies to the action of forces. Elementary analytical and practical approach to the principles and physical concepts of statics, focuses on mastery of basic principles of trigonometry, application of vectors and forces, and moments, with analysis of basic structures and structural components, trusses,	Prerequisites: A grade of C or better in MAT15+, (MAT182 OR MAT187 or MAT188) and PHY111.	LEC 3.0 3.0 3.0
CON222	Construction: Advanced Plumbing	Examines the safety, codes, components, installation, and repair of fixtures, appliances, and gas piping. Introduces water supply and distribution, drain, waste, and vent (DWV), and energy efficient water devices.	Prerequisites: A grade of C or better in CON122, or (CON122AA, CON122AB, and CON122AC), or permission of Instructor.	L+L 9.0 12.0 12.0
CON223	Strength of Materials	Strength and application of materials of construction, including mechanics of beams, shafts, and bolted and welded connections under various loading conditions. Construction behavior of various materials externally	Prerequisites: None.	LEC 3.0 3.0 3.0

CON224	Plumbing: Pipe Systems and Controls	Examines applied calculations to determine size, types and service of pipe systems. Discusses the application of drawings, codes, and specifications for assembly and installation of gas, air, and water systems.	Prerequisites: None.	L+L 3.0 4.0 4.0
CON225	Plumbing: Water Disposal Systems	Examines water disposal and drainage systems, to include the types, components, functions, codes,	Prerequisites: None.	L+L 4.0 5.0 5.0
CON226	Plumbing: Fixtures and Appliances	Examines the safety, codes, installation, maintenance, and repair of appliances, fixtures, and gas piping.	Prerequisites: None.	L+L 3.0 4.0 4.0
CON227	Plumbing: Water Resource Solutions	Introduces water supply disinfection, filtration systems, and sustainable water practices.	Prerequisites: None.	L+L 2.0 2.0 2.0
CON232	Construction: Advanced Electrical	Overview of residential, commercial, and industrial electrical advanced applications and components such as power distribution and transmission, motors and motor controls, and wiring applications. Includes testing	Prerequisites: A grade of C or better in CON132, or (CON132AA, CON132AB, and CON132AC), or permission of Instructor.	L+L 9.0 12.0 12.0
CON234	Electric Power Distribution	Theory and applications of distribution of power from utilities to residential and commercial sites, including transformers and commercial electrical distribution equipment and services. Includes safety, codes, and	Prerequisites: None.	L+L 3.0 4.0 4.0
CON235	Motors: Theory and Application	Describes motor and motor controls in electricity. Explains how to select and install relays and troubleshoot control circuits. Distinctions between AC and DC motors, motor speed control, and design and	Prerequisites: None.	L+L 4.0 5.0 5.0
CON236	Industrial Wiring Applications	A broad variety of electrical wiring applications, including healthcare facility, heating, ventilation and air conditioning (HVAC), standby, emergency, and fire	Prerequisites: None.	L+L 3.0 3.0 3.0
CON241	Surveying I	Fundamental surveying principles including theory and field work using the level and transit, horizontal measurement by tape or stadia, benchmark and profile leveling traverse surveys and computations, establishment of line and grade. Designed to develop semi-professional personnel working for private or	Prerequisites: None.	LEC 3.0 2.0 2.0 LAB 0.0 3.0 3.0
CON243	Heavy Construction Equipment, Methods, and Materials	Fundamentals of machine selection and production estimating, using computer-generated data to develop programs that speed the decision process or allow easy analysis of multiple options used in the heavy construction industry. Applications of engineering principles in analyzing economical approaches for heavy construction. Covers fleet operation, methods,	Prerequisites: None.	LEC 3.0 3.0 3.0

CON244	Working Drawing Analysis: Blueprint Reading	Detailed analysis and interpretation of construction drawings (blueprint reading); interpretation of symbols, annotations, conventions, terms of trade; and understanding of drawing, dimensioning, plan	Prerequisites: None.	LEC 3.0 3.0 3.0
CON251	Microcomputers for Constructors	Effective application of computers in support of construction management, administration, and technical aspects of the construction industry. Uses of the computer as a problem-solving tool, including multimedia software, information management, and	Prerequisites: None.	LEC 3.0 3.0 3.0
CON252	Building Construction Methods, Materials, and Equipment	Comprehensive study of construction methods, materials, codes, and equipment used in building construction.	Prerequisites: None.	LEC 3.0 3.0 3.0
CON262	Introduction International Residential Code (IRC)	Covers International Residential Code for various trades, including building, mechanical, plumbing and electric, for one and two family residential construction. Preparation for voluntary certification (IRC building	Prerequisites: None.	LEC 3.0 3.0 3.0
CON263	Building Codes	Designed specifically to acquaint students with safety principles of building construction under the International Building Code (IBC), including structural requirements for wood, masonry and concrete, fire resistance of building construction, fire resistant	Prerequisites: None.	LEC 3.0 3.0 3.0
CON271	Construction Safety	Overview of safety methods and procedures for accident prevention and equipment used by construction workers to maximize field safety during various phases of a construction project, including requirements and regulations for construction safety set by Occupational Safety and Health Administration	Prerequisites: None.	LEC 3.0 3.0 3.0
CON273	Electrical Construction Fundamentals	General knowledge of electrical work related to construction management, administration, and technical aspects of the construction industry. Covers circuits and machinery, power transmission, and electrical distribution with emphasis on secondary distribution systems as well as measurement and instrumentation, Ohm's Law, low voltage, high voltage, temporary power, generators, service, systems, circuits, motors,	Prerequisites: None.	LEC 3.0 3.0 3.0
CON290AA	Construction Internship	Construction internship office/field experience with private/public agencies or citizen volunteer groups. Eighty (80) hours of designated work experience.	Prerequisites: Permission of Department or Division.	LAB 1.0 6.0 0.0

CON290AB	Construction Internship	Construction internship office/field experience with private/public agencies or citizen volunteer groups. One hundred and sixty (160) hours of designated work	Prerequisites: Permission of Department or Division.	LAB 2.0 12.0 0.0
CON290AC	Construction Internship	Construction internship office/field experience with private/public agencies or citizen volunteer groups. Two hundred and forty (240) hours of designated work.	Prerequisites: Permission of Department or Division.	LAB 3.0 18.0 0.0
CON298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
CON298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
CON298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
COS104	Hair Essentials I	Introduction to the basic theory and procedures in cosmetology hair essentials.	Prerequisites: Admission to the Cosmetologist (32 Hours Per Week) program or the Hair Stylist (32 Hours Per Week) program.	200
COS106	Hair Essentials II	Hair-shaping techniques and chemical application procedures in cosmetology hair essentials.	Prerequisites: COS104 with a grade of 80% or better, or Program	200

COS114	Student Salon I	Continuation of cosmetology theory and practical concepts at an intermediate level. Theory will be focusing on professional development, salon ecology, anatomy and hair decisions. Practical skills will be demonstrated daily on clients and manikins. Rubrics on procedures are done monthly. One day a month on	Prerequisites: COS112 or COS106 with a grade of 80% or better, or Program Manager's approval.	200
COS116	Student Salon II	Apply concepts learned in the classroom and the student salon to develop real life scenarios while servicing a client and/or becoming a future business	Prerequisites: COS114 with a grade of 80% or better, or Program Manager's permission.	200
COS118	Hair Stylist State Licensure Focus	This course is designed to prepare students for the written and practical examinations for the Arizona Barbering and Cosmetology Board (BCB) HAIRSTYLIST	Prerequisites: COS116 with a grade of 80% or better, or Program Manager's approval.	200
COS119	Nail Essentials	Introduction to nail services in the beauty industry.	Prerequisites: COS116 with a grade of 80% or better, or Program	200
COS212	Skin Essentials	Introduction to skin services in the beauty industry.	Prerequisites: COS119 with a grade of 80% or better, or Program	200
COS214	Student Salon III	Prepares cosmetology students to be industry ready and prepared to perform services in their chosen field of expertise after licensure with the Arizona Barbering and	Prerequisites: COS212 with a grade of 80% or better, or Program Manager's permission.	200
COS218	Cosmetology State Licensure Focus	This course is designed to prepare cosmetology students for the written and practical examinations for Arizona Barbering and Cosmetology Board (BCB)	Prerequisites: COS214 with a grade of 80% or better, or Program Manager's permission.	100
COS250	Instructor in Training Orientation	Students will be introduced to the Arizona Barbering and Cosmetology Board instructor safety and sanitation, rules and regulations. This class is to prepare a student to become an instructor in their licensed field.	Prerequisites: 1. Must hold current Arizona Barbering and Cosmetology Board license in good standing, in the appropriate field. 2. Must have one year of industry work	80
COS251	Instructor in Training I	Students will train to become an instructor in their certified field of cosmetology, aesthetics, or nail technology. Students will learn the fundamentals of becoming an instructor by completing assigned work, shadowing instructors, creating lesson plans, coaching	Prerequisites: COS250.	135
COS252	Instructor in Training II	Students will continue to train to become an instructor in their certified field of cosmetology, aesthetics, or nail technology. Student will learn the fundamentals of becoming an instructor by completing assigned work, shadowing instructors, creating lesson plans, coaching students and working hands-on with students and	Prerequisites: COS251.	135

COV110	The Seven Habits of Highly Effective People	Development of interpersonal habits that are used by successful people in their personal and professional lives. Seven Habits of Highly Effective People. Video-	Prerequisites: None.	LEC 2.0 2.0 2.0
COV112	Great Leaders, Great Teams, Great Results	Overview of foundational characteristics of great teams and organizations. Process oriented approach to creating strategies for inspiring trust and building credibility, defining a purpose, aligning systems of	Prerequisites: None.	LEC 2.0 2.0 2.0
CPD101	Personal Development	Designed to assist students in developing confidence in making personal, social, and educational decisions. Examination and assessment of individual needs, interests, abilities and values to develop and strengthen interpersonal communication, enhance transitional skills	Prerequisites: None.	LEC 2.0 2.0 2.0
CPD102AB	Career Exploration	Designed to assist students make informed career decisions. Focuses on current occupational trends and outlook. Explores career-related interests, values, needs, preferences, skills, and strengths with the use of various assessments. Aids in the development of	Prerequisites: None.	LEC 2.0 2.0 2.0
CPD102AC	Creative Job Hunting	Assists students in gaining skills and confidence necessary to compete in the job market. Emphasis on job search techniques and strategies, resume and cover letter writing, interviewing skills and professional	Prerequisites: None.	LEC 2.0 2.0 2.0
CPD102AD	Growth and Transformation Strategies	Designed to help students adopt a growth mindset within a holistic framework in order to transform patterns that prevent them from achieving their goals.	Prerequisites: None.	LEC 2.0 2.0 2.0
CPD102AH	Stress Management	Reviews the sources of stress, the physiological effects and the psychological impact of stress on the individual. Provides strategies to manage and reduce stress. Helps students develop and understand behaviors to create a healthy balance in their lives by studying the biological, psychological, physiological, and social aspects of	Prerequisites: None.	LEC 3.0 3.0 3.0
CPD102AJ	Personal Spiritual Development	Designed to encourage exploration of human spirituality. Focus on personal values and individual belief systems. Emphasis on developing an integrated	Prerequisites: None.	LEC 2.0 2.0 2.0
CPD102AS	Conflict Resolution	Developing new skills for dealing effectively with everyday conflict and improving quality of one's own life. Opportunity to discuss issues and seek cooperative	Prerequisites: None.	LEC 2.0 2.0 2.0

CPD103BA	Women In Transition	Designed to assist and support women who are experiencing life transitions. Emphasis on assessing self-potential, increasing self-confidence, managing life change, and exploring education/career/life options in	Prerequisites: None.	LEC 2.0 2.0 2.0
CPD103BE	Native American Cultural Pride and Awareness	Develop an awareness of cultural roots, history, and traditions with emphasis on the shaping of personal identity, social, career, and educational decisions	Prerequisites: None.	LEC 2.0 2.0 2.0
CPD104	Career and Personal Development	An overview of the holistic process of career/life planning through self-awareness and understanding of the world of work. Exploration and application of behavioral, social, and cultural factors leading to college, career, and personal success with emphasis on	Prerequisites: None.	LEC 3.0 3.0 3.0
CPD108	Personal Money Management for College Students	Designed to assist students in examining values related to spending, borrowing and saving money. Identify financial priorities and responsibilities associated with debt. Develop and follow a personal budget plan and learn strategies for maintaining a financially balanced	Prerequisites: None.	LEC 1.0 1.0 1.0
CPD115	Creating College Success	Strategies to create success in college. Methods for selecting and developing effective academic strategies, increasing self-awareness and developing self-management strategies. Elements of college resources and relationships with others explored in support of	Prerequisites: None.	LEC 1.0 1.0 1.0
CPD150	Strategies for College Success	Focus on increasing student success through college orientation and personal growth, study skills development, and educational and career planning.	Prerequisites: None.	LEC 3.0 3.0 3.0
CPD150AA	College Orientation and Personal Growth	Emphasis on increasing student success through college orientation, identification of learning style and the use of time management, goal-setting, and	Prerequisites: None.	LEC 1.0 1.0 1.0
CPD150AB	Study Skills Development	Emphasis on increasing student success through the use of study strategies including materials organization, note-taking, reading, test-taking, memory, and critical	Prerequisites: None.	LEC 1.0 1.0 1.0
CPD150AC	Educational and Career Planning	Emphasis on increasing student success through educational and career planning.	Prerequisites: None.	LEC 1.0 1.0 1.0

CPD160	Introduction to Multiculturalism	Examination of the multiple cultures and subcultures within the contemporary United States. Personal exploration of awareness and appreciation of multiculturalism. Activities for experiencing diverse cultural perspectives. Critical thinking skills for recognizing, analyzing, and mediating cultural and	Prerequisites: A grade of C or better in ENG101, or ENG107, or permission of Instructor.	LEC 3.0 3.0 3.0
CPD180	Human Resilience: Cognitive, Emotional, and Behavioral Applications	Exploration of human resilience and well-being within the context of personal, academic, and career life. Focus on enhancing quality of life, and improving academic performance and career success through awareness of behavior, cognition, and emotion as well as the practice of self-regulation. Topics include mindfulness, positive psychology, motivation, effective	Prerequisites: None.	LEC 3.0 3.0 3.0
CPD195AB	Special Topics: Counseling and Personal Development	Introduction to current topics and contemporary issues related to promoting personal development. Focuses on a variety of techniques and strategies to improve	Prerequisites: None.	LEC 1.0 1.0 1.0
CPD250	Peer Mentor Training	Development and application of beginning skills and knowledge required to establish and maintain effective peer helping relationships in a college setting. Focus on the role, function, and responsibilities of the peer mentor; verbal and nonverbal communication skills; problem solving; and strategies and resources for first-	Prerequisites: Completion of 24 credit hours (100-level or above) with a B grade point average or better and permission of Instructor.	L+L 3.0 4.0 4.0
CPD282AA	Volunteerism for Counseling and Personal Development: A	Service-learning field experience within private/public agencies, and citizen volunteer groups.	Prerequisites: Permission of Instructor.	LAB 1.0 1.0 0.0
CPD282AB	Volunteerism for Counseling and Personal Development: A	Service-learning field experience within private/public agencies, and citizen volunteer groups.	Prerequisites: Permission of Instructor.	LAB 2.0 2.0 0.0
CPD282AC	Volunteerism for Counseling and Personal Development: A	Service-learning field experience within private/public agencies, and citizen volunteer groups.	Prerequisites: Permission of Instructor.	LAB 3.0 3.0 0.0

CPD298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
CPD298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
CPT110	Carpentry: Floor Systems	Course covers the layout and construction procedures for floor systems, including: interpretation of construction drawings and specifications; selection of appropriate types of floor system components; and application of floor system materials. Course also includes estimation of the amount of materials needed	Prerequisites: None.	81
CPT111	Carpentry: Wall Systems	Course covers the layout and construction procedures for wall systems, including: interpretation of construction drawings and specifications; selection of appropriate types of wall system components; and application of wall system materials. Course also includes estimation of the amount of materials needed for a wall assembly	Prerequisites: None.	81
CPT112	Carpentry Ceiling Joist and Roof Framing	Covers the layout and construction procedures for roof systems, including interpretation of construction drawings and specifications. Provides an overview of ceiling and roof construction methods, the different types of roofs used in residential construction, materials,	Prerequisites: None.	102
CPT213	Carpentry: Steel Framing	Course covers the layout and construction procedures for steel framing, including: interpretation of construction drawings and specifications; selection of appropriate types of steel framing components; and application of materials. Course also includes estimation of the	Prerequisites: None.	41

CPT214	Roof Systems and Building Envelopes	Course covers the safety, codes, and construction procedures for roof systems and building envelopes, including interpretation of construction drawings and specifications. Students construct conventional roof structures and ceilings, and install exterior finish	Prerequisites: None.	81
CPT215	Carpentry: Interior Finishes	Course covers the layout and construction procedures for interior finishes such as: drywall, trim, doors, cabinetry and stairs, including interpretation of construction drawings and specifications. Provides an overview of construction methods, the different types of	Prerequisites: None.	102
CPT216	Carpentry: Concrete Forms	Course covers the safety, codes, and construction procedures for layout and construction of concrete footers and post-tensioned slabs, wall forms, and columns. Includes interpretation of construction	Prerequisites: None.	81
CRC101	Introduction to Clinical Research	Introduction to the clinical research process. History, development and basic study designs in varied health, biomedical and biotechnical settings. Clinical trial development phases and regulatory protection for human subjects. Roles and responsibilities of the clinical research team and research organization. Good Clinical Practice (GCP) and International Committee on Harmonization (ICH) guidelines. Functions, research	Prerequisites: None.	LEC 4.0 4.0 4.0
CRC102	Clinical Research Regulations	Overview of legal and regulatory research compliance. Federal and international regulations, Good Clinical Practice (GCP) and International Council on Harmonization (ICH) guidelines. Roles, responsibilities and related regulations of Institutional Review Boards (IRB), Data Monitoring Boards and research organizations. Required forms, human subject protection, research integrity, ethical considerations,	Prerequisites: None.	LEC 4.0 4.0 4.0

CRC103	Research Design and Data Management	Major research design methodologies and data management. Interpretation of research design, organization of study charts and data, participant eligibility, and maintenance of screening/visit logs. Submission of adverse event forms. Overview of database structures, electronic data collection methods, and effective presentation of data in required reports. Tracking of investigational agents and preparation for audits and site visits by sponsors and/or regulators.	Prerequisites: None.	LEC 4.0 4.0 4.0
CRC151	Introduction to Medical Devices in Clinical Evaluation	Introduction to the role of the Clinical Research Coordinator (CRC) in medical device research. Overview of medical device regulatory requirements, the role of the Institutional Review Board (IRB), and classification of medical devices including Humanitarian Device Exemptions. Special emphasis on conduct of an	Prerequisites: None.	LEC 2.0 2.0 2.0
CRC152	Research Ethics	History of human experimentation and bioethics. Fundamentals of ethical principles including autonomy, beneficence, nonmaleficence and justice. Practical application of moral sensitivity, moral reasoning, moral commitment and perseverance, and moral implementation. Overview of ethical issues arising from biomedical research including informed consent, vulnerable populations, using children and animals for research, and placebos and sham surgery in research.	Prerequisites: None.	LEC 3.0 3.0 3.0
CRC153	Institutional Review Board in Clinical Research	Examines the historical development, regulatory roles, responsibilities and functions of Institutional Review Board (IRB) membership and related stakeholder relationships. Comparisons of different IRB organizational and operational designs in relation to emerging technologies and implications for future research will be reviewed. Special emphasis on developing an understanding of the complexity of IRB roles, the implementation of state, national and international regulations and guidelines, and potential	Prerequisites: None.	LEC 3.0 3.0 3.0

CRC160	Clinical Research Site Management	Clinical research site organization, operation and management. Office setup, study initiation process, site maintenance, essential documentation requirements and binders, site evaluation and site closure. Understanding Institutional Review Boards (IRB) timeliness for submission, approval and study maintenance. Budget and contract negotiation, and sponsor and regulatory audit components and preparation. Coordination with sponsors and related research entities; investigative staff training.	Prerequisites: None.	LEC 4.0 4.0 4.0
CRE101	College Critical Reading and Critical Thinking	Develop and apply critical thinking skills through critically reading varied and challenging materials. Includes analysis, evaluation, interpretation, and synthesis through at least two substantial writing and/or speaking tasks.	Prerequisites: A grade of C or better in [(ENG101 or ENG107) and (RDG100 or RDG100LL or RDG111 or RDG112 or RDG113)] or a grade of B or better in ALT100 or an appropriate district placement or	LEC 3.0 3.0 3.0
CRE101AT	College Critical Reading and Critical Thinking in Applied Technology	Develop and apply critical thinking skills through critically reading varied and challenging materials relevant to current issues in applied technology. Includes analysis, evaluation, interpretation, and synthesis through at least two substantial writing and/or speaking tasks.	Prerequisites: A grade of C or better in [(ENG101 or ENG107) and (RDG100 or RDG100LL or RDG111 or RDG112 or RDG113)] or a grade of B or better in ALT100 or an appropriate district placement or	LEC 3.0 3.0 3.0
CRE101BM	College Critical Reading and Critical Thinking in Business, Entrepreneurialism and Management	Develop and apply critical thinking skills through critically reading varied and challenging materials relevant to current issues in business, entrepreneurialism and management. Includes analysis, evaluation, interpretation, and synthesis through at least two substantial writing and/or speaking tasks.	Prerequisites: A grade of C or better in [(ENG101 or ENG107) and (RDG100 or RDG100LL or RDG111 or RDG112 or RDG113)] or a grade of B or better in ALT100 or an appropriate district placement or	LEC 3.0 3.0 3.0
CRE101BS	College Critical Reading and Critical Thinking in Behavioral Sciences and Human Services	Develop and apply critical thinking skills through critically reading varied and challenging materials relevant to current issues in behavioral sciences and human services. Includes analysis, evaluation, interpretation, and synthesis through at least two substantial writing and/or speaking tasks.	Prerequisites: A grade of C or better in [(ENG101 or ENG107) and (RDG100 or RDG100LL or RDG111 or RDG112 or RDG113)] or a grade of B or better in ALT100 or an appropriate district placement or	LEC 3.0 3.0 3.0

CRE101CS	College Critical Reading and Critical Thinking in Culture and Society	Develop and apply critical thinking skills through critically reading varied and challenging materials relevant to current issues in culture and society. Includes analysis, evaluation, interpretation, and synthesis through at least two substantial writing and/or speaking tasks.	Prerequisites: A grade of C or better in [(ENG101 or ENG107) and (RDG100 or RDG100LL or RDG111 or RDG112 or RDG113)] or a grade of B or better in ALT100 or an appropriate district placement or	LEC 3.0 3.0 3.0
CRE101CT	College Critical Reading and Critical Thinking in Computer Information Technology	Develop and apply critical thinking skills through critically reading varied and challenging materials relevant to current issues in computer information technology. Includes analysis, evaluation, interpretation, and synthesis through at least two substantial writing and/or speaking tasks.	Prerequisites: A grade of C or better in [(ENG101 or ENG107) and (RDG100 or RDG100LL or RDG111 or RDG112 or RDG113)] or a grade of B or better in ALT100 or an appropriate district placement or	LEC 3.0 3.0 3.0
CRE101ED	College Critical Reading and Critical Thinking in Education	Develop and apply critical thinking skills through critically reading varied and challenging materials relevant to current issues in education. Includes analysis, evaluation, interpretation, and synthesis through at least two substantial writing and/or speaking tasks.	Prerequisites: A grade of C or better in [(ENG101 or ENG107) and (RDG100 or RDG100LL or RDG111 or RDG112 or RDG113)] or a grade of B or better in ALT100 or an appropriate district placement or	LEC 3.0 3.0 3.0
CRE101HS	College Critical Reading and Critical Thinking in Health Sciences	Develop and apply critical thinking skills through critically reading varied and challenging materials relevant to current issues in health sciences. Includes analysis, evaluation, interpretation, and synthesis through at least two substantial writing and/or speaking tasks.	Prerequisites: A grade of C or better in [(ENG101 or ENG107) and (RDG100 or RDG100LL or RDG111 or RDG112 or RDG113)] or a grade of B or better in ALT100 or an appropriate district placement or	LEC 3.0 3.0 3.0
CRE101SM	College Critical Reading and Critical Thinking in STEM	Develop and apply critical thinking skills through critically reading varied and challenging materials relevant to current issues in science, technology, engineering, and mathematics (STEM). Includes analysis, evaluation, interpretation, and synthesis through at least two substantial writing and/or speaking tasks.	Prerequisites: A grade of C or better in [(ENG101 or ENG107) and (RDG100 or RDG100LL or RDG111 or RDG112 or RDG113)] or a grade of B or better in ALT100 or an appropriate district placement or	LEC 3.0 3.0 3.0
CRE101VA	College Critical Reading and Critical Thinking in Visual and Performing Arts	Develop and apply critical thinking skills through critically reading varied and challenging materials relevant to current issues in visual and performing arts. Includes analysis, evaluation, interpretation, and synthesis through at least two substantial writing and/or speaking tasks.	Prerequisites: A grade of C or better in [(ENG101 or ENG107) and (RDG100 or RDG100LL or RDG111 or RDG112 or RDG113)] or a grade of B or better in ALT100 or an appropriate district placement or	LEC 3.0 3.0 3.0

CRE201	Critical Reading and Writing in a Global Society	Critical evaluation of writings of authors from a variety of countries and cultures in order to gain a more global perspective of both universal and contemporary issues. Analysis, synthesis, and evaluation of various contemporary cultural viewpoints through at least two	Prerequisites: A grade of C or better in (ENG101 or ENG107) and (CRE101 or exemption by score on the reading placement test).	LEC 3.0 3.0 3.0
CRE298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
CRP101	Orientation - Carpenter Apprenticeship	Fundamental trade skills, employee-employer roles and responsibilities, and safe work practices needed for entry level performance in the construction industry. Emphasis on attaining standard industry safety credentials, practical experience using construction terminology, math and basic measuring techniques.	Prerequisites: Apprentice status or permission of the Apprenticeship Coordinator.	L+L 3.0 3.0 3.0
CRP102	Safety/Health Certifications for Carpentry - Carpenter Apprenticeship	Promotes hand/power tool and equipment skill development for various construction applications. Scaffold building and equipment operating procedures will also be covered. Financial and life skills will be presented to help survive in the construction industry. Upon successful completion, students will be issued	Prerequisites: Apprentice status or permission of the Apprenticeship Coordinator.	L+L 3.0 3.0 3.0
CRP102AI	Concrete Formwork: Concrete Stair Forms	Building stair forms from shop drawings; basic terminology related to stair form construction	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	L+L 1.0 1.5 1.5
CRP102AJ	Tilt-Up Construction I - Carpenter Apprenticeship	Building a form for a tilt-up slab for commercial structures complete with all necessary inserts and block-outs for openings.	Prerequisites: Apprentice status or permission of the Apprenticeship Coordinator.	L+L 1.0 1.5 1.5
CRP102AN	Concrete Formwork: Culverts, Headwall and Wingwalls	Box culvert design, form systems, areas, volumes and pressures. Culvert headwall, side walls and wingwall forms using a single and double whaler assembly.	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	LEC 2.0 2.0 2.0
CRP102AP	Concrete Formwork: Gang Forms	Building and plumbing a section of gang form using a standard whaler system complete with all the necessary components and hardware	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	L+L 1.0 1.5 1.5

CRP103	Tool and Equipment Applications - Carpenter	Safe and appropriate use of fall protection and emergency response procedures. Tool applications presented in this training will provide opportunities for	Prerequisites: Apprentice status or permission of the Apprenticeship Coordinator.	L+L 3.0 3.0 3.0
CRP103AI	Framing: Wood Stairs	Building a set of stairs consisting of two flights and a landing from a given set of working drawings	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	L+L 1.0 1.5 1.5
CRP104	Basic Wall Framing - Carpenter Apprenticeship	Theory, methods, and procedures required to frame basic walls. Hands-on practice using proper tool techniques and appropriate materials. Introduction to print reading, basic wall layout, plating procedures,	Prerequisites: Apprentice status or permission of the Apprenticeship Coordinator.	L+L 3.0 3.0 3.0
CRP105AC	Interior Finish: Running Trim	Building a small frame trimmed out with a variety of moldings according to a set of shop drawings	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	L+L 1.0 1.5 1.5
CRP105AG	Interior Finish: Door Hardware	Installation of door hardware including knob, latch, strike plate, hinge butts, and door closer.	Prerequisites: Registered Apprentice Status and a grade of C or better in CRP105AA or permission of the Apprenticeship Coordinator.	L+L 1.0 1.5 1.5
CRP105AI	Interior Finish: Metal Partitions	Assembling metal partition unit complete with all panels and hardware	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	L+L 1.0 1.5 1.5
CRP105AJ	Interior Finish: Soffit Panel	Building a soffit panel with trim and detailed projections as shown on a set of shop drawings	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	L+L 1.0 1.5 1.5
CRP106AA	Interior Systems: Metal Frame Walls	Tools, materials, components and erection procedures of metal frame walls and soffits as shown per shop drawings	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	L+L 1.0 1.5 1.5
CRP106AB	Interior Systems: Dry Wall Application	Tools, materials and installation procedures for dry wall application.	Prerequisites: Registered Apprentice Status and a grade of C or better in CRP106AA or permission of the Apprenticeship Coordinator.	L+L 1.0 1.5 1.5
CRP106AH	Interior Systems: Dry Wall Estimation of Material	Reading and interpreting blueprints and shop drawings to estimate the amount of material needed for a dry wall project	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	L+L 1.0 1.5 1.5
CRP106AK	Interior Systems: Suspended Lay-In Ceilings - Carpenter Apprenticeship	Tools, materials, components, and erection procedures for suspended lay-in ceilings	Prerequisites: Registered Apprentice status or permission of the Apprenticeship Coordinator.	L+L 1.0 1.5 1.5

CRP108	Moldings and Trim - Carpenter Apprenticeship	Course covers how moldings and trims are utilized to finish exterior and interior construction design features.	Prerequisites: Apprentice status or permission of the Apprenticeship Coordinator.	L+L 3.0 3.0 3.0
CRP110AA	Introduction to Carpentry I: History and Tools	History, significance and benefits of labor unions. Successful and efficient labor relations. Carpentry in relation to other construction trades. Building trades organizations. Components of lumber. Hand and power	Prerequisites: Registered Apprentice status with the Central Arizona Carpenters Joint Apprenticeship Training Committee or permission of	LEC 2.0 2.0 2.0
CRP110AB	Introduction to Carpentry II: OSHA Safety	Safe and proper use of hand and power tools. Safe work habits, first aid, and cardiopulmonary resuscitation (CPR) according to Occupational Safety and Health Administration (OSHA) regulations.	Prerequisites: Registered Apprentice status with the Central Arizona Carpenters Joint Apprenticeship Training Committee or permission of	LEC 2.0 2.0 2.0
CRP113	Basic Roof Framing - Carpenter Apprenticeship	Introduction to basic gable roof framing, terminology, characteristics, and construction methods. Interpretation of print views and drawing elevations for job planning, rafter systems, and layout details. Review of basic rise, run, rafter angles, and length calculations. Framed wall	Prerequisites: Apprentice status or permission of the Apprenticeship Coordinator.	L+L 3.0 3.0 3.0
CRP114AA	Blueprint Reading for Carpenters I	Types of blueprints and basic print reading. Symbols for materials. Construction details, standards, and specifications for brick veneer. Steel supports of plans for stores and apartments.	Prerequisites: Registered Apprentice status with the Central Arizona Carpenters Joint Apprenticeship Training Committee or permission of	LEC 2.0 2.0 2.0
CRP116AA	Concrete Formwork I	Construction and installation techniques. Building site and layout factors. Parts of forms and related hardware. Function of concrete form work in walls, columns, beams, decks and retaining walls. Wall forms and	Prerequisites: Registered apprentice status or permission of Apprenticeship Coordinator.	LEC 2.0 2.0 2.0
CRP116AB	Concrete Formwork II	Construction and installation techniques. Elements of flatwork construction	Prerequisites: A grade of C or better in CRP116AA.	LEC 2.0 2.0 2.0
CRP121	Print Reading for Carpenters - Carpenter Apprenticeship	Introduction to print reading skills for carpenters. Developing ability to interpret two-dimensional views, standard drawing methods, pictorial elements, visual and verbal communication cues. Recognizing parts of drawings, locating building and insulation features,	Prerequisites: Apprentice status or permission of the Apprenticeship Coordinator.	L+L 3.0 3.0 3.0
CRP123	Wall Forming - Carpenter Apprenticeship	Skills and procedures for forming reinforced concrete walls using single and double waler systems. Characteristics and application of built-in-place, prefabricated and specialty forms, wall forming, calculating layout dimensions and estimating. Overview	Prerequisites: Apprentice status or permission of the Apprenticeship Coordinator.	L+L 3.0 3.0 3.0

CRP124	Foundations and Flatwork - Carpenter Apprenticeship	Design and function of several types of foundations and concrete flatwork. Overview of methods, techniques and procedures for formwork layout, elevation, and construction including jobsite safety, print interpretation, material identification and basic use of builders' level.	Prerequisites: Apprentice status or permission of the Apprenticeship Coordinator.	L+L 3.0 3.0 3.0
CRP130	Basic Commercial Framing - Carpenter Apprenticeship	Introduction to basic rake wall framing theory and commercial construction techniques and materials.	Prerequisites: Apprentice status or permission of the Apprenticeship Coordinator.	L+L 2.0 2.0 2.0
CRP131	Commercial Floor Framing - Carpenter Apprenticeship	Course covers floor joist construction and the various installation techniques used in the commercial industry.	Prerequisites: Apprentice status or permission of the Apprenticeship Coordinator.	L+L 3.0 3.0 3.0
CRP150	Acoustical Ceilings - Carpenter Apprenticeship	Introduction to basic acoustical ceiling installation in accordance with industry standards and utilizing proper techniques and procedures. Acoustical engineering and applicable building and seismic code requirements.	Prerequisites: Admission into the Southwest Carpenters Training Fund (SWCTF) Registered Apprenticeship program and permission of the GateWay Apprenticeship Office.	L+L 3.0 3.0 3.0
CRP151	Standard Acoustical Grids - Carpenter Apprenticeship	Grid patterns considered standard for acoustical ceilings in the interior system construction industry. Methods and procedures used to form patterns. Students install several standard acoustical grid patterns to print specifications using proper techniques and procedures.	Prerequisites: Admission into the Southwest Carpenters Training Fund (SWCTF) Registered Apprenticeship program and permission of the GateWay Apprenticeship Office.	L+L 3.0 3.0 3.0
CRP152	Acoustical Soffits - Carpenter Apprenticeship	Construction of acoustical soffits in various configurations. Square and slant-faced, tapered, concealed, drywall suspension, and sloped soffits methods. Students complete selected acoustical soffit installation.	Prerequisites: Admission into the Southwest Carpenters Training Fund (SWCTF) Registered Apprenticeship program and permission of the GateWay Apprenticeship Office.	L+L 3.0 3.0 3.0
CRP153	Concealed Glue-Up/Staple-Up System - Carpenter Apprenticeship	Concealed and semi-concealed ceilings and soffits, glue-up and staple-up systems, and their design flexibility. Students employ glue-up/staple-up techniques to install a concealed grid ceiling system.	Prerequisites: Admission into the Southwest Carpenters Training Fund (SWCTF) Registered Apprenticeship program and permission of the GateWay Apprenticeship Office.	L+L 3.0 3.0 3.0
CRP154	Metal Pan and Security Systems - Carpenter Apprenticeship	Design, function, and installation of metal pan and security systems incorporated into construction of suspended ceilings. Students install components to create a monolithic appearance in a suspension ceiling grid system.	Prerequisites: Admission into the Southwest Carpenters Training Fund (SWCTF) Registered Apprenticeship program and permission of the GateWay Apprenticeship Office.	L+L 3.0 3.0 3.0

CRP160	Basic Lathing - Carpenter Apprenticeship	Advanced methods and application techniques for lath and trim products. Basic framing and lathing methods used for exterior/interior installations. Exterior waterproofing, lath, and trim installation procedures. Students complete an exterior lathing project.	Prerequisites: Admission into the Southwest Carpenters Training Fund (SWCTF) Registered Apprenticeship program and permission of the GateWay Apprenticeship Office.	L+L 3.0 3.0 3.0
CRP163	Framing Ceilings and Soffits - Carpenter Apprenticeship	Materials and their application for various types of fire-rated walls, ceilings, and soffits. Methods and procedures used for layout and template development. Drywall and trim applications. Types of tools and their associated safety, applied math, and print reading	Prerequisites: Admission into the Southwest Carpenters Training Fund (SWCTF) Registered Apprenticeship program and permission of the GateWay Apprenticeship Office.	L+L 3.0 3.0 3.0
CRP164	Basic Hand Finishing - Carpenter Apprenticeship	Basic hand finishing skills using correct tools and materials. Terminology and description of finishing levels, hand tool manipulation techniques, material identification, and selection criteria. Manufacturer's guidelines for environmental conditions, proper mixture preparation, and use. Typical finish issues, causes, and solutions frequently employed. Tool techniques and application sequence explained and demonstrated.	Prerequisites: Admission into the Southwest Carpenters Training Fund (SWCTF) Registered Apprenticeship program and permission of the GateWay Apprenticeship Office.	L+L 3.0 3.0 3.0
CRP165	Framing Curves and Arches - Carpenter Apprenticeship	Framing methods for curves and arches and their related structural limitations. Various wall and ceiling types, layout principles, and materials used for each. Lath applications and trim. Students complete a framing project including curves and arches.	Prerequisites: Admission into the Southwest Carpenters Training Fund (SWCTF) Registered Apprenticeship program and permission of the GateWay Apprenticeship Office.	L+L 3.0 3.0 3.0
CRP166	Automatic Finishing Tools - Carpenter Apprenticeship	Basic automatic tool techniques and finish schedule interpretation. Hands-on instruction with machine tools and the importance of proper use, assembly, and breakdown. Basic maintenance and repair techniques and safe handling demonstration. Sanding selections	Prerequisites: Admission into the Southwest Carpenters Training Fund (SWCTF) Registered Apprenticeship program and permission of the GateWay Apprenticeship Office.	L+L 3.0 3.0 3.0
CRP167	Exterior Insulation Finish Systems - Carpenter Apprenticeship	Introduction to exterior insulation finish systems including terminology, definitions, specifications, and properties. Reinforcing mesh installation and application of insulation board. Application methods and techniques for primers and finishes. Students complete	Prerequisites: Admission into the Southwest Carpenters Training Fund (SWCTF) Registered Apprenticeship program and permission of the GateWay Apprenticeship Office.	L+L 3.0 3.0 3.0
CRP202	Basic Stairs - Carpenter Apprenticeship	Introduction to stair framing theory, terminology, and construction techniques.	Prerequisites: Apprentice status or permission of the Apprenticeship Coordinator.	L+L 3.0 3.0 3.0

CRP207	Solar Installer Level I - Carpenter Apprenticeship	Design and installation of several types of solar panel systems. Methods, sequences, and procedures for layout, assembly, mounting, and elevating/positioning for solar array construction will be presented. Upon successful completion, students will receive a United Brotherhood of Carpenters (UBC) Solar Installer Level 1	Prerequisites: Apprentice status or permission of the Apprenticeship Coordinator.	L+L 2.0 2.0 2.0
CRP210AA	Basic Framing I	Construction and installation techniques. Floor framing and layout plate for specific spacing.	Prerequisites: Registered apprentice status or permission of Apprenticeship Coordinator.	LEC 2.0 2.0 2.0
CRP210AB	Basic Framing II	Construction and installation techniques. Factors of weight, stress, tension, and compression. Truss connectors, bracing, and anchors. Gable, gambrel, hip, and shed roofs. Dormers. Intersecting roof. Roof trusses.	Prerequisites: A grade of C or better in CRP210AA.	LEC 2.0 2.0 2.0
CRP211	Storefront Installations - Carpenter Apprenticeship	Installation process from constructing storefront openings to putting glass components into commercial storefront metal framing. An emphasis will be placed on print interpretation, window and door schedules,	Prerequisites: Apprentice status or permission of the Apprenticeship Coordinator.	L+L 3.0 3.0 3.0
CRP212AA	Scaffolding for Carpenters	Occupational Safety and Health Administration (OSHA) regulations for system scaffolding. Terminology, assembly procedures, platform safety and access, and dismantling of scaffolding. Scaffolding framework to	Prerequisites: Registered Apprentice status with the Central Arizona Carpenters Joint Apprenticeship Training Committee or permission of	LEC 2.0 2.0 2.0
CRP212AB	Level, Transit and Layout	Terminology, types, parts, handling, set up, care, storage, transport, and use of leveling instruments. Leveling rods, leveling operations, vernier scales, linear and angular measurement. Conventional system of measurement. Builder's level and transit level.	Prerequisites: Registered Apprentice status with the Central Arizona Carpenters Joint Apprenticeship Training Committee or permission of Apprenticeship Coordinator.	LEC 2.0 2.0 2.0
CRP212AC	Rigging - Carpenter Apprenticeship	Lifting theory and practical rigging methods and procedures. Rigging attachment procedures, lifting equipment, limits of operation, and communication	Prerequisites: Apprentice status or permission of the Apprenticeship Coordinator.	LEC 2.0 2.0 2.0
CRP214AA	Drywall Applications - Carpenter Apprenticeship	History, advantages, and applications of drywall and wall framing. Drywall products and wall framing for interior partition work. Safe tool use and jobsite safety. Blueprints, specifications, and layout. Standard framing for partitions. Drywall installation on metal framework. Suspended ceiling systems. Commercial and residential	Prerequisites: Apprentice status or permission of the Apprenticeship Coordinator.	LEC 2.0 2.0 2.0
CRP214AC	Interior Finish: Door Installation and Hardware	Terms, tools, types of doors and door hardware. Installation procedures for doors and door hardware. Fabrication and installation of jam and trip components.	Prerequisites: Registered apprentice status or permission of Apprenticeship Coordinator.	LEC 2.0 2.0 2.0

CRP214AD	Cabinets and Tops	Fundamentals, terms, tools, safety. Types of wood and glue. Case construction: joints, layout, cutting, assembly. Hardware, plastic laminates, completed cabinets, completed tops. Installation procedures.	Prerequisites: Registered apprentice status or permission of Apprenticeship Coordinator.	LEC 2.0 2.0 2.0
CRP215	Drywall/Acoustical Ceilings - Carpenter Apprenticeship	Materials and methods used for acoustical ceilings combined with drywall installation. Seismic codes, materials, and construction requirements reviewed. Green building rating systems applied to selected acoustical and drywall materials. Installation for various	Prerequisites: Admission into the Southwest Carpenters Training Fund (SWCTF) Registered Apprenticeship program and permission of the GateWay Apprenticeship Office.	L+L 3.0 3.0 3.0
CRP216	Designer and Specialty Trims - Carpenter Apprenticeship	Specialty skills to produce a professionally finished edge for designer ceiling installations. Techniques used to produce multiple ceiling variations using the Compasso trim system.	Prerequisites: Admission into the Southwest Carpenters Training Fund (SWCTF) Registered Apprenticeship program and permission of the GateWay Apprenticeship Office.	L+L 3.0 3.0 3.0
CRP217	Drywall Installation/Finish Trims - Carpenter Apprenticeship	Introduction to drywall handling methods, applications, and recommended levels of drywall finish to achieve desired aesthetics. Emphasis placed on trim attachment and finishing techniques. Identification of various types of finish trim. Students demonstrate proficiency in the	Prerequisites: Admission into the Southwest Carpenters Training Fund (SWCTF) Registered Apprenticeship program and permission of the GateWay Apprenticeship Office.	L+L 3.0 3.0 3.0
CRP221	Advanced Print Reading - Carpenter Apprenticeship	Analyze multi-view drawings to determine construction type. Locate benchmark and building elements. Review codes, references, and perform calculations for	Prerequisites: Apprentice status or permission of the Apprenticeship Coordinator.	L+L 2.0 2.0 2.0
CRP222	Bridge Construction - Carpenter Apprenticeship	Overview of basic bridge construction including exterior and interior girders, edge forms, bulkheads, and hinge forms. Job-built and precast formwork methods, panel construction, assembly, and hardware installation tasks.	Prerequisites: Apprentice status or permission of the Apprenticeship Coordinator.	L+L 3.0 3.0 3.0
CRP226	Air, Moisture, and Thermal Barriers - Carpenter Apprenticeship	Increasing building envelope energy efficiency using correctly installed air, moisture, and thermal barrier systems. Hands-on installation exercises using building sealing products.	Prerequisites: Admission into the Southwest Carpenters Training Fund (SWCTF) Registered Apprenticeship program and permission of the GateWay Apprenticeship Office.	L+L 3.0 3.0 3.0
CRP227	Green Building and Weatherization - Carpenter Apprenticeship	Explanation of building envelope science. Audit procedures, discuss testing and reporting mechanisms used to measure inefficiencies. Course provides novice workers with fundamental skills to properly install the beneficial "green" and cost-effective, energy-efficient	Prerequisites: Apprentice status or permission of the Apprenticeship Coordinator.	L+L 2.0 2.0 2.0

CRP228	Water Treatment Facilities - Carpenter Apprenticeship	Instruction in the detailing, layout, and construction of concrete formwork and waterstop used in water treatment facilities.	Prerequisites: Apprentice status or permission of the Apprenticeship Coordinator.	L+L 3.0 3.0 3.0
CRP232	Stair and Ramp Forming - Carpenter Apprenticeship	Methods, procedures and practices used to form stair and ramp structures including configuration and dimensions. Review of Stinger riser and stair thread	Prerequisites: Apprentice status or permission of the Apprenticeship Coordinator.	L+L 3.0 3.0 3.0
CRP233	Basic Metal Framing - Carpenter Apprenticeship	Overview of residential metal framing theory and construction techniques. Interpretation of prints for job planning and estimation of materials. Layout and detail of wall plates, measuring techniques, calculating principles, wall and roof assembly and installation	Prerequisites: Apprentice status or permission of the Apprenticeship Coordinator.	L+L 3.0 3.0 3.0
CRP234	Transit Level/Laser - Carpenter Apprenticeship	Detailing, layout and construction of abutments used in the heavy highway industry. Overview of assembly components, key terms and abutment anatomy; footings; piers and retaining walls. Techniques for laying	Prerequisites: Apprentice status or permission of the Apprenticeship Coordinator.	L+L 3.0 3.0 3.0
CRP235	Advanced Metal Framing - Carpenter Apprenticeship	Review of basic metal framing. Detailed procedures for framing curved, serpentine, and elliptical non-load-bearing partitions. Use of standard light gage components and other materials. Project emphasizing advanced techniques to expedite work processes.	Prerequisites: Admission into the Southwest Carpenters Training Fund (SWCTF) Registered Apprenticeship program and permission of the GateWay Apprenticeship Office.	L+L 3.0 3.0 3.0
CRP241	Gang Forms/Columns	Formwork types, applications and construction methods for gang and column forms using built and manufactured forming systems. Heavy timber gang forms and use of taper ties, bracing, and bulkhead	Prerequisites: Registered Apprentice status with the Central Arizona Carpenters Joint Apprenticeship Training Committee or permission of	L+L 3.0 3.0 3.0
CRP242	Doors/Door Hardware - Carpenter Apprenticeship	Installation process for several types of security and exit door hardware. Print interpretation, codes, door schedules, symbols, and hardware recognition.	Prerequisites: Apprentice status or permission of the Apprenticeship Coordinator.	L+L 3.0 3.0 3.0
CRP243	Scaffold Erector Qualification	Safety and terminology related to scaffold built applications, elevated platform use, span and loading criteria, access and egress, stability, and structural connections and inspections. Project drawing review for locating dimensions, determining layout and scaffold material requirements. Erection/dismantling sequence	Prerequisites: Registered Apprentice status with the Central Arizona Carpenters Joint Apprenticeship Training Committee or permission of Apprenticeship Coordinator.	L+L 3.0 3.0 3.0
CRP244	Cabinet Installation - Carpenter Apprenticeship	Cabinet installation from establishing the design layout to attaching countertops. Print interpretation, job planning, scribing techniques, and proper installation	Prerequisites: Apprentice status or permission of the Apprenticeship Coordinator.	L+L 3.0 3.0 3.0

CRP250	Prefab/Sound Panels - Carpenter Apprenticeship	Basic description of acoustical effectiveness of prefabricated sound panels. Planning, location, and installation of ceiling and wall panels.	Prerequisites: Admission into the Southwest Carpenters Training Fund (SWCTF) Registered Apprenticeship program and permission of the GateWay Apprenticeship Office.	L+L 3.0 3.0 3.0
CRP251	Advanced Acoustical Ceilings Layout - Carpenter Apprenticeship	Advanced layout methods used to complete accent acoustical ceiling installations. Seismic codes and hanger requirements. Layout techniques for establishing geometric designs. Students complete acoustical ceiling layout projects.	Prerequisites: Admission into the Southwest Carpenters Training Fund (SWCTF) Registered Apprenticeship program and permission of the GateWay Apprenticeship Office.	L+L 3.0 3.0 3.0
CRP252	Advanced Acoustical Ceiling Installations - Carpenter Apprenticeship	Identifying materials and methods used for the advanced installation of acoustical ceilings. Installation for custom and intricate grid systems. Green building rating systems applied to selected acoustical materials. Students complete a complex acoustical ceiling project.	Prerequisites: Admission into the Southwest Carpenters Training Fund (SWCTF) Registered Apprenticeship program and permission of the GateWay Apprenticeship Office.	L+L 3.0 3.0 3.0
CRP253	Framing Curves and Arches - Carpenter Apprenticeship	Framing methods for curves and arches and their related structural limitations. Identifying various wall and ceiling types and layout principles and materials used for each. Lath applications and trim. Students complete a framing project that includes curves and arches.	Prerequisites: Admission into the Southwest Carpenters Training Fund (SWCTF) Registered Apprenticeship program and permission of the GateWay Apprenticeship Office.	L+L 3.0 3.0 3.0
CRP255	Fire Stopping/Fire Proofing Procedures - Carpenter Apprenticeship	Methods, technical skills, and fire stopping/fire proofing materials used to meet industry code requirements. Students apply and test fire stopping/fire proofing materials in a controlled environment.	Prerequisites: Admission into the Southwest Carpenters Training Fund (SWCTF) Registered Apprenticeship program and permission of the GateWay Apprenticeship Office.	L+L 3.0 3.0 3.0
CRP260	Advanced Lathing - Carpenter Apprenticeship	Advanced skills for the interior/exterior application of lathing materials. Wall anatomy terminology, applicable codes, lathing materials, and waterproofing methods. Includes key discussions to draw attention to typical installation issues, causes, and solutions frequently employed to correct flaws. Detailed project drawing review, providing practical experience for design analysis, material requirement, and code assessment. Emphasis on construction sequence will foster the development of job planning, preparation, and applied math skills. Importance of applicable building codes,	Prerequisites: Admission into the Southwest Carpenters Training Fund (SWCTF) Registered Apprenticeship program and permission of the GateWay Apprenticeship Office.	L+L 3.0 3.0 3.0

CRP261	Free-Form Lathing - Carpenter Apprenticeship	Comprehensive study of the theory and techniques used for development of freeform lathing projects. Students interpret gridline drawings, lay out and build lath cage work, and apply the appropriate lath(s) to achieve the desired or designed form or structure.	Prerequisites: Admission into the Southwest Carpenters Training Fund (SWCTF) Registered Apprenticeship program and permission of the GateWay Apprenticeship Office.	L+L 3.0 3.0 3.0
CRP263	Ceiling and Soffit Finishing - Carpenter Apprenticeship	Advanced level of finishing skills for applications with architecturally detailed ceilings and soffits. Determining type and quantity of materials for various designs and differentiating between levels of finish. Guided practice with a combination of hand and automatic tool techniques, promoting manipulative ability required for a successful result. Variety of finish trims integrated into	Prerequisites: Admission into the Southwest Carpenters Training Fund (SWCTF) Registered Apprenticeship program and permission of the GateWay Apprenticeship Office.	L+L 3.0 3.0 3.0
CRP264	Advanced Hand Finishing - Carpenter Apprenticeship	Advanced methods and applications using hand tool techniques. Proper sequence of operation, phases, and materials to be used in order to produce a higher-level finished product to industry standards. Curved and radius wall characteristics for finish levels. Wall frame components, materials used, surface preparation, and	Prerequisites: Admission into the Southwest Carpenters Training Fund (SWCTF) Registered Apprenticeship program and permission of the GateWay Apprenticeship Office.	L+L 3.0 3.0 3.0
CRP267	Wet Wall Finishes - Carpenter Apprenticeship	Industry methods, mediums, and typical applications of wet wall finishes. Includes terminology and description of industry standard finishing levels, application tool types and techniques, and material identification and selection. Manufacturer's guidelines highlighting the environmental conditions for proper mixture preparation and use. Key discussions drawing attention to typical finish issues, causes, and solutions frequently employed. Emphasis on the selection and use of low volatile organic compounds (VOC) products. Importance	Prerequisites: Admission into the Southwest Carpenters Training Fund (SWCTF) Registered Apprenticeship program and permission of the GateWay Apprenticeship Office.	L+L 3.0 3.0 3.0
CRP268	Decorative Trims - Carpenter Apprenticeship	Advanced hand and automatic tool finishing techniques used to apply decorative trims. Product information for metal, paper, plastics, and art beads. Special attention given to coating and sanding sequence of selected specialty trim installations and waste reduction.	Prerequisites: Admission into the Southwest Carpenters Training Fund (SWCTF) Registered Apprenticeship program and permission of the GateWay Apprenticeship Office.	L+L 3.0 3.0 3.0
CRP280	Total Station (Robotics) - Carpenter Apprenticeship	Terminology, optical principles, and operating procedures for transit and laser levels. Students will set up levels, determine benchmarks, and take and record elevation readings.	Prerequisites: Admission into the Southwest Carpenters Training Fund (SWCTF) Registered Apprenticeship program and permission of the GateWay Apprenticeship Office.	L+L 3.0 3.0 3.0

CRP296WA	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 1.0 5.0 0.0
CRP296WB	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 2.0 10.0 0.0
CRP296WC	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 3.0 15.0 0.0

CRP296WD	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 4.0 20.0 0.0
CRP298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
CRP298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
CRP298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
CRW120	Introduction to Writing Children's Literature	Overview of writing children's literature. Emphasis on genres and standards for quality. Development of techniques in reading, evaluating, writing, revising, and editing literature written for children ENH291 suggested	Prerequisites: None. ENH291 suggested but not required.	LEC 3.0 3.0 3.0

CRW150	Introduction to Creative Writing	Introduction to the basic aesthetics and techniques in contemporary creative writing within a variety of genres. Introduction to the analytical concepts and terminology necessary to understand, interpret, and enact contemporary creative writing. Facilitation of writing	Prerequisites: None.	LEC 3.0 3.0 3.0
CRW160	Introduction to Writing Poetry	Prewriting (invention and discovery); writing; analyzing and evaluating (in workshop); and revising to practice manipulating various elements of poetry, critique one's own and the poetry of others, and produce a portfolio	Prerequisites: None. CRW150 recommended but not required.	LEC 3.0 3.0 3.0
CRW170	Introduction to Writing Fiction	Practice in writing fiction through a process of prewriting (invention and discovery), writing, analysis and evaluation (in workshop), and revision; practice in	Prerequisites: None. CRW150 recommended but not required.	LEC 3.0 3.0 3.0
CRW172	Introduction to Comic Book Writing	Introduction to elements and techniques of comic book writing in its specific form; teaches terminology and concepts needed for the successful participation in writing workshops; focuses on proposal outline, planning, structure facilitates writing practice (including character study) and evaluation; offers individual	Prerequisites: None.	LEC 3.0 3.0 3.0
CRW176	Writing Narrative for Video Games	Provides an introduction to narrative theory as it relates to video game production. Delivers a variety of video game storylines, narrative theories, and processes for narrative development in video games. Terminology and video game industry standards are covered. Offers	Prerequisites: None.	LEC 3.0 3.0 3.0
CRW180	Introduction to Writing Nonfiction	Practice in writing creative nonfiction, including autobiography and biography, the essay, reviews, and humor using a process of invention and discovery, writing, analysis, evaluation, and revision. Combines lecture, discussion, and workshop, leading to the	Prerequisites: None. CRW150 recommended but not required.	LEC 3.0 3.0 3.0
CRW190	Introduction to Screenwriting	Overview of screenwriting elements and introduction to screenwriting techniques.	Prerequisites: None. CRW150 recommended but not required.	LEC 3.0 3.0 3.0
CRW200	Readings for Writers	Close analysis and interpretation of selected literary texts designed to strengthen the students' own writing by extending their familiarity with the genre in which they write and their knowledge of selected literary	Prerequisites: A grade of C or better in CRW150 or permission of Instructor.	LAB 1.0 1.0 0.0

CRW201	Portfolio	Close analysis of the creative writing portfolio culminating in selection, revision, editing, and compiling of the student's own literary work in a portfolio. Students meet individually with instructor to choose, prepare, and compile their work.	Prerequisites: (Acceptance into Creative Writing Certificate Program and completion of at least nine (9) credit hours in creative writing (CRW)), or permission of Program	LAB 1.0 1.0 0.0
CRW202	The Writer as Witness	Studio course focusing on writing with the writer as witness of the world: pre-writing, drafting, analysis, evaluation, and writing in various formats.	Prerequisites: A grade of C or better in CRW150 or permission of Instructor.	LEC 3.0 3.0 3.0
CRW204	Journaling	Studio course focusing on practice in the art of various forms and genres of journal writing and memoir through a process of reflection, drafting, discovery and revision.	Prerequisites: A grade of C or better in CRW150 or permission of Instructor.	LEC 3.0 3.0 3.0
CRW220	Intermediate Writing Children's Literature	Application of techniques in writing literature for children. Emphasis on independent writing, self-evaluation, and revision. Includes completion of a major	Prerequisites: A grade of C or better in CRW120 or permission of Instructor.	LEC 3.0 3.0 3.0
CRW251	Topics in Creative Writing	Analysis, writing, and revision focused on a selected element applicable to all genres of creative writing.	Prerequisites: None. CRW150 recommended.	LEC 3.0 3.0 3.0
CRW260	Intermediate Poetry Writing	Emphasis on writing a series of original poems; analysis and evaluation of the functions and effects of established works of poetry; concentration on evaluation and revising students' poetry through	Prerequisites: A grade of C or better in CRW160 or permission of Instructor.	LEC 3.0 3.0 3.0
CRW261	Topics in Writing: Poetry	Analysis, writing, and revision of genre or element within poetry.	Prerequisites: A grade of C or better in CRW150 or permission of	LEC 3.0 3.0 3.0
CRW270	Intermediate Fiction Writing	Writing original short stories; analysis of works of fiction; concentration on revising students' fiction through	Prerequisites: A grade of C or better in CRW170.	LEC 3.0 3.0 3.0
CRW271	Topics in Writing: Fiction	Analysis, writing, and revision of genre or element within fiction.	Prerequisites: A grade of C or better in CRW150 or permission of	LEC 3.0 3.0 3.0
CRW272	Planning and Structuring the Novel	Focus on planning, structuring, and beginning a novel; prewriting, writing, analysis, evaluation, and revision of	Prerequisites: A grade of C or better in CRW150 or permission of	LEC 3.0 3.0 3.0
CRW273	Writing the Novel	Provides the beginning novelist with structure, support, and guidance vital to sustained writing; focus on establishing goals and using critique sessions with instructor and peers to draft a novel; open- and topic-	Prerequisites: A grade of C or better in CRW272 or permission of Instructor.	LEC 3.0 3.0 3.0
CRW274	Revising the Novel	Studio course workshop format. Requires a complete novel finished, in manuscript, ready for revision and	Prerequisites: A grade of C or better in CRW273 or permission of	LEC 3.0 3.0 3.0
CRW281	Topics in Writing: Non-Fiction	Analysis, writing, and revision of genre or element within non-fiction.	Prerequisites: A grade of C or better in CRW150 or permission of	LEC 3.0 3.0 3.0
CRW290	Intermediate Screenwriting	Drafting and revision of original screenplay; overview of marketing a screenplay.	Prerequisites: A grade of C or better in CRW190 or permission of	LEC 3.0 3.0 3.0

CRW291	Topics in Writing: Plays and/or Screenplays	Analysis, writing, and revision of genre or element within plays and/or motion picture screenplays.	Prerequisites: A grade of C or better in CRW150 or permission of	LEC 3.0 3.0 3.0
CRW298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
CRW298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
CRW298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
CSC100	Introduction to Computer Science (C++)	Concepts of problem solving, structured programming in C++, fundamental algorithms and techniques, and computer system concepts. Social and ethical responsibilities. Intended for majors other than Computer Science.	Prerequisites: A grade of C or better in or MAT114 or MAT115 or MAT12+ or an appropriate District placement for MAT15+ or higher or permission of Instructor or Department/Division	L+L 3.0 3.0 3.0
CSC100AA	Introduction to Computer Science (C++)	Concepts of problem solving, structured programming in C++, fundamental algorithms and techniques, and computer system concepts. Social and ethical responsibilities. Intended for majors other than Computer Science.	Prerequisites: A grade of C or better in MAT114 or MAT115 or MAT12+ or an appropriate District placement for MAT15+ or higher or permission of Instructor or Department/Division	L+L 3.0 4.0 4.0
CSC100AB	Introduction to Computer Science (C++)	Concepts of problem-solving, structured programming in C++, fundamental algorithms and techniques, and computer system concepts. Social and ethical responsibilities. Intended for majors other than Computer Science.	Prerequisites: A grade of C or better in MAT114 or MAT115 or MAT12+ or an appropriate District placement for MAT15+ or higher or permission of Instructor or Department/Division	L+L 4.0 4.0 4.0

CSC101	Introduction to Computing with Python	Introduction to computing using the Python programming language. Focus on basic concepts of computer science, algorithms, and the fundamentals of	Prerequisites: None.	L+L 3.0 4.0 4.0
CSC110	Introduction to Computer Science (Java)	Concepts of problem-solving, structured and object-oriented programming in Java, fundamental algorithms and techniques and computer system concepts. Social and ethical responsibilities. Intended for Computer Science and Computer Systems Engineering majors.	Prerequisites: A grade of C or better in MAT114 or MAT115, or MAT12+, or an appropriate District placement for MAT15+ or higher, or permission of Instructor or Department/Division	L+L 3.0 3.0 3.0
CSC110AA	Introduction to Computer Science (Java)	Concepts of problem-solving, structured and object-oriented programming in Java, fundamental algorithms and techniques and computer system concepts. Social and ethical responsibilities. Intended for Computer Science and Computer Systems Engineering majors.	Prerequisites: A grade of C or better in MAT114 or MAT115, or MAT12+ or an appropriate District placement for MAT15+ or higher, or permission of Instructor or Department/Division	L+L 3.0 4.0 4.0
CSC110AB	Introduction to Computer Science (Java)	Concepts of problem-solving, structured and object-oriented programming in Java, fundamental algorithms and techniques and computer system concepts. Social and ethical responsibilities. Intended for Computer Science and Computer Systems Engineering majors.	Prerequisites: A grade of C or better in AT114 or MAT115 or MAT12+ or an appropriate District placement for MAT15+ or higher, or permission of Instructor or Department/Division	L+L 4.0 4.0 4.0
CSC120	Digital Design Fundamentals	Number systems, conversion methods, binary and complement arithmetic, Boolean switching algebra and circuit minimization techniques. Analysis and design of combinational logic, flip-flops, simple counters, registers, Read Only Memory (ROMs), Programmable Logic Device (PLDs), synchronous and asynchronous	Prerequisites: None. Corequisites: CSC100 or (CSC110 or CSC110AB) or permission of Instructor or Division or Department Chair.	L+L 4.0 6.0 6.0
CSC150	Programming in C/C++	Introduction to C and C++ programming. Flow control, functions, pointers, data structures, file handling, and introduction to object-oriented programming	Prerequisites: Permission of Instructor.	L+L 3.0 4.0 4.0
CSC150AA	Programming in C/C++	Introduction to C and C++ programming. Flow control, functions, pointers, data structures, file handling, and introduction to object-oriented programming	Prerequisites: Permission of Instructor.	LEC 4.0 4.0 4.0
CSC180	Computer Literacy	Introduction to computers and technology and their impact on society. Explores technology, current topics in computing, applications and related issues. Students gain fluency in integrating technology to solve problems using computational thinking. Use of application software to create documents, spreadsheets,	Prerequisites: None.	LEC 3.0 3.0 3.0

CSC180AA	Computer Literacy	Introduction to computers and technology and their impact on society. Explores technology, current topics in computing, applications and related issues. Students gain fluency in integrating technology to solve problems using computational thinking. Use of application software to create documents, spreadsheets,	Prerequisites: None.	L+L 3.0 4.0 4.0
CSC180AB	Computer Literacy	Introduction to computers and technology and their impact on society. Explores technology, current topics in computing, applications and related issues. Students gain fluency in integrating technology to solve problems using computational thinking. Use of application software to create documents, spreadsheets,	Prerequisites: None.	LEC 4.0 4.0 4.0
CSC181AA	Applied Problem Solving with Visual BASIC	Introduction to systematic definition of problems, solution formulation, and testing. Visual BASIC programming language applied to problems in	Prerequisites: None.	L+L 3.0 4.0 4.0
CSC182	Principles of Programming with C#.NET	Introduction to object-oriented program analysis, design, and development using Visual C#.NET. Includes general concepts, data types, expressions, flow control, methods, classes, arrays, event-driven	Prerequisites: None.	LEC 3.0 3.0 3.0
CSC182AA	Principles of Programming with C#.NET	Introduction to object-oriented program analysis, design, and development using Visual C#.NET. Includes general concepts, data types, expressions, flow control, methods, classes, arrays, event-driven	Prerequisites: None.	L+L 3.0 4.0 4.0
CSC185	World Wide Web and Introductory Internet Programming	Organization of and access to information on the Internet. Design, creation and publication of interactive web pages with HTML, multimedia, animated custom graphics, applets and JavaScript programming. Ethical issues, including security and privacy on the World Wide	Prerequisites: None.	LEC 3.0 3.0 3.0
CSC200	Principles of Computer Science (Java)	Introduction to computer science. Issues and concepts throughout the field, including software development, data organization, machine architecture, algorithmic machines, and ethics in computing. Programming in	Prerequisites: A grade of C or better in (CSC110 or CSC110AB) or (CSC100 or equivalent) and permission of Instructor.	L+L 3.0 3.0 3.0
CSC200AA	Principles of Computer Science (Java)	Introduction to computer science. Issues and concepts throughout the field, including software development, data organization, machine architecture, algorithmic machines, and ethics in computing. Programming in	Prerequisites: A grade of C or better in (CSC110 or CSC110AB) or (CSC100 or equivalent) and permission of Instructor.	L+L 3.0 4.0 4.0

CSC200AB	Principles of Computer Science (Java)	Introduction to computer science. Issues and concepts throughout the field, including software development, data organization, machine architecture, algorithmic machines, and ethics in computing. Programming in	Prerequisites: A grade of C or better in (CSC110 or CSC110AB) or (CSC100 or equivalent) and permission of Instructor.	L+L 4.0 4.0 4.0
CSC205	Object Oriented Programming and Data Structures	Covers Object-Oriented design and programming; elementary data structures; arrays; lists; stacks; queues; binary trees; recursion; searching and sorting	Prerequisites: A grade of C or better in CSC110, or CSC110AB, or permission of Instructor.	L+L 3.0 3.0 3.0
CSC205AA	Object Oriented Programming and Data Structures	Covers Object-Oriented design and programming; elementary data structures; arrays; lists; stacks; queues; binary trees; recursion; searching and sorting	Prerequisites: A grade of C or better in CSC110, or CSC110AB, or permission of Instructor.	L+L 3.0 4.0 4.0
CSC205AB	Object Oriented Programming and Data Structures	Covers Object-Oriented design and programming; elementary data structures; arrays; lists; stacks; queues; binary trees; recursion; searching and sorting	Prerequisites: A grade of C or better in CSC110, or CSC110AB, or permission of Instructor.	L+L 4.0 4.0 4.0
CSC205AC	Object Oriented Programming and Data Structures	Covers Object-Oriented design and programming; elementary data structures; arrays; lists; stacks; queues; binary trees; recursion; searching and sorting	Prerequisites: A grade of C or better in CSC110, or CSC110AB, or permission of Instructor.	L+L 4.0 5.0 5.0
CSC205AD	Object Oriented Programming and Data Structures	Covers Object-Oriented design and programming; elementary data structures; arrays; lists; stacks; queues; binary trees; recursion; searching and sorting	Prerequisites: A grade of C or better in CSC110, or CSC110AB, or permission of Instructor.	L+L 4.0 6.0 6.0
CSC210	Data Structures and Algorithms (Java)	Static and dynamic data structures and associated applications; recursive and iterative sorting and searching algorithms; introduction to object oriented design and programming techniques; software engineering methods including design models and implementation/testing strategies; professional	Prerequisites: A grade of C or better in CSC200.	L+L 3.0 3.0 3.0
CSC210AA	Data Structures and Algorithms (Java)	Static and dynamic data structures and associated applications; recursive and iterative sorting and searching algorithms; introduction to object oriented design and programming techniques; software engineering methods including design models and implementation/testing strategies; professional	Prerequisites: A grade of C or better in CSC200.	L+L 3.0 4.0 4.0
CSC210AB	Data Structures and Algorithms (Java)	Static and dynamic data structures and associated applications; recursive and iterative sorting and searching algorithms; introduction to object oriented design and programming techniques; software engineering methods including design models and implementation/testing strategies; professional	Prerequisites: A grade of C or better in CSC200.	L+L 4.0 4.0 4.0

CSC220	Programming for Computer Engineering	Intermediate level procedural, object-oriented, and high-level scripting programming languages (C, C++, Python) in the Unix environment.	Prerequisites: A grade of C or better in (CSC/EEE120 and CSC205), or permission of Instructor or Division or Department Chair.	L+L 3.0 5.0 5.0
CSC225	Assembly Language Programming on Motorola Microprocessors	Assembly language programming including input/output programming and exception/interrupt handling. Register-level computer organization, I/O interfaces, assemblers, and linkers. Macintosh-based assignments.	Prerequisites: A grade of C or better in (CSC100 or CSC110 or CSC110AB or CSC200) and CSC/EEE120 or permission of	L+L 4.0 5.0 5.0
CSC230	Computer Organization and Assembly Language	Assembly language programming including input/output (I/O) programming and exception/interrupt handling. Register-level computer organization, I/O interfaces, assemblers and linkers. Processor organization and design, data path, control, pipelining and input/output.	Prerequisites: A grade of C or better in [(CSC100 or CSC110 or CSC110AB) and CSC/EEE120] or permission of Instructor or Division or Department Chair. Xref: CSC120	L+L 4.0 5.0 5.0
CSC240	Introduction to Different Programming	Introduction to procedural (C/C++), applicative (LISP), and declarative (Prolog) languages.	Prerequisites: A grade of C or better in CSC205 or permission of	L+L 3.0 5.0 5.0
CSC240AA	Introduction to Different Programming	Introduction to procedural (C/C++), applicative (LISP), and declarative (Prolog) languages.	Prerequisites: A grade of C or better in CSC205 or permission of	LEC 4.0 4.0 4.0
CSC260	Object-Oriented Programming in Java	Software development in Java including both applets and applications, in both standard and graphical programming. Includes objects and classes, inheritance, polymorphism, graphical programming with the Abstract Windows Toolkit and the Swing extension, graphical	Prerequisites: A grade of C or better in CSC150 or CSC200 or permission of Instructor.	L+L 3.0 4.0 4.0
CSC260AA	Object-Oriented Programming in Java	Software development in Java including both applets and applications, in both standard and graphical programming. Includes objects and classes, inheritance, polymorphism, graphical programming with the Abstract Windows Toolkit and the Swing extension, graphical	Prerequisites: A grade of C or better in CSC150 or CSC200 or permission of Instructor.	LEC 4.0 4.0 4.0
CSC282AA	Volunteerism for Computer Science: A Service Learning Experience	Service learning field experience within private/public agencies, educational institutions, and citizen volunteer groups.	Prerequisites: Permission of Instructor.	LAB 1.0 1.0 0.0
CSC282AB	Volunteerism for Computer Science: A Service Learning Experience	Service learning field experience within private/public agencies, educational institutions, and citizen volunteer groups.	Prerequisites: Permission of Instructor.	LAB 2.0 2.0 0.0

CSC282AC	Volunteerism for Computer Science: A Service Learning Experience	Service learning field experience within private/public agencies, educational institutions, and citizen volunteer groups.	Prerequisites: Permission of Instructor.	LAB 3.0 3.0 0.0
CSC283AA	Bioinformatics and Scientific Computing	Introduction to Bioinformatics, including history, concepts, major genetic databases and access tools. Computer software and techniques for analyzing one nucleotide or protein sequence, searching for similar sequences, and aligning and comparing two or multiple sequences. Microarray analysis and phylogenetic trees. Application of standard software to bioinformatic computing tasks, including word processing of reports, and use of spreadsheets for statistical analysis and	Prerequisites: A grade of C or better in [BIO220 and (MAT114 or MAT115 or MAT12+ or an appropriate District placement for MAT15+ or higher)] or permission of Instructor or Department/Division Chair.	LEC 4.0 4.0 4.0
CSC284	Web Programming and Design with FLASH	Design and publication of interactive web pages using Macromedia FLASH and Action Script. Animation, graphics design, timeline, layers, sound, movie clips, libraries, publishing with HTML, event driven programming, interactive programming of FLASH	Prerequisites: A grade of C or better in CSC185 or CIS233 or permission of Instructor.	LEC 3.0 3.0 3.0
CSC284AA	Web Programming and Design with FLASH	Design and publication of interactive web pages using Macromedia FLASH and Action Script. Animation, graphics design, timeline, layers, sound, movie clips, libraries, publishing with HTML, event driven programming, interactive programming of FLASH	Prerequisites: A grade of C or better in CSC185 or CIS233 or permission of Instructor.	LEC 3.0 4.0 3.7
CSC285	Computer Programming in the WWW Environment	Software development paradigms and environments including Advanced HTML, JavaScript, Common Gateway Interface (CGI) and CGI scripting languages.	Prerequisites: A grade of C or better in CSC185 and prior programming experience/coursework.	LEC 4.0 4.0 4.0
CSC285AA	Computer Programming in the WWW Environment	Software development paradigms and environments including Advanced HTML, JavaScript, Common Gateway Interface (CGI) and CGI scripting languages.	Prerequisites: A grade of C or better in CSC185 and prior programming experience/coursework.	LEC 3.0 4.0 3.7
CSC294	Special Topics in Computing	Investigation of special topics in computing technology and applications. Examination of industry trends to solve problems and/or investigate issues	Prerequisites: Permission of Instructor.	LEC 3.0 3.0 3.0
CSC294AA	Special Topics in Computing	Investigation of special topics in computing technology and applications. Examination of industry trends to solve problems and/or investigate issues	Prerequisites: Permission of Instructor.	L+L 3.0 4.0 4.0
CSC294AB	Special Topics in Computing	Investigation of special topics in computing technology and applications. Examination of industry trends to solve problems and/or investigate issues	Prerequisites: Permission of Instructor.	LEC 2.0 2.0 2.0

CSC294AC	Special Topics in Computing	Investigation of special topics in computing technology and applications. Examination of industry trends to solve problems and/or investigate issues	Prerequisites: Permission of Instructor.	L+L 2.0 3.0 3.0
CSC294AD	Special Topics in Computing	Investigation of special topics in computing technology and applications. Examination of industry trends to solve problems and/or investigate issues	Prerequisites: Permission of Instructor.	LEC 1.0 1.0 1.0
CSC294AE	Special Topics in Computing	Investigation of special topics in computing technology and applications. Examination of industry trends to solve problems and/or investigate issues	Prerequisites: Permission of Instructor.	L+L 1.0 2.0 2.0
CSC296WA	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify) or permission of instructor. Corequisites: Must be concurrent in at least one class which is related to student's major or career interest or with	LAB 1.0 5.0 0.0
CSC296WB	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify) or permission of instructor. Corequisites: Must be concurrent in at least one class which is related to student's major or career interest or with	LAB 2.0 10.0 0.0

CSC296WC	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify) or permission of instructor. Corequisites: Must be concurrent in at least one class which is related to student's major or career interest or with	LAB 3.0 15.0 0.0
CSC296WD	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify) or permission of instructor. Corequisites: Must be concurrent in at least one class which is related to student's major or career interest or with	LAB 4.0 20.0 0.0
CSC298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
CSC298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0

CSC298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
CSC310	Data Structures and Algorithms	Advanced algorithmic concepts and data structures, including algorithm analysis and design, trees, graphs, hashing, and advanced sorting techniques. Implementation of advanced algorithms and data	Prerequisites: A grade of C or better in [CSC240, and (MAT230 or MAT231), and MAT227], or permission of Program Director.	L+L 3.0 4.0 4.0
CSC350	Logic Programming for Artificial Intelligence	Introduction to the fundamentals of logic and logic programming, a paradigm that uses formal logic to express computational algorithms. Focus on propositional and predicate logic, basics of proof techniques, principles of computational logic, and logic programming concepts using Prolog-based logic	Prerequisites: A grade of C or better in (CSC240++ and MAT227) or permission of Program Director.	L+L 3.0 4.0 4.0
CSI105	Debt Resolution Enrollment	Overview of debt resolution enrollment procedures. Covers characteristics of debt settlement, including regulatory entities, information security, and client hardships. Also includes procedures for completing quality enrollment calls, as well as a review of resources	Prerequisites: None.	L+L 3.0 5.0 5.0
CSI154	Introduction to Debt Settlement	Introduction to the debt settlement industry. Covers customer service representative role in debt settlement including types of hardships, debt solutions, account resources, and legal services available to clients. Also	Prerequisites: None.	LEC 2.0 2.0 2.0
CSI155	Customer Service for Debt Settlement	Basic customer service principles for debt settlement. Evaluation of various program services as well as types of client debt. Emphasis on elements of customer service debt settlement transactions and effective	Prerequisites: None.	LEC 3.0 3.0 3.0
CSI161	Financial Services Retirement Plans	Introduction to financial service retirement accounts. Includes applicable vocabulary, Internal Revenue Service (IRS) codes, qualified and supplemental plans as well as loan options. Also covers deferred	Prerequisites: None.	LEC 3.0 3.0 3.0
CSI163	Employer Sponsored Retirement Plans	Characteristics, restrictions, and guidelines for various employer sponsored retirement plans. Includes	Prerequisites: None.	LEC 1.0 1.0 1.0

CSI164	Debt Resolution Account Procedures	Procedures for maintaining debt settlement customer accounts. Emphasis on screens and processes used to maintain accounts, provide education resources to customers, and respond to customer inquiries.	Prerequisites: None.	L+L 3.0 4.0 4.0
CSI165	Introduction to Financial Customer Service	Introduction to customer service procedures for managing member accounts. Covers computerized systems including online documentation and database usage. Procedures for account maintenance included as well as procedures for handling initial member requests. Emphasis on professional communication and	Prerequisites: None.	L+L 3.0 4.0 4.0
CSI166	Debt Settlement Services	Practical application of customer service representative debt settlement skills. Includes various types of customers, calls, and interactions in addition to procedures for navigating client accounts. Also covers	Prerequisites: None.	LAB 2.0 6.0 6.0
CSI167	Financial Systems Customer Service	Practical application of financial account procedures for customer services representatives. Includes procedures for initiating and completing distributions, loan, service credits purchase, and Qualified Domestic Relationship Orders (QDRO) in addition to processing death claims.	Prerequisites: None.	L+L 3.0 4.0 4.0
CSI168	Introduction to Debt Resolution Sales	Introduction to debt resolution sales and the debt settlement industry. Covers characteristics, solutions, components, and regulators of debt settlement including the Fair Debt Collection Practices Act. Also includes types of hardships and financial distress, credit reports, and resources available to clients, in addition to	Prerequisites: None.	LEC 3.0 3.0 3.0
CSI174	Debt Resolution Sales Procedures	Practical application of debt resolution sales procedures. Covers consultative sales tools and services used in the provision of direct debt management sales. Includes approval calls, enrollment agreements, underwriting and file submission	Prerequisites: None.	L+L 2.0 4.0 4.0
CSI180	Debt Resolution Sales Practices	Further application of debt resolution sales procedures. Covers consultative sales tools and services used in the provision of direct debt management sales. Includes approval and welcome calls, enrollment agreements, underwriting and file submission procedures as well as	Prerequisites: A grade of C or better in CSI174.	L+L 2.0 4.0 4.0

CSI182	Introduction to Loan Consolidation	Introduction to loan consolidation in the debt settlement industry. Covers consolidation loan terminology, details, cycles, and benefits as well as disclosures and effective business communication for the loan consultant.	Prerequisites: None.	LEC 2.0 2.0 2.0
CSI184	Loan Consolidation Procedures	Practical application of loan consolidation procedures. Covers benefits of and processes for loan consolidation as well as consultative sales tools and services used in the provision of direct debt management sales. Includes initial calls, enrollment agreements, and customer	Prerequisites: None.	L+L 3.0 4.0 4.0
CSI202	Debt Settlement Loan Servicing	Consolidation loan servicing procedures. Covers types of loans, features, and guidelines as well as enrollment structure and loan calculations. Also covers payments, customer protections, and procedures for account	Prerequisites: None.	L+L 4.0 6.0 6.0
CSI206	Banking Member Service Representative	Introduction to banking member service representative roles and responsibilities. Includes communication and problem solving skills when dealing with members. Also covers various types of banking products and services available to members as well as an introduction to	Prerequisites: None. Corequisites: CSI207, CSI208 and CSI209.	LEC 3.0 3.0 3.0
CSI207	Banking Accounts and Products	Knowledge of bank accounts, products, and procedures for banking member service representatives. Covers new accounts, debit cards, certificates of deposit, and individual retirement accounts. Self-service banking benefits and procedures as well as cash	Prerequisites: None. Corequisites: CSI206, CSI208, and CSI209.	LEC 3.0 3.0 3.0
CSI208	Banking Account Management	Account management procedures for banking member service representatives. Banking terminology and maintenance procedures including member verification and privacy policies. Includes fraud handling and common banking inquiries by members such as updating account information, stopping payments,	Prerequisites: None. Corequisites: CSI206, CSI207, and CSI209.	LEC 3.0 3.0 3.0
CSI209	Banking Account Management Lab	Practical application of banking member services and procedures. Covers computerized banking systems including online documentation and database usage. Procedures for new accounts and account maintenance included as well as procedures for handling various member requests. Communication and customer service	Prerequisites: None. Corequisites: CSI206, CSI207, and CSI208.	LAB 1.0 2.0 2.0
CSI250	Customer Service for Credit Counselors	Basic customer service principles for the credit counselor. Examination of credit-counseling programs covered. Emphasis on elements of customer service	Prerequisites: None.	L+L 3.0 4.0 4.0

CSI251	Legal Issues In Credit Counseling	Overview of laws and practices in granting credit. Types of credit and calculating finance charges included. Emphasis on implications of inadequate payment	Prerequisites: None.	LEC 3.0 3.0 3.0
CSI252	Credit Counseling New Accounts	Overview of establishing new client accounts in a credit-counseling program. Emphasis on screens used to	Prerequisites: None.	L+L 3.0 4.0 4.0
CSI255	Account Maintenance Procedures	Account maintenance procedures for customer service representatives. Emphasis on managing ongoing client accounts. Covers contact with creditors and clients	Prerequisites: None.	L+L 3.0 4.0 4.0
CSI257	Credit Counseling Account Processes	Overview of maintaining a client account in a credit counseling program. Emphasis on screens used to	Prerequisites: None.	L+L 3.0 4.0 4.0
CSI258	Credit Counseling and Financial Management	Overview of financial topics relevant to clients and their accounts. Covers creditor information and policies as well as procedures for account review. Also includes identification of and education regarding client financial issues in addition to client resource identification and	Prerequisites: None.	LEC 3.0 3.0 3.0
CSM101	Quality Customer Service	Examines the nature of quality customer service and the attitudes, knowledge, and skill needed to work effectively in a quality customer service environment. Foundation skills for quality customer services are	Prerequisites: None.	LEC 3.0 3.0 3.0
CSN102DA	Customer User Support	Examines skills, tools and strategies necessary for becoming a computer help-desk or end-user support	Prerequisites: None.	110
CSN110	Information Security Fundamentals	Fundamental concepts of information technology security. Topics include authentication methods, access control, cryptography, public key infrastructure (PKI), network attack and defense methods, hardening of operating systems and network devices, securing remote access and wireless technologies and securing infrastructures and topologies. Emphasis on hands-on labs in both the Windows and Linux environments. Builds on thorough understanding of transmission	Prerequisites: A grade of C or better in CSN126DL or CSN126RH or permission of Program Director. Corequisites: CSN150++ or CSN270.	122
CSN126DL	Linux Operating System	Introduction to the Linux operating system. Develop knowledge and skills required to install, configure and troubleshoot a Linux-based workstation including basic network functions. Learn basic command line and graphical user interface (GUI) desktop environment utilities and applications. Fundamental abilities to	Prerequisites: None.	110

CSN140AB	Introduction to Networks	Focus on the architecture, structure, functions, components, and models of the internet and other computer networks. Principles and structure of IP addressing and the fundamentals of Ethernet concepts, media, and operations are introduced. Students will build simple LANs, perform basic configurations for	Prerequisites: None.	122
CSN150AB	Switching, Routing, and Wireless Essentials	Focus is on configuring switches and routers for use in small and medium-sized networks. Includes virtual local area networks (VLANs), VLAN trunking, inter-VLAN routing, spanning tree protocol (STP), EtherChannel, dynamic host configuration protocol (DHCP), first hop redundancy, local area network (LAN) and switch security, and static routing. Knowledge and skills needed to implement a wireless local area network	Prerequisites: None.	122
CSN160AB	Enterprise Networking, Security, and Automation	Focus is on the configuration of routers and switches within small and medium size networks for advanced functionality including: open shortest path first (OSPF), network security, access control lists (ACLs), network address translation (NAT), wide area network (WAN) concepts, virtual private networks (VPNs), quality of service (QOS), network management, design,	Prerequisites: None.	122
CSN170	A+ Exam Prep: Computer Hardware Configuration and Support	Explore technical aspects of personal computers, including system components, installation, system configuration, peripheral devices, and notebooks. Emphasis placed on hardware installation, maintenance, mobile devices, and hardware	Prerequisites: None.	122
CSN270	A+ Exam Prep: Operating System Configuration and Support	Explore advanced technical aspects of maintaining and servicing computers. Emphasis placed on operating system (OS) installation, maintenance, mobile devices, security, software troubleshooting, and on proper usage of tools, safety procedures, and professionalism. Helps	Prerequisites: None.	122
CSR108	Motor Vehicle Documentation Concerns	Vehicle titling considerations with emphasis on documentation procedures. Includes Department of Revenue policy and procedures and examination of title documents. Also covers trailer and damaged vehicle documentation as well as procedures for completing	Prerequisites: None.	L+L 2.0 3.0 3.0

CSR109	Motor Vehicle Documentation Procedures	State motor vehicle documentation procedure. Use of computer based government workstation emphasized. Includes procedures for location and modification of	Prerequisites: None.	L+L 2.0 3.0 3.0
CSR118	Property Insurance Billing Procedures	Overview of property insurance procedures for the customer service agent. Covers mission/vision in relation to roles and responsibilities of customer service agent, including expectations, insurance terminology, insurance coverage and policies, contracts and billing,	Prerequisites: None.	LEC 3.0 3.0 3.0
CSR120	Introduction to Property Insurance: Issuing and Servicing	Introduction to property insurance for the customer service representative. Covers types of insurance components and policies for home, rental, and condo properties. Examination of insurance issuance and servicing procedures. Also includes call flow process	Prerequisites: None.	L+L 3.0 4.0 4.0
CSR122	Rental and Condo/Unit Owner Property Insurance	Introduction to rental property and condo/unit owner insurance components, policies and procedures for the customer service representative. Covers systems and procedures for issuance, modification, and cancellation of policies as well as declined accounts. Also includes	Prerequisites: None.	L+L 2.0 3.0 3.0
CSR124	Renters Valuable Personal Property Insurance: Issuing and Servicing	Introduction to renters Valuable Personal Property (VPP) insurance coverage and procedures for the customer service representative. Covers procedures for issuing and servicing renters VPP policies, including characteristics of VPP coverage. Also covers policy modifications, declines, cancellations, limits and	Prerequisites: None.	L+L 2.0 3.0 3.0
CSR130	Advocate-Driven Healthcare	Procedures for advocate-driven healthcare customer service representatives. Covers eligibility requirements, enrollment procedures, and Health Insurance Portability and Accountability Act of 1996 (HIPAA) compliance standards. Also includes healthcare services, products,	Prerequisites: None.	LEC 2.0 2.0 2.0
CSR136	Health Care Insurance: Claims I	Overview of health insurance, medical terminology, and various operating systems and applications. Also includes research of medical, outpatient, and inpatient	Prerequisites: None.	L+L 4.0 6.0 6.0
CSR139	Introduction to Pharmacy Prescription Benefits Customer Care	Introduction to the Pharmacy Prescription Benefits program. Includes customer care responsibilities, confidentiality, and eligibility status in addition to various types of member inquiries. Also covers quality assurance and Federal and State laws governing	Prerequisites: None.	LEC 3.0 3.0 3.0

CSR144	Prior Authorization Programs and Systems	Prior authorization programs and systems for federal employees. Covers Med-Ex, 'Buy and Bill' and Medical Formulary Exception (MFE) programs as well as identification and processes for compounds. Also covers customer service skills and use of an automated phone system and the Clinical Authorization System	Prerequisites: None.	LEC 3.0 3.0 3.0
CSR145	Prescription Prior Authorization I	Prescription prior authorization procedures for federal employees. Covers account access, documentation, and eligibility as well as claims process and claims adjudication. Computerized databases and automated	Prerequisites: None.	L+L 4.0 4.0 4.0
CSR146	Prescription Prior Authorization II	Advanced prescription prior authorization procedures for federal employees. Usage of various computerized databases emphasized. Includes drug benefit management, drug limitation guidelines, standard allowance fill quantity, and prior authorization fill quantity. Approved and denied authorizations also	Prerequisites: A grade of C or better in CSR145.	L+L 4.0 4.0 4.0
CSR148	Health Care Insurance: Customer Service	Overview of customer service standards and objectives for health care insurance phone inquiries. Covers customer service solution processes, including first call resolution, account inquiries, member eligibility and	Prerequisites: None.	L+L 4.0 6.0 6.0
CSR155	Pharmacy Prescription Benefit Plans	Overview of pharmacy prescription benefit plans. Includes types of plans, limitations, and drug coverage in addition to fulfillment requests. Also covers procedures for accessing accounts, responding to caller inquiries, completing test claims, and steps for locating	Prerequisites: A grade of C or better in CSR139.	LEC 3.0 3.0 3.0
CSR156	Retail Pharmacy Procedures	Practical application of retail pharmacy customer care procedures. Includes procedures for accessing accounts, responding to eligibility issues, and completing customer requests. Also covers billing and payment procedures as well as the provision of non-	Prerequisites: A grade of C or better in CSR139.	L+L 2.0 4.0 4.0
CSR157	Pharmacy Prescription Procedures	Practical application of pharmacy customer care procedures. Includes procedures for managing billing and payment inquiries as well as order status processes	Prerequisites: A grade of C or better in CSR155.	L+L 2.0 3.0 3.0
CSR160	Pharmacy Practice for the Customer Service Representative	Orientation to customer service responsibilities in pharmacy practice. Includes educational and licensure requirements as well as basic functions of the pharmacy	Prerequisites: Permission of Department or Division.	LEC 1.0 1.0 1.0

CSR162	Pharmacy Operations for the Customer Service Representative	Customer service responsibilities in pharmacy operations. Includes procedures for prescription dispensing and drug distribution in the retail setting. Inventory control, packaging and storage, in addition to	Prerequisites: A grade of C or better in CSR160.	LEC 3.0 3.0 3.0
CSR171	Customer Representative Web Design Products and Services	Introduction to web design products and services. Includes customer services for web design, branding, and hosting as well as various products available to business owners. Also covers domain ownership and	Prerequisites: None.	LEC 2.0 2.0 2.0
CSR172	Customer Representative Web Service Sales	Customer service account procedures for web service sales. Covers business specific services and products, and application to meeting customer needs. Also covers hosting and website design sales procedures as well as	Prerequisites: None.	LEC 2.0 2.0 2.0
CSR173	Customer Service for Web Hosting	Introduction to web hosting products and customer services. Includes features and benefits of branding, productivity, presence, and marketing.	Prerequisites: None.	LEC 2.0 2.0 2.0
CSR174	Hosting Product Support Customer Service	Hosting product support customer service procedures. Covers databases, email solutions, and Content Management Systems (CMS) as well as business hosting. Also covers troubleshooting procedures	Prerequisites: None.	LEC 2.0 2.0 2.0
CSR175	Web Hosting Account Customer Service	Account customer service for web hosting and domains. Includes new accounts, branding, and presence strategies and products, and their application to meeting customer needs. Also covers hosting and website design procedures as well as completion of a	Prerequisites: None.	LEC 1.0 1.0 1.0
CSR176	Customer Product Service Management for Web Hosting/Domain	Introduction to web hosting and domain registrar products and customer services. Includes features and benefits of branding, productivity, presence, and marketing.	Prerequisites: None.	LEC 3.0 3.0 3.0
CSR177	Customer Representative for Web Hosting/Domain Registrar Services	Customer service account procedures for web hosting and domain registrar product application. Includes new accounts, branding, and presence strategies and products, and their application to meeting customer needs. Also covers hosting and website design	Prerequisites: None.	L+L 2.0 4.0 4.0
CSR178	Customer Service Consultations and Troubleshooting Lab	Practical application of strategies and procedures for conducting customer consultations and troubleshooting.	Prerequisites: None.	LAB 1.0 2.0 2.0

CSR184	Business Technology in Customer Service	Foundational business technology for enhancing customer service. Includes the integration of technology into an effective workforce management solution. Covers Enterprise Resource Planning (ERP) in addition to Customer Relationship Management (CRM) and	Prerequisites: None.	LEC 2.0 2.0 2.0
CSR195	Customer Service Representative Sales and Marketing	Introduction to sales and marketing strategies for the customer service representative. Includes the sales and negotiation processes as well as behavioral styles and demographics of customers. Also covers types of markets, organizational structure, and elements of a	Prerequisites: None.	L+L 2.0 4.0 4.0
CSR196	Call Center Customer Service	Introduction to practical application for call center representatives. Covers the role of call center representatives and skills and behaviors necessary for successful and effective call flow and completion of inbound calls. Also includes procedures for customer	Prerequisites: Permission of Department or Division.	L+L 3.0 5.0 5.0
CSR197	Customer Service Representative Business Practices	Introduction to business practices for the customer service representative. Includes organization types and structures as well as essential business communication techniques and foundational skills. Also covers	Prerequisites: None.	L+L 2.0 3.0 3.0
CSR200	Automobile Representative Customer Services	Automobile representative customer service responsibilities. Includes overview of insurance industry terminology and contracts as well as need determination. Also covers privacy and security issues in	Prerequisites: None.	LEC 3.0 3.0 3.0
CSR201	Web-Based Hosting Customer Service	Web-based hosting customer service. Includes resources, tools, and services for setup, maintenance,	Prerequisites: None.	LEC 1.0 1.0 1.0
CSR203	Productivity Customer Service	Web-based productivity customer service. Includes tools and resources for managing productivity as well as	Prerequisites: None.	LEC 1.0 1.0 1.0
CSR207	Automobile Policy Adjustment	Emphasis upon policy explanation and adjustment. Covers membership flow-thru criteria, quality customer service information, and in-depth on-line resource instrument review. Also includes consultative selling practice and the observation of acting member service	Prerequisites: None.	L+L 3.0 4.0 4.0
CSR211	Auto Insurance Quotes	Procedures for providing auto insurance quotes and completing various payments. Covers tools for investigating rate changes as well as procedures for modifying account vehicles and driver information. Also includes account research techniques and	Prerequisites: None.	L+L 3.0 5.0 5.0

CSR212	Automobile Insurance Operations I	Automobile insurance member services representative operating procedures. Emphasis upon explanation of payment and rate information, the provision of written correspondence, and file information completion. Covers representative underwriting observation, fundamental need based sales principles, and phone	Prerequisites: None.	LEC 3.0 3.0 3.0
CSR213	Automobile Insurance Operations II	Auto insurance account operations. Includes the format and use of vehicle identification numbers (VIN) and the impact of regulation in the insurance industry. Also covers policy procedures including liability, exclusions, and credits. Review of the billing process and	Prerequisites: A grade of C or better in CSR212.	LEC 2.0 2.0 2.0
CSR214	Automobile Insurance Operations Lab	Practical application of auto insurance member services operational procedures. Includes use of the direct sales system to complete account navigation in addition to modification and billing procedures. Emphasis on effective communication skills, information gathering,	Prerequisites: A grade of C or better in CSR213.	LAB 1.0 2.0 2.0
CSR220	Sales and Retention	Practical application for call center representatives. Covers skills and behaviors necessary for successful and effective completion of inbound sales and retention	Prerequisites: Permission of Department or Division.	LAB 2.0 6.0 6.0
CSR280AB	Customer Service Internship	Customer service experience in business or industry. Eighty hours of designated work per credit. Maximum of	Prerequisites: Permission of Department or Division.	L+L 2.0 2.0 2.0
CTE200	Career and Technical Education: Principles, Philosophy and Student Organizations	Examination of the role of career and technical educational (CTE) pathways as they relate to workforce development. Overview of career and technical student organizations (CTSO), occupational clusters, development and role of career and technical education, philosophy, history and impact of federal	Prerequisites: None.	LEC 3.0 3.0 3.0
CTE210	Career and Technical Education: Teaching Methods and Curriculum Development	Overview and practical application of teaching methodology and curriculum development for secondary education career and technical education teachers. Teaching strategies and learning styles covered. Curriculum design/mapping, lesson objectives, time management skills, teaching resources, and Arizona	Prerequisites: None.	LEC 3.0 3.0 3.0
CTE220	Career and Technical Education: Classroom Management and Lab Safety	Classroom management techniques. Classroom discipline models, student behavior and misbehavior, group dynamics, student self-motivation, and learning styles covered. Essentials of lab safety issues, including regulatory agencies and policies. State Board of	Prerequisites: None.	LEC 4.0 4.0 4.0

CTT110	Introduction to Caterpillar Service Industry	Introduction to the Caterpillar organization and product line, basic shop safety, and shop operation. Includes computer operations and service information systems.	Prerequisites: Permission of Department or Division.	L+L 3.0 5.0 5.0
CTT111	Caterpillar Engine Fundamentals	Introduction to diesel engine theory and service procedures. Focuses on Caterpillar engine systems and	Prerequisites: A grade of C or better in CTT110.	L+L 4.0 8.0 8.0
CTT112	Hydraulic Fundamentals	Hydraulic fundamentals, including functions of valves used in Caterpillar hydraulic systems, functions of vane pumps, gear pumps, and piston pumps, and assembly and disassembly of hydraulic components. Includes ISO	Prerequisites: A grade of C or better in CTT110.	L+L 3.0 5.0 5.0
CTT113	Fuel Systems	Introduction to fuel systems used in Caterpillar engines. Covers fuel selection, calibrations, and nozzle testing procedures, governor operation, and hydraulic fuel ratio controls. Includes 1.1 and 1.2 MUI and HEUI, EUI,	Prerequisites: A grade of C or better in CTT110.	L+L 3.0 5.0 5.0
CTT114	Basic Electrical Fundamentals	Basic electrical and electronic principles used by the technician to diagnose and repair electrical systems in	Prerequisites: A grade of C or better in CTT110.	L+L 3.0 5.0 5.0
CTT115	Air Conditioning Fundamentals	Introduction to principles, systems, components, and servicing of air conditioning systems used in Caterpillar	Prerequisites: A grade of C or better in CTT110.	L+L 3.0 5.0 5.0
CTT116	Power Train I	Basic components and operations of power train systems used in Caterpillar machines. Covers basic components, clutches, manual shift transmissions, and	Prerequisites: A grade of C or better in CTT110.	L+L 3.0 5.0 5.0
CTT117	Machine Hydraulic Systems	Operation, testing, and adjustment procedures for pilot operated hydraulic systems, load sensing pressure compensated (LSPC) hydraulic systems, electro-hydraulic systems, and hydrostatic systems.	Prerequisites: A grade of C or better in CTT110.	L+L 3.0 5.0 5.0
CTT118	Caterpillar Dealer Internship I	Application of skills and knowledge gained in CTT coursework in an internship in a dealership environment. Develops professional skills required of Caterpillar service technician. Provides experience in tool usage, shop safety, connective devices, computers and service information systems, air intake and exhaust systems, lubrication systems, cooling systems, fuel systems, engines, and electrical systems. Requires intern to complete a list of learning objectives, keep a	Prerequisites: A grade of C or better in CTT110.	LAB 3.0 3.0 0.0

CTT119	Caterpillar Dealer Internship II	Application of skills and knowledge gained in CTT coursework in an internship in a dealership environment. Develops professional skills required of Caterpillar service technician. Provides experience in hydraulics, pumps, valves, cylinders, and pilot-operated implement system. Requires intern to complete a list of learning objectives, keep a logbook, and be evaluated	Prerequisites: A grade of C or better in CTT110.	LAB 3.0 3.0 0.0
CTT200	Power Train II	Methods of transferring power. Hydraulic-driven machines and mechanical power train components, including differentials, brakes, final drives, and	Prerequisites: A grade of C or better in CTT110.	L+L 3.0 5.0 5.0
CTT201	Machine Electronics	Introduction to machine electronic systems and diagnostic tooling used to diagnose and repair the complex electrical/electronic systems installed in	Prerequisites: A grade of C or better in CTT110.	L+L 3.0 5.0 5.0
CTT202	Engine Diagnostics and Repair	In-depth study of engine diagnostics and repair techniques used to troubleshoot and repair engine problems in Caterpillar machines. Selection and use of Caterpillar diagnostic tools. Covers oil, air, cooling, and	Prerequisites: A grade of C or better in CTT110.	L+L 3.0 5.0 5.0
CTT203	Machine Diagnostics	Failure analysis, troubleshooting logic, and diagnostic tooling and processes used to diagnose and repair the complex systems installed in Caterpillar machines. Use of Caterpillar's Applied Failure Analysis. Introduction to	Prerequisites: A grade of C or better in CTT110.	L+L 3.0 5.0 5.0
CTT204	Machine Specific Systems	Introduction to machine-specific systems. Machines covered include compact construction equipment, agricultural combines and challengers, 325B Excavator, off-highway trucks, wheel tractor scrapers, and motor	Prerequisites: A grade of C or better in CTT110.	L+L 3.0 5.0 5.0
CTT205	Caterpillar Dealer Internship III	Application of skills and knowledge gained in CTT coursework in an internship in a dealership environment. Develops professional skills required of Caterpillar service technician. Provides experience in air conditioning systems, power trains, couplings, transmissions, and hydraulic systems. Requires intern to complete a list of learning objectives, keep a logbook,	Prerequisites: A grade of C or better in CTT110.	LAB 3.0 3.0 0.0

CTT206	Caterpillar Dealer Internship IV	Application of skills and knowledge gained in CTT coursework in an internship in a dealership environment. Develops professional skills required of Caterpillar service technician. Provides experience in lubrication systems, engine air induction systems, cooling systems, fuel systems, timing systems, failure analysis, diagnosis, and troubleshooting of specific types of Caterpillar equipment. Requires intern to	Prerequisites: A grade of C or better in CTT110.	LAB 3.0 3.0 0.0
CUL101	Culinary Basics	Theory and practice of basic elements of culinary arts fundamentals. Emphasis on safety, sanitation and uniform requirements, culinary terminology, basic nutritional guidelines, equipment needs and usage, standard measurements, knife selection and care, basic	Prerequisites: None.	LEC 3.0 3.0 3.0
CUL102	Hot Foods	Cooking techniques and preparation of varied meat, fish and poultry items. Theory and practice of production of stocks, sauces, and soups. Study of	Prerequisites: None.	LEC 3.0 3.0 3.0
CUL103	Breakfast and Cold Foods	Cooking techniques and preparation of breakfast items, salads, sandwiches, and dressings. Theory and practice of production of egg, pasta, cheeses, and fruit dishes, canapes and hors d'oeuvre creations. Study of lettuces, fruits, grains, cheeses and dressings as	Prerequisites: None.	LEC 3.0 3.0 3.0
CUL104	Bakery and Pastry	Provides a study of cooking techniques and preparation methods for cakes, pies, cookies and simple desserts as well as production of doughs and breads. Includes preparation of various bakery sauces and toppings, uses of chocolate, and appropriate presentation	Prerequisites: None.	LEC 3.0 3.0 3.0
CUL105	Principles of Professional Cooking	Introductory principles and skills for professional cooking. Introduces organizational structure of kitchen staff in different types of kitchens. Includes basic principles of safety and sanitation, equipment and utensil use, French cooking terms, recipe use, measuring techniques, identification and use of seasoning agents, and basic cooking methods applied to stocks, sauces and soups, vegetables, starches,	Prerequisites: None.	L+L 3.0 5.0 5.0
CUL107	Cold Food and Breakfast Production	Cooking techniques and preparation of cold food items to include salads, sandwiches, hors d'oeuvres, and appetizers. Preparation of common breakfast foods	Prerequisites: A grade of C or better in CUL105.	L+L 3.0 5.0 5.0

CUL109	Menu Design and Development	Essential skills of menu planning and cost controls to follow a market plan. Emphasis on purchasing, receiving, storage, forecasting, production control, food and beverage control, budgeting, and evaluation systems. Provides a working model for food operation	Prerequisites: None.	LEC 2.0 2.0 2.0
CUL113	Commercial Baking Techniques	Principles and techniques for preparation, storage, and serving of bakery products. Includes breads, cakes, pies, pastry, cookies, fillings, and icings. Emphasis on	Prerequisites: None.	L+L 3.0 5.0 5.0
CUL115	Food Service Sanitation	Focuses on the theory and practice of food service safety and sanitation. Emphasis on understanding and applying the Hazard Analysis Critical Control Points (HACCP) concept. Reviews legal elements of food service sanitation based on requirements and recommendations of regulatory authorities. Focuses on stewarding as an important kitchen support service with	Prerequisites: None.	LEC 2.0 2.0 2.0
CUL119	Bakery Operations	Basic business operations for a bakery including examination of product lines, menu development,	Prerequisites: None.	LEC 3.0 3.0 3.0
CUL120	Food Costing, Purchasing and Inventory Control	Basic skills necessary to understand and utilize cost controls. Focus on measurements, recipe costing and yield analysis. Application of systems and practices for efficient food purchasing, storage, production,	Prerequisites: None.	L+L 3.0 3.0 3.0
CUL123	Customer Service Practicum	Professional food and beverage experience in a commercial food service operation. Focuses on food server, host/hostess, cashier, and busperson. Includes beverage preparation, application of sanitation, and safety concepts. Stresses professionalism in service,	Prerequisites: A grade of C or better in FON104.	L+L 4.0 11.0 0.0
CUL127	Classical Desserts	Advanced principles and techniques in commercial baking and dessert preparation. Focus on fine pastries with European flair and on desserts served in better hotels, restaurants, and resorts. Preparation of macaroons, tarts, puff pastries, specialty cakes, and desserts such as Bavarian creams, mousses, custards, souffles, crepe desserts, and flammeries. Preparation	Prerequisites: A grade of C or better in CUL113, or permission of Program Director.	L+L 3.0 5.0 5.0
CUL130	Savory Foods I	Studies all facets of hot foods with an emphasis on French and regional cooking techniques; including vegetable preparation, stocks, sauces, and soups. Reviews ingredients, production and plating techniques that are unique to contemporary, international and	Prerequisites: None.	L+L 6.0 7.5 7.5

CUL137	Specialty Breads and Breakfast Pastry	The preparation of classical and artisan breads using advanced production techniques and skills. Classic breakfast pastry, with the production of laminated doughs, sweet doughs, and rich yeast doughs to include Danish, croissant, puff pastry, brioche, and other international classics. Completion of edible	Prerequisites: A grade of C or better in CUL113 or permission of Program Director.	L+L 3.0 5.0 5.0
CUL145	Banquet Food and Beverage Service Externship	Waiter/waitress serving experiences in a banquet setting; includes instructor-assisted placement, orientation, job seeking skills, and working a minimum of four banquets or twenty-four hours in banquet service.	Prerequisites: A grade of C or better in CUL123 and FON104.	LAB 1.0 5.0 0.0
CUL150	Garde Manger and Cold Foods	Studies all facets of garde manger and cold foods with an emphasis on safety and sanitation, standard commercial kitchen equipment, salads, dressings, sandwiches, cold sauces, salad condiments, basic knife skills, and a foundation in herbs, spices, vinegars and oils. Introduces basic cooking techniques and	Prerequisites: None.	L+L 6.0 8.0 8.0
CUL160	Bakery I	Theory and practice of operating a bakery or pastry shop in a hotel or restaurant kitchen. Provides experience in planning, ordering, scheduling and producing fine French and American pastries and baked goods. Emphasis on rapid, high-quality hand	Prerequisites: None.	L+L 3.0 5.0 5.0
CUL170	Dining Room Operations I	Focuses on theory and practice of operating a casual dining room; includes set-up and clean-up, food and beverage service, proper etiquette, point-of-sale operation and presenting guest checks. Emphasis on service techniques, including buffet and banquet set-	Prerequisites: None.	L+L 3.0 5.0 5.0
CUL175	Restaurant Operations Management	Studies all facets of front of the house operations with an emphasis on operating a casual dining room including food and beverage service, proper etiquette, service techniques, point-of-sales operations and presenting guest checks. Introduces sustainability,	Prerequisites: None.	L+L 6.0 8.0 8.0
CUL201	International Cuisine	Gourmet international food preparation applied to restaurants. Review principles of sanitation and safety. Explores history and customs, serving styles, and preparation techniques of foods unique to selected international cultures. Emphasis on practical cooking experiences in a restaurant kitchen. Cultures to include,	Prerequisites: A grade of C or better in CUL105 or permission of Program Director.	L+L 3.0 5.0 5.0

CUL203	American Regional Cuisine	American regional food preparation applied to restaurants. Review principles of sanitation and safety. Explores history and customs, serving styles, and preparation techniques of foods unique to selected American regions. Emphasis on practical cooking experiences in a restaurant setting. American regions to	Prerequisites: A grade of C or better in CUL105 or permission of Program Director.	L+L 3.0 5.0 5.0
CUL205	French Cuisine	Principles of French cooking applied to restaurant kitchens. Includes review of safety and sanitation principles, orientation to French culture, use of French terms and recipes, and reading French menus. Emphasis on practical experiences in preparing French meals in a restaurant kitchen. Introduces preparation of	Prerequisites: A grade of C or better in CUL105 or permission of Program Director.	L+L 3.0 5.0 5.0
CUL207	Pacific Rim Cuisine	Local and gourmet Pacific Rim food preparation applied to restaurants. Overview of principles of sanitation and safety. Explores history and customs, serving styles, and preparation techniques of foods unique to Pacific Rim cultures. Emphasis on practical cooking experiences in a restaurant kitchen. Cultures to include,	Prerequisites: A grade of C or better in CUL105.	L+L 3.0 5.0 5.0
CUL209	Italian Cuisine	Principles of Italian cooking applied to restaurant kitchens. Includes review of safety and sanitation principles, orientation to Italian culture, use of Italian terms and recipes, and reading Italian menus. Emphasis on practical experiences in preparing Italian meals in a restaurant kitchen. Introduces preparation of	Prerequisites: A grade of C or better in CUL105.	L+L 3.0 5.0 5.0
CUL213	Buffet Catering	Focuses on the basic steps of the catering process in a commercial food setting. Includes an overview of safety and sanitation principles. Emphasizes practical experiences in booking and record keeping, function planning, ordering, production, and service set-up and	Prerequisites: A grade of C or better in CUL105 or permission of Program Director.	L+L 3.0 5.0 5.0
CUL215	Advanced Pastry Arts	Advanced pastry arts and decorative work as applied to showpieces and special occasion cakes. Includes sugar work such as pulled, blown, and poured as well as the use of tempered and modeling chocolate. Design and execution of a three-tier wedding cake as well as work on a special occasion and team wedding cake using gum paste, pastillage, chocolate, or marzipan. Includes	Prerequisites: A grade of C or better in CUL113 or permission of Program Director.	L+L 3.0 5.0 5.0
CUL217	Specialty Cakes	Advanced techniques for the production of special occasion cakes, including initial design work, baking,	Prerequisites: A grade of C or better in CUL113 or permission of Program	L+L 3.0 5.0 5.0

CUL219	Professional Pastry Techniques	Production techniques for frozen desserts, cakes with multiple components, individual pastries, and	Prerequisites: A grade of C or better in CUL113 or permission of Program	L+L 3.0 5.0 5.0
CUL220	Culinary Nutrition	Study of basic nutrition concepts with an emphasis on the nutritional concerns of restaurants and other types of food service operations. Focuses on nutrients in foods, the relationships to other nutrients and the	Prerequisites: None.	LEC 2.0 2.0 2.0
CUL223	Food Service Management	Administrative procedures and personnel relationships: Management of materials costs, record keeping and legal aspects of food and beverage service operations.	Prerequisites: None.	LEC 3.0 3.0 3.0
CUL230	Savory and Hot Foods	Studies all facets of hot foods with an emphasis on French, regional, international and contemporary cooking techniques. Focus on vegetable preparation, stocks, sauces and soups. Students also practice	Prerequisites: A grade of C or better in CUL150.	L+L 6.0 11.0 11.0
CUL231AC	Culinary Studies Internship	Work experience preparing hot and cold foods in a commercial food service operation, experience in volume food production preparing salads, soups, stocks, sauces, entrees, starches, and vegetables. Fifteen (15) hours of work weekly. Supervision and	Prerequisites: A grade of C or better in CUL105, CUL115, and permission of Department or Division.	LAB 3.0 15.0 0.0
CUL235	Advanced Culinary Techniques I - Meats	Theory and practice of the varied uses and preparation of protein products. Emphasis on butchering, creating stocks, soups and sauces, cooking methodologies, cost effective applications, plating and selection of	Prerequisites: A grade of C or better in CUL230 or industry equivalent.	L+L 2.0 2.0 2.0
CUL236	Advanced Culinary Techniques II - Seafood	Theory and practice of the varied uses and preparation of seafood products. Emphasis on butchering, creating stocks, soups and sauces, cooking methodologies, cost-effective applications, plating and selection of	Prerequisites: A grade of C or better in CUL230 or industry equivalent.	L+L 2.0 2.0 2.0
CUL237	Advanced Culinary Techniques III - Game and Poultry	Theory and practice of the varied uses and preparation of game and poultry products. Emphasis on butchering, creating stocks, soups and sauces, cooking methodologies, cost effective applications, plating and	Prerequisites: A grade of C or better in CUL230 or industry equivalent.	L+L 2.0 2.0 2.0
CUL255	Advanced Garde Manger I - Salads and Sandwiches	Theory and practice of creating simple and complex salads and sandwiches. Emphasis on use of multiple ingredients for hot and cold products, dressings, emulsified oils and vinegars, condiments, production methodologies, cost effective applications, plating and	Prerequisites: None.	L+L 2.0 2.0 2.0

CUL256	Advanced Garde Manger II - Appetizers and Hors d'oeuvres	Theory and practice of the key elements in production of appetizers and hors d'oeuvres. Emphasis on ingredient selection, flavor combinations, preparation methodologies, cost effective applications, displaying,	Prerequisites: None.	L+L 2.0 2.0 2.0
CUL260	Baking and Pastry	Studies all facets of bakery operations with an emphasis on French, regional, international and contemporary baking techniques. Focus on rapid, high-quality hand production of doughs, breads, creams, desserts, cookies and pastries. Students also practice	Prerequisites: A grade of C or better in CUL150.	L+L 6.0 11.0 11.0
CUL265	Professional Baking I - Base Products and Sauces	Theory and practice of the preparation of base products and sauces. Emphasis on creating finished products using basic components, creating sauces, and study of cooking methodologies, cost effective applications and	Prerequisites: A grade of C or better in CUL260 or industry equivalent.	L+L 2.0 2.0 2.0
CUL266	Professional Baking II - Breads and Rolls	Theory and practice of cooking techniques and procedures in the preparation of breads and rolls. Emphasis on hands-on production of scratch recipes, understanding formulas, ratios and ingredient interaction for producing high quality breads and rolls, cooking methodologies, and cost-effective applications. Focus on production of yeast-leavened breads, quick	Prerequisites: A grade of C or better in CUL260 or industry equivalent.	L+L 2.0 2.0 2.0
CUL267	Professional Baking III - Pastries, Pies and Cakes	Theory and practice of the preparation of complex pastries, pies and cakes. Emphasis on cooking methodologies, high quality cost effective applications,	Prerequisites: A grade of C or better in CUL260 or industry equivalent.	L+L 2.0 2.0 2.0
CUL268	Professional Baking IV - Decorative and Design Work	Theory and practice of the varied uses and preparation of chocolate and sugar as decorative items. Emphasis on applications for advanced show work, cooking methodologies, cost effective applications for plated	Prerequisites: A grade of C or better in CUL260 or industry equivalent.	L+L 2.0 2.0 2.0
CUL270	Dining Room Operations II	Theory and practice of operating a formal dining room, including set-up and clean-up, food and beverage service, proper etiquette and tableside food preparation. Emphasis on formal etiquette and service practices for a dining room including buffet and banquet	Prerequisites: A grade of C or better in CUL170.	L+L 3.0 6.0 6.0

CUL296WA	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 1.0 5.0 0.0
CUL296WB	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 2.0 10.0 0.0
CUL296WC	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 3.0 15.0 0.0

CUL296WD	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 4.0 20.0 0.0
CUL298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
CUL298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
CUL298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
CWE198AA	Career/Work Experience	Participation in a work experience, gaining on-the-job training, and/or exploring a career or field of choice. Helps students relate their education to the real work world. Resume writing and interviewing skills.	Prerequisites: None.	L+L 1.0 1.0 1.0

CWE198AB	Career/Work Experience	Participation in a work experience, gaining on-the-job training, and/or exploring a career or field of choice. Helps students relate their education to the real work world. Resume writing and interviewing skills.	Prerequisites: None.	L+L 2.0 2.0 2.0
CWE198AC	Career/Work Experience	Participation in a work experience, gaining on-the-job training, and/or exploring a career or field of choice. Helps students relate their education to the real work world. Resume writing and interviewing skills.	Prerequisites: None.	L+L 3.0 3.0 3.0
CWE298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
CWE298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
CWE298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
DAE112	Dental Assisting I	Introduction to general dentistry, dental sciences, and basic preclinical dental assisting theory and skills. Topics include dental anatomy, recording oral conditions, infection control, patient preparation, communication, patient safety and comfort, emergency management, four-handed dentistry concepts and the	Prerequisites: Acceptance into the Dental Assisting Program or permission of Program Director.	LEC 7.0 7.0 7.0 LAB 0.0 10.0 10.0

DAE124	Dental Radiography	Physics of radiography, theory of radiation production, exposure techniques, radiation protection, digital image production, film processing, mounting, and interpretation of radiographs.	Prerequisites: A grade of C or better in DAE156 or permission of Program Director. Corequisites: DAE131 or permission of Program Director.	LEC 2.0 2.0 2.0
DAE131	Dental Radiography Laboratory	Radiation safety and infection control procedures for operator and patient. Image receptor placement, exposure, processing, mounting, and evaluation of dental radiographs. Operation and maintenance of x-	Prerequisites: A grade of C or better in DAE156 or permission of Program Director. Corequisites: DAE124 or permission of Program Director.	LAB 2.0 6.0 6.0
DAE140	Dental Issues Seminar	Examination of legal and ethical responsibilities of dental team members. Review and analysis of clinical procedures in general and specialty practices. Includes professional and career development strategies and certification information and processes.	Prerequisites: A grade of C or better in DAE156 or permission of Program Director. Corequisites: (DAE224, DAE225, DAE226, DAE227, and DAE228) or permission of Program	LEC 1.0 1.0 1.0
DAE156	Dental Assisting II	Intermediate dental assisting skills, with an emphasis in treatment provided in general dentistry, including an introduction to dental diseases and their prevention, and preparing for and assisting in general dental restorative procedures, including the use of local anesthetics, dental materials, and pharmacological agents for procedures. Introduction to ethics and the	Prerequisites: A grade of C or better in DAE112 or permission of Program Director.	LEC 7.0 7.0 7.0 LAB 0.0 10.0 10.0
DAE212	Dental Assisting III	Advanced dental assisting skills, with an emphasis in assisting for dental specialty procedures, including pediatrics, endodontics, periodontics, orthodontics, prosthodontics, and oral and maxillofacial surgery. Additional emphasis will be on expanded functions procedures performed by the dental assistant, as well as patient records management and pharmacology	Prerequisites: A grade of C or better in DAE156 or permission of Program Director.	LEC 2.0 2.0 2.0 LAB 0.0 2.0 2.0
DAE224	General Clinical Practice	Placement of students in general practice dental facilities for supervised practical experience.	Prerequisites: A grade of C or better in DAE112 and DAE156, or Permission of Program Director. Corequisites: DAE140 or permission	LAB 1.0 5.0 0.0
DAE225	Pediatric Clinical Practice	Placement of students in pediatric dental facilities for supervised practical experience.	Prerequisites: A grade of C or better in DAE112 and DAE156, or Permission of Program Director. Corequisites: DAE140 or permission	LAB 1.0 5.0 0.0

DAE226	Periodontal Clinical Practice	Placement of students in periodontal facilities for supervised practical experience.	Prerequisites: A grade of C or better in DAE112 and DAE156, or Permission of Program Director. Corequisites: DAE140 or permission	LAB 1.0 5.0 0.0
DAE227	Orthodontic Clinical Practice	Placement of students in orthodontic facilities for supervised practical experience.	Prerequisites: A grade of C or better in DAE112 and DAE156, or Permission of Program Director. Corequisites: DAE140 or permission	LAB 1.0 5.0 0.0
DAE228	Oral and Maxillofacial Surgery Clinical Practice	Placement of students in oral and maxillofacial surgical facilities for supervised practical experience.	Prerequisites: A grade of C or better in DAE112 and DAE156, or Permission of Program Director. Corequisites: DAE140 or permission	LAB 1.0 5.0 0.0
DAE256	Dental Assisting IV	Advanced dental assisting sciences, with an emphasis in the recognition of oral pathologies, use of technology in dentistry, intermediate dental office management skills, and legal considerations for the practice of dentistry. Additional emphasis will be placed on coronal	Prerequisites: A grade of C or better in DAE212 or permission of Program Director.	LEC 2.0 2.0 2.0 LAB 0.0 2.0 2.0
DAH100	Introduction to Dance in the United States	Overview of the field of dance focusing on origins, historical development, cultural characteristics of the various styles of dance and their contemporary practice in the United States, and dance as a vital part of the	Prerequisites: None.	LEC 3.0 3.0 3.0
DAH201	Dance, Culture, and Global Contexts	Introduction to the study of dance as culture in diverse global contexts.	Prerequisites: None.	LEC 3.0 3.0 3.0
DAH250	Dance in Popular Culture	Interdisciplinary approach investigating diverse cultural dance practices that have shaped American popular culture from the late 19th century to the present. Highlights issues of power, class, race, ethnicity, gender, age and sexuality. Emphasis is on revealing	Prerequisites: None.	LEC 3.0 3.0 3.0
DAH255	Hip Hop: Arts, Aesthetic and Culture	Selective survey and historico-cultural analysis of hip hop arts, aesthetics and culture organized around the founding elements of DJing, MCing, B-boy and B-girling,	Prerequisites: A grade of C or better in ENG101 or ENG107.	LEC 3.0 3.0 3.0
DAN101AA	Social Dance: Ballroom	Theory and practice of Ballroom dance. Development of movement quality and performance skills individually, with a partner or in a group setting.	Prerequisites: None.	L+L 1.0 2.0 2.0
DAN101AB	Social Dance: Swing	Theory and practice of Swing dance. Development of movement quality and performance skills individually, with a partner or in a group setting.	Prerequisites: None.	L+L 1.0 2.0 2.0

DAN101AC	Social Dance: Latin	Theory and practice of Latin dance. Development of movement quality and performance skills individually,	Prerequisites: None.	L+L 1.0 2.0 2.0
DAN101AE	Social Dance: Tango	Theory and practice of Tango dance. Development of movement quality and performance skills individually, with a partner or in a group setting.	Prerequisites: None.	L+L 1.0 2.0 2.0
DAN102	Hip Hop I	Theory and practice of Hip Hop dance at the beginning level. Development of movement quality and	Prerequisites: None.	L+L 1.0 3.0 3.0
DAN102PA	Hip Hop Basic Level	Theory and practice of Hip Hop dance at the basic level. Development of movement quality and improvisation skills. Dance training for personal skill	Prerequisites: None.	L+L 0.5 1.5 1.5
DAN103	Hip Hop II	Theory and practice of Hip Hop dance at the advanced beginning level. Development of movement quality and	Prerequisites: A grade of C or better in DAN102 or permission of	L+L 1.0 3.0 3.0
DAN103PA	Hip Hop Beginning Level	Theory and practice of Hip Hop dance at the beginning level. Development of movement quality and improvisation skills. Dance training for personal skill	Prerequisites: A grade of C or better in DAN102 or DAN102PA or permission of Instructor.	L+L 0.5 1.5 1.5
DAN104AA	Ballroom I	Theory and practice of Ballroom dance at the beginning level. Development of movement quality and	Prerequisites: None.	L+L 1.0 3.0 3.0
DAN104AB	Ballroom II	Theory and practice of Ballroom dance at the advanced beginning level. Development of movement quality and	Prerequisites: A grade of C or better in DAN104AA or permission of	L+L 1.0 3.0 3.0
DAN106AA	Latin I	Theory and practice of Latin dance at the beginning level. Development of movement quality and	Prerequisites: None.	L+L 1.0 3.0 3.0
DAN106AB	Latin II	Theory and practice of Latin dance at the advanced beginning level. Development of movement quality and	Prerequisites: A grade of C or better in DAN106AA or permission of	L+L 1.0 3.0 3.0
DAN108AA	Tango I	Theory and practice of Tango dance at the beginning level. Development of movement quality and	Prerequisites: None.	L+L 1.0 3.0 3.0
DAN108AB	Tango II	Theory and practice of Tango dance at the advanced beginning level. Development of movement quality and	Prerequisites: A grade of C or better in DAN108AA or permission of	L+L 1.0 3.0 3.0
DAN115	Dance Trends	Theory and practice of current social dance trends. Development of movement quality and performance	Prerequisites: None.	L+L 1.0 3.0 3.0
DAN120AB	World Dance: Flamenco	Theory and practice of Flamenco. Development of movement quality and performance skills, individually,	Prerequisites: None.	L+L 1.0 3.0 3.0
DAN120AE	World Dance: Middle Eastern Dance	Theory and practice of Middle Eastern dance. Development of movement quality and performance	Prerequisites: None.	L+L 1.0 3.0 3.0
DAN120AK	World Dance: Capoeira	Theory and practice of Capoeira. Development of movement quality and performance skills.	Prerequisites: None.	L+L 1.0 3.0 3.0
DAN129	Musical Theatre Dance I	Introduction to the theory and practice of musical theatre dance at the beginning level. Development of movement quality and performance skills.	Prerequisites: None.	L+L 1.0 3.0 3.0

DAN130	Musical Theatre Dance II	Theory and practice of musical theatre dance at the advanced beginning level. Development of movement quality and performance skills.	Prerequisites: A grade of C or better in DAN129 or permission of Instructor.	L+L 1.0 3.0 3.0
DAN131	Ballet I	Level one ballet theory and practice. Development of movement quality and performance skills.	Prerequisites: None.	L+L 1.0 3.0 3.0
DAN131PA	Ballet I: Community	Dance training for personal skill development and interest. Level one ballet theory and practice.	Prerequisites: None. Prior dance experience suggested but not	L+L 0.5 1.5 1.5
DAN132	Modern Dance I	Introduction to the theory and practice of modern dance at the beginning level. Development of movement quality and performance skills.	Prerequisites: None.	L+L 1.0 3.0 3.0
DAN132PA	Modern Dance Basic Level	Dance training for personal skill development and interest. Introduction to the theory and practice of	Prerequisites: None. Prior dance experience suggested but not	L+L 0.5 1.5 1.5
DAN133	Jazz Dance I	Introduction to the theory and practice of jazz dance at the beginning level. Development of movement quality	Prerequisites: None. Corequisites: DAN138 for dance majors.	L+L 1.0 3.0 3.0
DAN133PA	Jazz Basic Level	Dance training for personal skill development and interest. Introduction to the theory and practice of jazz	Prerequisites: None. Prior dance experience suggested but not	L+L 0.5 1.5 1.5
DAN134	Ballet II	Level two ballet theory and practice. Development of movement quality and performance skills.	Prerequisites: A grade of C or better in DAN131 or permission of	L+L 1.0 3.0 3.0
DAN134PA	Ballet II: Community	Dance training for personal skill development and interest. Level two ballet theory and practice.	Prerequisites: A grade of C or better in DAN131PA or permission of Department or Division.	L+L 0.5 1.5 1.5
DAN135	Modern Dance II	Theory and practice of modern dance at the advanced beginning level. Development of movement quality and	Prerequisites: A grade of C or better in DAN132 or permission of	L+L 1.0 3.0 3.0
DAN135PA	Modern Dance Beginning Level	Dance training for personal skill development and interest. Theory and practice of modern dance at the beginning level.	Prerequisites: A grade of C or better in DAN132PA or permission of Department or Division.	L+L 0.5 1.5 1.5
DAN136	Jazz Dance II	Theory and practice of jazz dance at the advanced beginning level. Development of movement quality and	Prerequisites: A grade of C or better in DAN133 or permission of	L+L 1.0 3.0 3.0
DAN136PA	Jazz Beginning Level	Dance training for personal skill development and interest. Introduction to the theory and practice of jazz dance at the beginning level. Development of	Prerequisites: A grade of C or better in DAN133PA or permission of Department or Division.	L+L 0.5 1.5 1.5
DAN140	Tap Dance I	An introduction to the theory and practice of tap dance.	Prerequisites: None.	L+L 1.0 3.0 3.0
DAN141	Dance Workshop	An intensive experience in the process of choreography, performance, and production elements.	Prerequisites: None.	L+L 1.0 3.0 3.0
DAN145	Tap Dance II	Theory and practice of tap dance at an advanced beginning level.	Prerequisites: A grade of C or better in DAN140 or permission of	L+L 1.0 3.0 3.0
DAN146	Tap Dance Ensemble	Introduction to the process and practice of dance performance, specific to the genre of tap dance.	Prerequisites: A grade of C or better in DAN140 or permission of	L+L 1.0 3.0 3.0

DAN150	Dance Performance I	The process and practice of level I dance performance.	Prerequisites: None. Corequisites: Any level of any of the following dance technique courses with a DAN prefix: ballet, modern, jazz, hip hop,	L+L 1.0 3.0 3.0
DAN155	Dance Performance II	The process and practice of level II dance performance.	Prerequisites: A grade of C or better in DAN150 or permission of Instructor. Corequisites: Any level of any of the following dance technique courses with a DAN prefix: ballet, modern, jazz, hip hop, tap, social, or	L+L 1.0 3.0 3.0
DAN164	Improvisation	An introduction to and an exploration of basic improvisational dance skills.	Prerequisites: None.	L+L 1.0 3.0 3.0
DAN170	Dance Kinesiology	In-depth study of how the human body functions during dance movement both theoretically and practically. Attention given to correct body alignment and use while dancing, exploring each part of the body individually	Prerequisites: None.	LEC 3.0 3.0 3.0
DAN190	Discovering Dance Careers	An overview of the professional opportunities available in dance and dance related fields.	Prerequisites: None.	LEC 1.0 1.0 1.0
DAN191	Viewing Dance	This course emphasizes developing critical analysis skills in order to find effective and intelligent ways of viewing and discussing choreography, dance for film, and lighting design for dance. Students will view masterpiece examples of choreography, dance for film, and lighting design from notable artists during the 20th	Prerequisites: None.	L+L 1.0 1.0 1.0
DAN192	Digital Music for Dancers	Learn to use Digital Audio Workstation (DAW) software to edit and create music for dance performance and film as well as fix audio issues in music and sound.	Prerequisites: None.	L+L 1.0 1.0 1.0
DAN193	Professional Promotion for Dancers	An introduction to professional promotion for dancers. Design software and online applications will be used to manipulate photos and graphics in the creation of	Prerequisites: None.	L+L 1.0 1.0 1.0
DAN202	Hip Hop III	Theory and practice of Hip Hop dance at the beginning intermediate level. Development of movement quality	Prerequisites: A grade of C or better in DAN103 or permission of	L+L 1.0 3.0 3.0
DAN202PA	Hip Hop Intermediate Level	Theory and practice of Hip Hop dance at the intermediate level. Development of movement quality and improvisation skills. Dance training for personal skill	Prerequisites: A grade of C or better in DAN103, or DAN103PA, or permission of Instructor.	L+L 0.5 1.5 1.5
DAN203	Hip Hop IV	Theory and practice of Hip Hop dance at the intermediate level. Development of movement quality	Prerequisites: A grade of C or better in DAN202 or permission of	L+L 1.0 3.0 3.0

DAN203PA	Hip Hop Intermediate Advanced Level	Theory and practice of Hip Hop dance at the intermediate advanced level. Development of movement quality and improvisation skills. Dance	Prerequisites: A grade of C or better in DAN202, or DAN202PA, or permission of Instructor.	L+L 0.5 1.5 1.5
DAN210	Dance Production I	Introduction to the elements of pre-production and production, including but not limited to production organization, production management, lighting design, and sound design as they relate to the art of dance.	Prerequisites: None.	L+L 3.0 3.0 3.0
DAN220	Dance Career Preparation	This course provides foundational skills for employment in the field of dance including career research; development of promotional materials; interview and audition preparation; and entrepreneurial strategies for	Prerequisites: A grade of C or better in ENG101 or permission of Instructor.	L+L 3.0 3.0 3.0
DAN221	Rhythmic Awareness I	Exploration of rhythm in dance performance, choreography and pedagogy. Emphasis on the basic understanding of rhythm and cultivating awareness of	Prerequisites: None.	LEC 3.0 3.0 3.0
DAN229	Musical Theatre Dance III	Theory and practice of musical theatre dance at the beginning intermediate level. Development of movement quality and performance skills.	Prerequisites: A grade of C or better in DAN130 or permission of Instructor.	L+L 1.0 3.0 3.0
DAN230	Musical Theatre Dance IV	Theory and practice of musical theatre dance at the intermediate level. Development of movement quality	Prerequisites: A grade of C or better in DAN229 or permission of	L+L 1.0 3.0 3.0
DAN231	Ballet III	Level three ballet theory and practice. Development of movement quality and performance skills.	Prerequisites: A grade of C or better in DAN134 or permission of	L+L 1.0 3.0 3.0
DAN231AA	Ballet III: Intensive	Level three ballet theory and intensive practice. Development of movement quality and performance	Prerequisites: A grade of C or better in DAN134 or permission of	L+L 2.0 5.0 5.0
DAN231PA	Ballet III: Community	Dance training for personal skill development and interest. Level three ballet theory and practice.	Prerequisites: A grade of C or better in DAN134PA or permission of Department or Division.	L+L 0.5 1.5 1.5
DAN232	Modern Dance III	Theory and practice of modern dance at the beginning intermediate level. Development of movement quality	Prerequisites: A grade of C or better in DAN135 or permission of	L+L 1.0 3.0 3.0
DAN232AA	Modern Dance III: Intensive	Theory and intensive practice of modern dance at the beginning intermediate level. Development of movement quality and performance skills.	Prerequisites: A grade of C or better in DAN135 or permission of Instructor.	L+L 2.0 5.0 5.0
DAN232PA	Modern Dance Intermediate Level	Dance training for personal skill development and interest. Theory and practice of modern dance at the intermediate level.	Prerequisites: A grade of C or better in DAN135PA or permission of Department or Division.	L+L 0.5 1.5 1.5
DAN233	Jazz Dance III	Theory and practice of jazz dance at the beginning intermediate level. Development of movement quality	Prerequisites: A grade of C or better in DAN136 or permission of	L+L 1.0 3.0 3.0

DAN233AA	Jazz Dance III: Intensive	Theory and intensive practice of jazz dance at the beginning intermediate level. Development of movement quality and performance skills.	Prerequisites: A grade of C or better in DAN136 or permission of Instructor.	L+L 2.0 5.0 5.0
DAN233PA	Jazz Intermediate Level	Dance training for personal skill development and interest. Introduction to the theory and practice of jazz dance at the intermediate level.	Prerequisites: A grade of C or better in DAN136PA or permission of Department or Division.	L+L 0.5 1.5 1.5
DAN234	Ballet IV	Level four ballet theory and practice. Development of movement quality and performance skills.	Prerequisites: A grade of C or better in DAN231 or permission of	L+L 1.0 3.0 3.0
DAN234AA	Ballet IV: Intensive	Level four ballet theory and intensive practice. Development of movement quality and performance	Prerequisites: A grade of C or better in DAN231AA or permission of	L+L 2.0 5.0 5.0
DAN234PA	Ballet IV: Community	Dance training for personal skill development and interest. Level four ballet theory and practice.	Prerequisites: A grade of C or better in DAN231PA or permission of Department or Division.	L+L 0.5 1.5 1.5
DAN235	Modern Dance IV	Theory and practice of modern dance at the intermediate level. Development of movement quality	Prerequisites: A grade of C or better in DAN232 or permission of	L+L 1.0 3.0 3.0
DAN235AA	Modern Dance IV: Intensive	Theory and intensive practice of modern dance at the advanced intermediate level. Development of movement quality and performance skills.	Prerequisites: A grade of C or better in DAN232AA or permission of Instructor.	L+L 2.0 5.0 5.0
DAN235PA	Modern Dance Advanced Level	Dance training for personal development and interest. Theory and practice of modern dance at the advanced level. Development of movement quality and	Prerequisites: A grade of C or better in DAN232PA or permission of Department or Division.	L+L 0.5 1.5 1.5
DAN236	Jazz Dance IV	Theory and practice of jazz dance at the intermediate level. Development of movement quality and	Prerequisites: A grade of C or better in DAN233 or permission of	L+L 1.0 3.0 3.0
DAN236AA	Jazz Dance IV: Intensive	Theory and intensive practice of jazz dance at the advanced intermediate level. Development of movement quality and performance skills.	Prerequisites: A grade of C or better in DAN233AA or permission of Instructor.	L+L 2.0 5.0 5.0
DAN236PA	Jazz Advanced Level	Dance training for personal skill development and interest. Introduction to the theory and practice of jazz dance at the advanced level.	Prerequisites: A grade of C or better in DAN233PA or permission of Department or Division.	L+L 0.5 1.5 1.5
DAN237	Ballet Pointe I	An introduction to the theory and practice of level one pointe work. Development of strength and movement quality.	Prerequisites: A grade of C or better in DAN134 or permission of Instructor. Corequisites: DAN231 or	L+L 1.0 1.0 1.0
DAN240	Tap Dance III	Theory and practice of tap dance at a beginning intermediate level.	Prerequisites: A grade of C or better in DAN145 or permission of	L+L 1.0 3.0 3.0
DAN245	Tap Dance IV	Theory and practice of tap dance at an intermediate level.	Prerequisites: A grade of C or better in DAN240 or permission of	L+L 1.0 3.0 3.0

DAN250	Dance Performance III	The process and practice of level III dance performance.	Prerequisites: A grade of C or better in DAN155 or permission of Instructor. Corequisites: Any level of any of the following dance technique courses with a DAN prefix: ballet, modern, jazz, hip hop, tap, social, or	L+L 1.0 3.0 3.0
DAN255	Dance Performance IV	The process and practice of level IV dance performance.	Prerequisites: A grade of C or better in DAN250 or permission of Instructor. Corequisites: Any level of any of the following dance technique courses with a DAN prefix: ballet, modern, jazz, hip hop, tap, social, or	L+L 1.0 3.0 3.0
DAN264	Choreography I	Study of basic dance choreography to include construction of a phrase, structure and form in a composition, and the basic elements of time, space and	Prerequisites: None.	L+L 3.0 3.0 3.0
DAN265	Choreography II	Exploration of choreography at the intermediate level. Experimentation with the various approaches to creative practice as established by 20th and 21st century artists.	Prerequisites: A grade of C or better in DAN264 or permission of Instructor.	L+L 3.0 3.0 3.0
DAN272	Dance Technology	Survey of the expanding field of technology as it pertains to the study and performance of dance.	Prerequisites: None.	L+L 3.0 3.0 3.0
DAN275	Choreography for Film and Video	Introduction to creating choreography uniquely for screen medium, emphasizing relationship between choreography, work of the camera, and the editing in maintaining the three dimensional qualities of movement when transferred to the two dimensional	Prerequisites: None. DAN264 recommended but not required.	LEC 3.0 3.0 3.0
DAN280	Dance Practicum	A culmination of coursework for the dance major requiring completion of an extended choreographic work from conception to performance. Also requires a final evaluative paper on the successes and challenges	Prerequisites: Permission of Instructor.	L+L 2.0 3.0 3.0
DAN282AA	Service-Learning Experience in Dance	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 1.0 1.0 0.0
DAN282AB	Service-Learning Experience in Dance	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 2.0 2.0 0.0
DAN282AC	Service-Learning Experience in Dance	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 3.0 3.0 0.0

DAN290AA	Dance Conservatory I	An intensive course focusing on the theory and practice of dance technique including, but not limited to, ballet, modern dance, modern jazz, pilates, yoga and dance performance at the beginning level. Study of repertory and development of movement quality and performance skills. Includes an informal public showing of dance	Prerequisites: None.	L+L 1.0 3.0 3.0
DAN290AB	Dance Conservatory I	An intensive course focusing on the theory and practice of dance technique including, but not limited to, ballet, modern dance, modern jazz, pilates, yoga and dance performance at the beginning level. Study of repertory and development of movement quality and performance skills. Includes an informal public showing of dance	Prerequisites: None.	L+L 2.0 6.0 6.0
DAN290AC	Dance Conservatory I	An intensive course focusing on the theory and practice of dance technique including, but not limited to, ballet, modern dance, modern jazz, pilates, yoga and dance performance at the beginning level. Study of repertory and development of movement quality and performance skills. Includes an informal public showing of dance	Prerequisites: None.	L+L 3.0 9.0 9.0
DAN293	Teaching Dance in Elementary Education	Introduction to theories and methods of teaching dance and movement in the elementary school setting. Includes planning, facilitating, and assessing dance and movement experiences for grades K-6.	Prerequisites: A grade of C or better in (BIO160, DAN231, DAN232, DAN233 and DAN264) or permission of Instructor.	LEC 3.0 3.0 3.0
DAN294	Teaching Dance In Secondary Education	Introduction to the theories and methods of teaching dance and movement in the secondary school setting. Includes planning, facilitating, and assessing dance and movement experiences for grades 7-12.	Prerequisites: A grade of C or better in (BIO160, DAN231, DAN232, DAN233 and DAN264) or permission of Instructor.	LEC 3.0 3.0 3.0
DAN298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0

DAN298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
DAN298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
DFT105AA	Computer Aided Drafting I: AutoCAD	Industrial use of AUTOCAD equipment (hardware and software) in the areas of mechanical, electronic and	Prerequisites: None.	L+L 3.0 6.0 6.0
DFT106	Algebra and Graphs for Design Technology	Algebraic principles and applications used in the design trades. Additional topics in the use of rectangular coordinates.	Prerequisites: A grade of C or better in MAT092 or equivalent or 1 year of high school algebra or permission of Department or Division.	LEC 3.0 3.0 3.0
DFT107	Trigonometry and Analytic Geometry for Design Technology	An introduction to plane trigonometry and plane and solid geometry with practical applications to the field of design drafting. Problems in the analysis of force, stress, and vectors as well as primary geometric	Prerequisites: A grade of C or better in DFT106 or equivalent.	LEC 3.0 3.0 3.0
DFT110	Introduction to Drafting	Fundamentals of drafting including lettering, basic drawing concepts, geometric construction and multiview	Prerequisites: None.	L+L 3.0 6.0 6.0
DFT111	Intermediate Drafting	Dimensioning and tolerancing, sectional views and auxiliary views.	Prerequisites: A grade of C or better in DFT105AA, or DFT110, or	L+L 3.0 6.0 6.0
DFT112	Advanced Drafting	Detail and assembly drawings, dimensioning and tolerancing per current manufacturing standards.	Prerequisites: A grade of C or better in (DFT111 and DFT254AA) or	L+L 3.0 6.0 6.0
DFT114	Machine Trades Blueprint Reading	Analysis and interpretation of technical drawings, common to manufacturing and the machine trades	Prerequisites: None.	LEC 3.0 3.0 3.0
DFT115	Geometric Dimensioning and Tolerancing	Principles and application of the latest techniques in geometric dimensioning and tolerancing in accordance with current American Society of Mechanical Engineers (ASME) Y14.5M. Recommended for all manufacturing personnel who read or produce engineering drawings	Prerequisites: A grade of C or better in DFT110 or Corequisites: DFT110 or permission of Department or Division.	LEC 3.0 3.0 3.0

DFT126	Building Trades Blueprint Reading	Analysis and interpretation of technical drawings common to the construction industry and building trades	Prerequisites: None.	LEC 3.0 3.0 3.0
DFT254AA	Computer Aided Drafting II: AutoCAD	Advanced AutoCAD techniques in constructing three-dimensional objects and symbols, dimensioning and text; advanced techniques for projection, rotation, and	Prerequisites: A grade of C or better in DFT105AA or equivalent or permission of Department or Division.	L+L 3.0 6.0 6.0
DFT255	3D Printing/Additive Manufacturing	Rapidly advancing additive manufacturing (AM) technologies, often called 3D printing, provide us a direct way of converting digital data into physical objects. Additive manufacturing enables the building of customized parts previously impossible to fabricate. Design for additive manufacturing teaches background, terminology, fundamentals designing for additive manufacturing, and current AM technology as well as advantages and limitations of 3D printing, materials, and post-processing. Students will learn and apply technique through lab activities, machine operation and	Prerequisites: A grade of C or better in DFT254AA or permission of Department or Division.	L+L 4.0 4.0 4.0
DFT296WA	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 1.0 5.0 0.0
DFT296WB	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 2.0 10.0 0.0

DFT296WC	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 3.0 15.0 0.0
DFT296WD	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 4.0 20.0 0.0
DFT298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
DFT298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0

DFT298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
DHE110	Pharmacology for the Dental Hygienist	Study of the principles of pharmacology and drugs affecting oral health and dental treatment. Topics include drug interactions, oral manifestations, drugs	Prerequisites: Admission to the Dental Hygiene Program or permission of Instructor.	LEC 3.0 3.0 3.0
DHE112	Oral Pathology	Identification, classification, etiology, and treatment of lesions, diseases, and atypical conditions of the oral cavity and supporting structures. Evaluation of abnormal oral conditions and the need for a definitive diagnosis and referral. Apply technologies that are used	Prerequisites: Admission to the Dental Hygiene Program or permission of Instructor.	LEC 3.0 3.0 3.0
DHE115	Emergency Medicine	Introduction to recording and interpreting medical history. Additional topics include: recognition of signs and symptoms of medical emergencies, procedures and techniques introduced to prevent emergencies and management of emergency situations in the dental	Prerequisites: Admission to the Dental Hygiene Program.	LEC 2.0 2.0 2.0
DHE117	Dental Radiography	Physics of radiography, theory of radiation production, exposure techniques, radiation protection, image processing, mounting, and interpretation of radiography. Course activities include multimedia	Prerequisites: Admission to the Dental Hygiene Program or permission of Program Director.	LEC 2.0 2.0 2.0
DHE119	Head and Neck Anatomy	Study of the structures of the head and neck relevant to dental hygiene. Topics include: osteology, musculature, vascular supply, lymph and glandular tissue, cranial nerves and routes of infection. Course activities include use of skulls, models and multimedia	Prerequisites: Admission to the Dental Hygiene Program or permission of Instructor.	LEC 3.0 3.0 3.0
DHE120	Pre-Clinical Dental Hygiene	Introduction to the dental hygiene profession and the process of care. Infection control, patient assessment, preventive treatment and dental hygiene instrumentation are practiced. Students are introduced	Prerequisites: Admission to the Dental Hygiene Program or permission of Instructor.	L+L 6.0 12.0 12.0
DHE121	Dental Anatomy, Embryology and Histology	Includes the histology and embryology of oral tissues; developmental disturbances of the face, oral cavity, and related structures; tooth composition and morphology including anomalies; eruption patterns and occlusal evaluation. Use of skulls, models and multimedia	Prerequisites: Admission to the Dental Hygiene Program.	L+L 2.0 3.0 3.0

DHE125	Dental Radiography Laboratory	Radiation safety and infection control procedures for operator and patient. Image receptor placement, exposure, processing, mounting and evaluation of dental radiographs. Operation and maintenance of X-ray and processing equipment. Interpretation of	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: (DHE117 and admission to the Dental Hygiene Program) or permission of Program	LAB 1.0 3.0 3.0
DHE127	Prevention of Dental Disease	Introduction to preventive aids, chemotherapeutic agents, and motivational interviewing techniques to help patients achieve optimum oral health, reduce incidence of disease, and minimize risk of oral injury. Instills critical thinking in etiologic agents, cariology,	Prerequisites: Admission to the Dental Hygiene Program or permission of Instructor.	LEC 3.0 3.0 3.0
DHE132	Dental Hygiene Theory I	Study of the dental hygiene process of care with emphasis on assessment, planning and implementation. Topics include instrumentation, adjunct dental hygiene services, instrument sharpening, computer technology, dental specialties and	Prerequisites: A grade of C or better in (DHE120 and admission to the Dental Hygiene Program) or permission of Instructor. Corequisites: DHE133.	L+L 3.0 5.0 5.0
DHE133	Dental Hygiene Clinic I	Application of the dental hygiene process of care with emphasis on assessment, planning, and implementation. Introduction to evaluation of dental hygiene therapy.	Prerequisites: A grade of C or better in DHE120 and admission to the Dental Hygiene Program. Corequisites: DHE132 and current	LAB 3.0 9.0 9.0
DHE201	Dental Materials	Composition, properties and criteria for safe use of dental materials. Principles of manipulation of restorative, preventive, and laboratory dental materials.	Prerequisites: Admission to the Dental Hygiene Program or permission of Program Director/Chair.	LEC 2.0 2.0 2.0
DHE202	Dental Materials Laboratory	Manipulate permanent and temporary restorative materials, impression delivery systems, and dental cements. Fabricate mouth guards, tooth whitening appliances, and study models. Laboratory proficiency in	Prerequisites: Admission to the Dental Hygiene Program or permission of Program Director/Chair. Corequisites: DHE201.	LAB 1.0 3.0 3.0
DHE212	Dental Hygiene Theory II	Study of the dental hygiene process of care with emphasis on comprehensive care planning, case presentation, and clinical decision making. Introduction to advanced periodontal instrumentation.	Prerequisites: A grade of C or better in DHE132 and DHE133 and admission to the Dental Hygiene Program. Corequisites: DHE213.	L+L 2.0 3.0 3.0
DHE213	Dental Hygiene Clinic II	Application of the dental hygiene process of care with emphasis on comprehensive care planning, case presentation, clinical decision making, advanced instrumentation and improved time utilization.	Prerequisites: A grade of C or better in DHE132 and DHE133 and admission to the Dental Hygiene Program. Corequisites: DHE212.	LAB 5.0 15.0 15.0

DHE219	Practice Management	Integration of practice management concepts and comprehensive quality patient care in preparation for future collaborative practice between dental hygienists and dentists. Students are challenged with practice situations including productivity, conflict management,	Prerequisites: Admission to the Dental Hygiene Program or permission of Instructor.	LEC 2.0 2.0 2.0
DHE225	Periodontics	Principles of periodontology; etiology, microbiology, pathogenesis, classification and characteristics of healthy and diseased periodontal tissues. Surgical treatment of periodontal disease and the effects of dental hygiene therapy, surgical techniques and maintenance therapy. Evaluation of the scientific	Prerequisites: Admission to the Dental Hygiene Program or permission of Instructor.	LEC 3.0 3.0 3.0
DHE227	Dental Anesthesia	A comprehensive lecture and laboratory course providing concepts and techniques for the administration of local anesthetic agents and nitrous oxide. Experience gained in medical history review, electronic recordkeeping, patient management, and	Prerequisites: A grade of C or better in DHE119.	LEC 2.0 2.0 2.0 LAB 0.0 3.0 3.0
DHE229	Community Oral Health	An examination of methods used to assess the oral health status of the community and to plan, implement, finance and evaluate dental public health programs. Focus on community-based health promotion and disease prevention measures to improve the oral health of the population, as well as the characteristics of dental care delivery systems and the social, political,	Prerequisites: Admission to the Dental Hygiene Program or permission of Instructor.	LEC 3.0 3.0 3.0
DHE232	Dental Hygiene Theory III	Study of the dental hygiene process of care with emphasis on the patient with special needs and advanced instrumentation. Students participate in field observations and present case documentations.	Prerequisites: A grade of C or better in (DHE212 and DHE213) and admission to the Dental Hygiene Program. Corequisites: DHE233.	L+L 2.0 2.0 2.0
DHE233	Dental Hygiene Clinic III	Application of the dental hygiene process of care with emphasis on diverse populations. Students prepare for clinical practice using self assessment, evaluation and critical thinking skills.	Prerequisites: A grade of C or better in (DHE212 and DHE213) and admission to the Dental Hygiene Program. Corequisites: DHE232.	LAB 5.0 15.0 15.0
DHE298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0

DIE104	Electrical for Diesel Engines I	Introduces electrical principles and circuit theory through the operation, diagnostics and repair of batteries, starting and charging circuits. Concepts include magnetism, electrical circuits, DC electricity, electrical	Prerequisites: None.	L+L 3.0 4.0 4.0
DIE106	Mobile Hydraulics and Pneumatics	The transmission of energy through hydraulic and pneumatic systems. Defines the function and operation of valves, cylinders, pumps, motors, accumulators, reservoirs, coolers, hoses, fluids, filters, seals and contamination control. Basic troubleshooting and	Prerequisites: None.	L+L 3.0 4.0 4.0
DIE108	Heavy Duty Diesel PowerTrains	Introduction to powertrain concepts and operation of basic components of the powertrain system. Basic powertrain maintenance industry practices and skills that include but not limited to pressure testing and adjustments. Clutch fill calibration and some component	Prerequisites: None.	L+L 3.0 4.0 4.0
DIE112	General Diesel Engines	Introduction to diesel engine operation and related systems. Concepts include basic engine maintenance, engine tear-down, inspection, reassembly, and all	Prerequisites: None.	L+L 3.0 4.0 4.0
DIE296WA	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 1.0 5.0 0.0
DIE296WB	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 2.0 10.0 0.0

DIE296WC	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 3.0 15.0 0.0
DIE296WD	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 4.0 20.0 0.0
DIE298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
DIE298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0

DIE298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
DMS100	Introduction to Diagnostic Medical Sonography	Role of health care worker in diagnostic medical sonography. Job duties, responsibilities, working conditions and work environments in the inpatient and outpatient clinical settings. Overview of diagnostic and therapeutic procedures. Shadowing experience in	Prerequisites: None.	LEC 0.5 0.5 0.5
DMS101	Patient Care in Diagnostic Sonography	Safety procedures for the hospitalized patient. Transfer, moving and positioning techniques. Patent assessment methods and procedures. Protection of drains, tubes, intravenous lines, and infusion pumps. Gloving, gowning, and sterile procedures. Safe use and application of sonography equipment. Professional	Prerequisites: Admission to the Diagnostic Medical Sonography program or permission of Instructor.	LAB 1.0 3.0 3.0
DMS110	Introduction to Diagnostic Sonography	Use of ultrasound including medical applications. Job description including opportunities, licensure, use of sonography equipment, responsibilities of diagnostic medical sonographers in the workplace, and medical	Prerequisites: Admission to Diagnostic Medical Sonography program.	LEC 3.0 3.0 3.0
DMS110LL	Introduction to Diagnostic	Use and maintenance of sonography equipment, and responsibilities of Diagnostic Medical Sonographers in	Prerequisites: A grade of C or better in DMS110 or Corequisites: DMS110.	LAB 1.0 3.0 3.0
DMS120	Ultrasound Imaging: Abdominal Procedures I	Ultrasound evaluation of upper abdominal organs. Normal and pathologic ultrasound appearances of the liver, gallbladder, pancreas, biliary tree, spleen, adrenal glands, kidneys, major vascular structures, and lymph	Prerequisites: Admission to Diagnostic Medical Sonography program.	LEC 3.0 3.0 3.0
DMS120LL	Ultrasound Imaging: Abdominal Procedures I Laboratory	Ultrasound evaluation of upper abdominal organs. Normal ultrasound appearances of the liver, gallbladder, pancreas, biliary tree, spleen, adrenal glands, kidneys, major vascular structures, small parts, and lymph nodes.	Prerequisites: A grade of C or better in DMS120 or Corequisites: DMS120.	LAB 1.0 3.0 3.0
DMS121	Ultrasound Imaging: Abdominal Procedures II	Ultrasound evaluation of upper abdominal organs. Normal and pathologic ultrasound appearances of the liver, gallbladder, pancreas, biliary tree, spleen, adrenal glands, kidneys, major vascular structures, lymph	Prerequisites: Admission to Diagnostic Medical Sonography program.	LEC 3.0 3.0 3.0

DMS130	Ultrasound Imaging: OB/GYN Procedures	Ultrasound evaluation of the female pelvis, reproductive system, and fetus. Diagnostic tests related to the ultrasound procedure. Normal and pathologic ultrasound appearances of the fetus, placenta, uterus,	Prerequisites: Admission to Diagnostic Medical Sonography program.	LEC 3.0 3.0 3.0
DMS130LL	Ultrasound Imaging: OB/GYN Procedures Laboratory	Application of diagnostic concepts to evaluation of the pelvis, reproductive system, and fetus. Normal and pathologic ultrasound appearances of the fetus, placenta, uterus, cervix, fallopian tubes, ovaries, and	Prerequisites: None. Corequisites: DMS130 or permission of the Program Director.	LAB 1.0 3.0 3.0
DMS140	Ultrasound Case Studies: Part I	Medical terminology, anatomy, physical principles, and techniques for determining proper technical factors. Anatomical variants, normal, and pathological sonographic findings in diagnostic ultrasound case	Prerequisites: Admission to Diagnostic Medical Sonography program.	LEC 2.0 2.0 2.0
DMS145	Clinical Pathology for Diagnostic Imaging	Disease etiology and impact on the human body. Physiologic effects of disease on body systems. Role of Diagnostic Medical Imaging (DMI) modalities in the diagnosis and treatment of selected disease processes. DMI as part of the health care team. Cultural	Prerequisites: Admission to Diagnostic Medical Sonography program.	LEC 1.0 1.0 1.0
DMS148	Introduction to Musculoskeletal Sonographic Imaging	Ultrasound terminology. Ethics. Tissue structure and physiology in imaging. Legal ramifications. Documentation and reporting. Billing and coding. Professional standards. Roles healthcare clinicians and	Prerequisites: Admission to Diagnostic Medical Sonography program or permission of the Program Director.	LEC 1.0 1.0 1.0
DMS150	Sonographic Principles and Instrumentation I	Sonographic principles and instrumentation necessary for the performance of diagnostic sonographic imaging and vascular examinations. Quality control materials and procedures. Biological effects of ultrasound energy.	Prerequisites: Admission to Diagnostic Medical Sonography program.	LEC 3.0 3.0 3.0
DMS150LL	Sonographic Principles and Instrumentation Laboratory	Laboratory experience in support of DMS150.	Prerequisites: A grade of C or better in DMS150 or Corequisites: DMS150.	LAB 1.0 3.0 3.0
DMS151	Sonographic Principles and Instrumentation II	Sonographic principles and instrumentation necessary for the performance of diagnostic sonographic examinations using Hemodynamics and Doppler imaging. Identifying and reducing image artifacts. Quality control materials and procedures. Biological	Prerequisites: Admission to Diagnostic Medical Sonography program.	LEC 2.0 2.0 2.0
DMS155	Introduction to Clinical Care for Sonography	Observation of correct hospital policies and procedures in clinical simulation. The job description, duties, and functions of the sonographer. Career opportunities in	Prerequisites: Admission to Diagnostic Medical Sonography program.	LAB 1.0 3.0 3.0

DMS161	Clinical Practicum II-AA	Technical and professional aspects of diagnostic ultrasound in a simulated clinical setting at the beginner level. Simulation of hospital and clinical procedures and policies. Observation, assistance, and performance of clerical, patient care, and sonographic duties under	Prerequisites: Admission to Diagnostic Medical Sonography program.	LAB 1.0 3.0 3.0
DMS162	Clinical Practicum II-AB	Development of technical and professional aspects of diagnostic ultrasound in a hospital or clinical setting at the beginner level. Hospital procedures and policies. Continued observation, assistance and performance of clerical, patient care and sonographic duties under strict	Prerequisites: Admission to Diagnostic Medical Sonography program.	LAB 2.0 10.0 0.0
DMS171	Clinical Practicum III-AA	Technical and professional aspects of diagnostic ultrasound in a hospital or clinical setting at the advanced beginner level. Reinforcement and broadening of knowledge base related to hospital procedures and policies. Observation, assistance and	Prerequisites: Admission to Diagnostic Medical Sonography program.	LAB 2.0 10.0 0.0
DMS172	Clinical Practicum III-AB	Continued technical and professional aspects of diagnostic ultrasound in a hospital or clinical setting at the advanced beginner level. Ongoing reinforcement and broadening of knowledge base related to hospital procedures and policies. Continued observation, assistance and performance of patient care and	Prerequisites: Admission to Diagnostic Medical Sonography program.	LAB 2.0 10.0 0.0
DMS210	Concepts of Vascular Imaging	Vascular physics and terminology. Application of imaging concepts to arterial, venous, and cerebrovascular ultrasound. Normal, abnormal and pathologic states of human vascular anatomy. Review and demonstration of selected scanning protocols to	Prerequisites: Admission to Diagnostic Medical Sonography program.	LEC 3.0 3.0 3.0
DMS210LL	Concepts of Vascular Imaging Laboratory	Application of diagnostic concepts to arterial, venous, and cerebrovascular vasculature. Normal human vascular anatomy. Demonstration of selected scanning protocols to include extremity and visceral vascular	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: DMS210.	LAB 1.0 3.0 3.0

DMS220	Sectional Anatomy	Sectional human anatomy in the transverse, sagittal and coronal planes. Emphasis on the brain, neck, chest, abdomen and pelvic cavity.	Prerequisites: A grade of C or better in (BIO160 or BIO201) and (HCC145 or HCC146), or a graduate of a related medical program of study or currently registered as a technologist in radiography, nuclear medicine, radiation therapy or sonography OR Admission to the Medical Radiography Program or permission	LEC 3.0 3.0 3.0
DMS225	High Risk Obstetric/Gynecology Sonography	Sonographic overview of the female reproductive system. High risk intervention and tests related to sonography. Normal and abnormal sonographic	Prerequisites: Admission to Diagnostic Medical Sonography program.	LEC 1.0 1.0 1.0
DMS230	Introduction to Echocardiography	Anatomy and physiology of the heart. Normal, abnormal and pathologic states of cardiac anatomy as it relates to diagnostic sonography. Demonstration of scanning techniques in echocardiography.	Prerequisites: Admission to Diagnostic Medical Sonography program.	LEC 1.0 1.0 1.0
DMS235	Ultrasound Breast Imaging	Ultrasound imaging of the breast. Includes terminology, technique, physics and instrumentation. Breast anatomy, physical examination and procedure findings. Pathology and correlation with other imaging modalities.	Prerequisites: Admission to Diagnostic Medical Sonography program.	LEC 1.0 1.0 1.0
DMS240	Ultrasound Case Studies: Part II	Medical terminology, anatomy, physical principles, and technology for determining proper technical factors. Anatomical variants, normal, and pathological sonographic findings in diagnostic ultrasound case	Prerequisites: Admission to Diagnostic Medical Sonography program.	LEC 2.0 2.0 2.0
DMS241	Ultrasound Case Studies: Part III	Medical terminology, anatomy, physical principles, and technology for determining proper technical factors. Anatomical variants, normal, and pathological sonographic findings in diagnostic ultrasound case	Prerequisites: Admission to Diagnostic Medical Sonography program.	LEC 2.0 2.0 2.0
DMS245	Neurosonography	Neuroanatomy and neurosonography of the brain and spinal cord.	Prerequisites: Admission to Diagnostic Medical Sonography	LEC 1.0 1.0 1.0
DMS250	Musculoskeletal Sonography and Small Parts	Normal sonographic human anatomy in sagittal, transverse, oblique, coronal planes. Emphasis on musculoskeletal imaging, and small parts.	Prerequisites: Admission to Diagnostic Medical Sonography program.	L+L 2.0 2.0 2.0
DMS252	Musculoskeletal Procedures I	Ultrasound terminology and physics. Anatomical variants, normal, and pathological sonographic findings in musculoskeletal diagnostic ultrasound of the upper	Prerequisites: Admission to Diagnostic Medical Sonography program or permission of the	L+L 4.0 6.0 6.0

DMS254	Musculoskeletal Procedures II	Ultrasound terminology and physics. Anatomical variants, normal, and pathological sonographic findings in musculoskeletal diagnostic ultrasound of the lower	Prerequisites: Admission to Diagnostic Medical Sonography program or permission of the	L+L 4.0 6.0 6.0
DMS255	Abdominal Extended Sonography	Ultrasound imaging of the pediatric population and extended anatomy for abdominal procedures. Includes terminology, technique, physics and instrumentation. Embryology, anatomy, physical examination and procedure findings. Pathology and correlation with other	Prerequisites: Admission to Diagnostic Medical Sonography program, or Registered Diagnostic Medical Sonographer (RDMS) credentialed and permission of	LEC 3.0 3.0 3.0
DMS261	Clinical Practicum IV-AA	Technical and professional aspects of diagnostic ultrasound in a hospital or clinical setting at the intermediate level. Reinforcement and broadening of knowledge base related to hospital procedures and policies. Observation, assistance and performance of	Prerequisites: Admission to Diagnostic Medical Sonography program.	LAB 2.0 10.0 0.0
DMS262	Clinical Practicum IV-AB	Development of technical and professional aspects of diagnostic ultrasound in a hospital or clinical setting at the intermediate level. Ongoing reinforcement and broadening of knowledge base related to hospital procedures and policies. Continued observation, assistance and performance of patient care and	Prerequisites: Admission to Diagnostic Medical Sonography program.	LAB 2.0 10.0 0.0
DMS263	Vascular Clinical Practicum I	Technical and professional aspects of diagnostic vascular ultrasound in a hospital or clinical setting at the intermediate level. Reinforcement and broadening of knowledge base related to hospital procedures and policies. Observation, assistance and performance of	Prerequisites: Admission to Diagnostic Medical Sonography program.	LAB 2.0 10.0 0.0
DMS265	Musculoskeletal Clinical Practicum	Musculoskeletal Clinical Practicum of 240 hours in healthcare setting Ultrasound imaging instrumentation, protocol implementation and positioning techniques. Application of Ultrasound safety, quality control	Prerequisites: Admission to Diagnostic Medical Sonography program or permission of the Program Director.	LAB 4.0 24.0 0.0
DMS267	Musculoskeletal Case Studies	Medical terminology, anatomy, physical principles, and technology for determining proper technical factors. Anatomical variants, normal, and pathological sonographic findings in musculoskeletal diagnostic	Prerequisites: Admission to Diagnostic Medical Sonography program or permission of the Program Director.	LEC 1.0 1.0 1.0
DMS270	Clinical Practicum V-AA	Technical and professional aspects of diagnostic ultrasound in a hospital or clinical setting at the advanced level. Clinical diagnostic experiences in routine/high risk obstetrics, pelvic, vascular, abdominal	Prerequisites: Admission to Diagnostic Medical Sonography program.	LAB 2.0 10.0 0.0

DMS271	Clinical Practicum V-AB	Development of technical and professional aspects of diagnostic ultrasound in a hospital or clinical setting at the advanced level. Continued opportunity for clinical diagnostic experiences in routine/high risk obstetrics, pelvic, vascular, abdominal and small parts scanning.	Prerequisites: Admission to Diagnostic Medical Sonography program.	LAB 2.0 10.0 0.0
DMS272	Clinical Practicum V-AC	Culminating clinical practice course with application of theoretical and practical concepts related to diagnostic ultrasound. Emphasis on independent performance of all clinical diagnostic procedures including routine/high risk obstetrics, pelvic, vascular, abdominal and small	Prerequisites: Admission to Diagnostic Medical Sonography program.	LAB 2.0 10.0 0.0
DMS273	Vascular Clinical Practicum II	Development of technical and professional aspects of diagnostic vascular ultrasound in a hospital or clinical setting at the advanced level. Continued opportunity for clinical diagnostic experiences in routine/complex vascular scanning. Focus on progression to	Prerequisites: Admission to Diagnostic Medical Sonography program.	LAB 2.0 10.0 0.0
DMS281	Ultrasound Registry Preparation Seminar: Physics and Instrumentation	Intensive review of major content measured in the American Registry for Diagnostic Medical Sonography certification examination. Physics and instrumentation in ultrasound technology.	Prerequisites: Admission into the Diagnostic Medical Sonography program or permission of the Program Director.	LEC 1.0 1.0 1.0
DMS282	Ultrasound Registry Preparation Seminar: Abdominal and Small Parts Imaging	Intensive review of major content measured in the American Registry for Diagnostic Medical Sonography certification examination. Specialties of abdominal and small parts imaging.	Prerequisites: Admission into the Diagnostic Medical Sonography program or permission of the Program Director.	LEC 1.0 1.0 1.0
DMS283	Ultrasound Registry Preparation Seminar: Obstetrics and Gynecology	Intensive review of major content measured in the American Registry for Diagnostic Medical Sonography certification examination for obstetrics and gynecology.	Prerequisites: Admission into the Diagnostic Medical Sonography program or permission of the Program Director.	LEC 1.0 1.0 1.0
DMS284	Ultrasound Registry Preparation: Vascular Imaging	Anatomy and physiology of the vascular system. Testing parameters and methods for vascular examinations. Scan protocol for sonographic evaluation of head and neck, extremities, upper abdomen and	Prerequisites: Admission into the Diagnostic Medical Sonography program or permission of the Program Director.	LEC 1.0 1.0 1.0
DMS285	Intermediate Vascular Technology	Sonographic evaluation of the upper and lower peripheral vascular system and the cerebrovascular system. Normal and pathologic sonographic imaging and Doppler evaluation of the venous, arterial systems of the upper and lower extremities, and intra and	Prerequisites: Admission to Diagnostic Medical Sonography program.	LEC 2.0 2.0 2.0

DMS286	Advanced Vascular Technology	Vascular evaluation of the intracranial cerebrovascular system, indirect imaging techniques of the peripheral arterial and venous systems. Capabilities, limitations, protocols, and techniques required for diagnosis of the systemic, hepatportal, collateral systems, and extremities. Roles of ultrasound in surgical techniques,	Prerequisites: Admission to Diagnostic Medical Sonography program.	LEC 3.0 3.0 3.0
DMS286LL	Advanced Vascular Technology Laboratory	Application of advanced vascular imaging. Demonstration of selected scanning protocols to include lower extremity non-invasive procedures, transcranial doppler and grafts. Entry-level proficiency for most	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: DMS286.	LAB 1.0 3.0 3.0
DMS290	Advanced Medical Ultrasound Procedures	Presentation of advanced topics in sonography including state of the art equipment. Superficial organs, heart and vessels, neurosonography, musculoskeletal, intraoperative, and interventional procedures. Aseptic technique, medical-legal and patient record keeping and image acquisition for performance of advanced	Prerequisites: Admission to Diagnostic Medical Sonography program.	LEC 4.0 4.0 4.0
DMS295	Stress Echocardiography	Anatomy and physiology of the heart. Normal and stressed states of cardiac anatomy as it relates to diagnostic sonography. Performance of stress echocardiography exam. Pharmacological agents used in stress echocardiography.	Prerequisites: Completion of echocardiography program, or Registered Diagnostic Cardiac Sonographer (RDCS), or Registered Diagnostic Medical Sonographer (RDMS), or Registered Cardiac	L+L 2.0 3.5 3.5
ECE102	Engineering Analysis Tools and Techniques	Learning culture of engineering, engineering use of computer tools, and computer modeling as applied to engineering analysis and design.	Prerequisites: A grade of C or better in MAT15+ or higher-level mathematics course, or an appropriate District placement above MAT15+, or permission of Instructor	L+L 2.0 4.0 4.0
ECE103	Engineering Problem Solving and Design	Fundamentals of the design process: engineering modeling, communication and problem-solving skills in a team environment. Emphasis on process-based improvements to the design process. Introduction to	Prerequisites: A grade of C or better in ECE102 or permission of Instructor or Division or Department Chair.	L+L 2.0 4.0 4.0
ECE104	EPICS Gold I	EPICS Gold is the first of a sequence of two two-credit service learning courses in which EPICS teams are formed from students potentially representing all engineering, computer science, and construction disciplines, as well as other majors, including	Prerequisites: None.	L+L 2.0 2.0 2.0

ECE105	MATLAB Programming	Use MATLAB to solve engineering problems. An overview of programming, including matrices, structures, strings, functions, control flow, file management, data analysis, graphing capabilities, and mathematical calculations.	Prerequisites: A grade of C or better in [(MAT150 or MAT151 or MAT152 or MAT155 or MAT156) and MAT182] or (MAT187 or MAT188) or higher level mathematics course or permission of Instructor or Division or	L+L 1.0 2.0 2.0
ECE106	Survey of Nanotechnology	Reading and discussion on topics in nanotechnology. Includes key issues in the development of nanoscale	Prerequisites: None.	LEC 1.0 1.0 1.0
ECE111	Bioengineering Systems	Introduction to biological concepts and application of engineering to biological and earth systems. Analysis of materials, structures, fluid mechanics, bioelectricity, and dynamics as applied to biological and environmental	Prerequisites: None.	LEC 3.0 3.0 3.0 LAB 0.0 2.0 2.0
ECE150	Exploring Engineering and its Impact on	Introduction to the profession of engineering and its impact on culture and society.	Prerequisites: None.	LEC 3.0 3.0 3.0
ECE205	Introduction to Mining Engineering	Introduction to the process of mineral and metal extraction. From location, design, operation to	Prerequisites: A grade of C or better in ECE102.	LEC 3.0 3.0 3.0
ECE211	Engineering Mechanics-Statics	Modeling of static equilibrium in particles and rigid bodies through analysis of forces and mechanical properties.	Prerequisites: A grade of C or better in PHY121 or permission of Instructor or Division or Department Chair. Corequisites: MAT230 or MAT231 or permission of Instructor or Division or	LEC 3.0 3.0 3.0 LAB 0.0 2.0 2.0
ECE212	Engineering Mechanics-Dynamics	Modeling of dynamic motion in particles and rigid bodies through kinetics and kinematics. Work and energy principles; impulse and momentum principles; planar kinematics; equations of motion; conservation of energy and momentum.	A grade of C or better required in all Prerequisites. Prerequisites: (ECE211 and PHY121) or permission of Instructor or Division or Department Chair. Prerequisites or Corequisites: MAT240 or MAT241 or permission of Instructor or Division or	LEC 3.0 3.0 3.0 LAB 0.0 2.0 2.0
ECE214	Engineering Mechanics	Foundations of engineering mechanics, including force systems, resultants, equilibrium of particles and rigid bodies, analysis of static structures, centroids and centers of mass, area and mass moments of inertia, friction, internal forces in structures, kinematics, and kinetics of particles.	Prerequisites: A grade of C or better in [ECE103 and (MAT230 or MAT231) and PHY121] or permission of Instructor or Division or Department Chair. Corequisites: MAT240 or MAT241 or permission of	L+L 4.0 6.0 6.0

ECE215	Mechanics of Materials	Designed to provide students with a strong fundamental foundation in the mechanics of solids. Includes the concepts of stress and strain applied to the analysis and design of members subjected to axial and torsional loads and members subjected to shear and bending, applications and transformation of plane stress and	Prerequisites: A grade of C or better in (ECE211 or ECE214).	L+L 3.0 5.0 5.0
ECE216	Computer-Aided Engineering	Introduction to engineering graphics, including tolerancing and fasteners, as well as creation and use of engineering drawings.	Prerequisites: A grade of C or better in ECE103 or permission of Instructor. Corequisites: ECE216LL.	LEC 2.0 2.0 2.0
ECE216AA	Computer-Aided Engineering	Study and application of engineering graphics, parts modeling, assemblies modeling, and engineering drawings including tolerancing and fasteners using	Prerequisites: A grade of C or better in ECE103 or permission of Instructor or Division or Department Chair.	L+L 3.0 4.0 4.0
ECE216LL	Computer-Aided Engineering Laboratory	Laboratory experience in support of ECE216.	Prerequisites: A grade of C or better in ECE103 or permission of Instructor. Corequisites: ECE216.	LAB 1.0 2.0 2.0
ECE230	Introduction to the Chemical Engineering Process	Introduces fundamental skills and principles needed to analyze the industrial processes of importance to the chemical engineering profession.	Prerequisites: A grade of C or better in CHM152 and MAT231.	L+L 3.0 5.0 5.0
ECE231	Introduction to Fluid Transport Phenomena	Fundamental skills and principles of fluid transport on both macroscopic and microscopic scales using mass balances, momentum balances and energy balances to analyze and/or design fluid systems of interest in the	Prerequisites: A grade of C or better in MAT271 and PHY121.	L+L 3.0 5.0 5.0
ECE280	Foundational Statistics for Engineers	Fundamentals of probability, descriptive statistics, sampling distributions, parameter estimation, tests of hypotheses, regression analysis, analysis of variance,	Prerequisites: A grade of C or better in MAT220, or MAT221, or equivalent.	L+L 3.0 5.0 5.0
ECE285	Introduction to Astrodynamics	Introduction to celestial mechanics and the dynamics of spacecraft navigation. Introduction to rocket propulsion and spacecraft design. Orbital and interplanetary celestial mechanics and maneuvers. Astrophysics and characteristics of the space environment. Lab is project-	Prerequisites: A grade of C or better in ENG101 and PHY121.	LEC 4.0 3.0 3.0 LAB 0.0 3.0 3.0
ECE294	Special Topics in Engineering	Exploration and investigation of a focused topic in engineering.	Prerequisites: Permission of Instructor or Department or Division	L+L 3.0 3.0 3.0
ECE294AA	Special Topics in Engineering	Exploration and investigation of a focused topic in engineering.	Prerequisites: Permission of Instructor or Department or Division	L+L 2.0 2.0 2.0
ECE294AB	Special Topics in Engineering	Exploration and investigation of a focused topic in engineering.	Prerequisites: Permission of Instructor or Department or Division	L+L 1.0 1.0 1.0
ECE294AC	Special Topics in Engineering	Exploration and investigation of a focused topic in engineering.	Prerequisites: Permission of Instructor, or Department or Division	L+L 0.5 0.5 0.5

ECE296WA	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify) or permission of Instructor. Corequisites: Must be concurrent in at least one class which is related to student's major or career interest or	LAB 1.0 5.0 0.0
ECE296WB	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify) or permission of Instructor. Corequisites: Must be concurrent in at least one class which is related to student's major or career interest or	LAB 2.0 10.0 0.0
ECE296WC	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify) or permission of Instructor. Corequisites: Must be concurrent in at least one class which is related to student's major or career interest or	LAB 3.0 15.0 0.0

ECE296WD	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify) or permission of Instructor. Corequisites: Must be concurrent in at least one class which is related to student's major or career interest or	LAB 4.0 20.0 0.0
ECE297WA	Engineering Internship	Supervised work experience in engineering environment. Includes experience working with engineers or technicians, related to troubleshooting, system design, or other processes. Also includes experiences in problem solving, working as a team, soft	Prerequisites: Permission of Instructor or Division Chair or Department Chair.	LAB 1.0 5.0 0.0
ECE297WB	Engineering Internship	Supervised work experience in engineering environment. Includes experience working with engineers or technicians, related to troubleshooting, system design, or other processes. Also includes experiences in problem solving, working as a team, soft	Prerequisites: Permission of Instructor or Division Chair or Department Chair.	LAB 2.0 10.0 0.0
ECE297WC	Engineering Internship	Supervised work experience in engineering environment. Includes experience working with engineers or technicians, related to troubleshooting, system design, or other processes. Also includes experiences in problem solving, working as a team, soft	Prerequisites: Permission of Instructor or Division Chair or Department Chair.	LAB 3.0 15.0 0.0
ECE297WD	Engineering Internship	Supervised work experience in engineering environment. Includes experience working with engineers or technicians, related to troubleshooting, system design, or other processes. Also includes experiences in problem solving, working as a team, soft	Prerequisites: Permission of Instructor or Division Chair or Department Chair.	LAB 4.0 20.0 0.0
ECE298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Instructor, or Department or Division Chair.	LAB 1.0 1.0 0.0

ECE298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Instructor, or Department or Division Chair.	LAB 2.0 2.0 0.0
ECE298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Instructor, or Department or Division Chair.	LAB 3.0 3.0 0.0
ECG100	Introduction to Healthcare: Medical, Legal, Ethics	This course is designed to offer the student a foundation in allied health career skills. Students will demonstrate knowledge of the healthcare delivery system, health occupations, basic infection control procedures, Health Insurance Portability and Accountability Act (HIPAA) guidelines, and the general laws and ethical responsibilities of healthcare workers. Students will learn to handle emergency situations, practice safety and security procedures, build interpersonal communication skills as well as define the roles and responsibilities of an electrocardiogram (ECG) technician. Students will learn medical terminology used in healthcare, with special care populations and in special services. Body systems approach to terms	Prerequisites: Successful completion of RDG100 or higher or appropriate reading placement into CRE101.	25

ECG101	The Cardiovascular System: Anatomy & Physiology and Pathophysiology of Cardiovascular Disease	In this course, students will explore the structure and functions of the cardiovascular system. This course covers the anatomical structures of the heart, the composition of blood, the path of the blood through the heart, and the electrical conduction system. Students will learn how these systems act as one to supply vital oxygen, nutrients and hormones to tissues and remove carbon dioxide and metabolic waste products. This course also covers pathophysiologic concepts and interventions for patients with heart and coronary vessel disease and disorders such as coronary artery disease	Prerequisites: ECG100.	30
ECG102	Introduction to ECG	Students will learn the fundamentals of electrocardiography. Students will be able to describe the electrophysiologic basis of cardiac arrhythmias, illustrate the electrical conduction system through the heart, and the process of recording an electrocardiogram (ECG). Students will learn how to	Prerequisites: ECG101.	40
ECG103	Applied ECG: Atrial, Junctional, Ventricular Rhythms and Heart Blocks	Students will learn to recognize arrhythmias that originate within the atria, the ventricle, the AV junction, AV node as well as heart blocks. Students will identify the specific features of each arrhythmia, where it	Prerequisites: ECG102.	50
ECG105	Advanced ECG: Diagnostic Procedures, Certification Prep and Exam	In this course, students will learn the skills and knowledge to perform patient assessments, and obtain vital signs. Students will learn how to attach a Holter monitor to produce a diagnostic trace and analyze the trace following the monitoring process. Students will also learn how to conduct clinical exercise stress tests utilizing exercise electrocardiography for patients with known or suspected coronary artery disease. In this course, students will also learn how to conduct telemetry monitoring while in a hospital setting and assess and evaluate pacemakers. Diagnostic testing procedures will be performed within a prescribed range of functions involving routine and non-routine methods as well as diagnostic procedures which require the exercise of some discretion and judgment. Students will have completed an exam prep course and taken the	Prerequisites: ECG103.	100

ECG106	Clinical Practicum	This course serves as the clinical practicum for Electrocardiogram (ECG) Technician in which the students synthesize standard of care and scope of practice through diagnostic technology, patient assessment, patient advocacy, ethical and professional behaviors, critical thinking and decision making while in the healthcare industry setting. Mandatory attendance for all 80 hours is required for successful completion.	Prerequisites: 1. A grade of C or better in ECG105. 2. Background check requirements in compliance with the Maricopa County Community College District Supplemental Background Check Policy. 3. Students also must provide a copy of an Arizona Department of Public Safety Level One Fingerprint Clearance Card. Students must maintain current fingerprint clearance throughout the externship(s). 4. Complete and submit the Allied Health Student Health and Safety Documentation Checklist, with included documentation. 5. Students are responsible to meet the requirements of the background	80
ECH128	Early Learning: Play and the Arts	Examines theory, research and practices relating to play and the creative arts in early childhood. Considers practical constraints and alternative perspectives.	Prerequisites: None.	LEC 3.0 3.0 3.0
ECH140	Learning Made Visible Through Documentation	The study of pedagogical documentation in early childhood settings, including strategies to reflect on children's thinking, hypothesis development, and multiple relationships essential in learning environments.	Prerequisites: None.	LEC 1.0 1.0 1.0
ECH141	Explore the Fundamentals of the Reggio Emilia	Investigation and critically examination of the integral elements of the organization and philosophy of the Reggio Emilia approach to early childhood education.	Prerequisites: None.	LEC 1.0 1.0 1.0
ECH176	Child Development	Study of the science of human development from conception through adolescence. Includes observation skills, parent and adult roles in the lives of children, and	Prerequisites: None.	LEC 3.0 3.0 3.0
ECH267	Child Development Associate Preparation Practicum I	Participation in early childhood education related work experience for the purpose of final preparation for the Child Development Associate (CDA) national credential	Prerequisites: None.	LAB 1.0 1.0 0.0
ECH268	Child Development Associate Preparation Practicum II	Participation in early childhood education related work experience for the purpose of final preparation for the Child Development Associate (CDA) national credential	Prerequisites: None.	LAB 1.0 1.0 0.0

ECH269	Early Childhood Education Seminar	Emphasizes professional experiences including employment procedures, human relations, employment related issues, and career exploration.	Prerequisites: Permission of Department or Division.	LEC 1.0 1.0 1.0
ECH270	Observing Young Children	Introduction to observation techniques, recording methods and interpretation of collected data for children from birth to age eight while addressing legal and	Prerequisites: None.	LEC 1.0 1.0 1.0
ECH271	Arranging the Environment	Exploration of the influence of the environment on the behavior and development of young children. Considers indoor and outdoor spaces from the perspective of safety, age-related needs, spatial requirements, and	Prerequisites: None.	LEC 1.0 1.0 1.0
ECH272	Science and the Young Child	Methods and techniques for recognizing and supporting scientific thinking in young children between the ages of birth and age eight. Focus upon social constructivist	Prerequisites: None.	LEC 1.0 1.0 1.0
ECH273	Math and the Young Child	Methods and techniques for recognizing and supporting mathematical thought in young children between the ages of birth through age eight. Focus upon social	Prerequisites: None.	LEC 1.0 1.0 1.0
ECH274	Books and Verse for the Young Child	Introduction to verse, storytelling, books and bookmaking for infants, toddlers, and preschoolers. Information as well as storybooks considered.	Prerequisites: None.	LEC 1.0 1.0 1.0
ECH275	Literacy Development and the Young Child	Literacy development from birth through age eight. Focus on communication and multiliteracies within social	Prerequisites: None.	LEC 1.0 1.0 1.0
ECH279	Early Childhood Curriculum Development	An intensive focus on the process of building curriculum appropriate to the interests and capabilities through the use of design, implementation and evaluation of materials and experiences for children, birth through	Prerequisites: None.	LEC 1.0 1.0 1.0
ECH280	Food Experiences with Young Children	A discussion of the nutritional needs of young children and the cultural and social meanings of foods, feeding and eating. Includes planning and managing food	Prerequisites: None.	LEC 1.0 1.0 1.0
ECH281	Movement/Music for the Young Child	Consideration of motor development in the toddler through the 8-year-old and exploration of age-appropriate rhythmic, musical and creative movement	Prerequisites: None.	LEC 1.0 1.0 1.0
ECH282	Discipline/Guidance of Child Groups	Exploration of techniques for guiding children in groups with focus on individual child and adult needs for a	Prerequisites: None.	LEC 1.0 1.0 1.0
ECH284AA	Early Childhood Teaching Internship	Work experience in child care centers. 80 hours of designated work per credit.	Prerequisites: A grade of C or better in CFS/ECH176 and permission of Department or Division. Xref:	L+L 1.0 1.0 0.0
ECH284AB	Early Childhood Teaching Internship	Work experience in early care and education settings centers. 80 hours of designated work per credit.	Prerequisites: Permission of Department or Division.	L+L 3.0 3.0 0.0

ECH287	Professional Development in Early Childhood Education	Emerging professionalism within the field of early childhood education. Consideration of job responsibilities, rewards, ethics and current issues	Prerequisites: None.	LEC 1.0 1.0 1.0
ECH288	Community Resources and Referral	Survey of current community agencies, resources, and support groups for a variety of child and family needs. Considers appropriate procedures for referral, handling of information, confidentiality and follow up.	Prerequisites: None.	LAB 1.0 1.0 0.0
ECH298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
ECH298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
ECH298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
ECN100	Economics in American Society	Selected principles of macroeconomic and microeconomic analysis. Recommended as a social science elective and for some paraprofessional programs. Not for business transfer students; credit will	Prerequisites: None.	LEC 3.0 3.0 3.0
ECN160	Economic History of the United States	A description of the trends of American population, industry, and wealth through examination of major American institutions, historical events, and economic thought. Emphasis on the roles of technology and natural resources in agriculture and industry, the labor force, the monetary system, market structures, and the	Prerequisites: None.	LEC 3.0 3.0 3.0

ECN208	Microeconomic Issues	Microeconomic principles applied to current problems of market structure, consumer preference, supply and demand, and the theory of the firm. Topics will include contemporary events that are suitable for application of	Prerequisites: None.	LEC 3.0 3.0 3.0
ECN211	Macroeconomic Principles	A descriptive analysis of the structure and functioning of the American economy. Emphasis on basic economic institutions and factors that determine national income and employment levels. Consideration given to the macroeconomic topics of national income,	Prerequisites: None.	LEC 3.0 3.0 3.0
ECN212	Microeconomic Principles	Microeconomic analysis including the theory of consumer choice, price determination, resource allocation and income distribution. Includes non-competitive market structures such as monopoly and	Prerequisites: None.	LEC 3.0 3.0 3.0
ECN213	The World Economy	An analysis of the economic interdependence among nations, with emphasis on international trade and finance. Consideration given to the role and function of	Prerequisites: None.	L+L 3.0 3.0 3.0
ECN250	World Economic Systems	A descriptive analysis of capitalist, socialist and mixed economies. Some consideration also given to the problems of less developed economies	Prerequisites: None.	L+L 3.0 3.0 3.0
ECN296WA	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify) or permission of instructor. Corequisites: Must be concurrent in at least one class which is related to student's major or career interest or with	LAB 1.0 5.0 0.0

ECN296WB	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify) or permission of instructor. Corequisites: Must be concurrent in at least one class which is related to student's major or career interest or with	LAB 2.0 10.0 0.0
ECN298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
ECN298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
EDT100	Introduction to Endoscopy	Interpret endoscopy technology purpose, design, and structure. Basic understanding of the history and advancement of endoscopic procedures; anatomy of flexible endoscopes; role and importance of endoscopy technicians; introductory endoscopy reprocessing; regulating agencies and professional endoscopy	Prerequisites: None. Corequisites: EDT101, EDT102, EDT105, or permission of Program Director.	L+L 1.0 1.0 1.0
EDT101	Microbiology and Infection Control in Endoscopy	Identify and review the basic concepts of microbiology and microorganisms affecting endoscopic reprocessing and procedures. Indicate the requirements for all endoscopic work areas and staff to properly insure	Prerequisites: None. Corequisites: EDT100, EDT102, EDT105, or permission of Program Director.	LEC 1.0 1.0 1.0
EDT102	Fundamentals of Endoscope Care and Handling	Learn the fundamentals of endoscope care and handling including cleaning, decontamination, testing, and preparation for disinfection and sterilization.	Prerequisites: None. Corequisites: EDT100, EDT101, EDT105, or permission of Program Director.	L+L 3.0 3.0 3.0

EDT105	Advanced Endoscopy Care and Handling	Learn advanced endoscope care and handling including recordkeeping, transport, manual and mechanical high-level disinfection and storage of rigid,	Prerequisites: None. Corequisites: EDT100, EDT101, EDT102, or permission of Program Director.	L+L 3.0 3.0 3.0
EDT200	Clinical Practicum	Direct preceptor supervision of students applying knowledge from the Endoscopy program to include communication, policy and procedures, aseptic and sterile technique, endoscopy instruments, trays and packs, sterilization equipment, documentation, and	Prerequisites: A grade of C or better in (EDT100 and EDT101 and EDT102 and EDT105) or permission of Program Director. Corequisites: EDT201 or permission of Program	LAB 3.0 22.5 0.0
EDT201	Endoscopy Procedures	Roles and responsibilities of endoscopy room personnel focusing on the endoscopy technician under the direction of the clinical facility preceptor demonstrating the role of the endoscopy technician and scope of practice and standard of recommendations.	Prerequisites: A grade of C or better in (EDT100 and EDT101 and EDT102 and EDT105) or permission of Program Director. Corequisites: EDT200 or permission of Program	LEC 3.0 3.0 3.0
EDU101AA	Tutor Training and Practicum	Tutor training with an opportunity to gain insights into instructional support services through a minimum of 30 hours of supervised on-site experience within an educational setting. Overview of the role and responsibilities of instructional tutors as well as tutoring	Prerequisites: None.	LEC 1.0 1.0 1.0
EDU115	Digital Literacy for Teaching and Learning in Education	Overview of digital literacy for identifying the skills needed to become informed users of technology to communicate, instruct, create and think critically with digital tools. Explores how emerging technologies are used to teach and learn across varied educational environments (face-to-face, hybrid, online, etc). Includes skills focused on basic computer operations, productivity software, digital citizenship, instructional practices, information literacy and family and professional	Prerequisites: None.	LEC 3.0 3.0 3.0
EDU204	Fine Arts in Educational Settings	Exploration of fine arts integration in the K-12 classroom setting. Focus on the impact on life-long learning and education goal achievement when curriculum includes fine arts. Arizona art standards of dance, visual, theater	Prerequisites: Formal acceptance to a Maricopa Community College state approved teacher preparation program or permission of Department	LEC 3.0 3.0 3.0
EDU220	Introduction to Serving English Language Learners (ELL)	Historical overview of current educational and legal issues for serving English Learners (EL). Comparison and evaluation of various types of language educational models including Structured English Immersion (SEI), Sheltered English Instruction, and bilingual/Dual Language Immersion (DLI). Includes SEI,	Prerequisites: None.	LEC 3.0 3.0 3.0

EDU221	Introduction to Education	Overview of the historical, political, economic, social, ethical, and philosophical factors that contribute to the complexity of the education system. Opportunity for students to self-reflect and assess their interest and	Prerequisites: None.	LEC 3.0 3.0 3.0
EDU222	Introduction to the Exceptional Learner	Overview of the exceptional learner with emphasis on factors relating to current practices, identification, characteristics, and educational adaptations. Issues related to mild disabilities, severe disabilities, emotional and behavioral disorders, intellectual disabilities, and	Prerequisites: None.	LEC 3.0 3.0 3.0
EDU223AA	Emotional Disabilities in the Classroom	Investigation into the characteristics of and teaching strategies for students with emotional disabilities. Emphasis on Professional Teaching Standards. Includes current research findings related to teaching	Prerequisites: Baccalaureate Degree and formal admission to a state approved post-baccalaureate teacher preparation program and a	LEC 3.0 3.0 3.0
EDU223AB	Learning Disabilities in the Classroom	Investigation into the characteristics of and teaching strategies for students with learning disabilities. Emphasis on Professional Teaching Standards. Includes current research findings related to teaching	Prerequisites: Baccalaureate Degree and formal admission to a state approved post-baccalaureate teacher preparation program and a	LEC 3.0 3.0 3.0
EDU223AC	Mild and Moderate Intellectual Disability in the Classroom	Investigation into the characteristics of and teaching strategies for students with mild and moderate intellectual disability. Emphasis on Professional Teaching Standards.	Prerequisites: Baccalaureate Degree and formal admission to a state approved post-baccalaureate teacher preparation program and a	LEC 3.0 3.0 3.0
EDU223AD	Physical and Other Health Impairments in the Classroom	Investigation into the characteristics of and teaching strategies for students with physical and other health impairments. Emphasis on Professional Teaching Standards. Includes current research findings related to teaching students with physical and other health	Prerequisites: Baccalaureate Degree and formal admission to a state approved post-baccalaureate teacher preparation program and a grade of C or better in EDU222.	LEC 3.0 3.0 3.0
EDU223AF	Assessment and Eligibility in Special Education	A basic overview of eligibility requirements for special services of students with disabilities, as well as investigation into the concepts, laws, issues, and procedures that relate to the formal and informal assessment of students with disabilities. Covers educational achievement tests and standardized diagnostic tests for students with disabilities as well as intelligence and adaptive behavior measurements. Includes current research findings related to assessing	Prerequisites: Baccalaureate Degree and formal admission to a state approved post-baccalaureate teacher preparation program.	LEC 3.0 3.0 3.0

EDU224	Brain Development and Learning	Exploration of fine arts integration in the K-12 classroom setting. Focus on the impact on life-long learning and education goal achievement when curriculum includes fine arts. Arizona art standards of dance, visual, theater and music also covered.	Prerequisites: Formal acceptance to a Maricopa Community College undergraduate state approved teacher preparation program or permission of Department or Division.	LEC 3.0 3.0 3.0
EDU225	Professionalism and Ethics in Education	Exploration of topics relative to the professionalism, legal knowledge, and ethical development of classroom teachers. Topics include professionalism within the teaching profession, legal considerations, ethics vs. code of conduct, dispositions, and impact of personal and community values. Prepares individuals for the	Prerequisites: None.	LEC 1.0 1.0 1.0
EDU230	Cultural Diversity in Education	Examination of the relationship of cultural diversity to academic success. Includes educational environments and their impact on educational equity. Emphasis on teacher preparation that offers an equal educational	Prerequisites: None.	LEC 3.0 3.0 3.0
EDU235	The Exceptional Learner	Overview of the exceptional learner, one who differs from the average or typical, with emphasis on factors relating to current practices, identification, characteristics, and educational adaptations. Issues related to mildly disabled, severely disabled, emotionally and behaviorally disordered, intellectual disabilities, and gifted students. Includes current research findings	Prerequisites: Baccalaureate Degree and formal acceptance to a Maricopa Community College state approved post-baccalaureate teacher preparation program or permission of Department or Division.	LEC 3.0 3.0 3.0
EDU236	Classroom Relationships	Analysis of K-12 classroom interactions, classroom environment, and classroom management skills from a teacher's point of view. Focus on classroom as a multidimensional environment in which principles of classroom design, communication, management, and	Prerequisites: None. EDU221 suggested but not required.	LEC 3.0 3.0 3.0
EDU239	Structured English Immersion Grades K-8	A foundation course designed to prepare educators to serve the needs of English Learners (EL) grades K-8. Includes Structured English Immersion (SEI) models and the Arizona Language Development Approach with emphasis on asset based behaviors and expectations, integrated and targeted English Language Development (ELD) instruction, assessment monitoring	Prerequisites: Baccalaureate Degree or permission of Department or Division.	LEC 3.0 3.0 3.0

EDU240	Structured English Immersion Grades 6-12	A foundational course designed to serve needs of English Learners (EL) grades 6-12. Includes comparison and evaluation of various Structured English Immersion (SEI) models and the Arizona Language Development Approach including asset based behaviors and expectations, integrated and targeted English Language Development (ELD)	Prerequisites: Baccalaureate Degree or permission of Department or Division.	LEC 3.0 3.0 3.0
EDU242	Language Developmental and Disorders	Language development and language acquisition of typical children and children with disabilities. Includes language characteristics of children with a variety of disabilities and the creation of enhanced learning experiences in the classroom. Covers the referral process, as well as augmentative and alternative	Prerequisites: Baccalaureate Degree and formal admission to a state approved post-baccalaureate teacher preparation program or permission of Department or Division.	LAB 2.0 2.0 2.0
EDU244	Special Education Collaboration and Communication Practices	Principles of effective collaboration, consultation, and co-teaching to improve programs, services, and outcomes for individuals with exceptionalities and their families. Includes critical interpersonal communication strategies and tools for working with diverse groups of people in addition to the benefits of collaboration as	Prerequisites: Baccalaureate Degree and formal admission to a state approved post-baccalaureate teacher preparation program or permission of Department or Division.	LAB 1.0 1.0 1.0
EDU250	Teaching and Learning in the Community College	The history, functions, organization and current issues in the community/junior college with emphasis on the Arizona community colleges. Includes focus on the design and practice of effective community college teaching and learning with special emphasis on the	Prerequisites: None.	LEC 3.0 3.0 3.0
EDU254	Education Internship	Teaching experience in PK-12 classroom setting. Required to work 120 hours. Supervised and evaluated by a faculty coordinator.	Prerequisites: Permission of Department or Division and admission into a post-baccalaureate teacher certification program.	LAB 1.5 7.5 0.0
EDU255AA	Student Teaching Lab Elementary Education, K-8	Supervised student teaching in a K-8 classroom. Development of knowledge and skills in the areas of lesson plan development, teaching strategies, classroom management, assessing the trajectory of	Prerequisites: Baccalaureate Degree and formal acceptance into an elementary (K-8) post-baccalaureate program or permission of Department	LAB 4.0 12.0 0.0
EDU255AB	Student Teaching Lab Elementary Education, K-8	Supervised student teaching in a K-8 classroom. Competency in knowledge and skills in the areas of lesson plan development, teaching strategies, classroom management, assessing the trajectory of student learning, and professionalism.	Prerequisites: Baccalaureate Degree, a grade of C or better in EDU255AA, and formal acceptance into an elementary (K-8) post-baccalaureate program or permission	LAB 4.0 12.0 0.0

EDU255AC	Student Teaching Lab Elementary Education, K-8	Supervised student teaching in a K-8 classroom. Foundational knowledge and skills in the areas of lesson plan development, teaching strategies, classroom management, assessing the trajectory of	Prerequisites: Baccalaureate Degree and formal acceptance into an elementary (K-8) post-baccalaureate program or permission of Department	LAB 2.0 6.0 0.0
EDU255AD	Student Teaching Lab Elementary Education, K-8	Supervised student teaching in a K-8 classroom. Development of knowledge and skills in the areas of lesson plan development, teaching strategies, classroom management, assessing the trajectory of student learning, and professionalism.	Prerequisites: Baccalaureate Degree, a grade of C or better in EDU255AC, and formal acceptance into an elementary (K-8) post- baccalaureate program or permission	LAB 2.0 6.0 0.0
EDU255AE	Student Teaching Lab Elementary Education, K-8	Supervised student teaching in a K-8 classroom. Refinement of knowledge and skills in the areas of lesson plan development, teaching strategies, classroom management, assessing the trajectory of student learning, and professionalism.	Prerequisites: Baccalaureate Degree, a grade of C or better in EDU255AD, and formal acceptance into an elementary (K-8) post- baccalaureate program or permission	LAB 2.0 6.0 0.0
EDU255AF	Student Teaching Lab Elementary Education, K-8	Supervised student teaching in a K-8 classroom. Competency in knowledge and skills in the areas of lesson plan development, teaching strategies, classroom management, assessing the trajectory of student learning, and professionalism.	Prerequisites: Baccalaureate Degree, a grade of C or better in EDU255AE, and formal acceptance into an elementary (K-8) post- baccalaureate program or permission	LAB 2.0 6.0 0.0
EDU256AA	Student Teaching Lab Secondary Education, 6-12	Supervised student teaching in a 6-12 classroom. Development of knowledge and skills in the areas of lesson plan development, teaching strategies, classroom management, assessing the trajectory of	Prerequisites: Baccalaureate Degree and formal acceptance into a secondary (6-12) post-baccalaureate program or permission of Department	LAB 4.0 12.0 0.0
EDU256AB	Student Teaching Lab Secondary Education, 6-12	Supervised student teaching in a 6-12 classroom. Competency in knowledge and skills in the areas of lesson plan development, teaching strategies, classroom management, assessing the trajectory of student learning, and professionalism.	Prerequisites: Baccalaureate Degree, a grade of C or better in EDU256AA, and formal acceptance into a secondary (6-12) post- baccalaureate program or permission	LAB 4.0 12.0 0.0
EDU256AC	Student Teaching Lab Secondary Education, 6-12	Supervised student teaching in a 6-12 classroom. Foundational knowledge and skills in the areas of lesson plan development, teaching strategies, classroom management, assessing the trajectory of	Prerequisites: Baccalaureate Degree and formal acceptance into a secondary (6-12) post-baccalaureate program or permission of Department	LAB 2.0 6.0 0.0
EDU256AD	Student Teaching Lab Secondary Education, 6-12	Supervised student teaching in a 6-12 classroom. Development of knowledge and skills in the areas of lesson plan development, teaching strategies, classroom management, assessing the trajectory of student learning, and professionalism.	Prerequisites: Baccalaureate Degree, a grade of C or better in EDU256AC, and formal acceptance into a secondary (6-12) post- baccalaureate program or permission	LAB 2.0 6.0 0.0

EDU256AE	Student Teaching Lab Secondary Education, 6-12	Supervised student teaching in a 6-12 classroom. Refinement of knowledge and skills in the areas of lesson plan development, teaching strategies, classroom management, assessing the trajectory of student learning, and professionalism.	Prerequisites: Baccalaureate Degree, a grade of C or better in EDU256AD, and formal acceptance into a secondary (6-12) post-baccalaureate program or permission	LAB 2.0 6.0 0.0
EDU256AF	Student Teaching Lab Secondary Education, 6-12	Supervised student teaching in a 6-12 classroom. Competency in knowledge and skills in the areas of lesson plan development, teaching strategies, classroom management, assessing the trajectory of student learning, and professionalism.	Prerequisites: Baccalaureate Degree, a grade of C or better in EDU256AE, and formal acceptance into a secondary (6-12) post-baccalaureate program or permission	LAB 2.0 6.0 0.0
EDU260AA	Art Methods and Curriculum Development for Elementary	Overview and practical application of teaching elementary art. Covers teaching strategies, learning environments, teaching resources, and use of technology. Emphasis on State Board of Education	Prerequisites: Baccalaureate Degree and formal admission to a state approved post-baccalaureate teacher preparation program.	LEC 4.0 4.0 4.0
EDU260AB	Art Methods and Curriculum Development for Secondary	Overview and practical application of teaching secondary art. Covers teaching strategies, learning environments, teaching resources, and use of technology. Emphasis on State Board of Education	Prerequisites: Baccalaureate Degree and formal admission to a state approved post-baccalaureate teacher preparation program.	LEC 4.0 4.0 4.0
EDU261AA	Dance Methods and Curriculum Development for Elementary	Overview and practical application of teaching elementary dance and movement. Covers teaching strategies, learning environments, teaching resources, and use of technology. Emphasis on State Board of	Prerequisites: Baccalaureate Degree and formal admission to a state approved post-baccalaureate teacher preparation program.	LEC 4.0 4.0 4.0
EDU261AB	Dance Methods and Curriculum Development for Secondary	Overview and practical application of teaching secondary dance and movement. Covers teaching strategies, learning environments, teaching resources, and use of technology. Emphasis on State Board of	Prerequisites: Baccalaureate Degree and formal admission to a state approved post-baccalaureate teacher preparation program.	LEC 4.0 4.0 4.0
EDU262AA	Dramatic Arts Methods and Curriculum Development for Elementary	Overview and practical application of teaching elementary dramatic arts. Covers teaching strategies, learning environments, teaching resources, and use of technology. Emphasis on State Board of Education	Prerequisites: Baccalaureate Degree and formal admission to a state approved post-baccalaureate teacher preparation program.	LEC 4.0 4.0 4.0
EDU262AB	Dramatic Arts Methods and Curriculum Development for Secondary	Overview and practical application of teaching secondary dramatic arts. Covers teaching strategies, learning environments, teaching resources, and use of technology. Emphasis on State Board of Education	Prerequisites: Baccalaureate Degree and formal admission to a state approved post-baccalaureate teacher preparation program.	LEC 4.0 4.0 4.0
EDU263AA	Music Methods and Curriculum Development for Elementary	Overview and practical application of teaching elementary music. Covers teaching strategies, learning environments, teaching resources, and use of technology. Emphasis on State Board of Education	Prerequisites: Baccalaureate Degree and formal admission to a state approved post-baccalaureate teacher preparation program.	LEC 4.0 4.0 4.0

EDU263AB	Music Methods and Curriculum Development for Secondary	Overview and practical application of teaching secondary music. Covers teaching strategies, learning environments, teaching resources, and use of technology. Emphasis on State Board of Education	Prerequisites: Baccalaureate Degree and formal admission to a state approved post-baccalaureate teacher preparation program.	LEC 4.0 4.0 4.0
EDU267	Reading Instructional Practices, Interventions, and Assessments	Overview of instructional practices, interventions, and assessments associated with reading instruction and the systematic teaching of phonics. Course will address historical methods and current research in reading; analyze research-based instructional practices; analyze research-based assessments and possible interventions; review support provided by Multi-Tiered Systems of Support (MTSS) and Response to	Prerequisites: Formal acceptance to a Maricopa Community College state approved teacher preparation program or permission of Department or Division.	LEC 3.0 3.0 3.0
EDU268	Science of Reading Including Systematic Phonics Instruction	Overview of the science of reading with an emphasis on explicit instructional practices associated with research based systematic phonics instruction. Covers research based on the science of reading related to the teaching of reading in the K-8 school setting to include understanding reading research; essential components of reading instruction; implementation of effective	Prerequisites: Formal acceptance to a Maricopa Community College state approved teacher preparation program or permission of Department or Division.	LEC 3.0 3.0 3.0
EDU269	Educational Technology	Overview and practical application of teaching methodology integrating technology into curriculum development for teachers. Explores how emerging technologies are used to teach and learn across varied educational environments (face-to-face, hybrid, online, etc.). Includes skills focused on basic computer operations, productivity software, digital citizenship, instructional practices, information literacy and family and professional partnerships. Emphasis placed on	Prerequisites: Baccalaureate Degree and formal acceptance to a Maricopa Community College state approved post-baccalaureate teacher preparation program or permission of Department or Division.	LEC 3.0 3.0 3.0
EDU270	Learning and the Brain	Teaching and learning issues within a cognitive processes context. Covers emotion, memory, and recall as well as early brain development and its relationship to learning. Emphasis on current neuroscientific brain research and how it impacts teaching practice in preK-	Prerequisites: Baccalaureate Degree and formal acceptance to a Maricopa Community College state approved post-baccalaureate teacher preparation program or permission of	LEC 3.0 3.0 3.0
EDU270AB	Secondary Reading and Decoding	Focus on the theories, methods and models of teaching literacy and decoding in the content areas of secondary grades.	Prerequisites: Baccalaureate Degree and formal admission to a state approved Post Baccalaureate teacher preparation program.	LEC 3.0 3.0 3.0

EDU272	Educational Psychology	Focus on the study and application of psychological principles, theories, and methodologies related to teaching and learning. Emphasis on developmental, learning, and motivational theories. Current trends also	Prerequisites: None.	LEC 3.0 3.0 3.0
EDU274	Understanding Adolescent Behavior in the Classroom	Focuses on understanding adolescents' development including psychosocial, emotional, cognitive and physical. Covers impact of early experiences, relationships, and learning abilities. Establishment of a learning environment supportive of the adolescent	Prerequisites: Baccalaureate Degree and formal admission to a state approved post-baccalaureate teacher preparation program or permission of Department or Division.	LEC 3.0 3.0 3.0
EDU276	Classroom Management and Behavior Analysis	Classroom management techniques, and behavior analysis. Classroom discipline models, student behavior and misbehavior, group dynamics, student self-motivation and learning styles covered. Professional Teaching Standards emphasized.	Prerequisites: Baccalaureate Degree and formal acceptance to a Maricopa Community College state approved post-baccalaureate teacher preparation program or permission of	LEC 3.0 3.0 3.0
EDU278	Educational Assessment and Evaluation	Examination of assessing student performance. Assessment criteria and development of various types of assessment covered. Instructor developed assessments emphasized. Standardized, norm-referenced and criterion-referenced tests also included.	Prerequisites: None.	LEC 3.0 3.0 3.0
EDU282AA	Service-Learning Experience in	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 1.0 1.0 0.0
EDU282AB	Service-Learning Experience in	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 2.0 2.0 0.0
EDU282AC	Service-Learning Experience in	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 3.0 3.0 0.0
EDU287AA	Master Teacher Seminar I	Special topics in education with an emphasis on current issues not covered in education courses.	Prerequisites: Baccalaureate Degree and formal acceptance to a Maricopa Community College state approved post-baccalaureate teacher preparation program or permission of	LEC 1.0 1.0 1.0
EDU287AB	Master Teacher Seminar II	Special topics in education with an emphasis on current issues not covered in education courses.	Prerequisites: Formal admission to an undergraduate teacher preparation program.	LEC 1.0 1.0 1.0
EDU287AC	Master Teacher Seminar III	Special topics in education with an emphasis on current issues not covered in education courses.	Prerequisites: Baccalaureate degree and formal admission to a state approved post baccalaureate teacher preparation program.	LEC 1.0 1.0 1.0

EDU288AA	Student Teaching Lab - Elementary	Supervised student teacher practicum. Emphasis on the provision of instruction to learners. Covers lesson plan development, classroom procedures, classroom management, and educator professionalism. Includes learner preparation, learner engagement, and learner	Prerequisites: Baccalaureate Degree and formal admission to a state approved post-baccalaureate teacher preparation program and a grade of C or better in EDU251 and	LAB 8.0 5.0 0.0
EDU288AB	Student Teaching Lab - Secondary	Supervised student teacher practicum. Emphasis on the provision of instruction to learners. Covers lesson plan development, classroom procedures, classroom management, and educator professionalism. Includes learner preparation, learner engagement, and learner	Prerequisites: Baccalaureate Degree and formal admission to a state approved post-baccalaureate teacher preparation program and a grade of C or better in EDU251 and	LAB 8.0 5.0 0.0
EDU289	Secondary Methods and Curriculum Development	Overview and practical application of teaching methodology and curriculum development for secondary education teachers. Teaching strategies, curriculum design, lesson objectives, time management skills, teaching resources and student assessments covered. Professional Teaching Standards emphasized. Includes current research findings related to secondary	Prerequisites: Baccalaureate Degree and formal admission to a state approved post-baccalaureate teacher preparation program.	LEC 1.0 1.0 1.0
EDU289AA	Secondary Social Studies Methods and Curriculum Development	Overview and practical application of social studies teaching methodology and curriculum development for secondary teachers. Teaching strategies and learning styles covered. Curriculum design, lesson objectives, time management skills, teaching resources and student assessment also included. Professional Teaching Standards emphasized. Includes current research findings related to the application and learning of secondary social studies content; the methods	Prerequisites: Baccalaureate Degree and acceptance of formal application into a state approved post-baccalaureate teacher preparation program or permission of Department or Division. A grade of C or better in EDU289 or Corequisites: EDU289.	L+L 2.0 2.0 2.0
EDU289AB	Secondary Mathematics Methods and Curriculum Development	Overview and practical application of mathematics teaching methodology and curriculum development for secondary teachers. Teaching strategies and learning styles covered. Curriculum design, lesson objectives, time management skills, teaching resources and student assessment also included. Professional Teaching Standards emphasized. Includes current	Prerequisites: Baccalaureate Degree and formal admission to a state approved post-baccalaureate teacher preparation program. Prerequisites: A grade of C or better in EDU289 or Corequisites: EDU289.	L+L 2.0 2.0 2.0

EDU289AC	Secondary Science Methods and Curriculum Development	Overview and practical application of science teaching methodology and curriculum development for secondary teachers. Teaching strategies and learning styles covered. Curriculum design, lesson objectives, time management skills, teaching resources and student assessment also included. Professional Teaching Standards emphasized. Includes current research	Prerequisites: Baccalaureate Degree and formal admission to a state approved post-baccalaureate teacher preparation program. Prerequisites: A grade of C or better in EDU289 or Corequisites: EDU289.	L+L 2.0 2.0 2.0
EDU289AD	Secondary English Methods and Curriculum Development	Overview and practical application of English teaching methodology and curriculum development for secondary teachers. Teaching strategies and learning styles covered. Curriculum design, lesson objectives, time management skills, teaching resources and student assessment also included. Professional Teaching Standards emphasized. Includes current research	Prerequisites: Baccalaureate Degree and formal admission to a state approved post-baccalaureate teacher preparation program. Prerequisites: A grade of C or better in EDU289 or Corequisites: EDU289.	L+L 2.0 2.0 2.0
EDU289AE	Secondary Methods and Curriculum Development in Special Topics	Overview and practical application of teaching methodology and curriculum development for secondary teachers in special topics such as Music, Theater, Art, Economics, Foreign Languages, Computers, PE, etc. Teaching strategies and learning styles covered. Curriculum design, lesson objectives, time management skills, teaching resources and student assessment also included. Professional Teaching Standards	Prerequisites: Baccalaureate Degree and formal admission to a state approved post-baccalaureate teacher preparation program. Prerequisites: A grade of C or better in EDU289 or Corequisites: EDU289.	L+L 2.0 2.0 2.0
EDU290	Science Methods and Curriculum Development	Overview and practical application of teaching elementary science. Covers teaching strategies, learning environments, teaching resources, and use of technology. Emphasis on Professional Teaching Standards. Includes current research findings related to	Prerequisites: Baccalaureate Degree and formal admission to a state approved post-baccalaureate teacher preparation program.	LEC 3.0 3.0 3.0
EDU291	Children's Literature	Review of folk and modern literature from a variety of world cultures, including application of literary criteria to folk and modern literature for children.	Prerequisites: None.	LEC 3.0 3.0 3.0
EDU292	The Art Of Storytelling	Explore the art and origin of storytelling. Provide a variety of storytelling techniques, styles and exercises to enhance the delivery of telling stories. Assist in the integration and application of storytelling to the learning	Prerequisites: None.	LEC 3.0 3.0 3.0

EDU293	Mathematics Methods and Curriculum Development	Overview and practical application of teaching mathematics in K-8 grades. Development of lesson plans and assessment instruments emphasized. Current trends, Professional Teaching Standards and National Council of Teachers of Mathematics Standards also covered. Includes current research findings related to	Prerequisites: Baccalaureate Degree and formal admission to a state approved post-baccalaureate teacher preparation program.	LEC 3.0 3.0 3.0
EDU294	Multicultural Folktales	Study of multicultural folktales, exploring the impact of the oral tradition in American society and showing	Prerequisites: None.	LEC 3.0 3.0 3.0
EDU295	Social Studies Methods and Curriculum Development	Overview of teaching elementary social studies. Topics include lesson plans preparation, teaching strategies, assessments, classroom management techniques and teaching resources. Emphasis on Professional Teaching Standards. Includes current research findings related to the application and learning of elementary	Prerequisites: Baccalaureate Degree and formal admission to a state approved post-baccalaureate teacher preparation program.	LEC 3.0 3.0 3.0
EDU297	Language Arts Methods and Curriculum Development	Methods to teach research-based instruction in elementary English language arts including reading, writing, speaking, and listening. Topics include developmentally appropriate instruction, assessment, cross-curricular integration, lesson plan preparation,	Prerequisites: Baccalaureate degree and formal admission to a post-baccalaureate teacher preparation program, or permission of Department or Division.	LEC 3.0 3.0 3.0
EDU298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
EDU298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0

EDU298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
EDU337	Structured English Immersion in Grades K-8	Overview of teaching to serve the needs of diverse English learner (EL) students in grades K-8. Includes comparison and evaluation of various language educational models, including Structured English Immersion (SEI) and the Arizona Language Development Approach (LDA) with a focus on asset based behaviors and expectations, integrated and	Prerequisites: Formal acceptance to a Maricopa Community College state approved teacher preparation program or permission of Department or Division.	LEC 3.0 3.0 3.0
EDU367	Science of Reading with Systematic Phonics Instruction in Grades K-8	Overview of the science of reading with an emphasis on explicit instructional practices associated with research-based systematic phonics instruction. Uses analysis of science of reading-based research to identify best practices for effectively teaching reading in the K-8 school setting, including essential components,	Prerequisites: Formal acceptance to a Maricopa Community College state approved teacher preparation program or permission of Department or Division.	LEC 3.0 3.0 3.0
EDU368	Reading Instructional Practices, Interventions, and Assessments in Grades K-8	Application of instructional practices, interventions and assessments associated with reading instruction and the systematic teaching of phonics to support readers of varying ages and ability levels, including students with dyslexia. This course addresses historical methods, current research, research-based instructional practices, assessments and interventions using Multi-tiered	Prerequisites: Formal acceptance to a Maricopa Community College state approved teacher preparation program or permission of Department or Division.	LEC 3.0 3.0 3.0
EDU372	Educational Psychology for Teachers (Grades K-12)	Overview of scientific research and psychological principles, theories, and methodologies related to teaching and learning. Emphasis on developmental, learning, and motivational theories. Focuses on human diversity, theories of learning, intelligence, memory,	Prerequisites: Formal acceptance to a Maricopa Community College state approved teacher preparation program or permission of Department or Division.	LEC 3.0 3.0 3.0
EDU427	Social Studies Teaching Methods and Pedagogical Strategies for Grades K-8	Application of research-based instruction in elementary social studies. Topics include developmentally appropriate instruction, and assessment, cross-curricular integration of social studies, lesson plan preparation, evidence-based teaching strategies, and teaching resources. Emphasis on current professional teaching	Prerequisites: Formal acceptance to a Maricopa Community College state approved teacher preparation program or permission of Department or Division.	LEC 3.0 3.0 3.0

EDU428	English Language Arts Teaching Methods and Pedagogical Strategies for Grades K-8	Application of research-based instruction in elementary English Language Arts, including reading, writing, speaking, and listening. Topics include developmentally appropriate instruction, and assessment, cross-curricular integration of language arts, lesson plan preparation, evidence-based teaching strategies, and teaching resources. Emphasis on current professional teaching	Prerequisites: Formal acceptance to a Maricopa Community College state approved teacher preparation program or permission of Department or Division.	LEC 3.0 3.0 3.0
EDU429	Science Teaching Methods and Pedagogical Strategies for Grades K-8	Application of research-based instruction in elementary science. Topics include developmentally appropriate instruction, and assessment, cross-curricular integration of scientific concepts and problem solving skills, lesson plan preparation, evidence-based teaching strategies, and teaching resources. Emphasis on current	Prerequisites: Formal acceptance to a Maricopa Community College state approved teacher preparation program or permission of Department or Division.	LEC 3.0 3.0 3.0
EDU431	Mathematics Teaching Methods and Pedagogical Strategies for Grades K-8	Application of research-based instruction in elementary mathematics. Topics include developmentally appropriate instruction, and assessment, cross-curricular integration of mathematics and logical problem solving, lesson plan preparation, evidence-based teaching strategies, and teaching resources. Emphasis on	Prerequisites: Formal acceptance to a Maricopa Community College state approved teacher preparation program or permission of Department or Division.	LEC 3.0 3.0 3.0
EDU477	Student Teaching: Elementary (Grades K-8)	Supervised student teacher practicum in a K-8 classroom. Emphasis on the provision of instruction to learners. Covers lesson plan development, teaching strategies, classroom management, assessing the	Prerequisites: Formal acceptance to a Maricopa Community College state approved teacher preparation program or permission of Department	LAB 6.0 6.0 0.0
EDU487	Professional Seminar: Current Trends in Elementary and Special Education	Special topics in K-12 (elementary and special) education with an emphasis on current topics and trends.	Prerequisites: Formal acceptance to a Maricopa Community College state approved teacher preparation program or permission of Department	LEC 2.0 2.0 2.0
EEC205	Early Learning: Instructional Methodologies of Language, Math, Science, Social Studies and the Arts	Overview and practical application of teaching elementary language, math, science, social studies and the arts. Covers teaching strategies, learning environments, teaching resources, and use of technology. Emphasis on Early Learning Standards (Birth to Age 5), Arizona Academic Standards	Prerequisites: Must hold a provisional or standard elementary or special education teaching certificate or permission of Department or Division.	LEC 3.0 3.0 3.0

EED111	Multimedia and the Early Childhood Education Classroom	Explores theories and teaching strategies related to the use of multimedia with children from birth through 8 years of age. Examines usage of various multimedia in early childhood education settings and ways to meaningfully integrate it to foster cognitive development. Explores the use of multimedia and early	Prerequisites: None.	LEC 3.0 3.0 3.0
EED115	Digital Literacy for Teaching and Learning in Education	Overview of digital literacy for identifying the skills needed to become informed users of technology to communicate, instruct, create and think critically with digital tools. Explores how emerging technologies are used to teach and learn across varied educational environments (face-to-face, hybrid, online, etc). Includes skills focused on basic computer operations, productivity software, digital citizenship, instructional practices, information literacy and family and professional	Prerequisites: None.	LEC 3.0 3.0 3.0
EED200	Foundations of Early Childhood Education	Overview of early childhood education (birth to age eight) in American society, including current issues and responsibilities. Emphasis on issues of professionalism, ethics and program types. Opportunities for students to	Prerequisites: None.	LEC 3.0 3.0 3.0
EED205	The Developing Child: Prenatal to Age Eight	Examination of process of physical, social, emotional, cognitive, language, and literacy development of typical and atypical young children; prenatal through age eight. Includes practical application and fieldwork	Prerequisites: None.	LEC 3.0 3.0 3.0
EED210	Creative and Cognitive Play	Benefits of play for children birth to 8 years of age. Inclusion of art, music, and movement used in all dimensions of play. Identify uses and roles in the	Prerequisites: A grade of C or better in CFS176 ECH176, or CFS235, or EED205.	LEC 3.0 3.0 3.0
EED211	Language Acquisition in the Young Child	Define speech and language and discuss theories of language acquisition in young children, birth through 8 years of age in a variety of settings. Explore techniques to encourage and support the development of language, assessment techniques and family	Prerequisites: A grade of C or better in CFS/ECH176, or CFS235, or EED205. Xref: CFS176	LEC 3.0 3.0 3.0
EED212	Guidance, Effective Interactions and the Environment	Principles for guiding young children in early care and education environments. Exploration of guidance, effective interactions, and how the environment impacts the lives of young children. Includes observation of	Prerequisites: None.	LEC 3.0 3.0 3.0

EED215	Early Learning: Health, Safety, Nutrition and Physical Fitness	Consideration of public health issues and safety procedures within early childhood settings that serve young children birth to age eight. Overview of nutritional needs and issues of physical fitness and well-being in young children. Includes practicum designed to explore	Prerequisites: None.	LEC 3.0 3.0 3.0
EED220	Child, Family, Community and Culture	Examines family, community and cultural influences on development of the young child (birth to age eight). Considers trends and threats to attachment, relationships and cultural identity. Includes social and	Prerequisites: None.	LEC 3.0 3.0 3.0
EED222	Introduction to the Exceptional Young Child: Birth to Age Eight	Overview of the exceptional learner (birth - age eight), one who differs from the average or the norm, with emphasis on observation, techniques, characteristics, identification, types of programs, and work with families. Issues related to learning exceptionalities, sensory and communication disorders, social and emotional problems, physical and health related disorders, and	Prerequisites: None.	LEC 3.0 3.0 3.0
EED225	Language and Literacy in the Context of Culture and Relationships	Introduces children's language acquisition and literacy development. Exploration of the relationships among language, literacy, family, culture, and community. Study of educational practices and advocacy opportunities that support language acquisition, literacy	Prerequisites: None.	LEC 3.0 3.0 3.0
EED250	Early Literacy Development	Overview of emergent literacy, early literacy development, and appropriate early experiences with books, reading, and writing. Emphasis placed on reading and writing readiness, methods to enhance literacy development, and strategies for selecting and	Prerequisites: None.	LEC 3.0 3.0 3.0
EED255	Independent Study Portfolio Development and Writing for the Early Childhood	Portfolio development, completion, and presentation skills designed for the individual student. Self-assessment and educational short-term and long-term planning, professional development, writing and critical	Prerequisites: A grade of C or better in completion of twelve (12) credit hours of EED Early Education coursework and permission of	LEC 3.0 3.0 3.0
EED260	Early Childhood Infant/Toddler	Work experience with infants and toddlers in early care and education settings. 80 hours of designated work	Prerequisites: Permission of Department or Division.	LAB 1.0 1.0 0.0
EED261	Early Childhood Preschool Internship	Work experience with preschoolers in early care and education settings. 80 hours of designated work per	Prerequisites: Permission of Department or Division.	LAB 1.0 1.0 0.0
EED262	Early Childhood Internship:	Work experience with infants and toddlers in early care and education settings.	Prerequisites: Permission of Department or Division.	LAB 2.0 2.0 0.0
EED263	Early Childhood Internship: Preschool	Work experience with preschoolers in early care and education settings.	Prerequisites: Permission of Department or Division.	LAB 2.0 2.0 0.0

EED265	Early Childhood Internship: K-3	Supervised student teacher practicum. Emphasis on the provision of instruction to learners. Covers lesson plan development, classroom procedures, classroom management, and educator professionalism. Includes learner preparation, learner engagement, and learner	Prerequisites: A grade of C or better in EED200, EED212, EED215, EED220, EED222, EED270, EED275, and EED280.	LAB 4.0 5.0 0.0
EED270	Early Learning Development: Birth to Age Eight	Teaching and early learning issues within a cognitive processes context. Covers emotion, memory, and recall as well as early brain development and its relationship to early learning for the young child, birth to age eight.	Prerequisites: A grade of C or better in CFS/ECH176 or CFS205 or CFS235 or EED205 or permission of instructor. Xref: CFS176	LEC 3.0 3.0 3.0
EED275	Early Learning Curriculum and Instruction: Math and Science	Overview and practical application of teaching math and science concepts to typical and atypical toddlers, preschoolers, and students Kindergarten-third grade (K-3). Covers teaching strategies, learning environments, teaching resources, and use of technology. Emphasis on overview and practical application of National Association for the Education of Young Children Standards, Early Learning Standards, Arizona Academic Standards (K-3), State Board of Education	Prerequisites: A grade of C or better in CFS/ECH176 or EED205. Xref: CFS176	LEC 3.0 3.0 3.0
EED277	Early Learning Curriculum and Instruction: Language Arts, Social Studies, Art, Music and Movement	Overview and practical application of teaching language arts, social studies, art, music and movement to typical and atypical toddlers, preschoolers, and students K-3. Covers teaching strategies, learning environments, teaching resources, and use of technology. Emphasis on overview and practical application of National Association for the Education of Young Children Standards, Early Learning Standards, Arizona	Prerequisites: A grade of C or better in CFS/ECH176 or EED205. Xref: CFS176	LEC 3.0 3.0 3.0
EED278	Early Learning Curriculum and Instruction - Birth to Age Eight	Considerations and evaluations of curriculum appropriate to the developmental characteristics of learners, birth through eight years. Includes how early childhood standards, philosophies, and program settings relate to the teaching, learning, and	Prerequisites: A grade of C or better in EED200.	LEC 3.0 3.0 3.0
EED280	Standards, Observation & Assessment of Typical/Atypical Behaviors of Young Children Birth to Age	Standards, observation, and assessment of typical and atypical behaviors, overview of standards, observation and assessment methodologies for typical and atypical young children (birth to age eight). Includes ethics, referral and reporting procedures, and collaboration with families and other professionals.	Prerequisites: A grade of C or better in CFS/ECH176 or CFS235 or EED205. Xref: CFS176	LEC 3.0 3.0 3.0

EED282AA	Service-Learning Experience in Early Childhood Education	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 1.0 1.0 0.0
EED282AB	Service-Learning Experience in Early Childhood Education	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 2.0 2.0 0.0
EED282AC	Service-Learning Experience in Early Childhood Education	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 3.0 3.0 0.0
EEE120	Digital Design Fundamentals	Number systems, conversion methods, binary and complement arithmetic, Boolean switching algebra and circuit minimization techniques. Analysis and design of combinational logic, flip-flops, simple counters, registers, Read Only Memory (ROMs), Programmable Logic Device (PLDs), synchronous and asynchronous	Prerequisites: None. Corequisites: CSC100 or (CSC110 or CSC110AB) or permission of Instructor or Division or Department Chair.	L+L 4.0 6.0 6.0
EEE202	Circuits and Devices	Introduction to circuits and devices. Component models, transient analysis, steady state analysis, Laplace transform, and active and passive filter networks.	Prerequisites: None. Corequisites: (PHY131 or permission of Instructor or Division or Department Chair) and (MAT276 or permission of Instructor or Division or Department Chair).	LEC 5.0 4.0 4.0 LAB 0.0 3.0 3.0
EEE203	Signals and Systems	Introduction to continuous and discrete time signal and system analysis, linear systems, Fourier, and z-	Prerequisites: A grade of C or better in EEE202.	L+L 3.0 5.0 5.0
EEE220	Programming for Computer Engineering	Intermediate level procedural, object-oriented, and high-level scripting programming languages (C, C++, Python) in the Unix environment.	Prerequisites: A grade of C or better in (CSC/EEE120 and CSC205), or permission of Instructor or Division or Department Chair.	L+L 3.0 5.0 5.0
EEE230	Computer Organization and Assembly Language	Assembly language programming including input/output (I/O) programming and exception/interrupt handling. Register-level computer organization, I/O interfaces, assemblers, and linkers. Processor organization and design, data path, control, pipelining, and input/output.	Prerequisites: A grade of C or better in [(CSC100 or CSC110 or CSC110AB) and CSC/EEE120] or permission of Instructor or Division or Department Chair. Xref: CSC120	L+L 4.0 5.0 5.0
EEG202	Intermediate Electroencephalography (EEG)	Intermediate Electroencephalography (EEG) testing principles and procedures including terminology, tracings, normal findings, activations, American Clinical Neurophysiology Society (ACNS) guidelines, and	Prerequisites: A grade of C or better in NDT101 and admission into the Clinical Neurodiagnostic Technology program. Corequisites: EEG202LL.	LEC 3.0 3.0 3.0

EEG202LL	Intermediate Electroencephalography (EEG) Laboratory	Application of Electroencephalography (EEG) advanced skills for measurement, electrode application, equipment operation, and procedures.	Prerequisites: A grade of C or better in NDT103LL and admission into the Clinical Neurodiagnostic Technology program. Corequisites: EEG202.	LAB 1.0 3.0 3.0
EEG203	Advanced Electroencephalography (EEG)	Advanced Electroencephalography (EEG) testing principles and procedures, including abnormal EEG, epilepsy, seizure types, pattern recognition, and disorders and diseases that affect brain activity.	Prerequisites: A grade of C or better in EEG202 and admission into the Clinical Neurodiagnostic Technology program. Corequisites: NDT200LL.	LEC 2.0 2.0 2.0
EEG215	Electroencephalography (EEG) Clinical Rotation I	Introduction to a Neurodiagnostic Technology (NDT) facility conducting Electroencephalograms (EEG), and participation in performance of associated procedures. Emphasis on patient preparation, testing protocol, instrument calibration and operation, documentation,	Prerequisites: A grade of C or better in NDT200LL and admission into the Clinical Neurodiagnostic Technology program. Corequisites: PSG215.	LEC 3.0 15.0 0.0
EEG225	Electroencephalography (EEG) Clinical Rotation II	Participation in clinical Electroencephalogram (EEG) testing. Emphasis on patient preparation, troubleshooting, documentation, record review, and report generation.	Prerequisites: A grade of C or better in EEG215 and admission into the Clinical Neurodiagnostic Technology program. Corequisites: PSG225.	LEC 3.0 15.0 0.0
EEG235	Electroencephalography (EEG) Clinical Rotation III	Advanced participation in clinical Electroencephalography (EEG) testing. Emphasis on patient preparation, troubleshooting, documentation, record review, and technologist interpretation.	Prerequisites: A grade of C or better in EEG225 and admission into the Clinical Neurodiagnostic Technology program. Corequisites: PSG235.	LEC 3.0 15.0 0.0
EEG280	EEG Board Exam Review	Includes a review of all material covered in the Electroneurodiagnostic Technology program. Taught during students' final semester of coursework to prepare	Prerequisites: Admission into the Electroneurodiagnostic Technology program or permission of Program	LEC 2.0 2.0 2.0
EED224	Child Development: Prenatal to Age Eight	Examination of process of physical, social, emotional, cognitive, language, and literacy development of typical and atypical young children; prenatal through age eight. Consideration of public health issues and safety procedures within early childhood settings. Overview of nutritional needs and issues of physical fitness and well-being in typical and atypical young children. Includes	Prerequisites: Baccalaureate Degree and formal acceptance to a Maricopa Community College state approved post-baccalaureate teacher preparation program or permission of Department or Division.	LEC 3.0 3.0 3.0
EED240	Early Childhood Foundations	Overview of early childhood education (birth to age eight) in American society, including current issues and responsibilities. Emphasis on issues of professionalism, ethics and program types. Opportunities for students to explore potential career paths. Includes field	Prerequisites: Baccalaureate Degree and formal acceptance to a Maricopa Community College state approved post-baccalaureate teacher preparation program or permission of	LEC 3.0 3.0 3.0

EEP242	Early Childhood Guidance and Management	Principles for guiding young children in early care and education environments. Exploration of guidance, management, and how the environment impacts the lives of typical and atypical young children. Includes observation of classrooms of children ages birth to age	Prerequisites: Baccalaureate Degree and formal acceptance to a Maricopa Community College state approved post-baccalaureate teacher preparation program or permission of	LEC 3.0 3.0 3.0
EEP244	Early Childhood Introduction to the Exceptional Young Child	Overview of the exceptional learner (birth to age eight), one who differs from the average or the norm, with emphasis on observation, techniques, characteristics, identification, types of programs, and work with families. Issues related to learning exceptionalities, sensory and communication disorders, social and emotional	Prerequisites: Baccalaureate Degree and formal acceptance to a Maricopa Community College state approved post-baccalaureate teacher preparation program or permission of Department or Division.	LEC 3.0 3.0 3.0
EEP246	Early Childhood Culture, Community, Family and the Child	Examines family, community, and cultural influences on development of the young child birth to third grade. Considers trends and threats to attachment, relationships and cultural identity. Includes social and emotional experiences and their impact on the	Prerequisites: Baccalaureate Degree and formal acceptance to a Maricopa Community College state approved post-baccalaureate teacher preparation program or permission of	LEC 3.0 3.0 3.0
EEP260	Early Childhood Curriculum and Methods of Math - Birth to Age Eight	Overview and practical application of teaching math concepts to toddlers, preschoolers, and students Kindergarten through third grade (K-3). Covers teaching strategies, learning environments, teaching resources, and use of technology. Emphasis on overview and practical application of Early Learning Standards, Arizona Academic Standards (K-3), State Board of	Prerequisites: Baccalaureate Degree and formal admission to a state approved post-baccalaureate early childhood teacher preparation program.	LEC 3.0 3.0 3.0
EEP262	Early Childhood Curriculum and Methods of Science - Birth to Age Eight	Overview and practical application of teaching science concepts to toddlers, preschoolers, and students Kindergarten and third grade (K-3). Covers teaching strategies, learning environments, teaching resources, and use of technology. Emphasis on overview and practical application of Early Learning Standards,	Prerequisites: Baccalaureate Degree and formal admission to a state approved post-baccalaureate early childhood teacher preparation program.	LEC 2.0 2.0 2.0
EEP264	Early Childhood Curriculum and Methods of Social Studies - Birth to Age Eight	Overview and practical application of teaching social studies to toddlers, preschoolers, and students K-3. Covers teaching strategies, learning environments, and teaching resources. Emphasis on overview and practical application of Early Learning Standards, Arizona	Prerequisites: Baccalaureate Degree and formal admission to a state approved post-baccalaureate early childhood teacher preparation program.	LEC 1.0 1.0 1.0

EEP266	Early Childhood Curriculum and Methods in Language Arts - Birth to Age Eight	Overview and practical application of teaching Language Arts concepts to toddlers, preschoolers, and students in Kindergarten through third grade (K-3). Covers communication skills of reading, writing, listening and speaking, interpreting visual messages and creating visual messages. Emphasis on overview and practical application of Early Learning Standards, Arizona Language Arts Standards (K-3), and State	Prerequisites: Baccalaureate Degree and formal admission to a state approved post-baccalaureate early childhood teacher preparation program.	LEC 1.0 1.0 1.0
EEP268	Early Childhood Curriculum and Methods in The Arts - Birth to Age Eight	Exploration of fine arts integration, birth to age 8, in early childhood settings. Focus on the impact on life-long learning and education goal achievement when curriculum includes fine arts. Arizona art standards of	Prerequisites: Baccalaureate Degree and formal admission to a post-baccalaureate early childhood teacher preparation program.	LEC 1.0 1.0 1.0
EEP276	Standards, Observation and Assessment of Typical and Atypical Behaviors Birth to Age Eight	Observation and assessment of typical and atypical behaviors, overview of standards, observation and assessment methodologies for typical and atypical young children birth to age eight. Includes ethics, referral and reporting procedures, and collaboration with families and other professionals.	Prerequisites: A grade of C or better in EEP260, EEP262, EEP264, EEP266, EEP268 and Baccalaureate Degree and formal admission to a state approved post-baccalaureate early childhood	LEC 3.0 3.0 3.0
EEP288	Student Teaching Lab - Early Childhood	Supervised (K-3) student teacher practicum. Emphasis on the provision of instruction to learners. Covers lesson plan development, classroom procedures, classroom management, and educator professionalism. Includes learner preparation, learner engagement, and learner outcome awareness.	Prerequisites: Baccalaureate Degree and formal admission to a state approved post-baccalaureate teacher preparation program and a grade of C or better in (EDU220, EDU251, EEP240, EEP242, EEP244, EEP246 and EEP276) and	LAB 4.0 5.0 0.0
EEP289	Internship: Early Childhood Infant, Toddler, Preschool	Supervised field experience with infants, toddlers and/or preschoolers in early care and education settings.	Prerequisites: Baccalaureate Degree and formal admission to a state approved post-baccalaureate early childhood teacher preparation program and (EDU220 EDU251 EEP240 EEP242 EEP244 EEP246 and EEP276) and permission of	LEC 4.0 4.0 0.0

EEP311	Foundations of Dual Language Learning - Birth to Age Eight	Examination of the needs of dual language learners birth to grade three. Includes comparison and evaluation of various language educational models with a focus on asset based behaviors and expectations, integrated and targeted dual language instruction. Covers legal and historical foundations and current issues.	Prerequisites: A grade of C or better in EED200 or permission of Instructor and (formal admission to an undergraduate educator preparation program or declaration of the BA in Early Childhood Education - Dual Language program or permission of	LEC 3.0 3.0 3.0
EEP312	Family, Community, and School Collaboration for Dual Language Learners - Birth to Age Eight	Examines multiple influences on the development of the dual language learner (birth to age eight). Considers foundational structure provided by and reinforced by the family. Recognizes multiple messages of value and power communicated through community structures. Includes strategies for relationship building between families, school, and community with a long term goal of	Prerequisites: A grade of C or better in EED200 or permission of Instructor and (formal admission to an undergraduate educator preparation program or declaration of the BA in Early Childhood Education - Dual Language program or permission of	LEC 3.0 3.0 3.0
EEP313	Bilingual and ESL Methods - Birth to Age Eight	Culturally responsive strategies for working with the dual language learners in early childhood settings. Components of dual language curriculum content and learning techniques focusing on bilingual and English as a Second Language (ESL) strategies.	Prerequisites: A grade of C or better in EED200 or permission of Instructor and (formal admission to an undergraduate educator preparation program or declaration of the BA in Early Childhood Education - Dual Language program or permission of	LEC 3.0 3.0 3.0
EEP314	Teaching of Reading and Writing for Dual Language Learners - Birth to Age Eight	Introduction to teaching reading and writing for dual language learners in early childhood settings. Includes second language acquisition terminology, theories, and strategies. Emphasis on instructional and assessment strategies as well as reading comprehension and writing skills.	Prerequisites: A grade of C or better in EED200 or permission of Instructor and (formal admission to an undergraduate educator preparation program or declaration of the BA in Early Childhood Education - Dual Language program or permission of	LEC 3.0 3.0 3.0
EEP315	Social Studies and Arts Methods for Dual Language Learners - Birth to Age Eight	Overview and practical application of teaching social studies and arts for dual language learners in early childhood settings. Covers teaching strategies, learning environments, and teaching resources. Emphasis on overview of relevant guidelines and standards for children birth through third grade (pre-K-3).	Prerequisites: A grade of C or better in EED200 or permission of Instructor and (formal admission to an undergraduate educator preparation program or declaration of the BA in Early Childhood Education - Dual Language program or permission of	LEC 3.0 3.0 3.0

EEP316	Math and Science Methods for Dual Language Learners - Birth to Age Eight	Overview and practical application of teaching math and science for dual language learners in early childhood settings. Covers teaching strategies, learning environments, and teaching resources. Emphasis on overview of relevant guidelines and standards for children birth through third grade (pre-K-3).	Prerequisites: A grade of C or better in EED200 or permission of Instructor and (formal admission to an undergraduate educator preparation program or declaration of the BA in Early Childhood Education - Dual Language program or permission of	LEC 3.0 3.0 3.0
EEP411	Sheltered Instruction for Dual Language Settings - Birth to Age Eight	Analysis of sheltered instruction strategies designed to serve the needs of dual language learners ages birth to eight. Includes comparison and evaluation of various language educational models with a focus on asset based behaviors and expectations as well as integrated and targeted language instruction.	Prerequisites: A grade of C or better in EEP311 or permission of Instructor and (formal admission to an undergraduate educator preparation program or declaration of the BA in Early Childhood Education - Dual Language program or permission of	LEC 3.0 3.0 3.0
EEP412	Assessment of Dual Language Learners - Birth to Age Eight	Teaching and assessment of dual language learners ages birth to eight. Covers differentiated instruction, special education needs vs. language needs, learning environments and utilizing ongoing assessment of student learning to guide instruction.	Prerequisites: A grade of C or better in EEP311 or permission of Instructor and (formal admission to an undergraduate educator preparation program or declaration of the BA in Early Childhood Education - Dual Language program or permission of	LEC 3.0 3.0 3.0
EEP413	Reading Instructional Practices, Interventions, and Assessments - Birth through Adolescence	Overview of instructional practices, interventions, and assessments associated with reading instruction and the systematic teaching of phonics to children from birth through adolescence. Includes historical methods and current research in reading; research-based instructional practices; research based assessments and possible interventions; support provided by Multi-Tiered Systems of Support (MTSS) and Response to Intervention (RTI). Focus on reading disabilities	Prerequisites: A grade of C or better in EEP311 or permission of Instructor and (formal admission to an undergraduate educator preparation program or declaration of the BA in Early Childhood Education - Dual Language program or permission of Department or Division).	LEC 3.0 3.0 3.0
EEP414	Science of Reading and Systematic Phonics Instruction for Birth through Adolescence	Overview of the science of reading with an emphasis on explicit instructional practices associated with research-based, systematic phonics instruction for children from birth through adolescence. Covers research-based on the science of reading related to the teaching of reading in the pre-K-8 school setting to include understanding reading research; essential components of reading instruction; implementation of effective	Prerequisites: A grade of C or better in EEP311 or permission of Instructor and (formal admission to an undergraduate educator preparation program or declaration of the BA in Early Childhood Education - Dual Language program or permission of Department or Division).	LEC 3.0 3.0 3.0

EEP415	Student Teaching in a Dual Language K-3 Setting	Supervised (K-3) student teacher practicum in a dual language setting. Emphasis on the provision of instruction to learners. Covers lesson plan development, classroom procedures, classroom management, and educator professionalism. Includes learner preparation, learner engagement, and learner outcome awareness.	Prerequisites: A grade of C or better in EEP311 or permission of Instructor and (formal admission to an undergraduate educator preparation program or declaration of the BA in Early Childhood Education - Dual Language program or permission of	LEC 3.0 3.0 0.0
EFE232	Mild-Moderate Disabilities Student Teaching	Supervised student teaching. Emphasis on the provision of instruction to learners. Covers lesson plan development, classroom procedures, classroom management, and educator professionalism. Includes learner preparation, learner engagement, and learner	Prerequisites: Formal admission to an undergraduate teacher preparation program and permission of Department or Division.	LAB 8.0 5.0 0.0
EFE260	Student Teaching Lab K-12 - Art	Supervised student teacher practicum. Emphasis on the provision of K-12 art instruction to learners. Covers lesson plan development, classroom procedures, classroom management, and educator professionalism. Includes learner preparation, learner engagement, and	Prerequisites: Baccalaureate Degree and formal admission to a state-approved post-baccalaureate teacher preparation program and permission of Department or Division.	LAB 12.0 9.0 0.0
EFE260AC	Intern Certificate Student Teaching Lab K-12 - Art Education I	Supervised student teacher practicum. Emphasis on the provision of K-12 art instruction to learners. Covers lesson plan development, classroom procedures, classroom management, and educator professionalism. Includes learner preparation, learner engagement, and	Prerequisites: Baccalaureate Degree and formal acceptance of a specified teacher prep two year program plan by an Arizona Department of Education approved college program	LAB 3.0 9.0 0.0
EFE260AD	Intern Certificate Student Teaching Lab K-12 - Art Education II	Supervised student teacher practicum. Emphasis on the provision of K-12 art instruction to learners. Covers lesson plan development, classroom procedures, classroom management, and educator professionalism. Includes learner preparation, learner engagement, and learner outcome awareness.	Prerequisites: Baccalaureate Degree and formal acceptance of a specified teacher prep two year program plan by an Arizona Department of Education approved college program the partnering school district EFE260AC and a minimum of 25% successful completion of all	LAB 3.0 9.0 0.0
EFE260AE	Intern Certificate Student Teaching Lab K-12 - Art Education III	Supervised student teacher practicum. Emphasis on the provision of K-12 art instruction to learners. Covers lesson plan development, classroom procedures, classroom management, and educator professionalism. Includes learner preparation, learner engagement, and learner outcome awareness.	Prerequisites: Baccalaureate Degree and formal acceptance of a specified teacher prep two year program plan by an Arizona Department of Education approved college program the partnering school district EFE260AD and a minimum of 50% successful completion of all	LAB 3.0 9.0 0.0

EFE260AF	Intern Certificate Student Teaching Lab K-12 - Art Education IV	Supervised student teacher practicum. Emphasis on the provision of K-12 art instruction to learners. Covers lesson plan development, classroom procedures, classroom management, and educator professionalism. Includes learner preparation, learner engagement, and learner outcome awareness.	Prerequisites: Baccalaureate Degree and formal acceptance of a specified teacher prep two year program plan by an Arizona Department of Education approved college program the partnering school district EFE260AE and a minimum of 75% successful completion of all	LAB 3.0 9.0 0.0
EFE261	Student Teaching Lab K-12 - Dance	Supervised student teacher practicum. Emphasis on the provision of K-12 dance instruction to learners. Covers lesson plan development, classroom procedures, classroom management, and educator professionalism. Includes learner preparation, learner engagement, and	Prerequisites: Baccalaureate Degree and formal admission to a state-approved post-baccalaureate teacher preparation program and permission of Department or Division.	LAB 12.0 9.0 0.0
EFE261AC	Intern Certificate Student Teaching Lab K-12 - Dance Education I	Supervised student teacher practicum. Emphasis on the provision of K-12 dance instruction to learners. Covers lesson plan development, classroom procedures, classroom management, and educator professionalism. Includes learner preparation, learner engagement, and	Prerequisites: Baccalaureate Degree and formal acceptance of a specified teacher prep two year program plan by an Arizona Department of Education approved college program	LAB 3.0 9.0 0.0
EFE261AD	Intern Certificate Student Teaching Lab K-12 - Dance Education II	Supervised student teacher practicum. Emphasis on the provision of K-12 dance instruction to learners. Covers lesson plan development, classroom procedures, classroom management, and educator professionalism. Includes learner preparation, learner engagement, and learner outcome awareness.	Prerequisites: Baccalaureate Degree and formal acceptance of a specified teacher prep two year program plan by an Arizona Department of Education approved college program and the partnering school district EFE261AC and a minimum of 25% successful completion of all	LAB 3.0 9.0 0.0
EFE261AE	Intern Certificate Student Teaching Lab K-12 - Dance Education III	Supervised student teacher practicum. Emphasis on the provision of K-12 dance instruction to learners. Covers lesson plan development, classroom procedures, classroom management, and educator professionalism. Includes learner preparation, learner engagement, and learner outcome awareness.	Prerequisites: Baccalaureate Degree and formal acceptance of a specified teacher prep two year program plan by an Arizona Department of Education approved college program and the partnering school district EFE261AD and a minimum of 50% successful completion of all	LAB 3.0 9.0 0.0

EFE261AF	Intern Certificate Student Teaching Lab K-12 - Dance Education IV	Supervised student teacher practicum. Emphasis on the provision of K-12 dance instruction to learners. Covers lesson plan development, classroom procedures, classroom management, and educator professionalism. Includes learner preparation, learner engagement, and learner outcome awareness.	Prerequisites: Baccalaureate Degree and formal acceptance of a specified teacher prep two year program plan by an Arizona Department of Education approved college program and the partnering school district EFE261AE and a minimum of 75% successful completion of all	LAB 3.0 9.0 0.0
EFE262	Student Teaching Lab K-12 - Drama	Supervised student teacher practicum. Emphasis on the provision of K-12 drama instruction to learners. Covers lesson plan development, classroom procedures, classroom management, and educator professionalism. Includes learner preparation, learner engagement, and	Prerequisites: Baccalaureate Degree and formal admission to a state-approved post-baccalaureate teacher preparation program and permission of Department or Division.	LAB 12.0 9.0 0.0
EFE262AC	Intern Certificate Student Teaching Lab K-12 - Drama Education I	Supervised student teacher practicum. Emphasis on the provision of K-12 drama instruction to learners. Covers lesson plan development, classroom procedures, classroom management, and educator professionalism. Includes learner preparation, learner engagement, and	Prerequisites: Baccalaureate Degree and formal acceptance of a specified teacher prep two year program plan by an Arizona Department of Education approved college program	LAB 3.0 9.0 0.0
EFE262AD	Intern Certificate Student Teaching Lab K-12 - Drama Education II	Supervised student teacher practicum. Emphasis on the provision of K-12 drama instruction to learners. Covers lesson plan development, classroom procedures, classroom management, and educator professionalism. Includes learner preparation, learner engagement, and learner outcome awareness.	Prerequisites: Baccalaureate Degree and formal acceptance of a specified teacher prep two year program plan by an Arizona Department of Education approved college program and the partnering school district EFE262AC and a minimum of 25% successful completion of all	LAB 3.0 9.0 0.0
EFE262AE	Intern Certificate Student Teaching Lab K-12 - Drama Education III	Supervised student teacher practicum. Emphasis on the provision of K-12 drama instruction to learners. Covers lesson plan development, classroom procedures, classroom management, and educator professionalism. Includes learner preparation, learner engagement, and learner outcome awareness.	Prerequisites: Baccalaureate Degree and formal acceptance of a specified teacher prep two year program plan by an Arizona Department of Education approved college program and the partnering school district EFE262AD and a minimum of 50% successful completion of all	LAB 3.0 9.0 0.0

EFE262AF	Intern Certificate Student Teaching Lab K-12 - Drama Education IV	Supervised student teacher practicum. Emphasis on the provision of K-12 drama instruction to learners. Covers lesson plan development, classroom procedures, classroom management, and educator professionalism. Includes learner preparation, learner engagement, and learner outcome awareness.	Prerequisites: Baccalaureate Degree and formal acceptance of a specified teacher prep two year program plan by an Arizona Department of Education approved college program and the partnering school district EFE262AE and a minimum of 75% successful completion of all	LAB 3.0 9.0 0.0
EFE263	Student Teaching Lab K-12 - Music	Supervised student teacher practicum. Emphasis on the provision of K-12 music instruction to learners. Covers lesson plan development, classroom procedures, classroom management, and educator professionalism. Includes learner preparation, learner engagement, and	Prerequisites: Baccalaureate Degree and formal admission to a state-approved post-baccalaureate teacher preparation program and permission of Department or Division.	LAB 12.0 9.0 0.0
EFE263AC	Intern Certificate Student Teaching Lab K-12 - Music Education I	Supervised student teacher practicum. Emphasis on the provision of K-12 music instruction to learners. Covers lesson plan development, classroom procedures, classroom management, and educator professionalism. Includes learner preparation, learner engagement, and	Prerequisites: Baccalaureate Degree and formal acceptance of a specified teacher prep two year program plan by an Arizona Department of Education approved college program	LAB 3.0 9.0 0.0
EFE263AD	Intern Certificate Student Teaching Lab K-12 - Music Education II	Supervised student teacher practicum. Emphasis on the provision of K-12 music instruction to learners. Covers lesson plan development, classroom procedures, classroom management, and educator professionalism. Includes learner preparation, learner engagement, and learner outcome awareness.	Prerequisites: Baccalaureate Degree and formal acceptance of a specified teacher prep two year program plan by an Arizona Department of Education approved college program and the partnering school district EFE263AC and a minimum of 25% successful completion of all	LAB 3.0 9.0 0.0
EFE263AE	Intern Certificate Student Teaching Lab K-12 - Music Education III	Supervised student teacher practicum. Emphasis on the provision of K-12 music instruction to learners. Covers lesson plan development, classroom procedures, classroom management, and educator professionalism. Includes learner preparation, learner engagement, and learner outcome awareness.	Prerequisites: Baccalaureate Degree and formal acceptance of a specified teacher prep two year program plan by an Arizona Department of Education approved college program and the partnering school district EFE263AD and a minimum of 50% successful completion of all	LAB 3.0 9.0 0.0

EFE263AF	Intern Certificate Student Teaching Lab K-12 - Music Education IV	Supervised student teacher practicum. Emphasis on the provision of K-12 music instruction to learners. Covers lesson plan development, classroom procedures, classroom management, and educator professionalism. Includes learner preparation, learner engagement, and learner outcome awareness.	Prerequisites: Baccalaureate Degree and formal acceptance of a specified teacher prep two year program plan by an Arizona Department of Education approved college program and the partnering school district EFE263AE and a minimum of 75% successful completion of all	LAB 3.0 9.0 0.0
EFE291	Special Education: Mild-Moderate Student Teaching	Supervised student teaching. Emphasis on the provision of instruction to learners. Covers lesson plan development, classroom procedures, classroom management, and educator professionalism. Includes learner preparation, learner engagement, and learner outcome awareness.	Prerequisites: Baccalaureate Degree and formal admission to a state approved post-baccalaureate teacher preparation program and (a grade of C or better in EDU223AF and EDU293) and permission of	LAB 8.0 5.0 0.0
EFE291AC	Special Education: Mild-Moderate Student Teaching I	Supervised student teaching in a K-12 special education setting. Students are expected to demonstrate foundational knowledge and skills in the areas of appropriate assessment strategies, lesson planning, implement instructional strategies, and utilize behavior management systems and programs. Emphasis on the provision of specialized instruction to	Prerequisites: Baccalaureate Degree and formal acceptance into a mild/moderate disabilities, K-12 post baccalaureate program or permission of Department or Division.	LAB 2.0 6.0 0.0
EFE291AD	Special Education: Mild-Moderate Student Teaching II	Supervised student teaching in a K-12 special education setting. Students are expected to demonstrate developing knowledge and skills in the areas of appropriate assessment strategies, lesson planning, implement instructional strategies, and utilize behavior management systems and programs. Emphasis on the provision of specialized instruction to	Prerequisites: Baccalaureate Degree, a grade of C or better in EFE291AC, and formal acceptance into a mild/moderate disabilities, K-12 post baccalaureate program or permission of Department or Division.	LAB 2.0 6.0 0.0
EFE291AE	Special Education: Mild-Moderate Student Teaching III	Supervised student teaching in a K-12 special education setting. Students are expected to demonstrate refining knowledge and skills in the areas of appropriate assessment strategies, lesson planning, implement instructional strategies, and utilize behavior management systems and programs. Emphasis on the provision of specialized instruction to meet the	Prerequisites: Baccalaureate Degree, a grade of C or better in EFE291AD, and formal acceptance into a mild/moderate disabilities, K-12 post baccalaureate program or permission of Department or Division.	LAB 2.0 6.0 0.0

EFE291AF	Special Education: Mild-Moderate Student Teaching IV	Supervised student teaching in a K-12 special education setting. Students are expected to demonstrate competent knowledge and skills in the areas of appropriate assessment strategies, lesson planning, implement instructional strategies, and utilize behavior management systems and programs. Emphasis on the provision of specialized instruction to	Prerequisites: Baccalaureate Degree, a grade of C or better in EFE291AE, and formal acceptance into a mild/moderate disabilities, K-12 post baccalaureate program or permission of Department or Division.	LAB 2.0 6.0 0.0
EFE297AA	Intern Certificate Student Teaching Lab - K-3 Part A	Supervised student teacher practicum in K-3 grade classroom. Emphasis on the provision of instruction to learners. Covers lesson plan development, classroom procedures, classroom management, and educator professionalism. Includes learner preparation, learner	Prerequisites: Baccalaureate Degree and formal acceptance of a teacher prep program plan by an Arizona Department of Education approved college program and the partnering	LAB 2.0 6.0 0.0
EFE297AB	Intern Certificate Student Teaching Lab - K-3 Part B	Supervised student teacher practicum in K-3 grade classroom. Emphasis on the provision of instruction to learners. Covers lesson plan development, classroom procedures, classroom management, and educator professionalism. Includes learner preparation, learner engagement, and learner outcome awareness.	Prerequisites: Baccalaureate Degree and formal acceptance of a teacher prep plan by an Arizona Department of Education approved college program, the partnering school district, EFE297AA, and a minimum of 50% successful completion of	LAB 2.0 6.0 0.0
EFE297AC	Intern Certificate Student Teaching Lab - K-3 Level I	Supervised student teacher practicum in K-3 grade classroom. Emphasis on the provision of instruction to learners. Covers lesson plan development, classroom procedures, classroom management, and educator professionalism. Includes learner preparation, learner	Prerequisites: Baccalaureate Degree and formal acceptance of a teacher prep program plan by an Arizona Department of Education approved college program and the partnering	LAB 1.0 3.0 0.0
EFE297AD	Intern Certificate Student Teaching Lab - K-3 Level II	Supervised student teacher practicum in K-3 grade classroom. Emphasis on the provision of instruction to learners. Covers lesson plan development, classroom procedures, classroom management, and educator professionalism. Includes learner preparation, learner engagement, and learner outcome awareness.	Prerequisites: Baccalaureate Degree and formal acceptance of a teacher prep plan by an Arizona Department of Education approved college program, the partnering school district, EFE297AC, and a minimum of 25% successful completion of	LAB 1.0 3.0 0.0
EFE297AE	Intern Certificate Student Teaching Lab - K-3 Level III	Supervised student teacher practicum in K-3 grade classroom. Emphasis on the provision of instruction to learners. Covers lesson plan development, classroom procedures, classroom management, and educator professionalism. Includes learner preparation, learner engagement, and learner outcome awareness.	Prerequisites: Baccalaureate Degree and formal acceptance of a teacher prep plan by an Arizona Department of Education approved college program, the partnering school district, EFE297AD, and a minimum of 50% successful completion of	LAB 1.0 3.0 0.0

EFE297AF	Intern Certificate Student Teaching Lab - K-3 Level IV	Supervised student teacher practicum in K-3 grade classroom. Emphasis on the provision of instruction to learners. Covers lesson plan development, classroom procedures, classroom management, and educator professionalism. Includes learner preparation, learner engagement, and learner outcome awareness.	Prerequisites: Baccalaureate Degree and formal acceptance of a teacher prep plan by an Arizona Department of Education approved college program, the partnering school district, EFE297AE, and a minimum of 75% successful completion of	LAB 1.0 3.0 0.0
EHS100	Aesthetics Essentials I	As students begin their training in Aesthetics, they will begin to develop and demonstrate proficiencies in effective client communication, interpersonal skills, and will learn how to deliver an effective skin care facial treatment and client pre and post consultations. Topics will also include sanitation, Arizona laws, client care,	Prerequisites: Admission to the Aesthetics program, or Program Manager's approval.	184
EHS105	Aesthetics Essentials II	As students continue their training in Aesthetics, they will further develop and demonstrate proficiencies in effective client communication, interpersonal skills, and will learn how to deliver an effective skin care facial treatment and client pre and post consultations. Topics will also include sanitation, Arizona laws, client care,	Prerequisites: Completion of EHS100 with a grade of 80% or better.	132
EHS110	Advanced Aesthetics	Theory and application of advanced skin care modalities, resurfacing, and cosmetic chemistry. Hair removal techniques, makeup application, and an introduction to body treatments are also included. Application of theory and skills through treatment services provided to the public. Focus on communication and documentation to create customized treatment plans and product	Prerequisites: EHS105 with a grade of 80% or Program Manager's approval.	180
EHS115	Aesthetics Mastery	Focus on theories and performance of comprehensive professional aesthetics treatments for the public including communication and documentation to create customized treatment plans and product recommendations for clients that follow all safety and infection control procedures in compliance with the Arizona Barbering and Cosmetology Board (BCB). Overview of business planning and employment in the field including marketing, job search strategies,	Prerequisites: EHS110 with a grade of 80% or better, or Program Manager's approval.	104

ELA111	Construction Electricity I	Introduction to the electrical construction trade incorporating safety awareness, introductory concepts in electrical theory, math review, solving simple equations, ratios, percentages and proportions. Study of the National Electrical code (NEC), practical use of materials and tools of the electrical construction trade. Basic splicing, anchoring, and fusing procedures; basic conduit bending calculations and installations,	Prerequisites: Registered apprenticeship status or permission of the Apprenticeship Coordinator.	L+L 6.0 6.0 6.0
ELA112	Construction Electricity II	Introduction to the fundamentals electricity, basic direct current (DC) theory through advanced DC theory, advanced conduit fabrication, bending applications and calculations. Practical applications for wiring devices	Prerequisites: Registered apprenticeship status or permission of the Apprenticeship Coordinator.	L+L 6.0 6.0 6.0
ELA113	Introduction to National Electrical Code	Development, content, structure, and definitions in the National Electrical Code (NEC). Application of the NEC for proper and safe electrical installations and wiring	Prerequisites: Registered apprenticeship status or permission of Apprenticeship Coordinator.	L+L 3.0 3.0 3.0
ELA123	Construction Electricity III	American labor history, parliamentary procedures. Electrical theory of alternating current systems pertaining to inductance, and capacitance; use of alternating current (AC) and direct current (DC) meters,	Prerequisites: Registered apprenticeship status or permission of the Apprenticeship Coordinator.	L+L 6.0 6.0 6.0
ELA124	Construction Electricity IV	Transformers principles and applications in regards to use, connection, installation and safety related to transformer principles and applications including requirements specified by the National Electrical Code (NEC). Filters and power quality for electrical systems, direct current generation, application of test instruments for power quality, instrumentation, insulation testing and voice-data-video. Blueprint reading for electricians,	Prerequisites: Registered apprenticeship status or permission of the Apprenticeship Coordinator.	L+L 6.0 6.0 6.0
ELA125	National Electric Code I	National Electrical Code (NEC) related to branch circuits, feeders, services, devices, conductors, raceways and cable assemblies. Electrical safety incorporating Occupational Safety and Health Association (OSHA) requirements and National Fire Protection Association	Prerequisites: Registered apprenticeship status or permission of the Apprenticeship Coordinator.	L+L 3.0 3.0 3.0
ELA235	Advanced Construction Electricity I	Advanced industrial blueprint reading, lighting design, healthcare systems including the National Electrical Code (NEC) requirements. Motors and motor controls.	Prerequisites: Registered apprenticeship status or permission of the Apprenticeship Coordinator.	L+L 6.0 6.0 6.0

ELA236	Advanced Construction Electricity II	Motor Controls, types of motor controls, components, motor control circuitry, and installations of motor control components and circuitry: Instrumentation and process controls, theory of process controls, installation, calibration, and troubleshooting of instruments and	Prerequisites: Registered apprenticeship status or permission of the Apprenticeship Coordinator.	L+L 6.0 6.0 6.0
ELA238	National Electric Code II	National Electrical Code requirements for Grounding and bonding electrical installations. Continued study of electrical safety incorporating Occupational Safety and Health Association (OSHA) requirements and National	Prerequisites: Registered apprenticeship status or permission of the Apprenticeship Coordinator.	LAB 3.0 3.0 3.0
ELA246	National Electric Code III	National Electrical Code (NEC) requirements for special occupancies, conditions, and equipment. Calculations for conductor ampacities, conductor fill specific branch circuits. Installation and NEC requirements for	Prerequisites: Registered apprenticeship status or permission of the Apprenticeship Coordinator.	LAB 3.0 3.0 3.0
ELA247	Advanced Construction Electricity III	Leadership and motivation techniques for the electrical industry, digital electronics, Boolean algebra and logic gates. Power quality for electrical systems, distributed generation, information technologies sites, uninterruptable power supplies, and fuel cells. Torque theory and applications. National Electrical Code (NEC) related to over current protective devices (OCPDs), types, sizing, and ratings. Tape rules, fault current	Prerequisites: Registered apprenticeship status or permission of the Apprenticeship Coordinator.	L+L 6.0 6.0 6.0
ELA248	Advanced Construction Electricity IV	Introduction to fire alarm systems, requirements, devices, wiring methods and applicable codes; fire alarm blueprints and specifications. Cables, cabling systems, terminations, grounding and bonding. Telecommunications Industry Association/Electronic Industries Alliance (TIA/EIA) standards. Hazardous location introduction and history, area classification, protection techniques, equipment, wiring requirements, and special occupancies. National Electrical Code (NEC) updates, installation of emergency and standby systems over 600 volts, remote-control, signaling, and	Prerequisites: Registered apprenticeship status or permission of the Apprenticeship Coordinator.	L+L 6.0 6.0 6.0
ELC103	Electrical/Mechanical Calculations	Fundamental calculations in arithmetic, algebra, trigonometry, descriptive geometry, economics, and probability. Application of theories and formulas to solve design, installation, maintenance, and troubleshooting problems for industrial, commercial, and residential	Prerequisites: None.	LEC 3.0 3.0 3.0

ELC115	Motors, Controls and Wiring Diagrams	Principles of three-phase motors. Wye and delta wiring. Calculation of motor current draw. Sequence of operation, wiring diagram and electrical components associated with industrial equipment. Procedures for	Prerequisites: None.	LEC 3.0 3.0 3.0
ELC119	Concepts of Electricity and Electronics	Introduction to theory and principles of electric circuits, magnetism and electromagnetism including basic motors, transformers and generators. Use of basic measuring instruments. Overview of Ohm's and	Prerequisites: None.	LEC 3.0 3.0 3.0
ELC120	Solid State Fundamentals	Theory of operation of semi-conductor devices, component and system construction, operation, installation, and service. Specific and practical applications in relations to temperature, light, speed and pressure control as used in industry today. Includes amplifiers, power supplies, integrated circuits,	Prerequisites: None.	LEC 3.0 3.0 3.0
ELC123	Residential Electrical Wiring and Codes	Analysis and interpretation of residential drawings, local codes and specific sections of the National Electrical Code. Including needed materials derived from plans and specifications and the proper procedures for wiring a residence and other special locations. Areas of focus include circuits, conductors, switches, outlets, heating,	Prerequisites: None.	L+L 3.0 3.0 3.0
ELC124	Industrial Electrical Wiring and Codes	Industrial electrical power techniques of low, medium and high voltage systems. Selection of electrical distribution components, single and three phase systems, one-line diagrams, motors, transformers, protective devices, power factor, demand factor,	Prerequisites: A grade of C or better in ELC123 or permission of Instructor or admission to Electric League of Arizona program.	LEC 3.0 3.0 3.0
ELC125	Commercial Electrical Wiring and Codes	Commercial electrical power distribution techniques of low voltage (under 600 volt) systems. Selection of electrical distribution components, single and three systems, one-line diagrams and conductor selection. System grounding, planning and over current	Prerequisites: A grade of C or better in ELC123 or permission of Instructor or admission to Electric League of Arizona program.	L+L 3.0 3.0 3.0
ELC144	Basic Automated Systems Using Programmable Controllers	Principles of automated control systems. Principles and application of programmable controllers, control functions, hardware, logic, programming, documentation, troubleshooting, start-up, maintenance and operation. Commercial and industrial control	Prerequisites: A grade of C or better in ELC120 or permission of Instructor or admission to Electric League of Arizona program.	L+L 3.0 3.0 3.0

ELC160	Applied Electrical Codes I	Analysis of diagrams and application of current code interpretations. Includes local exceptions and practices. Review of the National Electrical Code (NEC) related to definitions, installations, wiring and protection, wiring	Prerequisites: A grade of C or better in ELC119 or permission of Instructor.	LEC 3.0 3.0 3.0
ELC161	Applied Electrical Codes II	National Electrical Code (NEC) requirements for hazardous locations, special use and occupancies. Commercial, industrial and service locations. Fiber optics, communications and other state-of-the-art	Prerequisites: A grade of C or better in ELC160 or permission of Instructor.	LEC 3.0 3.0 3.0
ELC162	Electrical Codes and Inspection I	Analysis of diagrams and application of current code interpretations. Includes local exceptions and practices	Prerequisites: A grade of C or better in (ELE100 and ELE101) or permission of Instructor.	LEC 3.0 3.0 3.0
ELC164	Grounding and Bonding	Electrical theory and calculation of electrical current. Grounding and bonding terminology including National Electric Code (NEC) Articles 250. Interpreting code requirements for grounding and bonding. Code	Prerequisites: None.	LEC 3.0 3.0 3.0
ELC210	AC Machinery and DC Machinery	Principles and operation of AC (Alternating current) and DC (direct current) motors, generators, and alternators. Includes single-phase motors along with induction, synchronous, and wound-rotor types of three-phase motors. DC motors including shunt-field, series field,	Prerequisites: A grade of C or better in ELC119 or permission of Instructor or admission to Electric League of Arizona program.	LEC 3.0 3.0 3.0
ELC217	Motor Controls	Electrical symbols, line diagrams and logic. Contacts and starters, control devices, reversing circuits and power distribution systems. Magnetism and magnetic solenoids, reduced voltage starters, and circuits. Hand	Prerequisites: A grade of C or better in ELC119 or permission of Department or Division or admission to Electric League of Arizona	L+L 3.0 3.0 3.0
ELC218	Variable Frequency Drives	Principles and operation of frequency controlled AC (Alternating current) motor drives, including current source inverters (CSI), variable voltage inverters (VVI) and pulse width modulated inverters (PWM). Heating, ventilation and air conditioning (HVAC) applications	Prerequisites: A grade of C or better in ELC120 or permission of Instructor or admission to Electric League of Arizona program.	LEC 3.0 3.0 3.0
ELC219	Programmable Controllers	Principles and applications of programmable logic controls (PLC's). Numbering systems, control strategies, and ladder logic. Basic machine functions and operations to include programming, troubleshooting and maintenance. Application of PLC programming,	Prerequisites: A grade of C or better in ELC/FAC115 and ELC119 or permission of Instructor. Xref: ELC115	L+L 4.0 6.0 6.0

ELC296WA	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 1.0 5.0 0.0
ELC296WB	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 2.0 10.0 0.0
ELC296WC	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 3.0 20.0 0.0

ELC296WD	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 4.0 20.0 0.0
ELC298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
ELC298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
ELC298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
ELE100	Concepts of Electricity and Electronics	Principles of electric circuits, magnetism and electromagnetism including basic motors and generators. Use of basic measuring instruments.	Prerequisites: None.	L+L 3.0 4.0 4.0
ELE101	Beginning Algebra for Technology	Basic axioms of algebra, linear equations in one or two variables, operations on polynomials, rational expressions, simultaneous solutions of linear equations, laws of exponents.	Prerequisites: Score of 19 on Technical Mathematics placement test or a Grade of C or better in GTC107 or MAT082 or equivalent.	LEC 3.0 3.0 3.0

ELE105	Algebra-Trigonometry for Technology	Topics from college algebra and trigonometry essential to the study of electronics; polynomials, exponential and logarithmic functions, complex numbers, and trigonometric functions and identities.	Prerequisites: A grade of C or better in either ELE101 or MAT090 or MAT091 or MAT092 or equivalent or score of 16 on Technical Algebra	LEC 5.0 5.0 5.0
ELE111	Circuit Analysis I	Direct current (DC) and alternating current (AC) electric circuits. Ohm's law, Kirchoff's laws, series, parallel and series-parallel circuits, fundamentals of inductance and capacitance, and the transient behavior of circuits containing resistance and capacitance or resistance	Prerequisites: None. Corequisites: MAT120, or MAT121, or MAT122, or equivalent.	L+L 4.0 6.0 6.0
ELE112	Circuit Analysis II	Alternating current (AC) and direct current (DC) circuits containing resistance and reactance. Detailed coverage of AC/DC circuit parameters, including theorems,	Prerequisites: A grade of C or better in ELE111.	L+L 4.0 6.0 6.0
ELE121	Solid-State Devices and Circuits I	Theory of operation of semiconductor diodes and transistors. Bipolar junction transistor biasing and load-line analysis. Alternating Current (AC) equivalent circuits applied to small signal amplifiers. Characteristics of large	Prerequisites: A grade of C or better in ELE111.	L+L 4.0 6.0 6.0
ELE131	Digital Logic and Circuits	Number systems, binary arithmetic, and Boolean algebra, combinational and sequential logic circuits, and	Prerequisites: None.	L+L 3.0 6.0 6.0
ELE161	Custom Electric Guitar Fabrication	Offered to guitar or bass players, artists, woodworkers or anyone who wants to learn the specialized skills of a luthier or the art of electric guitar crafting, maintenance, and setup. Fabricate and integrate a complete guitar neck and body, and finish with a combination of paint,	Prerequisites: None.	L+L 3.0 4.0 4.0
ELE162	Custom Acoustic Guitar Fabrication	Offered to guitar players, artists, woodworkers or anyone who wants to learn the specialized skills of a luthier or the art of acoustic guitar crafting, maintenance, and setup. Fabricate and integrate a complete guitar neck and body, and finish with a	Prerequisites: None.	L+L 3.0 4.0 4.0
ELE173	Fabrication Techniques	Introduction to electronic assembly safety practices and procedures, hand tool, and measuring devices. Includes basic and special assembly tools, fastener installation and removal tools, precision measuring tools, fabrication tools, torque measuring instruments, Electrostatic Discharge (ESD) awareness and	Prerequisites: None.	L+L 3.0 6.0 6.0
ELE181	Computer Programming for	Elementary computer programming techniques. Hands-on computer usage	Prerequisites: None.	L+L 3.0 5.0 5.0
ELE222	Solid-State Devices and Circuits II	Theory and application of differential and operational amplifiers. Power supplies and regulators; special	Prerequisites: A grade of C or better in ELE112 and ELE121.	L+L 4.0 6.0 6.0

ELE241	Microprocessor Concepts	Architectures of selected microprocessors. Presentation of machine and assembly language programming	Prerequisites: A grade of C or better in ELE131.	L+L 4.0 6.0 6.0
ELE243	Microprocessor Applications	Presents the microprocessor in computing and control applications. System hardware and software used to control the microprocessor system to perform	Prerequisites: A grade of C or better in ELE241.	L+L 3.0 5.0 5.0
ELE245	Advanced Microprocessors and Systems	Microprocessors and systems, in the expanding Internet of Things. Legacy, current, and future wired and wireless interfaces and protocols. Connecting modern software environments to real-world electronic hardware.	Prerequisites: A grade of C or better in (ELE131 and ELE181), or ELE241, or permission of Instructor.	L+L 3.0 3.0 3.0
ELE251	Electronic Measurements	Application and operation of common electronic and electrical test instruments including: oscilloscopes, analog and digital multimeters, digital counters and signal sources. Transducers, amplifiers, and filters, as they apply to instrumentation systems. Laboratory	Prerequisites: A grade of C or better in ELE121.	L+L 3.0 5.0 5.0
ELE261	Communication Systems	Communication systems. Amplitude modulation (AM), frequency modulation (FM), single-sideband (SSB), radio receivers, pulse systems, radiation, antennas and	Prerequisites: A grade of C or better in ELE121 and ELE131. Corequisites: ELE222.	L+L 4.0 6.0 6.0
ELE263	Digital Data Communications	Overview of modern telephone system. Telephone switching and modulation techniques. Familiarization with AM(amplitude modulation) and FM(frequency modulation) circuits. Operation of asynchronous and	Prerequisites: A grade of C or better in ELE121 and ELE241.	L+L 4.0 6.0 6.0
ELR131	Electrical Systems	Electricity related to residential and light commercial applications, to include common electrical components, alternating current (AC) and direct current (DC) circuits, and electrical safety. Provides an introduction to reading, interpreting, and creating wiring diagrams and the application of electrical power. Operation and use of specific meters, tools, and an introduction to the	Prerequisites: None.	140
ELR132	Distribution Panels, Wiring, and Circuit Protection in Electrical Systems	Course covers construction drawings and code related to conductors and cables (types, ratings), residential and commercial applications, wire sizes, utilities, meters, disconnects, breakers, grounding and bonding, rough-	Prerequisites: None.	140
ELR133	Conduit, Raceways, and Termination in Electrical Systems	Course covers termination and the implementation of electricity in a facility. Considers topics related to box capacities, raceways, conduit sizes, termination	Prerequisites: None.	120
ELR133DC	Conduit, Raceways, and Termination in Electrical Systems	Course covers termination and the implementation of electricity in a facility. Considers topics related to box capacities, raceways, conduit sizes, termination	Prerequisites: None.	140

ELR234	Electric Power Distribution	Course covers the theory and applications of distribution of power from utilities to residential and commercial sites, including transformers and commercial electrical distribution equipment and services. Also includes safety, codes, and interpretation of	Prerequisites: None.	81
ELR234DC	Electric Power Distribution	Course covers the theory and applications of distribution of power from utilities to residential and commercial sites, including transformers and commercial electrical distribution equipment and services. Also includes safety, codes, and interpretation of	Prerequisites: None.	70
ELR235	Motors: Theory and Application	Course covers motor and motor controls in electricity. Explains how to select and install relays and troubleshoot control circuits. Distinctions between alternating current (AC) and direct current (DC) motors, motor speed control, design and operation	Prerequisites: None.	120
ELR235DC	Motors: Theory and Application	Course covers motor and motor controls in electricity. Explains how to select and install relays and troubleshoot control circuits. Distinctions between alternating current (AC) and direct current (DC) motors, motor speed control, design and operation	Prerequisites: None.	70
ELR236	Industrial Wiring Applications	Course covers a broad variety of electrical wiring applications, including healthcare facility, heating, ventilation, and air conditioning (HVAC), standby,	Prerequisites: None.	81
ELR236DC	Industrial Wiring Applications	Course covers a broad variety of electrical wiring applications, including healthcare facility, heating, ventilation, and air conditioning (HVAC), standby,	Prerequisites: None.	70
ELT100	Survey of Electronics	An introduction to the field of electronics for those who may not intend to specialize in electronics. Essentially nonmathematical in nature; includes familiarization with a wide range of electronic components. Application to electronic systems, such as radio transmitters and receivers - both AM(amplitude modulation) and FM(frequency modulation), television transmitters and	Prerequisites: None.	LEC 3.0 3.0 3.0
ELT101	Mathematics for Electronics I	Basic principles of Algebra with applications to the analysis of electronic circuits. Emphasis on the use of the calculator for conversions and DC(direct current)	Prerequisites: None.	LEC 3.0 3.0 3.0

ELT102	Mathematics for Electronics II	The study of simultaneous equations, quadratic equations, trigonometric relationships, periodic functions and logarithms as applied to AC(alternating current) circuit analysis. Application of the scientific calculator to	Prerequisites: A grade of C or better in ELT101 or equivalent.	LEC 3.0 3.0 3.0
ELT113	Basic Electronics	Direct and alternating current electrical circuits. Theory and practical lab experience, using the appropriate test equipment and computer solutions. Ohm's Law, Kirchhoff's Laws, and various network theorems applied to the study and analysis of series, parallel, and series-parallel circuit configurations. Includes complex algebra,	Prerequisites: A grade of C or better in ELT102 or Corequisites: ELT102 or equivalent.	LEC 4.0 3.0 3.0 LAB 0.0 3.0 3.0
ELT131	Digital and Logic Circuits	Digital concepts and fundamentals, number systems and codes, Boolean algebra and combinational logic, logic reduction techniques, and logic hardware. Memories and programmable logic arrays. Hands-on	Prerequisites: A grade of C or better in ELT113, or ELC119, or permission of Instructor.	LEC 4.0 3.0 3.0 LAB 0.0 3.0 3.0
ELT195	Solid State Electronics	Characteristics and use of solid state devices in practical circuit applications. Circuit analysis techniques and computer simulations. Includes, diodes, transistors, four-layer devices, operational amplifiers, and	Prerequisites: A grade of C or better in ELT113 or permission of Department or Division.	LEC 4.0 3.0 3.0 LAB 0.0 3.0 3.0
ELT243	Microprocessor Applications	Presents the microprocessor in computing and control applications. System hardware and software used to control the microprocessor system to perform	Prerequisites: A grade of C or better in ELE241.	L+L 3.0 5.0 5.0
ELT251	Electronic Instrumentation	Electronic instruments and their usage in measuring and analyzing electronic circuits. Includes both analog and digital meters, oscilloscopes, and digital logic analyzers. Covers automatic test equipment, various	Prerequisites: A grade of C or better in ELT195, or ELC120, or permission of Department or Division.	LEC 3.0 2.0 2.0 LAB 0.0 3.0 3.0
ELT296WA	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 1.0 5.0 0.0

ELT296WB	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 2.0 10.0 0.0
ELT296WC	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 3.0 15.0 0.0
ELT296WD	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 4.0 20.0 0.0
ELT298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0

ELT298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
ELT298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
EMC101	CPR/Basic Cardiac Life Support	Designed to train students in the skills of cardiopulmonary resuscitation (CPR) to include mouth-to-mouth, mouth-to-mask, cardiac compression, stabilization of adult, infant, and child victims with airway obstruction, respiratory, and cardiac arrest.	Prerequisites: Admission into the Emergency Medical Technology program. Successful completion of RDG100 or higher or appropriate reading placement into CRE101.	6
EMC104	Basic Emergency Medical Technology	Designed as the Emergency Medical Technician (EMT) lecture and lab to prepare students for scope of practice and standard of care with comprehensive assessment, diagnostic technology, patient advocacy, ethical and professional behaviors, critical thinking, decision-making, and patient management of medical and trauma emergencies and non-emergencies. Scenario-based learning applied to the techniques of emergency medical care is in accordance with national and state curriculum. Students will participate in the	Prerequisites: EMC101 or with Program Manager approval.	214
EMC105	Hazardous Materials Awareness and Operations	Basic methods of recognition and identification based upon the chemical and physical properties of hazardous materials; basic safety procedures when utilizing specific types of protective clothing and equipment; basic tactical information relating to scene management. Satisfies minimum standards for certification testing set forth by the current ProBoard and/or Arizona State	Prerequisites: None.	40

EMC108	Emergency Medical Services and Fire Preparatory Academy	This course is designed specifically for individuals seeking a career in the fire-medical service and addresses foundational emergency medical technology, hazardous materials, and firefighting content material, as well as meeting two of the prerequisites for the Fire Department Operations course also known as the "Fire Academy" (FSC102). These two prerequisites are Emergency Medical Technology (EMT/FSC104) and Hazardous Materials (FSC105). Upon successful completion of the course, the participant will be eligible to sit for the EMT and Hazardous Materials (Haz-Mat) certification examinations. The course meets current United States Department of Transportation (USDOT) national standard education guidelines for emergency medical technicians. Course teaches techniques of emergency medical care in accordance with national and state curriculum. Study of the human body, patient assessment, treatment of medically or traumatically compromised patients, special hazards, medical operations, intravenous (IV) monitoring, patient-assisted medication administration, automated external defibrillators (AEDs), and blood-glucose monitoring. The course meets the current Hazardous Materials First Responder certification requirements for the Arizona Center for Fire Service Excellence. The course will cover	Prerequisites: Admission into the Emergency Medical Services and Fire Preparatory Academy program. Successful completion of RDG100 or higher or appropriate reading placement into CRE101.	300
EMC110	Wildland Firefighter	Basic-level course for individuals with little or no experience in the wildland environment. Preparation for performing as a beginning-level wildland firefighter with an organized fire department engine or hand crew. Satisfies minimum standards for certification testing set	Prerequisites: None.	50
EMT101	Basic Life Support/Cardiopulmonary Resuscitation (CPR) for Health Care	Designed to provide the allied healthcare provider with the knowledge and skills to perform Basic Life Support (BLS) according to current guidelines for emergency cardiovascular care (ECC).	Prerequisites: None.	L+L 0.5 0.5 0.5

EMT101AB	Basic Life Support/Cardiopulmonary Resuscitation (CPR) Practicum for Health Care Providers	Designed to assess the allied healthcare provider in the skills of Basic Life Support (BLS) according to current guidelines for emergency cardiovascular care (ECC).	Prerequisites: Successful completion of Healthcare Provider CPR AED Online Part 1 course from an American Heart Association (AHA) certified program.	L+L 0.25 0.25 0.25
EMT102AB	Emergency Medical Responder	A comprehensive course to train a lay person to provide care for patients suffering sudden illness or injury. For members of law enforcement agencies, industry, and	Prerequisites: None.	L+L 3.0 3.0 3.0
EMT104	Emergency Medical Technology	Designed as the Emergency Medical Technician (EMT) lecture to prepare students for scope of practice and standard of care with comprehensive assessment, diagnostic technology, patient advocacy, ethical and professional behaviors, critical thinking, decision-making, and patient management of medical and trauma emergencies and non-emergencies.	Prerequisites: Must be 18 years or older or permission of EMT Program Director and (A grade of C or better in CRE101, or 95 or higher on EdReady Critical Reading and Critical Thinking exam, or 261 or higher on Gen Accuplacer Reading Exam, or High School GPA 3.0 or higher within the previous 10 years, or Associate's	LEC 10.0 10.0 10.0
EMT104AA	Practical Skills Testing	Manipulative skills testing of specific skills identified by the scope of practice for EMT Basic Students. Successful completion qualifies the student for EMT	Prerequisites: None. Corequisites: EMT104.	LAB 0.5 0.5 0.5
EMT104AB	Applied Practical Studies for Emergency Medical Technology	Simulation of actual emergency responses, with practical application of techniques and skills covered in EMT curricula. Scenario based learning applied to the techniques of emergency medical care in accordance with national and state curriculum. Practical application of anatomy, physiology, patient assessment, and treatment of medically or traumatically compromised patients, special hazards and medical operations. Also includes patient-assisted medication administration,	Prerequisites: None. Corequisites: EMT104.	LAB 0.5 0.5 0.5
EMT104LL	Emergency Medical Technology Practicum	Designed as the simulated Emergency Medical Technician (EMT) practicum in which the student synthesizes standard of care and scope of practice with comprehensive assessment and diagnostic technology, patient advocacy, ethical and professional behaviors, critical thinking, decision-making, and patient management of medical and trauma emergencies. Provides scenario based learning applied to the	Prerequisites: A grade of C or better in EMT104 or permission of Instructor or Corequisites: EMT104.	LAB 2.0 3.5 3.2

EMT106	Ambulance Operations	Practical application of rules and regulations governing care and transport of patient. Inventory, methods of disinfection, and charge procedures covered. Practical and defensive driving techniques and maintenance of the ambulance demonstrated and practiced, according to the U.S. Department of Transportation (DOT)	Prerequisites: EMT at any level of certification.	L+L 2.0 2.0 2.0
EMT108	Tactical Safety and Street Survival for EMTs	Principles of response to emergencies in potentially dangerous situations. Emphasis on recognizing and responding to potentially violent situations, including active crime scenes and domestic terrorism. Emphasis on personal protection, de-escalation, communication skills, defensive tactics, and interaction with local and	Prerequisites: Healthcare provider certification or licensure or police officer with POST certification. Level 1 DPS fingerprint clearance card or permission of Department or Division.	L+L 3.0 3.0 3.0
EMT116	Emergency Medical Communications (EMD)	Designed to educate and train individuals as the emergency link among the community, health care providers, and law enforcement agencies. Comprehensive program to educate and train in procedures of communications, interrogation, assessment, and deployment. Includes interactive	Prerequisites: A grade of C or better in EMT101 or Corequisites: EMT101 or any current American Red Cross or CPR for the Professional Rescuer or American Heart Association Basic Life Support Health Care Provider	L+L 1.5 1.8 1.8
EMT120	Spanish For Emergency-Care Providers	Participative course for prehospital and other emergency-care providers. Vocabulary, pronunciations, voice inflections, phrases, conversational terms, and methods of interviewing the ill or injured victim. Cultural information to facilitate approach and interaction with the victim, family, and/or significant other.	Prerequisites: Certified EMT or licensed medical personnel.	LEC 1.0 1.0 1.0
EMT165	Pediatric Education for Prehospital Providers: Basic	An interactive, scenario-based course designed for Basic EMTs (Emergency medical technicians) who are not yet practicing in the field. Enables these EMTs to perform a rapid assessment of sick and injured children in a variety of different circumstances. Includes use of pediatric assessment triangle, developmental differences, injury prevention, basic airway management techniques, recognition of medical emergencies such as pediatric trauma, mechanism of injury, submersion events, children with special health care needs, abuse and neglect, child and family interactions, use of specialized equipment, and special issues in pediatric	Prerequisites: A grade of C or better in EMT104 or permission of Instructor.	L+L 2.0 2.87 2.87

EMT200	Refresher Course for Certified Emergency Medical Technicians	Designed to meet National and Arizona Department of Health Services (A-DHS) recertification for EMTs. Enhances the knowledge base of the Emergency Medical Technician (EMT) and reinforces basic skills	Prerequisites: Current validation in Basic Life Support (BLS) Health Care Provider/Professional Rescuer or permission of Instructor.	L+L 2.0 2.7 2.7
EMT200AA	EMT Certification Renewal Challenge	Designed to contribute to Arizona Department of Health Services (A-DHS) Bureau of Emergency Medical Services (B-EMS) recertification requirements for Emergency Medical Technician (EMT) according to the U.S. Department of Transportation (DOT) EMT National	Prerequisites: Current validation in Basic Life Support (BLS) Health Care Provider/Professional Rescuer or proof of current registry with the National Registry of Emergency	LEC 0.6 0.6 0.6
EMT200AB	EMT-Basic Certification Expanded Refresher Challenge	Designed to contribute to Arizona Department of Health Services (A-DHS) Bureau of Emergency Medical Services (B-EMS) recertification requirements for Emergency Medical Technician Basic (EMTB) according to the U.S. Department of Transportation (DOT) EMT-Basic National Curriculum and the Arizona EMT Basic	Prerequisites: Current Basic Life Support American Heart Association Healthcare Provider CPR or equivalent and current EMT Basic certification in the state of Arizona Must be currently functioning as an	LEC 1.0 1.0 1.0
EMT201	Interactive Basic EMT Refresher	Designed to contribute to Arizona Department of Health Services recertification requirements for Emergency Medical Technicians (EMT) according to the US Department of Transportation (DOT) EMT-Basic National Curriculum and the Arizona Basic EMT Refresher Curriculum Guidelines. Enhances the knowledge base of the EMT. Updates a wide variety of subjects including	Prerequisites: (Current EMT Basic certification in the state of Arizona or proof of current registry with the National Registry of Emergency Medical Technicians [NREMT]) and validation in Basic Life Support (BLS) Health Care Provider/Professional	L+L 1.0 2.2 2.2
EMT215	Stress and Emergency Services Professionals	Participative course designed to familiarize students with differences which exist in the socioeconomic, cultural, organizational, and technologic environments and the distress that can occur to emergency-care providers functioning in those arenas. Physiologic, psychologic and behavioral manifestations of distress as it relates to emergency responders. Explores distress	Prerequisites: Currently employed as prehospital-care provider or registered nurse working in the prehospital setting.	LEC 3.0 3.0 3.0
EMT230	Advanced Concepts for EMTs	Designed to meet Arizona Department of Health Services recertification requirements for EMTs. Enhances the knowledge base of the Emergency Medical Technician (EMT) and incorporates new information into daily practice. Updates a wide variety of subjects including medical and trauma emergencies, cardiac life support, interaction with advanced life	Prerequisites: Current EMT certification in the state of Arizona.	L+L 1.5 1.5 1.5

EMT238	Vehicular Extrication and Patient Stabilization	Participative course designed for the Emergency Medical Technicians (EMT). Incorporates new knowledge and skills necessary to access, extricate, and care for victims of crash incidents. Provides exposure to scene management, including size-up, disentanglement, victim stabilization for single and multi-victim situations, hazardous materials incidents, integration of local emergency medical services (EMS)	Prerequisites: Basic EMT certification current enrollment in an EMT-Basic program nurse with emergency department experience or law enforcement personnel or permission of Instructor.	LEC 2.0 2.0 2.0
EMT245	Trauma Management I	Designed to instruct prehospital care personnel in the critical skills necessary to manage the trauma victim and the emergency scene through the Incident Command System (ICS). Enhances basic emergency medical technology (EMT) skills by focusing on emergency care interventions. Provides exposure to victim assessment, initial treatment, resuscitative techniques, victim	Prerequisites: Basic EMT certification or nurse with emergency room experience or permission of Department or Division.	L+L 2.0 3.5 3.5
EMT258	Victimology and Crisis Management in Public Safety	Victimology, the criminal justice system, techniques of crisis intervention and management, and the importance of a multicultural and global perspective. Includes violent crimes, sexual assault, family violence, post-traumatic stress disorder, the role of substance abuse, developing effective coping skills of victims and responders, appropriate community resources, and the	Prerequisites: None.	LEC 3.0 3.0 3.0
EMT260	Advanced Airway Management for EMTs	Designed to instruct emergency care personnel in the critical skills necessary to establish and maintain an airway of the traumatized or medically compromised patient. Airway skills include oxygen therapy with all adjuncts, administration of pharmaceuticals via the endotracheal (ET)/pharyngeal tracheal lumen airway (PTLA), management of the airway as a route for medications, and invasive airway procedures. Content concurrent with Department of Transportation	Prerequisites: Certified EMT or licensed registered nurse with emergency department experience; EMT or emergency department licensed registered nurse with Medical Control physician supervision according to Arizona Department of Health Services (A-DHS) Bureau of Emergency Medical Services (B-	L+L 2.0 2.0 2.0
EMT264	Vascular Access for EMTs	Includes review of anatomy of the circulatory system. Skills include peripheral intravenous cannulation techniques, fluid resuscitation, obtaining venous blood samples for laboratory analysis, infection control techniques for the safety of self and victim, and complications of intravenous cannulation; each and all with medical control. Content concurrent with American	Prerequisites: (EMT-Basic or registered nurse with emergency department experience or Licensed Physician or Physician Assistant) or permission of Instructor.	L+L 1.0 1.0 1.0

EMT298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
EMT298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
EMT298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
ENG100AA	American-English Spelling System	American-English spelling system rules, mnemonic devices.	Prerequisites: Appropriate English placement test score, or a grade of C or better in ESL097 or permission of Instructor.	LEC 1.0 1.0 1.0
ENG100AB	Vocabulary Development	Latin and Greek derivatives, development of competency and discrimination in word choice, specialized vocabulary.	Prerequisites: Appropriate English placement test score or a grade of C or better in ESL097 or permission of Instructor.	LEC 1.0 1.0 1.0
ENG100AC	The Mechanics of Written English	Review of the mechanics of written English, including punctuation, arbitrary marks and usages, capitalization, agreement, tense, and sentence patterns.	Prerequisites: Appropriate English placement test score or a grade of C or better in ESL097 or permission of Instructor.	LEC 1.0 1.0 1.0
ENG100AD	Grammar and Usage	The social aspects of grammar and usage, including appropriate levels of formal and informal language.	Prerequisites: Appropriate English placement test score or a grade of C or better in ESL097 or permission of Instructor.	LEC 1.0 1.0 1.0

ENG100AE	Composition Skills	Developing generative and evaluative writing skills using selected software programs.	Prerequisites: Appropriate English placement test score or a grade of C or better in ESL097 or permission of Instructor.	LEC 1.0 1.0 1.0
ENG101	First-Year Composition	Emphasis on rhetoric and composition with a focus on expository writing and understanding writing as a process. Establishing effective college-level writing strategies through four or more writing projects comprising at least 3,000 words in total.	Prerequisites: Appropriate writing placement test score, or (a grade of C or better in ESL097 or WAC101), or (a grade of B or better in ALT100), or (a grade of C in ALT100 and Corequisites: ENG101LL, or ENG107LL, or WAC101, or ENG100A+), or (a grade of C or better in ESL202 and Corequisites:	LEC 3.0 3.0 3.0
ENG101LL	First-Year Composition Lab	Supplemental instruction for composition courses. Focus on developing effective writing processes to address a range of rhetorical situations.	Prerequisites: Appropriate writing placement test score, or (a grade of C or better in ESL202. Corequisites: ENG101, or ENG107).	LAB 1.0 3.0 3.0
ENG102	First-Year Composition	Emphasis on rhetoric and composition with a focus on persuasive, research-based writing and understanding writing as a process. Developing advanced college-level writing strategies through three or more writing projects	Prerequisites: A grade of C or better in ENG101.	LEC 3.0 3.0 3.0
ENG107	First-Year Composition for ESL	Equivalent of ENG101 for students of English as a Second Language (ESL). Emphasis on rhetoric and composition with a focus on expository writing and understanding writing as a process. Establishing effective college-level writing strategies through four or more writing projects comprising at least 3,000 words in total.	Prerequisites: Appropriate writing placement test score, or (a grade of C or better in ESL097 or WAC101), or (a grade of B or better in ALT100), or (a grade of C in ALT100 and Corequisites: ENG101LL, or ENG107LL, or WAC101, or ENG100A+), or (a grade of C or better in ESL202 and Corequisites:	LEC 3.0 3.0 3.0
ENG107LL	First-Year Composition Lab for ESL	Equivalent of ENG101LL for students of English as a Second Language (ESL). Supplemental instruction for composition courses. Focus on developing effective writing processes to address a range of rhetorical	Prerequisites: Appropriate writing placement test score, or (a grade of C or better in ESL202. Corequisites: ENG101, or ENG107).	LAB 1.0 3.0 3.0

ENG108	First-Year Composition for ESL	Equivalent of ENG102 for students of English as a Second Language (ESL). Emphasis on rhetoric and composition with a focus on persuasive, research-based writing and understanding writing as a process. Developing advanced college-level writing strategies	Prerequisites: A grade of C or better in ENG107.	LEC 3.0 3.0 3.0
ENG110	Approaching Big Problems	Language-based approach to inquiry. Explores how language frames and influences important issues and questions in today's world. Examines how language and other meaning-making practices shape the circulation of various social and cultural issues. Investigates the process of meaning-making, problem solving, and formulating responses to these issues.	Prerequisites: None.	LEC 3.0 3.0 3.0
ENG111	Technical and Professional Writing	Introduces students to the genres, style, and design of technical documents that are used in various professional fields. Includes examining the role of workplace writing, preparing documents appropriate to diverse audiences, and integrating data and graphics	Prerequisites: A grade of C or better in ENG101 or ENG107 or permission of Instructor.	LEC 3.0 3.0 3.0
ENG183	Basic Manuscript Writing: Fiction	Basic skills and techniques used by the professional fiction writer in writing fiction for publication, including characterization, plot development, writing dialogue, setting scenes, and establishing mood. Emphasis on	Prerequisites: None.	LEC 3.0 3.0 3.0
ENG200	Reading and Writing About Literature	Emphasis on critical analysis of various genres of literature; includes study of necessary terminology, introduction to methods of literary criticism, and practice	Prerequisites: A grade of C or better in ENG102.	LEC 3.0 3.0 3.0
ENG206	Introduction to Literary Studies	Introduces the terminology, methods, and objectives for interpreting and writing about a variety of literary texts. Focuses on the distinctive features of literature, key concepts in critical theory, close reading, and the use of	Prerequisites: A grade of C or better in ENG102 or ENG108.	LEC 3.0 3.0 3.0
ENG210	Creative Writing	Skills and techniques used in the production of marketable materials for contemporary publications that buy prose fiction, poetry, and expository articles.	Prerequisites: A grade of C or better in ENG102 or permission of Department or Division.	LEC 3.0 3.0 3.0
ENG211	Introduction to English Studies	Explores the broad nature of "texts," including literature, language, and other cultural productions and artifacts. Introduces key theories and approaches for analyzing and interpreting diverse literary and cultural texts.	Prerequisites: A grade of C or better in ENG102 or ENG108.	LEC 3.0 3.0 3.0
ENG213	Introduction to the Study of Language	Study of language as code; phonetics, phonology, morphology, syntax, semantics; language acquisition; historical and socio-linguistics	Prerequisites: A grade of C or better in ENG102 or ENG111 or permission of Instructor.	LEC 3.0 3.0 3.0

ENG215	Strategies of Academic Writing	Advanced course in techniques of analyzing and writing academic expository prose. Writing to be research based.	Prerequisites: A grade of C or better in ENG102 or ENG111 or permission of Instructor.	LEC 3.0 3.0 3.0
ENG216	Persuasive Writing on Public Issues	Advanced course in techniques of analyzing and writing persuasive arguments addressing topics of current public interest. Papers research based	Prerequisites: A grade of C or better in ENG102.	LEC 3.0 3.0 3.0
ENG217	Personal and Exploratory Writing	Using writing to explore one's self and the world one lives in; emphasis on journal writing as a source and	Prerequisites: A grade of C or better in ENG101 or ENG107 or equivalent.	LEC 3.0 3.0 3.0
ENG235	Magazine Article Writing	Basic skills and techniques used by professional writers for publication in magazines. Includes analyzing markets, identifying article slant, research techniques, editing, and submission procedures. Emphasis on	Prerequisites: None.	LEC 3.0 3.0 3.0
ENG298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
ENG298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
ENH110	Introduction to Literature	Introduction to international literature through various forms of literary expression; e.g., poetry, drama, essay, autobiographical fiction, short story, and novel. Provides a global overview of literature with special emphasis on diverse cultural contributions of women, African Americans, Asian Americans, Hispanic Americans, and	Prerequisites: None.	LEC 3.0 3.0 3.0
ENH111	Literature and the American Experience	Introduction to the foundations and diversity of American culture through a survey of its literature, including minority and women writers. Exploration of various facets of American culture including frontier, regional, rural, and urban life; ethnic, racial, and	Prerequisites: None.	LEC 3.0 3.0 3.0

ENH112	Chicano Literature	Introduction to the works of Mexican-American writers. Samples poetry, fiction, and essays viewed in their relationship to American cultural heritage and to	Prerequisites: None.	LEC 3.0 3.0 3.0
ENH113	Writers/Directors and Current Issues	In-depth analysis of literary texts by contemporary writers/directors throughout the world, including essayists, journalists, playwrights, novelists, directors, short story writers, and/or poets. Examines perspectives representing a variety of cultures. Critical responses to current issues of worldwide interest examined, including topics as environment, technology, medicine,	Prerequisites: None.	LEC 3.0 3.0 3.0
ENH114	African American Literature	Survey of major African American writers from Colonial period through the present. Analysis of trends and movements within African American literary history.	Prerequisites: None.	LEC 3.0 3.0 3.0
ENH117	Rap Literature: The Oral Tradition	Survey of selected rap poetry looking at the oral tradition of Africa, the Caribbean, and the United States as precursors to East Coast, West Coast, Southern, North Central, and International development of the genre. Investigation of cultural environments, historical events, competitions (the "battles"), artists' biographies,	Prerequisites: None.	LEC 3.0 3.0 3.0
ENH120	The Literature of Science Fiction	Surveys the last one hundred and fifty years of Science Fiction literature. Investigates the similarities between Science Fiction and other imaginative literatures Examines the Science Fiction genre, sub genres, and themes from a variety of perspectives, as well as social	Prerequisites: None.	LEC 3.0 3.0 3.0
ENH130	Mystery Fiction from the Nineteenth Century to the Present	A study of mystery fiction as a literary genre and as a reflection of culture through the writings of significant authors.	Prerequisites: None.	LEC 3.0 3.0 3.0
ENH140	Representations of Society in Literature and Film	Explores how a particular field of endeavor is and has been represented in narrative literature and film, using examples from a range of U.S. media. Investigates how narrative representation engages changing cultural and historical contexts as well as how it shapes social perceptions of fields of human endeavor. Focus on analysis of narratives' form and content, and the	Prerequisites: Appropriate reading placement and eligibility for ENG101 as indicated by appropriate writing placement.	LEC 3.0 3.0 3.0

ENH140AA	Sports in Literature and Film	Explores how sports are and have been represented in narrative literature and film, using examples from a range of U.S. media. Investigates how narrative representation engages changing cultural and historical contexts as well as how it shapes social perceptions of fields of human endeavor. Focus on analysis of	Prerequisites: Appropriate reading placement and eligibility for ENG101 as indicated by appropriate writing placement.	LEC 3.0 3.0 3.0
ENH140AB	Business in Literature and Film	Explores how business is and has been represented in narrative literature and film, using examples from a range of U.S. media. Investigates how narrative representation engages changing cultural and historical contexts as well as how it shapes social perceptions of fields of human endeavor. Focus on analysis of	Prerequisites: Appropriate reading placement and eligibility for ENG101 as indicated by appropriate writing placement.	LEC 3.0 3.0 3.0
ENH140AC	Science in Literature and Film	Explores how science is and has been represented in narrative literature and film, using examples from a range of U.S. media. Investigates how narrative representation engages changing cultural and historical contexts as well as how it shapes social perceptions of fields of human endeavor. Focus on analysis of	Prerequisites: Appropriate reading placement and eligibility for ENG101 as indicated by appropriate writing placement.	LEC 3.0 3.0 3.0
ENH140AD	Art in Literature and Film	Explores how art is and has been represented in narrative literature and film, using examples from a range of U.S. media. Investigates how narrative representation engages changing cultural and historical contexts as well as how it shapes social perceptions of fields of human endeavor. Focus on analysis of	Prerequisites: Appropriate reading placement and eligibility for ENG101 as indicated by appropriate writing placement.	LEC 3.0 3.0 3.0
ENH140AE	Education in Literature and Film	Explores how education is and has been represented in narrative literature and film, using examples from a range of U.S. media. Investigates how narrative representation engages changing cultural and historical contexts as well as how it shapes social perceptions of fields of human endeavor. Focus on analysis of	Prerequisites: Appropriate reading placement and eligibility for ENG101 as indicated by appropriate writing placement.	LEC 3.0 3.0 3.0
ENH140AF	Law in Literature and Film	Explores how law is and has been represented in narrative literature and film, using examples from a range of U.S. media. Investigates how narrative representation engages changing cultural and historical contexts as well as how it shapes social perceptions of fields of human endeavor. Focus on analysis of	Prerequisites: Appropriate reading placement and eligibility for ENG101 as indicated by appropriate writing placement.	LEC 3.0 3.0 3.0

ENH140AG	Medicine in Literature and Film	Explores how medicine is and has been represented in narrative literature and film, using examples from a range of U.S. media. Investigates how narrative representation engages changing cultural and historical contexts as well as how it shapes social perceptions of fields of human endeavor. Focus on analysis of	Prerequisites: Appropriate reading placement and eligibility for ENG101 as indicated by appropriate writing placement.	LEC 3.0 3.0 3.0
ENH190	Introduction to US Ethnic Literature	Introduction to the US ethnic literatures of African Americans, Arab Americans, Asian Americans, Latinas/os, Native Americans, Mixed Race, and other emerging ethnic groups through various expressions. Examines the interconnections of the various experiences of racialized groups living in the US. Provides ethnic US literature a global context through study of the interconnections with the literatures of Africa, Asia, Latin America, and Oceania. Focus on	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: ENG101 or ENG107.	LEC 3.0 3.0 3.0
ENH201	World Literature Through the Renaissance	Examines a selection of the world's literary masterpieces within their cultural contexts from ancient times through the Renaissance. Analyzes the influences of major literary philosophies, themes, genre, and styles. Assesses the contributions of major writers. Introduces	Prerequisites: None.	LEC 3.0 3.0 3.0
ENH202	World Literature After the Renaissance	Includes a selection of the world's literary masterpieces from the Renaissance to modern times	Prerequisites: None.	LEC 3.0 3.0 3.0
ENH204	Introduction to Contemporary Literature	Examines the work of major writers in poetry, fiction and drama from 1945 to the present. Examines important movements that have developed within these genre	Prerequisites: None.	LEC 3.0 3.0 3.0
ENH206	Nature and Environmental Literature	Investigates major themes in nature and environmental writing. Explores relationship between humanity and the environment as expressed through fiction, non-fiction, and poetry. Examines how literature drives attitudes	Prerequisites: None. CRE101 or equivalent as indicated by assessment recommended but not required.	LEC 3.0 3.0 3.0
ENH214	Poetry Study	Involves reading, discussing, and analyzing poetry of various forms and from selected periods	Prerequisites: None.	LEC 3.0 3.0 3.0
ENH220	Gender, Media, and Culture	Introduction to gender and its intersections with race, ethnicity, class, sexuality, nationality, ability, and country of origin in media. Examines film, television, popular culture, advertising, gaming, print and digital media,	Prerequisites: A grade of C or better in ENG101 or ENG107.	LEC 3.0 3.0 3.0
ENH221	Survey of English Literature Before 1800	Emphasizes the social and political backgrounds as well as the form and content of English literature from Anglo-Saxon times to the end of the eighteenth century.	Prerequisites: A grade of C or better in ENG101 or ENG107. ENH110 or ENG200 or ENG206 suggested but	LEC 3.0 3.0 3.0

ENH222	Survey of English Literature After 1800	Emphasizes the social and political backgrounds as well as the form and content of English literature in the nineteenth and twentieth centuries.	Prerequisites: A grade of C or better in ENG101 or ENG107. ENH110 or ENG200 or ENG206 suggested but	LEC 3.0 3.0 3.0
ENH230	Introduction To Shakespeare	Introduces Shakespeare the playwright, the sonneteer, the linguist, and the citizen of the 17th century. Considers the major tragedies, comedies, histories, and sonnets; focuses on the use of language; and connects the writer to the time. Some emphasis on Shakespeare's influence through the centuries, noting	Prerequisites: None.	LEC 3.0 3.0 3.0
ENH231	Introduction to Shakespeare: The Early Plays	Introduces Shakespeare, the playwright and linguist, and the late 16th century. Considers representative comedies, histories, and tragedies from Shakespeare's early period, from 1590-1599. Focuses on the use of language and connects the writer to his historical era.	Prerequisites: None. ENH110 or ENG200 or ENG206 suggested but not required.	LEC 3.0 3.0 3.0
ENH232	Introduction to Shakespeare: The Late Plays	Introduces Shakespeare, the playwright and linguist, and the early 17th century. Considers representative comedies, histories, tragedies, and romances from Shakespeare's late period, 1600-1611. Focuses on the use of language and connects the writer to his historical	Prerequisites: None. ENH110 or ENG200 or ENG206 suggested but not required.	LEC 3.0 3.0 3.0
ENH235	Survey of Gothic Literature	A study of the origins, common elements and characteristics, and historical development of Gothic literature with an exploration of the literary techniques	Prerequisites: None.	LEC 3.0 3.0 3.0
ENH241	American Literature Before 1860	Includes literature written prior to 1860 in the United States.	Prerequisites: A grade of C or better in ENG101.	LEC 3.0 3.0 3.0
ENH242	American Literature After 1860	Includes literature written after 1860 in the United States	Prerequisites: None.	LEC 3.0 3.0 3.0
ENH245	J.R.R. Tolkien and C.S. Lewis: Battling Modernism	Focuses on the writings, language, themes, influences and vision of J.R.R. Tolkien and C.S. Lewis in contrast to the ideas and literature of the Modernist movement.	Prerequisites: None.	LEC 3.0 3.0 3.0
ENH251	Mythology	Deals with the myths and legends of civilizations with the greatest influence upon the development of the literature and culture of the English speaking people, and compares those myths with myths from other	Prerequisites: None.	LEC 3.0 3.0 3.0

ENH253	Contemporary Global Literature and Film	Characteristics of literary and cinematic mediums. Challenges of adapting literature to film. Global examination of historical, religious, socioeconomic, political, and colonial/post colonial themes depicted in Western and non-Western literature and film (e. g., Africa, Asia, and Latin America) outside the United States. Use of narrative in each medium and how it translates various global/international perspectives and	Prerequisites: A grade of C or better in ENG101, or ENG107, or equivalent.	LEC 3.0 3.0 3.0
ENH254	Literature and Film	Presents works of literature and their film versions and analyzes distinguishing techniques of each medium.	Prerequisites: A grade of C or better in ENG101, or ENG107, or	LEC 3.0 3.0 3.0
ENH255	Contemporary U.S. Literature and Film	A discussion of the strengths and weaknesses of literature created by U.S. authors and film created by U.S. or other filmmakers. Includes the challenges of adapting literature to film; addressing the racial, ethnic, sex, sexuality, gender, class, and religious differences among cultures and mediums; the use of narrative in each medium and how it translates various cultural values and assumptions particular to U.S. society and	Prerequisites: A grade of C or better in ENG101, or ENG107, or equivalent.	LEC 3.0 3.0 3.0
ENH256	Shakespeare on Film	Presents cinematic versions of Shakespeare's plays and explains and analyzes how the dramatist's major tragedies, comedies, histories and romances have been	Prerequisites: None.	LEC 3.0 3.0 3.0
ENH259	American Indian Literature	Contemporary American Indian forms of literary expression. Selected oral traditions of American Indians. Trends and movements within American Indian	Prerequisites: None.	LEC 3.0 3.0 3.0
ENH260	Literature of the Southwest	Investigates major themes in Southwestern American literature including the Western myth, minority roles in the region's literature, control of nature versus primacy of nature, and growth. Both prose and poetry are examined with an emphasis on contemporary	Prerequisites: None.	LEC 3.0 3.0 3.0
ENH261	Indigenous Women's Literature of the Americas	Explores contemporary voices of Indigenous women authors and artists in the Americas as expressed in poetry, fiction, nonfiction, drama, and oral traditions. Focuses on themes relevant to Indigenous women and examines the trends and movements within Indigenous peoples and women's literary history. Examines themes relevant to Indigenous women such as racial and	Prerequisites: A grade of C or better in ENG101 or ENG107.	LEC 3.0 3.0 3.0
ENH275	Modern Fiction	Includes novels and short stories of modern writers which reflect significant themes of our time	Prerequisites: None.	LEC 3.0 3.0 3.0

ENH277	Narrative Genres	Explores how narrative shapes culture and culture shapes narrative through the international study of a particular genre in multiple media (e.g. literature, film, television, computer games, etc.). Investigates how a genre evolves, and how genre conventions influence narrative production and reception. Focus on analysis	Prerequisites: A grade of C or better in ENG101 or ENG107. ENH110 or ENG200 or ENG206 suggested but not required.	LEC 3.0 3.0 3.0
ENH277AA	Dark Futures: Dystopian Narrative	Explores how narrative shapes culture and culture shapes narrative through the international study of a particular genre in multiple media (e.g. literature, film, television, computer games, etc.). Investigates how a genre evolves, and how genre conventions influence narrative production and reception. Focus on analysis	Prerequisites: A grade of C or better in ENG101 or ENG107. ENH110 or ENG200 or ENG206 suggested but not required.	LEC 3.0 3.0 3.0
ENH277AB	Whodunnits: Mystery Narrative	Explores how narrative shapes culture and culture shapes narrative through the international study of a particular genre in multiple media (e.g. literature, film, television, computer games, etc.). Investigates how a genre evolves, and how genre conventions influence narrative production and reception. Focus on analysis	Prerequisites: A grade of C or better in ENG101 or ENG107. ENH110 or ENG200 or ENG206 suggested but not required.	LEC 3.0 3.0 3.0
ENH277AC	Happily Ever: Children's Narrative	Explores how narrative shapes culture and culture shapes narrative through the international study of a particular genre in multiple media (e.g. literature, film, television, computer games, etc.). Investigates how a genre evolves, and how genre conventions influence narrative production and reception. Focus on analysis	Prerequisites: A grade of C or better in ENG101 or ENG107. ENH110 or ENG200 or ENG206 suggested but not required.	LEC 3.0 3.0 3.0
ENH277AD	Stuff Blows Up: Action Narrative	Explores how narrative shapes culture and culture shapes narrative through the international study of a particular genre in multiple media (e.g. literature, film, television, computer games, etc.). Investigates how a genre evolves, and how genre conventions influence narrative production and reception. Focus on analysis	Prerequisites: A grade of C or better in ENG101 or ENG107. ENH110 or ENG200 or ENG206 suggested but not required.	LEC 3.0 3.0 3.0
ENH277AE	Tour of Duty: War Narrative	Explores how narrative shapes culture and culture shapes narrative through the international study of a particular genre in multiple media (e.g. literature, film, television, computer games, etc.). Investigates how a genre evolves, and how genre conventions influence narrative production and reception. Focus on analysis	Prerequisites: A grade of C or better in ENG101 or ENG107. ENH110 or ENG200 or ENG206 suggested but not required.	LEC 3.0 3.0 3.0

ENH277AF	Heroic Quests: Fantasy Narrative	Explores how narrative shapes culture and culture shapes narrative through the international study of a particular genre in multiple media (e.g. literature, film, television, computer games, etc.). Investigates how a genre evolves, and how genre conventions influence narrative production and reception. Focus on analysis	Prerequisites: A grade of C or better in ENG101 or ENG107. ENH110 or ENG200 or ENG206 suggested but not required.	LEC 3.0 3.0 3.0
ENH277AG	Out There: Science Fiction Narrative	Explores how narrative shapes culture and culture shapes narrative through the international study of a particular genre in multiple media (e.g. literature, film, television, computer games, etc.). Investigates how a genre evolves, and how genre conventions influence narrative production and reception. Focus on analysis	Prerequisites: A grade of C or better in ENG101 or ENG107. ENH110 or ENG200 or ENG206 suggested but not required.	LEC 3.0 3.0 3.0
ENH277AH	Facing Fear: Horror Narrative	Explores how narrative shapes culture and culture shapes narrative through the international study of a particular genre in multiple media (e.g. literature, film, television, computer games, etc.). Investigates how a genre evolves, and how genre conventions influence narrative production and reception. Focus on analysis	Prerequisites: A grade of C or better in ENG101 or ENG107. ENH110 or ENG200 or ENG206 suggested but not required.	LEC 3.0 3.0 3.0
ENH277AI	Make 'Em Laugh: Comedy Narrative	Explores how narrative shapes culture and culture shapes narrative through the international study of a particular genre in multiple media (e.g. literature, film, television, computer games, etc.). Investigates how a genre evolves, and how genre conventions influence narrative production and reception. Focus on analysis	Prerequisites: A grade of C or better in ENG101 or ENG107. ENH110 or ENG200 or ENG206 suggested but not required.	LEC 3.0 3.0 3.0
ENH277AJ	Love and Passion: Romance Narrative	Explores how narrative shapes culture and culture shapes narrative through the international study of a particular genre in multiple media (e.g. literature, film, television, computer games, etc.). Investigates how a genre evolves, and how genre conventions influence narrative production and reception. Focus on analysis	Prerequisites: A grade of C or better in ENG101 or ENG107. ENH110 or ENG200 or ENG206 suggested but not required.	LEC 3.0 3.0 3.0
ENH277AK	The Wild Frontier: Western Narrative	Explores how narrative shapes culture and culture shapes narrative through the international study of a particular genre in multiple media (e.g. literature, film, television, computer games, etc.). Investigates how a genre evolves, and how genre conventions influence narrative production and reception. Focus on analysis	Prerequisites: A grade of C or better in ENG101 or ENG107. ENH110 or ENG200 or ENG206 suggested but not required.	LEC 3.0 3.0 3.0

ENH280	Topics in American Literature	Exploration of selected topic(s) in American Literature. Focuses on a theme, genre, era, technique, or critical approach. Includes reading and interpretation of literature from a variety of cultures within the United	Prerequisites: A grade of C or better in (ENG101 or ENG107) or permission of Instructor.	LEC 3.0 3.0 3.0
ENH284	19th Century Women Writers	Investigates major themes in literature by women writing in the 19th century including the nature of women's lives in the family, in work situations, and in society. Poetry, prose, essays and drama are examined with an	Prerequisites: None.	LEC 3.0 3.0 3.0
ENH285	Contemporary Women Writers	Explores twentieth century literature (short stories, essays, plays, and poetry) written by women and about women. Focus on themes relevant to women's lives	Prerequisites: None.	LEC 3.0 3.0 3.0
ENH291	Children's Literature	Review of folk and modern literature from a variety of world cultures, including application of literary criteria to folk and modern literature for children	Prerequisites: None.	LEC 3.0 3.0 3.0
ENH292	Literature for Adolescents	Reviews selected literature written for adolescents. Develops and applies literary criteria for the evaluation	Prerequisites: None.	LEC 3.0 3.0 3.0
ENH294	Multicultural Folktales	Study of multicultural folktales, exploring the impact of the oral tradition in American society and showing	Prerequisites: None.	LEC 3.0 3.0 3.0
ENH295	Banned Books and Censorship	History, motivations, and effects of censorship in a democratic society. Censorship and book banning as a method of silencing diverse voices. Critical analysis of banned or challenged literature for children and adults.	Prerequisites: None.	LEC 3.0 3.0 3.0
ENH298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
ENV101	Introduction to Environmental Science	Introduces the interconnected nature of environmental science and solutions to environmental issues.	Prerequisites: None.	LEC 4.0 3.0 3.0 LAB 0.0 3.0 3.0
ENV119	Introduction to Geospatial Technology for Environmental Science	Introduction to geospatial technology concepts and applications including map reading, aerial photography interpretation, and remote sensing. Hands-on experience investigating the local environment with an air photo browser, remote imaging viewer, and a	Prerequisites: None.	L+L 4.0 4.0 4.0

ENV219	Geospatial Technology for Environmental	Hands-on experience using Geographic Information Systems (GIS), Remote Sensing (RS), and Global Positioning Systems (GPS) with applications using local	Prerequisites: A grade of C or better in ENV119 or Corequisites: ENV119, or permission of Instructor.	L+L 4.0 4.0 4.0
ENV225	Our Changing Planet	Evaluates biogeochemical cycles and energy flows supporting life on Earth using the scientific method. Integrates core concepts of atmospheric science, geology, hydrology, ecology, and soil science to provide a foundational understanding of the critical zone and its relationship to environmental issues. Examines the influences of human activity on the functioning of the critical zone with consideration of management best	Prerequisites: None.	LEC 4.0 3.0 3.0 LAB 0.0 3.0 3.0
ENV273	Geospatial Technology for Environmental	Advanced geospatial techniques including Geographic Information System (GIS) data integration, surface creation and analysis, 3D displays, and animation using	Prerequisites: A grade of C or better in ENV219 or permission of Instructor.	L+L 4.0 4.0 4.0
ENV295	Geospatial Technology for Environmental	Completion of a self-paced geospatial technology project.	Prerequisites: A grade of C or better in ENV273 or permission of Instructor.	L+L 4.0 4.0 4.0
EPD205	Science, Technology, Engineering, and Mathematics (STEM) Education	A basic introduction to Science, Technology, Engineering, and Mathematics (STEM) education in the United States. Emphasis on the understanding of state and national educational acad standards, the importance of the role of higher education in closing the achievement gap and effective strategies for improving teaching in the STEM disciplines. Includes examples of successful school programs along with practical	Prerequisites: Must hold a Career and Technical Education (CTE), provisional or standard elementary, secondary or special education certificate, or permission of Department or Division.	LEC 3.0 3.0 3.0
EPD212AA	Elementary Art Methods and Curriculum Development	Overview and practical application of teaching elementary art. Covers teaching strategies, learning environments, teaching resources, and use of technology. Emphasis on State Board of Education Professional Teaching Standards.	Prerequisites: Must hold a Career and Technical Education (CTE) provisional or standard elementary, secondary, or special education teaching certificate, or permission of	LEC 3.0 3.0 3.0
EPD212AB	Secondary Art Methods and Curriculum Development	Overview and practical application of teaching secondary art. Covers teaching strategies, learning environments, teaching resources, and use of technology. Emphasis on State Board of Education Professional Teaching Standards.	Prerequisites: Must hold a Career and Technical Education (CTE) provisional or standard elementary, secondary, or special education teaching certificate, or permission of	LEC 3.0 3.0 3.0

EPD216AA	Elementary Physical Education Methods and Curriculum Development	Overview and practical application of teaching elementary physical education. Covers teaching strategies, learning environments, teaching resources, and use of technology. Emphasis on State Board of Education Professional Teaching Standards	Prerequisites: Must hold a Career and Technical Education (CTE) provisional or standard elementary, secondary, or special education teaching certificate, or permission of	LEC 3.0 3.0 3.0
EPD216AB	Secondary Physical Education Methods and Curriculum Development	Overview and practical application of teaching secondary physical education. Covers teaching strategies, learning environments, teaching resources, and use of technology. Emphasis on State Board of Education Professional Teaching Standards.	Prerequisites: Must hold a Career and Technical Education (CTE) provisional or standard elementary, secondary, or special education teaching certificate, or permission of	LEC 3.0 3.0 3.0
EPD225	Foundations of Gifted Education and Identification of Gifted Learners	Students explore definitions of giftedness, ways of identifying gifted and talented students, and types of programs and services developed for this population. Students address issues in educating gifted and	Prerequisites: Must hold a provisional or standard early childhood, elementary, secondary or special education teaching certificate.	LEC 3.0 3.0 3.0
EPD226	Social and Emotional Needs of Gifted and Talented Students	Students explore the intellectual, social, emotional, developmental, and educational characteristics of gifted and talented students.	Prerequisites: Must hold a provisional or standard early childhood, elementary, secondary or special education teaching certificate and a grade of C or better in EPD225 or (permission of Department or Division	LEC 3.0 3.0 3.0
EPD227	Methods and Models for Differentiating Curriculum for Gifted Learners	Students explore the theory and practice of teaching methods and differentiating curriculum and instruction for gifted learners.	Prerequisites: Must hold a provisional or standard early childhood, elementary, secondary or special education teaching certificate and a grade of C or better in EPD225 (or permission of Department or Division	LEC 3.0 3.0 3.0
EPD228	Creativity and Critical Thinking Skills in Gifted Education	Students explore the concept of creativity, including theories and characteristics. Brain research on critical thinking and implications for gifted education is examined.	Prerequisites: Must hold a provisional or standard early childhood, elementary, secondary or special education teaching certificate and a grade of C or better in EPD225 (or permission of Department or Division	LEC 3.0 3.0 3.0
EPD250	Teaching Elementary Number Sense and Operations Grades K-8	Focus on knowledge and skills for number sense and operations grades K-8. Covers learning environments, teaching resources, and use of technology in the presentation of numeration, number theory and computation. Emphasis on State Academic Math and Common Core Standards. Includes practical application	Prerequisites: Must hold a Career and Technical Education (CTE) provisional or standard elementary, secondary, or special education teaching certificate, or permission of Department or Division.	LEC 6.0 6.0 6.0

EPD251	Teaching Geometry and Measurement Grades K-8	Focus on knowledge and skills for geometry and measurement concepts for grades K-8. Covers geometric properties, transformation of shapes, coordinate geometry and measurement. Emphasis on State Academic Math and Common Core Standards. Includes practical application of teaching strategies for	Prerequisites: A grade of C or better in EPD250.	LEC 3.0 3.0 3.0
EPD252	Teaching Patterns, Algebra and Functions Grades K-8	Focus on knowledge and skills for patterns, algebra and functions grades K-8. Covers learning environments, teaching resources, and use of technology in the presentation of algebraic notation, properties, relations and functions, equations and inequalities. Emphasis on State Academic Math and Common Core Standards. Includes practical application of teaching strategies for	Prerequisites: A grade of C or better in EPD250.	LEC 6.0 6.0 6.0
EPD253	Teaching Data Analysis, Probability and Discrete Mathematics Grades K-8	Focus on knowledge and skills for data analysis, probability and discrete mathematics concepts for grades K-8. Covers statistics, sampling, systemic listing and counting, and vertex edge graphs. Emphasis on State Academic Math and Common Core Standards. Includes practical application of teaching strategies for	Prerequisites: A grade of C or better in EPD250.	LEC 3.0 3.0 3.0
EPD254	Mathematics Classroom Assessment	A thorough examination of techniques and strategies for assessment in the mathematics classroom. Focus on formative and summative assessments.	Prerequisites: A grade of C or better in EPD250, EPD251, EPD252, and EPD253.	LEC 3.0 3.0 3.0
EPD255	Research-Based Practices, Pedagogy, and Instructional Leadership in Mathematics	Designed to provide strategies that may be used when assuming leadership roles in mathematics. Focus on examining research-based practices, pedagogy, and techniques of instructional leadership in mathematics. Examination of academic math standards and common	Prerequisites: A grade of C or better in EPD250, EPD251, EPD252, EPD253, and EPD254.	LEC 3.0 3.0 3.0
EPD256	Science, Technology, Engineering, and Mathematics (STEM) Education and Technology	Overview of the current status of Science, Technology, Engineering, and Mathematics (STEM) education and technology in the United States and The Standards for Technological Literacy developed by the International Technology Education Association (ITEA). Emphasis on the impact of technology and its interdependence with the other STEM fields in engineering, science, and mathematics. Topics include: technology systems, processes and concepts, energy and power, communication, biotechnology, manufacturing,	Prerequisites: A grade of C or better in EPD205.	LEC 3.0 3.0 3.0

EPD257	Science, Technology, Engineering, and Mathematics (STEM) Education and Science	Overview of the current status of Science, Technology, Engineering, and Mathematics (STEM) education and science in the United States and the National Science Education standards. Emphasis on techniques associated with the scientific inquiry-based approach to teaching and learning science, models-based science teaching, and STEM science student research. Topics include the scientific 'process' skills, project-based learning, the 5E instructional model, and the interdisciplinary connection of science to other STEM	Prerequisites: A grade of C or better in EPD205.	LEC 3.0 3.0 3.0
EPD258	Science, Technology, Engineering, and Mathematics (STEM) Education and Engineering	Overview of the current status of Science, Technology, Engineering, and Mathematics (STEM) education and engineering in the United States. Emphasis on the underlying principles of engineering education and project-based learning. Topics include a brief history of engineering and its disciplines, technical communication skills, problem solving and teamwork, ethics, and engineering systems with modeling and design	Prerequisites: A grade of C or better in EPD205.	LEC 3.0 3.0 3.0
EPD259	Science, Technology, Engineering, and Mathematics (STEM) Education and Mathematics	Overview of the current status of Science, Technology, Engineering, and Mathematics (STEM) education and mathematics in the United States and the Mathematics Common Core Standards. Emphasis on techniques associated with the inquiry-based approach to teaching and learning mathematics, project-based learning, and the interdisciplinary connection of mathematics to other STEM fields. Strategies for practical application in the	Prerequisites: A grade of C or better in EPD205.	LEC 3.0 3.0 3.0
EPD270	Theoretical and Research Foundations of Language and Literacy	Focus on scientifically-based research as the foundation for classroom reading instruction. Emphasis on the five major areas of reading: phonemic awareness, phonics, fluency, vocabulary, and comprehension. Application of techniques for organizing and implementing explicit, systematic instruction in each of these areas, and methods of	Prerequisites: Must hold a valid Arizona Elementary, Secondary, Special Education, or Early Childhood teaching certificate, or permission of Department or Division.	LEC 3.0 3.0 3.0
EPD271AA	Essential Elements of Elementary Reading and Writing Instruction K-8	Overview of the interrelated critical components of reading and writing instruction. Focus on developmental stages, benchmarks, and research-based instructional strategies to effectively teach literacy in the elementary	Prerequisites: Must hold a valid Arizona Elementary, Secondary, Special Education, or Early Childhood teaching certificate, or	LEC 3.0 3.0 3.0

EPD271AB	Essential Elements of Adolescent Reading and Writing Instruction 6-12	Focus on the theories, methods, and models of the essential elements needed to develop and improve reading and writing skills of adolescents.	Prerequisites: Must hold a valid Arizona Elementary, Secondary, Special Education, or Early Childhood teaching certificate, or	LEC 3.0 3.0 3.0
EPD272AA	Elements of Elementary Content Area Reading and Writing K-8	Focus on practical and effective methods and strategies for the teaching of reading and writing in the elementary content area based on research-based principles and theories.	Prerequisites: Must hold a valid Arizona Elementary, Secondary, Special Education, or Early Childhood teaching certificate, or	LEC 3.0 3.0 3.0
EPD272AB	Elements of Adolescent Content Area Reading and Writing 6-12	Focus on practical and effective methods and strategies for the teaching of reading and writing in the adolescent content area based on research-based principles and theories.	Prerequisites: Must hold a valid Arizona Elementary, Secondary, Special Education, or Early Childhood teaching certificate, or	LEC 3.0 3.0 3.0
EPD274	Reading Assessment	Focus on assessment practices and systems including examining assessments, data collection and analysis, diagnosing reading difficulties, developing student growth plans, and utilizing data to provide appropriate effective instruction to increase literacy success for all	Prerequisites: Must hold a valid Arizona Elementary, Secondary, Special Education, or Early Childhood teaching certificate, or permission of Department or Division.	LEC 6.0 6.0 6.0
EPD276	The Teacher Leader	Focus on K-12 teachers' skills as recognized teacher leaders. Includes reading, summarizing, and analyzing current educational research and theory about the teacher leader. Examination of the effect of informal and formal roles of the teacher leader in the schools. Also covers discovery of personal philosophies of	Prerequisites: Must hold a valid Arizona Elementary, Secondary, Special Education, or Early Childhood teaching certificate, or permission of Department or Division.	L+L 3.0 3.0 3.0
EPD277AA	Reading Field Experience K-5	Focus on the practical application of current philosophical theories, methods, and models of assessment and instruction for remediation of reading.	Prerequisites: A grade of C or better in EPD270, EPD271AA, EPD272AA, EPD274, EPD276, and must hold a valid Arizona Elementary, Secondary, Special Education, Early Childhood teaching certificate, or permission of Department or Division.	LAB 3.0 3.0 0.0
EPD277AB	Reading Field Experience 6-12	Focus on the practical application of current philosophical theories, methods, and models of assessment and instruction for remediation of reading.	Prerequisites: A grade of C or better in EPD270, EPD271AB, EPD272AB, EPD274, EPD276, and must hold a valid Arizona Elementary, Secondary, Special Education teaching certificate, or permission of	LAB 3.0 3.0 0.0

EPD287	Science, Technology, Engineering, and Mathematics Education (STEM) Education Capstone Project	Organized and tailored around completed coursework in Science, Technology, Engineering, and Mathematics (STEM) education. Structured to provide a capstone experience by providing opportunities for individualized research and study guided by professional expertise. Allows for best opportunities of independent study and individualized learning to maximize teacher development and knowledge in the STEM fields. Final project required. Includes a development plan for	Prerequisites: A grade of C or better in EPD256, EPD257, EPD258, and EPD259.	LEC 3.0 3.0 3.0
EPS150	Introduction to Entrepreneurship	Overview of entrepreneurship. Includes the entrepreneurial process and the skills required to be successful, including starting, planning, financing,	Prerequisites: None.	LEC 3.0 3.0 3.0
EPS151	Project-Based Entrepreneurship: Community Solutions	Practical experience in applying core entrepreneurial skills and knowledge in a real-world context including innovation and creativity exercises. Application of knowledge and skills from earlier coursework to develop and present solutions to real-world situations currently faced by Entrepreneurs, Community-Based	Prerequisites: A grade of C or better in EPS150 or permission of Instructor.	LEC 3.0 3.0 3.0
EPS160	New Venture Creation	Process of starting a new venture including evaluating specific business opportunities identifying financing alternatives, and defining start-up issues.	Prerequisites: None.	LEC 2.0 2.0 2.0
EPS161	New Venture Law and Finance	Introduction to the principles of legalization and capitalization of a new business venture. Includes the processes required to organize, register, finance,	Prerequisites: None.	LEC 3.0 3.0 3.0
EPS162	Introduction to Social Entrepreneurship	Introduction to the history, theory, and emerging activities of social entrepreneurship. Includes management skills for social entrepreneurial organizations, scaling of social impact, and social performance measurement. Emphasis on social capital,	Prerequisites: None.	LEC 3.0 3.0 3.0
EPS165	New Venture Feasibility Analysis	Introduction to the industry's market and competitive structure. Includes the technical skills to develop a competitive strategy for entry into the business segment. Covers the market potential evaluation, niche identification, analysis of competition, and development of customer profiles. Also involves development of a	Prerequisites: None.	LEC 2.0 2.0 2.0

EPS180	Technology Business Planning	Fundamentals of identifying new technologies and innovations for profitable commercial feasibility. Determination of capabilities, resources, and interests of the entrepreneur. Evaluation and selection of technology opportunities. Creation of business concept and plan. Customer development and business models. Finances, venture capital and accounting. Marketing and sales. Legal formation and intellectual property.	Prerequisites: None.	LEC 3.0 3.0 3.0
EPS195	Business Start-Up and Planning	Development of a feasibility approach to strategic decision making concerning new venture start-up. Includes development of a business feasibility study	Prerequisites: None.	LEC 2.0 2.0 2.0
EQS105	Principles of Equine Science	Breeds, colors and markings; horse selection; basic conformation; structures of the hoof; footfall sequences; vision, managed health program; nutrition principles; management practices, Arizona issues and history and	Prerequisites: Permission of Instructor.	LEC 3.0 3.0 3.0
EQS120	Equine Anatomy and Physiology	Study of structure and function of the equine. Includes cell structure, anatomy and physiology of major systems with emphasis on skeletal, muscular, and digestive systems. Incorporates detailed discussion and	Prerequisites: A grade of C or better in EQS105 or permission of Department or Division.	L+L 4.0 5.0 5.0
EQS130	Equine Business and Law	Practices and records used in the equine business. Includes record keeping systems and basic accounting principles; taxes; personnel management practices; computer programs for record keeping and operations management. Addresses legal aspects and laws unique	Prerequisites: None.	LEC 3.0 3.0 3.0
EQS140	Equine Behavior	Equine behavior modification using the horse's natural behavior patterns. Emphasis on intelligence level, vision, emotions, hearing, and attention span of the	Prerequisites: A grade of C or better in EQS105 or permission of Department or Division.	LEC 3.0 3.0 3.0
EQS162	Equine and Stable Management I	Focus on daily stable operations in the care and management of horses. Practical experience in basic horse husbandry, horsemanship, and stable management. Development of ground handling skills and use of lunge line and round penning techniques. Topics include feeding, watering, stable sanitation, grooming, bathing, vaccines, parasite control, safety,	Prerequisites: A grade of C or better in EQS105 or permission of Department or Division.	L+L 3.0 4.0 4.0

EQS162VT	Equine Management for the Veterinary Technician	A hands-on introduction to daily stable operations in the care and management of horses. Practical experience with various assigned horses in basic horse husbandry, horsemanship, and stable management. Development of ground handling skills during various activities related to the care of horses. Effective use of lunge line and round penning techniques. Topics include feeding, watering, stable sanitation, grooming, bathing, lameness exams, vaccines, blood draws, parasite	Prerequisites: Veterinary Technician student currently enrolled in Mesa Community College (MCC) Veterinary Technology Program or student currently enrolled in Scottsdale Community College (SCC) Equine Science Program on track with Mesa Community College (MCC) Veterinary Technology Program upon	L+L 2.0 4.0 4.0
EQS195	Equine Therapies I	Designed to acquaint students with equine therapies for major muscle groups, the skeletal system and the hoof of the horse. The relationship that exists between the listed systems, equine locomotion and lameness problems will be discussed. Discussion, demonstration, and/or practical hands-on opportunities of equine	Prerequisites: A grade of C or better in EQS120 and EQS264, or permission of Department or Division.	L+L 3.0 6.0 6.0
EQS200	Principles of Equine Nutrition	Basic principles of equine nutrition and digestion. Proper selection, evaluation and utilization of feeds as well as the feeding and care of the equine in various stages of production, growth and performance. Emphasis on nutrient content and ration evaluation, general health and feed management. Identifies specific nutritional needs of each class of equine and	Prerequisites: A grade of C or better in EQS120 or permission of Department or Division.	LEC 3.0 3.0 3.0
EQS220	Equine Reproduction	Reproductive anatomy and physiology; care and management of the breeding stallion; breeding procedures and artificial insemination. Care of pregnant	Prerequisites: A grade of C or better in EQS120 or permission of Department or Division.	LEC 3.0 3.0 3.0
EQS225	Equine Health and Disease Management	Aspects of equine health and disease prevention. Emphasis on preventive maintenance. Preventive medicine and necessary managerial practices needed to keep the equine athlete, broodmare, or family horse	Prerequisites: A grade of C or better in EQS120 or permission of Department or Division.	LEC 3.0 3.0 3.0
EQS250	Equine Evaluation	Fundamental relationship between good conformation and ability of the horse to remain sound and useful. Includes basic skeletal structure, common deviations in range of motion and evidence of lamenesses. Breed conformation standards and performance events for the	Prerequisites: A grade of C or better in EQS120 or permission of Department or Division.	L+L 3.0 4.0 4.0

EQS264	Equine and Stable Management II	Advanced practical experience in horse and stable management. Practical and supervisory experience in daily stable operations that increase skill and knowledge level in the care and management of horses. Topics include nutrition, diseases and their prevention, environmental issues parasite, pests and rodent control, safety, horse handling, wounds and their treatments, injury and treatments, inventory control,	Prerequisites: A grade of C or better in EQS162, or permission of Department or Division.	L+L 3.0 4.0 4.0
EQS275	Equine Lameness	A continuing study of equine skeletal anatomy with emphasis on the normal function of front and hind legs and the hoof. Covers methods of evaluating various deviations that present as lameness in horses; how conformation, gait, and lameness relate to performance, physical and behavior issues; the protocol of equine gait assessments on actual horses; and how to diagram the footfalls of the horse. Topics include the body's response to injury, forms of therapy, types of	Prerequisites: A grade of C or better in EQS250, or permission of Department or Division.	L+L 4.0 4.0 4.0
EQS280	Equine Science Internship	Equine industry work experience at faculty approved site. Focus of internship is immersion in an area of interest in or related to equine industry.	Prerequisites: A grade of C or better in EQS264 or permission of Department or Division.	LAB 3.0 15.0 0.0
EQS283	Special Event Internship	Hands-on career track experience before, during and after a major equine event. Emphasis on event coordination and management issues.	Prerequisites: A grade of C or better in EQS105 or permission of Department or Division.	LAB 1.0 2.0 0.0
EQS285	Equine Science Practicum	Equine industry work experience at faculty approved site.	Prerequisites: A grade of C or better in EQS264 or permission of Department or Division.	LAB 2.0 10.0 0.0
EQS295	Equine Therapies II	Designed to train students with advanced equine therapy methods to relieve common conditions and pathologies for the musculoskeletal system. Identifying biomechanics, variations and abnormalities, muscle tension, joint stress, common injuries and lameness. Identifying and assessing the relationship between conformational flaws, range of motion and lameness as they align with the performance of specific disciplines. Discussion and demonstration with practical hands-on training of advanced equine therapy methods. Designed to train students to work in the field as an Equine Massage Practitioner with the ability to evaluate	Prerequisites: A grade of B or better in EQS195 or permission of Department or Division.	L+L 3.0 6.0 6.0

EQS298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
ESL002	Basic English as a Second Language II	Listening, speaking, reading, and writing in English at a high beginning level. Focus on survival skills related to life in the United States. Continuing development of	Prerequisites: A grade of C or better in ESL001 or permission of Instructor.	LEC 6.0 6.0 6.0
ESL010	English as a Second Language I: Grammar	First level of English as a Second Language (ESL) grammar. Emphasis on present and past verbs, basic parts of speech, simple sentence structure, and	Prerequisites: Appropriate ESL placement test score.	LEC 3.0 3.0 3.0
ESL011	English as a Second Language I: Listening and Speaking	Emphasis on listening and speaking skills involving survival skills. Asking and answering questions related to work, shopping, and personal safety.	Prerequisites: Appropriate ESL placement test score or a grade of C or better in ESL002.	LEC 3.0 3.0 3.0
ESL012	ESL I-Writing with Oral Practice	Emphasis on basic conventions of writing in English. Includes introduction to the alphabet, capitalization, punctuation, and simple sentence structure.	Prerequisites: Appropriate ESL placement test score or permission of Instructor.	LEC 3.0 3.0 3.0
ESL013	Vocabulary for ESL I	Emphasis on the acquisition of basic English vocabulary including identifying and pronouncing words related to people, medical/dental care, occupations and other	Prerequisites: Appropriate ESL placement test score or permission of Instructor.	L+L 1.0 1.0 1.0
ESL016	Reading English as a Second Language I	Designed for students who are learning English as a second language. Skills needed to become proficient readers in English. Sound symbol relationships of the English alphabet. Essential vocabulary for daily communication both in isolation and context.	Prerequisites: Appropriate ESL placement test score.	LEC 3.0 3.0 3.0
ESL020	English as a Second Language II: Grammar	Second level of English as a Second Language (ESL) grammar. Emphasis on present, past, and future verbs, modals, compound sentence structure, and identifying	Prerequisites: Appropriate ESL placement test score or a grade of P or C or better in ESL010.	LEC 3.0 3.0 3.0
ESL021	English as a Second Language II: Listening and Speaking	Emphasis on listening and speaking skills involving social exchange. Asking and answering questions, using tag questions. Practice with question and answer	Prerequisites: Appropriate ESL placement test score or a grade of C or better in ESL010 or ESL011 or	LEC 3.0 3.0 3.0
ESL022	ESL II-Writing with Oral Practice	Emphasis on basic writing skills, accompanied by recitation of short writings. Sentence patterns and introduction of paragraph writing.	Prerequisites: Appropriate ESL course placement score or a grade of C or better in ESL012 or	LEC 3.0 3.0 3.0

ESL023	Vocabulary for ESL II	Emphasis on the acquisition of basic English vocabulary including identifying and pronouncing words related to people, medical/dental care, occupations and other	Prerequisites: Appropriate ESL placement test score or permission of Instructor.	L+L 1.0 1.0 1.0
ESL026	Reading English as a Second Language II	Designed for students who are learning English as a second language. Continued development of vocabulary and reading comprehension skills.	Prerequisites: Appropriate ESL placement test score or a grade of C or better in ESL016 or permission of	LEC 3.0 3.0 3.0
ESL030	English as a Second Language III: Grammar	Third level of English as a Second Language (ESL) grammar. Emphasis on simple, progressive, and perfect verbs, complex sentence structure, paragraph building,	Prerequisites: Appropriate ESL placement test score or a grade of P or C or better in ESL020.	LEC 3.0 3.0 3.0
ESL031	English as a Second Language III: Listening and	Emphasis on listening and speaking skills related primarily to the academic environment. Asking questions, working in small groups, using college	Prerequisites: Appropriate ESL placement test score or a grade of C or better in ESL020 or ESL021 or	LEC 3.0 3.0 3.0
ESL032	ESL III-Writing with Oral Practice	Emphasis on complex sentence patterns in writing and speech. Introduction to the prewriting and writing process in a college setting.	Prerequisites: Appropriate ESL course placement score or a grade of C or better in ESL022 or	LEC 3.0 3.0 3.0
ESL033	Vocabulary for ESL III	Emphasis on the acquisition of basic English vocabulary including identifying and pronouncing words related to people, medical/dental care, occupations and other	Prerequisites: Appropriate ESL placement test score or permission of Instructor.	L+L 1.0 1.0 1.0
ESL036	Reading English as a Second Language III	Designed for students who are learning English as a second language. Instruction for more advanced vocabulary and reading comprehension skills.	Prerequisites: Appropriate ESL placement test score or a grade of C or better in ESL026 or permission of	LEC 3.0 3.0 3.0
ESL040	English as a Second Language IV: Grammar	Fourth level of English as a Second Language (ESL) grammar. Emphasis on verb forms, modals, participles, gerunds and infinitives, clauses, and paragraph writing.	Prerequisites: Appropriate ESL placement test score or a grade of P or C or better in ESL030.	LEC 3.0 3.0 3.0
ESL041	English as a Second Language IV: Listening and	Emphasis on academic skills. Listening to lectures, notetaking, peer interaction, accessing and using media resources, formal oral presentations.	Prerequisites: Appropriate ESL placement test score or a grade of C or better in ESL030 or ESL031 or	LEC 3.0 3.0 3.0
ESL042	ESL IV-Writing with Oral Practice	Emphasis on paragraph writing and oral recitation of complex sentences and paragraphs. Introduction to the prewriting and writing process for short essays.	Prerequisites: Appropriate ESL course placement score or a grade of C or better in ESL032 or	LEC 3.0 3.0 3.0
ESL046	Reading English as a Second Language IV	Developed for students of English as a second language. Development of advanced vocabulary, comprehension skills, and culture awareness.	Prerequisites: Appropriate ESL placement test score or a grade of C or better in ESL036 or permission of	LEC 3.0 3.0 3.0
ESL049	General Vocational English as a Second Language	General English speaking, listening, reading, and writing skills needed for use at work.	Prerequisites: Appropriate ESL placement test score, or a grade of "C" or better in ESL010, or	LEC 3.0 3.0 3.0

ESL050	Review Grammar For ESL	Review of English as a Second Language (ESL) grammar. Emphasis on verb forms, parts of speech, and sentence structure.	Prerequisites: Appropriate ESL course placement score, or a grade of C or better in ESL040, or	LEC 3.0 3.0 3.0
ESL050AA	Basic Review Grammar for ESL	Review of the use of English verbs and word placement in sentences for ESL (English as a Second Language) students who have some previous experience in reading and writing English. Appropriate for students	Prerequisites: Appropriate ESL placement test score, or a grade of C or better in ESL010 or permission of Instructor.	L+L 1.0 1.0 1.0
ESL050AB	Intermediate Review Grammar for ESL	Review of auxiliary verbs and the comparative and superlative for ESL (English as a Second Language) students who have some previous experience in reading and writing English. Appropriate for students	Prerequisites: Appropriate ESL placement test score, or a grade of "C" or better in ESL020, or permission of Instructor.	L+L 1.0 1.0 1.0
ESL050AC	Advanced Review Grammar for ESL	Review of verbals and gerunds for ESL (English as a Second Language) students who have some previous experience in reading and writing English. Appropriate for students who want to practice sentence skills in	Prerequisites: Appropriate ESL placement test score, or a grade of "C" or better in ESL030, or permission of Instructor.	L+L 1.0 1.0 1.0
ESL051	Pronunciation Improvement for ESL Speakers	Individualized pronunciation practice and drills for English as a second language (ESL) speakers.	Prerequisites: Appropriate ESL course placement score, or a grade of C or better in (ESL020 or ESL021 or ESL022 or ESL026) or permission	LEC 3.0 3.0 3.0
ESL053	Phonics	Designed for students who are learning English as a second language. Includes the study of the speech sounds used in English as represented by the written symbols of the alphabet; recognition of spelling	Prerequisites: Appropriate ESL course placement score, or a grade of C or better in (ESL020, or ESL021, or ESL022, or ESL026), or	LEC 3.0 3.0 3.0
ESL054	American Culture	Reading and writing about American culture including history, institutions and sports, and entertainment.	Prerequisites: Appropriate ESL placement test score or a grade of C or better in ESL040 or ESL046 or permission of Instructor.	LEC 3.0 3.0 3.0
ESL054AA	American Culture: History	Reading and writing about American history.	Prerequisites: Appropriate ESL placement test score or a grade of C or better in ESL040 or ESL046 or permission of Instructor.	L+L 1.0 1.0 1.0
ESL054AB	American Culture: Institutions and Customs	Reading and writing about American cultural institutions and customs.	Prerequisites: Appropriate ESL placement test score or a grade of C or better in ESL040 or ESL046 or permission of Instructor.	L+L 1.0 1.0 1.0

ESL054AC	American Culture: Sports and Entertainment	Reading and writing about American sports and entertainment.	Prerequisites: Appropriate ESL placement test score or a grade of C or better in ESL040 or ESL046 or permission of Instructor.	L+L 1.0 1.0 1.0
ESL061	Informal Conversational and Written English for Non-	Practice speaking and writing English in informal settings. Emphasis on friendly conversational techniques and effective use of the computer and the	Prerequisites: Appropriate ESL placement test score or a grade of P or C or better in ESL020 or ESL021	LEC 3.0 3.0 3.0
ESL071	Advanced Pronunciation and Oral Reading for ESL	Pronunciation practice and review, spelling of English sounds, and oral reading for stress and intonation patterns in English.	Prerequisites: A grade of C or better in ESL051 or permission of Instructor.	LEC 3.0 3.0 3.0
ESL077	Preparatory Academic Writing I for ESL	Emphasizes preparation for college level composition and related reading tasks with a focus on communicating through complete, grammatically correct	Prerequisites: Appropriate writing placement test score or permission of Department or Division.	LEC 3.0 3.0 3.0
ESL087	Preparatory Academic Writing II for ESL	Emphasizes preparation for college-level composition and related reading tasks with a focus on critical writing, reading, and thinking skills and processes.	Prerequisites: Appropriate ESL course placement score or a grade of C or better in ESL042 or ESL202 or permission of ESL Coordinator.	LEC 3.0 3.0 3.0
ESL097	Preparatory Academic Writing III for ESL	Emphasizes preparation for first year composition with a focus on critical writing, reading, and thinking skills and processes at an increased level of academic complexity.	Prerequisites: A grade of C or better in ESL087 or permission of Department or Division Chair.	LEC 3.0 3.0 3.0
ESL101	English as a Second Language I	Beginning language skills for English language learners to develop reading, writing, listening, and speaking skills. Emphasizes integrated reading and writing skills.	Prerequisites: Appropriate ESL placement score or permission of Instructor.	LEC 6.0 6.0 6.0
ESL101AA	English as a Second Language IA	Beginning language skills for English language learners to develop reading, writing, listening, and speaking skills. Emphasizes integrated reading and writing skills.	Prerequisites: Appropriate ESL placement score or permission of Instructor.	LEC 3.0 3.0 3.0
ESL101AB	English as a Second Language IB	Beginning language skills for English language learners to develop reading, writing, listening, and speaking skills. Emphasizes integrated reading and writing skills.	Prerequisites: Appropriate ESL placement score or permission of Instructor.	LEC 3.0 3.0 3.0
ESL102	English as a Second Language II	Low-intermediate language skills for English language learners to develop reading, writing, listening, and speaking skills. Emphasizes integrated reading and writing skills.	Prerequisites: A grade of C or better in ESL101, or (ESL101AA and ESL101AB), or appropriate placement score, or permission of	LEC 6.0 6.0 6.0
ESL102AA	English as a Second Language IIA	Language skills for English language learners to develop reading, writing, listening, and speaking skills. Emphasizes integrated reading and writing skills.	Prerequisites: A grade of C or better in ESL101, or (ESL101AA and ESL101AB), or appropriate placement score, or permission of	LEC 3.0 3.0 3.0

ESL102AB	English as a Second Language IIB	Language skills for English language learners to develop reading, writing, listening, and speaking skills. Emphasizes integrated reading and writing skills.	Prerequisites: A grade of C or better in ESL101, or (ESL101AA and ESL101AB), or appropriate placement score, or permission of	LEC 3.0 3.0 3.0
ESL110	Beginning to Low-Intermediate English Listening and Speaking	Beginning to low-intermediate English language listening and speaking skills on familiar topics. Focus on the development of an appropriate degree of accuracy, fluency, and spontaneity to allow for interactions	Prerequisites: Appropriate ESL placement score or permission of Instructor.	LEC 3.0 3.0 3.0
ESL140	Beginning to Low-Intermediate English Grammar	Beginning to low-intermediate grammar for English language learners. Emphasis on use of language in familiar contexts.	Prerequisites: Appropriate ESL placement score or permission of Instructor.	LEC 3.0 3.0 3.0
ESL201	English as a Second Language III	High-intermediate language instruction for English language learners to build proficiency in academic and professional listening, speaking, reading, and writing. Focuses on integrated reading and writing skills.	Prerequisites: A grade of C or better in ESL102, or (ESL102AA and ESL102AB), or appropriate ESL placement score, or permission of	LEC 6.0 6.0 6.0
ESL201AA	English as a Second Language IIIA	High-intermediate language instruction for English language learners to build proficiency in academic and professional listening, speaking, reading, and writing. Focuses on integrated reading and writing skills.	Prerequisites: A grade of C or better in ESL102, or (ESL102AA and ESL102AB), or appropriate ESL placement score, or permission of	LEC 3.0 3.0 3.0
ESL201AB	English as a Second Language IIIB	High-intermediate language instruction for English language learners to build proficiency in academic and professional listening, speaking, reading, and writing. Focuses on integrated reading and writing skills.	Prerequisites: A grade of C or better in ESL102, or (ESL102AA and ESL102AB), or appropriate ESL placement score, or permission of	LEC 3.0 3.0 3.0
ESL202	English as a Second Language IV	Advanced language instruction for English language learners to further develop proficiency in academic and professional listening, speaking, reading, and writing with an introduction to information literacy. Emphasizes integrated reading and writing skills for use in research	Prerequisites: A grade of C or better in ESL201, or (ESL201AA and ESL201AB), or appropriate ESL placement score, or permission of Instructor.	LEC 6.0 6.0 6.0
ESL202AA	English as a Second Language IVA	Advanced language instruction for English language learners to further develop proficiency in academic and professional listening, speaking, reading, and writing with an introduction to information literacy. Emphasizes integrated reading and writing skills for use in research	Prerequisites: A grade of C or better in ESL201, or (ESL201AA and ESL201AB), or appropriate ESL placement score, or permission of Instructor.	LEC 3.0 3.0 3.0
ESL202AB	English as a Second Language IVB	High-intermediate language instruction for English language learners to build proficiency in academic and professional listening, speaking, reading, and writing. Focuses on integrated reading and writing skills.	Prerequisites: A grade of C or better in ESL201, or (ESL201AA and ESL201AB), or appropriate ESL placement score, or permission of	LEC 3.0 3.0 3.0

ESL210	High-Intermediate to Advanced English Listening and Speaking	High-Intermediate to advanced English language listening and speaking skills on academic, professional, and socio-cultural topics. Focus on the development of accuracy, fluency, and spontaneity to allow for	Prerequisites: A grade of C or better in ESL102, or appropriate ESL placement score, or permission of Instructor.	LEC 3.0 3.0 3.0
ESL240	High-Intermediate to Advanced English Grammar	High-intermediate to advanced grammar for English language learners. Emphasis on use of language for different situations.	Prerequisites: A grade of C or better in ESL102, or appropriate ESL placement score, or permission of	LEC 3.0 3.0 3.0
ESL250	Vocational English	Overview of job-related vocabulary, language skills, and intercultural competence for English language learners to use in pursuing, attaining, and maintaining employment.	Prerequisites: A grade of C or better in ESL102, or (ESL102AA and ESL102AB), or appropriate ESL placement score, or permission of	LEC 3.0 3.0 3.0
ESL298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
ESL298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
ESL298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0

ESP180	College and Career Readiness	This college and career readiness course is designed to prepare students for the rigors and expectations of post-secondary education. Students will learn essential professional skills required for success in the workplace, as well as learn vital academic skills required for success in the classroom. Students will be introduced to educational pathways for career exploration, learn how to write a professional resume, cover letter, conduct	Prerequisites: Admission into the Emergency Medical Technology program. Successful completion of RDG100 or higher or appropriate reading placement into CRE101.	40
EST102	Aesthetics Essentials	As students begin their training in Aesthetics, they will begin to develop and demonstrate proficiencies in effective client communication, interpersonal skills, and will learn how to deliver an effective skin care facial treatment and client pre and post consultations. Topics will also include sanitation, Arizona laws, client care,	Prerequisites: Admission to the Aesthetics program, or Program Manager's approval.	200
EST110	Advanced Aesthetics	Theory and application of advanced skin care modalities, resurfacing, and cosmetic chemistry. Hair removal techniques, makeup application, and an introduction to body treatments are also included. Application of theory and skills through treatment services provided to the public. Focus on communication and documentation to create customized treatment plans and product	Prerequisites: EST102 with a grade of 80% or better, or Program Manager's approval.	200
EST115	Aesthetics Mastery	Focus on theories and performance of comprehensive professional aesthetics treatments for the public including communication and documentation to create customized treatment plans and product recommendations for clients that follow all safety and infection control procedures in compliance with the Arizona Barbering and Cosmetology Board (BCB). Overview of business planning and employment in the field including marketing, job search strategies,	Prerequisites: EST110 with a grade of 80% or better, or Program Manager's approval.	200
ETH210	Multicultural Representation in the History of STEM	Aims to fill a gap by exploring the perspectives, experiences, and contributions of individuals from various cultural backgrounds in the study of science, technology, engineering, and mathematics (STEM). Analyzes and synthesizes how different cultures have shaped scientific knowledge, examining the impact of diversity on innovation and problem-solving, and	Prerequisites: None.	LEC 3.0 3.0 3.0

ETL220	Online Teaching and Learning I	Application of and experience using an online teaching and learning environment from a student's perspective to inform the design and support of an online course environment. Application and evaluation of online learning principles and tools for teaching and learning. Identification and development of online facilitation knowledge and skills. Introduction to the best practices	Prerequisites: Permission of Instructor.	LEC 3.0 3.0 3.0
ETL221	Online Teaching and Learning II	Experience with creating an online or hybrid duplicative course module structure in an online teaching and learning environment using evidence-based practices in course design. Develop learning objectives and module map based on curricular principles. Using instructional design techniques develop and align materials, activities, assignments and assessments to learning objectives. Discuss and develop active learning strategies for presenting content, facilitating	Prerequisites: A grade of C or better in ETL220 or permission of Instructor.	LEC 3.0 3.0 3.0
EXS101	Introduction to Exercise Science	Introductory course that will provide the student with a general overview of the key theories and concepts, professions, and research areas associated with the field of Exercise Science. Educational pathways and	Prerequisites: None.	LEC 3.0 3.0 3.0
EXS123	Active for Life	Uses a variety of behavior change strategies to help fit physical activity into a busy schedule. Addresses the root causes of physical inactivity and focuses on the skills needed to establish a lifelong habit of physical	Prerequisites: None.	L+L 2.0 4.0 4.0
EXS125	Introduction to Exercise Physiology	Principles of exercise science applied to fitness instruction. Major factors related to the function of the human body will be examined/introduced with an emphasis on exercise physiology and functional	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: EXS101 or permission of Instructor.	LEC 3.0 3.0 3.0
EXS138	Starting a Fitness Business	Overview of starting a fitness business. Skills for becoming a successful and effective fitness business	Prerequisites: None.	LEC 1.0 1.0 1.0
EXS146	Introduction to Exercise Testing	Introductory course in exercise testing, to include health appraisal, risk stratification, and the selection and administration of common evidence-based assessments for apparently healthy populations.	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: EXS101 or permission of Instructor. Prior completion of or concurrent enrollment in EXS125 is	L+L 1.0 2.0 2.0

EXS215	Resistance Training and Recovery Techniques	Fundamental methods for safe and effective instruction of resistance, functional, and athletic conditioning exercises. Application of foundational principles of physiology and kinesiology. Overview of warm-up,	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: EXS101 or permission of Instructor.	L+L 3.0 4.0 4.0
EXS217	Cardiorespiratory and Flexibility Training	Fundamental methods for safe and effective instruction of cardiorespiratory and flexibility training exercises. Application of foundational principles of physiology and	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: EXS101 or permission	L+L 3.0 4.0 4.0
EXS220	Personal Trainer Practicum	Integration of knowledge, skills and abilities developed in the prerequisite classes to develop best practices as a fitness professional. Assessment of clients' baseline fitness; development and implementation of a safe and appropriate exercise program. This capstone classroom experience is for students in the personal training	Prerequisites: A grade of C or better in EXS112, EXS125, EXS130, and FON105.	L+L 3.0 3.0 3.0
EXS246	Advanced Exercise Testing	Advanced course in exercise testing, to include health appraisal, risk stratification, and the selection and administration of evidence-based assessments for apparently healthy and athletic populations. Pharmacology, special populations, and environmental	Prerequisites: A grade of C or better in EXS146 or permission of Instructor.	L+L 2.0 3.0 3.0
EXS250	Applied Kinesiology	Anatomical and physiological fundamentals and applications of human movement. Emphasizes the relationship between anatomical structure and function of the musculoskeletal system. Examines neuromuscular aspects of human motion and fundamental stabilization and movement of the extremities and spine. Analyzes kinesiological aspects	Prerequisites: A grade of C or better in (BIO160 or BIO201) and EXS125 and (EXS130 or EXS216).	LEC 4.0 4.0 4.0 LAB 0.0 2.0 2.0
EXS255	Program Design: Muscular Fitness and Performance	Advanced principles of muscular fitness, sports performance, and recovery techniques including needs analysis, interpretation of assessment outcomes, and evidence-based program design for healthy and athletic populations. Considerations for special populations and	Prerequisites: A grade of C or better in (EXS125 and EXS146) or permission of Instructor.	L+L 3.0 4.0 4.0
EXS257	Program Design: Cardiorespiratory Fitness	Advanced principles of cardiorespiratory fitness and weight management including needs analysis, interpretation of assessment outcomes, and evidence-based program design for healthy and athletic populations. Considerations for special populations and	Prerequisites: A grade of C or better in (EXS125 and EXS146) or permission of Instructor.	L+L 3.0 4.0 4.0

EXS270	Exercise Science Internship	A capstone experience in a fitness or health related facility. Eighty (80) hours of designated work per credit.	Prerequisites: Completion of nine (9) credits of EXS courses with a grade of C or better, current CPR and AED card, and permission of Department/Division Chair and/or the	LAB 3.0 3.0 0.0
EXS270AA	Exercise Science Internship	A capstone experience in a fitness or health related facility. Eighty (80) hours of designated work per credit.	Prerequisites: Completion of nine (9) credits of EXS courses with a grade of C or better, current CPR and AED card, and permission of Department/Division Chair and/or the	LAB 1.0 1.0 0.0
EXS270AB	Exercise Science Internship	A capstone experience in a fitness or health related facility. 160 hours of designated work per credit.	Prerequisites: Completion of nine (9) credits of EXS courses with a grade of C or better, current CPR and AED card, and permission of Department/Division Chair and/or the	LAB 2.0 2.0 0.0
EXS275	Sport Science Internship	A capstone experience in a fitness or health related facility supervised by a National Strength and Conditioning Association (NSCA) Certified Strength and Conditioning Specialists (CSCS) professional. Eighty (80) hours of designated work per credit.	Prerequisites: Completion of a grade of C or better in nine (9) credits of EXS courses, approved by the Department Chair and/or Director, current CPR and AED card, and	L+L 3.0 3.0 0.0
EXS275AA	Sport Science Internship	A capstone experience in a fitness or health related facility supervised by a National Strength and Conditioning Association (NSCA) Certified Strength and Conditioning Specialists (CSCS) professional. Eighty (80) hours of designated work per credit.	Prerequisites: Completion of a grade of C or better in nine (9) credits of EXS courses, approved by the Department Chair and/or Director, current CPR and AED card, and	L+L 1.0 1.0 0.0
EXS275AB	Sport Science Internship	A capstone experience in a fitness or health related facility supervised by a National Strength and Conditioning Association (NSCA) Certified Strength and Conditioning Specialists (CSCS) professional. Eighty (80) hours of designated work per credit.	Prerequisites: Completion of a grade of C or better in nine (9) credits of EXS courses, approved by the Department Chair and/or Director, current CPR and AED card, and	L+L 2.0 2.0 0.0
EXS280	Special Topics in Exercise Science	Conceptual and research basis of current topics in exercise science.	Prerequisites: None.	LEC 2.0 2.0 2.0
EXS280AA	Special Topics in Exercise Science	Conceptual and research basis of current topics in exercise science.	Prerequisites: None.	LEC 0.5 0.5 0.5
EXS280AB	Special Topics in Exercise Science	Conceptual and research basis of current topics in exercise science.	Prerequisites: None.	LEC 1.0 1.0 1.0

EXS282AA	Service-Learning Experience in Exercise Science	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 1.0 1.0 0.0
EXS282AC	Service-Learning Experience in Exercise Science	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 3.0 3.0 0.0
EXS290	Introduction to Evidence-Based Practice	Introduction to Evidence-Based Practice (EBP) as a framework for logical reasoning and informed decision-making in professional settings, particularly in the movement sciences. Students formulate professional questions, acquire and appraise relevant evidence, synthesize findings, and explore practical applications. Specific emphasis on the use of data to inform recommendations and consideration of audience,	Prerequisites: A grade of C or better in ENG101 or ENG107 or permission of Instructor. EXS101 OR HES100 OR FON100 OR FON241 recommended.	LEC 3.0 3.0 3.0
EXS298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
EXS298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
EXS298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
FAC101	HVAC for Residential Systems I	Introduction to major components and functions of residential heating, ventilation, and air conditioning (HVAC) systems, to include heat flow and basic	Prerequisites: None.	L+L 4.0 5.0 5.0

FAC115	Motors, Controls and Wiring Diagrams	Principles of three-phase motors. Wye and delta wiring. Calculation of motor current draw. Sequence of operation, wiring diagram and electrical components associated with industrial equipment. Procedures for	Prerequisites: None.	LEC 3.0 3.0 3.0
FAC115LL	Motors, Controls and Wiring Diagrams Lab	Drawing wiring diagrams, wiring systems and checking electrical circuits. Troubleshooting electrical problems of three-phase motors and controls. Safety stressed.	Prerequisites: None.	LAB 1.0 3.0 3.0
FAC186	Electro-Mechanical Devices	Concepts, principles, maintenance, and troubleshooting of mechanical and electro-mechanical devices. Mechanical alignment of shafts, pillow blocks, gears, and couplers on mechanical equipment. Bearings removal and installation. Installation and troubleshooting of pump seals. Vernier calipers, micrometers, tachometers. Use and operation of air flow hoods for air balancing. Belt drive systems and set up	Prerequisites: A grade of C or better in HVA130 or permission of Department.	L+L 3.0 5.0 5.0
FAC210	Facilities Air Conditioning Systems	Fundamental principles of air conditioning including all-air, all-water (hydronic) and air-water combination systems. Overview of the physical principles, including air distribution systems and heating and cooling load calculation. System components and application theory for boilers, chillers, pumps, fans, and cooling towers. Theory and application of central air conditioning systems, air cleaning and humidification devices, pressure boosting, heat storage, expansion and pressurization equipment. Properties of water, pressure distribution in hydronic systems, flow in pipes, pressure	Prerequisites: A grade of C or better in HVA130 or permission of Department.	L+L 4.0 6.0 6.0
FAC220	Controls and Instrumentation	Control theory and terminology, pneumatics, electrical, and electronic control devices, flow control devices, elementary and advanced control systems. Electric and electronic control systems, programmable logic controls, and facilities management systems. Process and terms used in instrumentation, methods of heat transfer, calculations for heat temperature, and heat transfer. Measuring and calculating pressure, fluid flow,	Prerequisites: A grade of C or better in FAC/HVA210 or permission of Department. Xref: FAC210	L+L 4.0 6.0 6.0

FAC231	Codes	Local codes, Federal Housing Administration and Urban Development standards. Acceptable building practices based on the Uniform Building Code, National Electric Code, Uniform Mechanical Code, and the Uniform Plumbing Code. Impact of American with Disabilities Act	Prerequisites: None.	L+L 3.0 5.0 5.0
FAC235	Commercial Air and Water Test and Balance	Specific types of duct distribution systems, fans, coil types and applications. Characteristics of Heating Ventilation and Air Conditioning (HVAC) piping systems. Specific types of pumps and applications. Air and water flow measuring and control devices. Collection and analysis of data specific to air handling systems. Principles of fluid dynamics, thermal loading factors,	Prerequisites: A grade of C or better in HVA210.	L+L 4.0 6.0 6.0
FAC240	Fire Protection Systems	Building occupant safety requirements including industry standards, regulations, building codes, fire codes and life safety codes. Fundamentals of fire protection system operation, inspection and maintenance. Principles of life safety systems including	Prerequisites: A grade of C or better in OSH106AC.	LEC 3.0 3.0 3.0
FAC298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
FAC298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
FAC298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0

FCS110	Influences on Young Children's Development	Overview of the influences on young children's development. Covers the principles, patterns, and assessment of child growth and development and a survey of the influences on development including routines, curriculum, environments, guidance, and child	Prerequisites: None.	LEC 3.0 3.0 3.0
FCS120	Developmentally Appropriate Environments for Young Children	Overview of policies, practices and procedures, legal, and regulatory standards of the Arizona Department of Health and Childcare licensing. Covers program planning and evaluation methods to ensure environments are developmentally appropriate for children zero to age eight and for continuous improvement efforts. Emphasis on health and safety	Prerequisites: None.	LEC 3.0 3.0 3.0
FCS130	Supporting Young Children and Their Families	Explores communication, collaboration, advocacy, ethics, and leadership needed to support young children and their families. Covers strategies designed to nurture these concepts utilizing technology, professional development, quality indicators, and	Prerequisites: None.	LEC 3.0 3.0 3.0
FCS250	Portfolio Development and Professional Writing	Techniques of portfolio development to document prior learning gained through experience, training, and/or previous education. Includes study of learning styles and levels, analysis of personal and vocational experiences, synthesis of these with competencies for specific courses, and integration of the above with other	Prerequisites: A grade of C or better in 12 credit hours of CFS and/or FCS coursework or permission of Program Director.	LEC 3.0 3.0 3.0
FCS260	Family and Consumer Science Internship	Work experience in community-based, family-focused service and/or educational organizations. 80 hours of	Prerequisites: Permission of Instructor.	LEC 1.0 1.0 0.0
FLA240	Foreign Language Teaching Methods	Introduction to methods and techniques for second-language teaching. Principles and procedures for building language proficiency, including the assessment of practical experience through mini-teaching situations	Prerequisites: None.	LEC 3.0 3.0 3.0
FMP105	Studio Production	Multiple camera studio production for corporate, film, cable, and broadcast applications. Basic single and multi-camera production techniques, talent and camera blocking, set design, scriptwriting; shooting; lighting, audio and video recording; production crew team member experience, pre-production planning and	Prerequisites: None.	LEC 3.0 2.0 2.0 LAB 0.0 3.0 3.0
FMP108	Video Production	Foundations of media production, including single camera shooting, audio recording, lighting, and editing.	Prerequisites: None.	LEC 3.0 2.0 2.0 LAB 0.0 3.0 3.0

FMP111	Screenwriting I	Provides a foundation in screenwriting for film and television, including introduction to story theory, character development, and screenplay format.	Prerequisites: None.	LEC 3.0 3.0 3.0
FMP111AA	Scripting for the Media	Provides an overview of screenwriting for short documentaries, podcasts, training films, commercials and public service announcements (PSAs).	Prerequisites: None.	LEC 3.0 3.0 3.0
FMP114	Audio Production	Focus on audio in the production of media projects. Emphasis on location-based, studio and sound room for corporate, cable and broadcast applications. Concepts covered include: microphones and audio recording equipment; audio production techniques using shotgun microphones or lavaliers while in the field; audio recording in the sound room, multi-track recording, and mixdown; audio editing using a non-linear computer	Prerequisites: A grade of C or better in FMP105 or FMP108.	LEC 3.0 2.0 2.0 LAB 0.0 3.0 3.0
FMP115	Introduction to Editing for Media	Introduction to editing for media on a nonlinear editing system.	Prerequisites: None.	L+L 3.0 4.0 4.0
FMP117	Introduction to Cinematography	Introductory workshop focusing on basic film and video camera operation and lighting. Emphasis on the role of the cinematographer, basic camera operation and lens selection, introduction to cinematic storytelling to include interpreting the script, basic lighting techniques,	Prerequisites: A grade of C or better in FMP108, or FMT136, or permission of Instructor.	L+L 3.0 5.0 5.0
FMP125	Podcasting	Overview of evolution and key elements of podcasting. Focuses on development and creation of original podcasts, including pre-production, post-production,	Prerequisites: None.	L+L 3.0 4.0 4.0
FMP134	Pre-Production for Film and Media	Introduction to elements of pre-production for film, television, and commercial productions. Focuses on aesthetics, writing, budgeting, and selecting cast and crew. Features pre-production meetings to establish style, location, production design, shot list/storyboard, sound design, and shooting schedule. Pre-production of one narrative or collaborative commercial project	Prerequisites: A grade of C or better in FMT100, or FMP108, or permission of Department or Division.	L+L 3.0 4.0 4.0
FMP151	TV and New Media Production	Introduction to multi-camera television production in studio and on location. Emphasizes teamwork and group production through a variety of program types.	Prerequisites: A grade of C or better in FMP105, or FMT100, or permission of Instructor.	L+L 3.0 4.0 4.0
FMP170	Introduction to Documentary	An in-depth study into the art, ethics and process of documentary filmmaking.	Prerequisites: None. ENG101 or ENG107 strongly recommended.	LEC 3.0 3.0 3.0

FMP202	Directing	Techniques for directing and blocking talent. Techniques for working with location and studio crews. Field and studio multi-camera production equipment usage. Advanced single and multi-camera shooting styles for corporate, cable and broadcast productions. Advanced post-production techniques for audio, video special effects for editing. The role of the director/producer in pre-production planning for the	Prerequisites: A grade of C or better in FMP105.	LEC 3.0 2.0 2.0 LAB 0.0 3.0 3.0
FMP204	Advanced Video Production	Advanced techniques of digital video production from concept to delivery with an emphasis on production in	Prerequisites: A grade of C or better in FMP108.	LEC 3.0 2.0 2.0 LAB 0.0 3.0 3.0
FMP206	Production Design	Intermediate workshop on Film Production Design focusing on areas such as script breakdowns for design elements, theories for symbolic and iconic visual content, color and lighting theory, miniatures and model	Prerequisites: A grade of C or better in (FMP108 and [FMP134 or FMT134]), or FMT136, or permission of Instructor.	LEC 3.0 3.0 3.0
FMP208	Production Company Management	The coordination and supervision of the personnel involved in the production team; preparation of charge-back system; facility budgets in equipment, personnel, and operation; interaction with senior management.	Prerequisites: None.	LEC 3.0 3.0 3.0
FMP211	Screenwriting II	Advanced workshop in screenwriting for feature films and television.	Prerequisites: A grade of C or better in FMP111 or permission of	L+L 3.0 4.0 4.0
FMP214AA	Video Production Internship	Video production work experience in a business or industry. 80 hours of designated work per credit.	Prerequisites: Permission of Instructor.	L+L 1.0 1.0 0.0
FMP214AB	Video Production Internship	Video production work experience in a business or industry. 80 hours of designated work per credit.	Prerequisites: Permission of Instructor.	L+L 2.0 2.0 0.0
FMP214AC	Video Production Internship	Video production work experience in a business or industry. 80 hours of designated work per credit.	Prerequisites: Permission of Instructor.	L+L 3.0 3.0 0.0
FMP215	Digital Video Effects	Basics of video-production including the use of colors, textures, and shapes in the preparation of graphics for video production. Graphics design using the rules of good design and techniques for interaction with Producer/Directors. Story boarding and animation techniques, character generation. Video special effects	Prerequisites: A grade of C or better in FMP108 or FMP115 or permission of Instructor. FMP115 strongly recommended for students in AAS/3570 Film and Media Production. AVC/MMT184 strongly	LEC 3.0 2.0 2.0 LAB 0.0 3.0 3.0
FMP216	Screenwriting III	Advanced workshop in narrative screenwriting for film and television.	Prerequisites: A grade of C or better in FMP211.	L+L 3.0 7.0 7.0

FMP260	Film and Media Producing and Financing	Guides the independent film/video producer through basic business aspects of production. Examines methods of setting up a production company, strategies for financing and distribution, and approaches to packaging a film/video project. Includes development of	Prerequisites: None.	L+L 3.0 4.0 4.0
FMP270	Documentaries for Social Change	Advanced study and practical application of nonfiction film production. Focuses on diverse voices and styles of short social documentaries, philosophical and ethical issues faced by the filmmaker, technical production	Prerequisites: A grade of C or better in (FMP108 and FMP115), or FMT136, or permission of Instructor.	L+L 4.0 6.0 6.0
FMP275	Advanced Portfolio Production	Advanced workshop in portfolio development for Producers, Directors, Cinematographers, Production	Prerequisites: Permission of Instructor.	L+L 4.0 7.0 7.0
FMP294AA	Special Topics in Motion Picture, Television, Documentary, and	Exploration of current topics, issues and aspects of motion picture, television, documentary, and new media production.	Prerequisites: A grade of C or better in (FMP108 and FMP115) or FMT136, or permission of Instructor.	LEC 1.0 1.0 1.0
FMP294AB	Special Topics in Motion Picture, Television, Documentary, and	Exploration of current topics, issues and aspects of motion picture, television, documentary, and new media production.	Prerequisites: A grade of C or better in (FMP108 and FMP115) or FMT136, or permission of Instructor.	LEC 2.0 2.0 2.0
FMP294AC	Special Topics in Motion Picture, Television, Documentary, and	Exploration of current topics, issues and aspects of motion picture, television, documentary, and new media production.	Prerequisites: A grade of C or better in (FMP108 and FMP115) or FMT136, or permission of Instructor.	LEC 3.0 3.0 3.0
FMP298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
FMP298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0

FMP298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
FMT100	Introduction to Production	Introduction to the major production components of a multimedia project.	Prerequisites: None.	L+L 3.0 3.0 3.0
FMT107	Career Pathways in the Media	Emphasis on theories of broadcasting, how the media functions in our society, the business structure of the U.S. media environment, the cultural import and potential impact of the programming and films, and the	Prerequisites: None.	LEC 3.0 3.0 3.0
FMT117	Introduction to Cinematography	Introductory workshop focusing on basic film and video camera operation and lighting. Emphasis on the role of the cinematographer, basic camera operation and lens selection, introduction to cinematic storytelling to include interpreting the script, basic lighting techniques,	Prerequisites: A grade of C or better in FMP108, or FMT136, or permission of Instructor.	L+L 3.0 5.0 5.0
FMT118	Lighting for Film, TV, and Media	Introductory workshop focusing on lighting for video and film productions. Emphasis on the role of the cinematographer in developing a look and mood for a production and to tell a story through the use of light	Prerequisites: None.	L+L 3.0 5.0 5.0
FMT120	Introduction to Sound Design for Film and Video	Basic principles of recording and mixing sound for film and video. Includes voice-over, automatic dialog replacement (ADR), foley, ambience, special effects and music. Emphasis on analog and digital recording	Prerequisites: A grade of C or better in (FMT100 and FMT136) or permission of Instructor.	LEC 3.0 3.0 3.0
FMT121	Story Theory for Film, Television and Media	Introduction to story theory and structure as it applies to screenwriting for feature films, television programs (one-hour dramas and sitcoms) and related media.	Prerequisites: None.	LEC 3.0 3.0 3.0
FMT123	Feature Screenwriting: First Draft	Intermediate workshop focused in writing initial draft of a narrative feature film screenplay.	Prerequisites: A grade of C or better in FMT121.	L+L 3.0 6.0 6.0
FMT124	Television Screenwriting: Writers Room	Intermediate workshop focused on understanding the collaborative nature of series/television (TV) story development (i.e., writers room) and writing initial draft of a spec script for an existing TV one-hour drama or half-	Prerequisites: A grade of C or better in FMT121.	L+L 3.0 6.0 6.0

FMT134	16mm Film Workshop: Pre-Production	Introduction to elements of pre-production for motion picture and television. Focuses on aesthetics, scriptwriting, budgeting, and selecting cast and crew. Features pre-production meetings to establish style, location, art design, shot sheet/storyboard, sound design, shooting schedule and film stock/video tapes. Pre-production of one film project and one video project	Prerequisites: A grade of C or better in FMP105, or FMT100, or permission of Department or Division.	L+L 3.0 4.0 4.0
FMT135	16mm Film Workshop: Production	Introduction to elements of production for motion picture and television. Focuses on directing, crew responsibilities, camera operation, lenses, lighting and sound recording. Production of one film shoot and one	Prerequisites: A grade of C or better in FMT134, or permission of Department or Division.	L+L 3.0 3.0 3.0
FMT136	16mm Film Workshop: Post-Production	Introduction to elements of post-production for motion picture and television. Focuses on editing, titles, sound design and marketing strategies. Post-production and marketing of one film and one video required.	Prerequisites: A grade of C or better in FMT135 or permission of Department or Division.	L+L 3.0 3.0 3.0
FMT151	TV and New Media Production	Introduction to multi-camera television production in studio and on location. Emphasizes teamwork and group production through a variety of program types.	Prerequisites: A grade of C or better in FMP105, or FMT100, or permission of Instructor.	L+L 3.0 4.0 4.0
FMT206	Production Design	Intermediate workshop on Film Production Design focusing on areas such as script breakdowns for design elements, theories for symbolic and iconic visual content, color and lighting theory, miniatures and model	Prerequisites: A grade of C or better in (FMP108 and [FMP134 or FMT134]), or FMT136, or permission of Instructor.	LEC 3.0 3.0 3.0
FMT217	Advanced Cinematography	Advanced workshop focusing on film and video camera operation and lighting. Emphasis on the role of the cinematographer and camera department, in-depth camera operation and lens selection, advanced cinematic storytelling to include interpreting the script, advanced lighting techniques, exposure meters, film stocks, and planning for the editing style. In-depth analysis of on-set communication and collaboration	Prerequisites: A grade of C or better in FMP/FMT117 and (FMP204 or FMT241), or permission of Instructor. Xref: FMP117	L+L 3.0 5.0 5.0
FMT220	Advanced Sound Design for Film and Video	Explores techniques and advanced applications used in designing sound using original student footage on a non-linear editing system.	Prerequisites: A grade of C or better in FMT/MUC120 or permission of Instructor. Xref: FMT120	LEC 3.0 3.0 3.0 LAB 0.0 2.0 2.0
FMT223	Feature Screenwriting: The Rewrite	Advanced workshop focused in rewriting narrative feature film screenplay, developing an individual writing voice and understanding the professional feature	Prerequisites: A grade of C or better in FMT123.	L+L 3.0 6.0 6.0

FMT224	Television Screenwriting: Original TV Pilot	Advanced workshop focused on creating an original television series concept, writing an original pilot script for the series, developing an individual writing voice and understanding the professional television writing	Prerequisites: A grade of C or better in FMT121.	L+L 3.0 6.0 6.0
FMT230	Motion Picture Directing	Theory and practice in directing the motion picture. Includes overview of the roles and responsibilities of the film director, examples of film directing, and practice sessions in analyzing a script, creating a scene, working with actors, conducting rehearsals, planning the camera	Prerequisites: A grade of C or better in (FMT117, FMT/MUC120, FMT121 and FMT241) or permission of Instructor. Xref: FMT120	L+L 4.0 4.0 4.0
FMT241	AVID Media Composer Editing	Editing on a Media Composer non-linear editing system, including timeline editing, trimming, dialog and action editing, refining audio, basic multi-layer motion, and 3D effects; also covers basic and intermediate color correction, intermediate and three-dimension titling,	Prerequisites: A grade of C or better in FMT136 or permission of Instructor.	L+L 4.0 6.0 6.0
FMT242	Professional Portfolio for Film, TV, and	Explores techniques and applications used in editing an individual project on an editing system.	Prerequisites: A grade of C or better in FMT241 or permission of	L+L 2.0 4.0 3.4
FMT242AA	Professional Portfolio in Screenwriting	Explores techniques and applications used in screenwriting for an individual project.	Prerequisites: A grade of C or better in FMT223 or FMT224.	L+L 2.0 4.0 3.4
FMT243	Introduction to Video Compositing and Title Animation	Introduction to computer-based video compositing and title animation.	Prerequisites: A grade of C or better in FMT241 or permission of Instructor.	L+L 4.0 6.0 6.0
FMT244	Film Finishing	Introduction to editing system and applications.	Prerequisites: A grade of C or better in FMT241 or permission of	L+L 4.0 6.0 6.0
FMT248	Advanced Film Production Techniques	Advanced workshop in the techniques of film production. Emphasizes real world simulation of production departments.	Prerequisites: A grade of C or better in (FMP/FMT117 and FMT/MUC120) or permission of Instructor. Xref: FMP117 FMT120	L+L 4.0 6.0 6.0
FMT251	Advanced Studio Production	Advanced video production within a studio environment.	Prerequisites: A grade of C or better in (FMP/FMT117, FMT121, FMT151, and FMT241) or permission of Instructor. Xref: FMP117	L+L 3.0 5.0 5.0
FMT260	Motion Picture Producing and Production	Introduction to functions specific to producing, production management, and business affairs for film, television, and new media productions.	Prerequisites: A grade of C or better in FMT136.	L+L 3.0 3.0 3.0

FMT263	Film Style, Theory and Analysis	Survey of the development of the art and theory of motion pictures, including study and criticism of stylistic elements. Tailored toward teaching different approaches and techniques of filmmaking as demonstrated in a variety of historic film movements.	Prerequisites: A grade of C or better in FMT136 or permission of Instructor.	LEC 4.0 4.0 4.0
FMT270	Documentaries for Social Change	Advanced study and practical application of nonfiction film production. Focuses on diverse voices and styles of short social documentaries, philosophical and ethical issues faced by the filmmaker, technical production	Prerequisites: A grade of C or better in (FMP108 and FMP115), or FMT136, or permission of Instructor.	L+L 4.0 6.0 6.0
FMT280	The Art of Editing	A lab intensive post-production course. Emphasizes the art of editing movie and television media and the development of editing skills. Editing products, including demo reels, from instructor provided or student provided	Prerequisites: A grade of C or better in FMT241 or permission of Instructor.	L+L 3.0 5.0 5.0
FMT283	Advanced Non-Linear Editing Techniques	Explores techniques and advanced applications used in creating and editing an advanced project on a non-	Prerequisites: A grade of C or better in FMT241 or permission of	L+L 4.0 6.0 6.0
FMT283AA	Advanced Non-Linear Editing Techniques:	Explores techniques and advanced applications used in creating and editing an advanced project on a non-	Prerequisites: A grade of C or better in FMT241 or permission of	L+L 4.0 6.0 6.0
FMT294AA	Special Topics in Motion Picture, Television, Documentary, and	Exploration of current topics, issues and aspects of motion picture, television, documentary, and new media production.	Prerequisites: A grade of C or better in (FMP108 and FMP115) or FMT136, or permission of Instructor.	LEC 1.0 1.0 1.0
FMT294AB	Special Topics in Motion Picture, Television, Documentary, and	Exploration of current topics, issues and aspects of motion picture, television, documentary, and new media production.	Prerequisites: A grade of C or better in (FMP108 and FMP115) or FMT136, or permission of Instructor.	LEC 2.0 2.0 2.0
FMT294AC	Special Topics in Motion Picture, Television, Documentary, and	Exploration of current topics, issues and aspects of motion picture, television, documentary, and new media production.	Prerequisites: A grade of C or better in (FMP108 and FMP115) or FMT136, or permission of Instructor.	LEC 3.0 3.0 3.0

FMT296WA	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to student's academic or career goals (student's present job may qualify) or permission of Instructor. Corequisites: Must be concurrent in at least one class which is related to student's major or career interest or	LAB 1.0 5.0 0.0
FMT296WB	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to student's academic or career goals (student's present job may qualify) or permission of Instructor. Corequisites: Must be concurrent in at least one class which is related to student's major or career interest or	LAB 2.0 10.0 0.0
FMT296WC	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to student's academic or career goals (student's present job may qualify) or permission of Instructor. Corequisites: Must be concurrent in at least one class which is related to student's major or career interest or	LAB 3.0 15.0 0.0

FMT296WD	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to student's academic or career goals (student's present job may qualify) or permission of Instructor. Corequisites: Must be concurrent in at least one class which is related to student's major or career interest or	LAB 4.0 20.0 0.0
FMT298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
FMT298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
FMT298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0

FON100	Introductory Nutrition	Introduction to the science of food and human nutrition. Current sustainable dietary recommendations and applications for maximizing well-being and minimizing risk of chronic disease throughout the life cycle. An overview of the nutrients, emphasizing the importance of energy and fluid balance, and optimal functioning of the digestive system. Understanding factors that influence food intake in different cultures. Methods for evaluating credibility of nutrition claims, a focus on modern food safety and technology practices, and a	Prerequisites: None.	LEC 3.0 3.0 3.0
FON100LL	Introductory Nutrition Laboratory	Introduction to nutrition using anthropometric, biochemical, clinical, and dietary analysis. Includes the use of qualitative and quantitative methodology to determine nutritional status. Emphasis on self-	Prerequisites: None.	LAB 1.0 3.0 3.0
FON104	Certification in Food Service Safety and Sanitation	Preparation for and certification in a national food sanitation and safety program. Emphasis on food from purchasing, receiving, and storing to preparation, holding, and serving. Focuses on safe and sanitary food service facilities and equipment, employee habits and personal hygiene, and role of management in safety and sanitation. Includes time-temperature principles, foodborne illnesses, pest control, accident	Prerequisites: None.	LEC 1.0 1.0 1.0
FON125	Introduction to Professions in Food, Nutrition, and Dietetics	Overview and discussion of career opportunities in the fields of food, nutrition, and dietetics. Includes information about history, ethics, standards of practice, communication and counseling skills. Emphasis on how to become a Registered Dietitian Nutritionist or a	Prerequisites: None.	LEC 1.0 1.0 1.0
FON135	Sustainable Cooking	Basic cooking techniques for healthful and enjoyable eating. Emphasis on strategies for maximizing the use of whole, local, and nutrient-dense food while focusing on applying the dietary recommendations for optimal health to food choices. Opportunities to learn about sustainable food living and identifying resources that enable people to be more in control of their food	Prerequisites: None.	L+L 3.0 4.0 4.0
FON142AB	Science of Food	Exploration and application of scientific principles of food; experiences with ingredient functionality and	Prerequisites: None.	L+L 3.0 5.0 5.0

FON143	Food and Culture	Understanding diet in the context of culture. Historical, religious, and sociocultural influences on the development of cuisine, meal patterns, eating customs, cooking methods, and nutritional status of various ethnic groups. Traditional and contemporary food	Prerequisites: None.	L+L 3.0 3.0 3.0
FON161	Sustainable Food Production Systems	Overview of the global food system. Covers historical events impacting current food production model and the effects food systems have on the environment, health, and communities. Also covers conventional agriculture and food safety concerns. Emphasis on the movement	Prerequisites: None.	LEC 3.0 3.0 3.0
FON163	Sustainable Kitchen Practices	Overview of sustainable kitchen practices. Covers energy efficient appliances and equipment, as well as electricity and water conservation practices. Includes environmentally friendly kitchen products and methods for disposal of waste. Researching food sources, purchasing locally, and building relationships, and promoting local food equity are also covered. Emphasis	Prerequisites: None.	L+L 3.0 5.0 5.0
FON165	Sustainable Food Entrepreneurship	Overview of the process for starting a small food business. Covers stages for introducing a variety of food products into the market, food safety, and sanitation requirements. Includes business and marketing strategies, processing, labeling, and distribution requirements for different food product types such as dairy, meat, poultry, and fish. Covers the importance of diversity, equity, and inclusion for the	Prerequisites: None.	LEC 3.0 3.0 3.0
FON207	Introduction to Nutrition Services Management	Principles, knowledge, and techniques required for effective nutrition services management. Includes nutrition service issues in relation to health care trends, leadership skills, management theories and styles, food service manager responsibilities, and laws which pertain	Prerequisites: A grade of C or better in (MAT055, MAT056, and MAT057), or (MAT090, or MAT091, or MAT092), or satisfactory mathematics placement.	LEC 3.0 3.0 3.0
FON210	Sports Nutrition and Supplements for Physical Activity	Principles of nutrition applied to fitness, exercise, and sports. Dietary guidelines as applied to body metabolism, fuel utilization, hydration, and other unique needs for exercise and sports. Includes dietary guidelines for weight or endurance training, glycogen loading, the pre-game meal, and glycogen recovery with an emphasis on maximizing fitness, performance, and	Prerequisites: A grade of C or better in FON100 or FON241.	LEC 3.0 3.0 3.0

FON225	Research in Complementary and Alternative Nutrition Therapies	Introduction to basic research methods and statistics as applied to complementary and alternative nutrition therapies. Emphasis on the analysis and interpretation of health-related research.	Prerequisites: A grade of C or better in MAT092 or equivalent or satisfactory score on district placement exam.	LEC 3.0 3.0 3.0
FON230	Nutrition for Special Populations	Nutritional changes and appropriate management across the lifespan to maximize health and longevity. Addresses needs of those individuals with particular dietary restrictions, requirements or deficiencies. Includes special dietary needs of those diagnosed with	Prerequisites: A grade of C or better in FON100, or FON241, or permission of Instructor.	LEC 3.0 3.0 3.0
FON241	Principles of Human Nutrition	Scientific principles of human nutrition. Emphasis on scientific literacy and the study of nutrients for disease prevention. Includes macronutrients and micronutrients, human nutrient metabolism and nutrition's role in the health of the human body throughout the life cycle. Addresses nutrition principles for prevention of nutrition-	Prerequisites: None.	LEC 3.0 3.0 3.0
FON241LL	Principles of Human Nutrition Laboratory	Self-evaluative laboratory experience to complement FON241, Principles of Human Nutrition using anthropometric, biochemical, clinical, and dietary analysis. Includes the use of qualitative and quantitative methodology to determine nutritional status	Prerequisites: A grade of C or better in FON241 or Corequisites: FON241.	LAB 1.0 3.0 3.0
FON242	Introduction to Medical Nutrition Therapy	Introduction to fundamental principles of medical nutrition therapy. Introduces the study of nutritional therapy of disease and evidence-based practice in prevention and nutritional management of diseases. Nutrition care planning for chronic diseases is taught via a variety of methods including case studies. This course applies foundational skills in the application of the Nutrition Care Process (NCP) for diet therapy implementation and documentation. Includes strategies	Prerequisites: A grade of C or better in BIO160 and FON241.	LEC 3.0 3.0 3.0
FON244AA	Food Service Management Practicum	Classroom preparation and training, under the instruction and supervision of a registered dietitian. Application of principles, knowledge, and skills required in the delivery of nutrition services for food service management including food service operations, quantity food production, procurement, organizing and management principles, facility design and equipment,	Prerequisites: A grade of C or better in (FON125, FON142AB, FON207, and FON242) and permission of Program Director. Corequisites: FON244AB.	LEC 2.0 2.0 2.0

FON244AB	Food Service Management Practicum Laboratory	Practicum experience under the supervision of a registered dietitian. Application of principles, knowledge, and skills required in the delivery of nutrition services for food service management including food service operations, quantity food production, procurement, organizing and management principles, facility design and equipment, financial management, food safety and	Prerequisites: A grade of C or better in (FON125, FON142AB, FON207, and FON242) and permission of Program Director. Corequisites: FON244AA.	LAB 2.5 10.0 0.0
FON245AA	Medical Nutrition Therapy Practicum	Classroom preparation and training, under the instruction and supervision of a registered dietitian. Understanding of principles, knowledge, and skills required for the delivery of medical nutrition therapy. Comprehension of nutritional screening, assessment, monitoring, and evaluation for common and complex medical conditions, medical documentation, patient interviewing and counseling, and education in health	Prerequisites: A grade of C or better in (FON125, FON242, and HCC145AA) and (MAT092, or equivalent, or satisfactory score on district placement exam) and permission of Program Director. Corequisites: FON245AB.	LEC 2.0 2.0 2.0
FON245AB	Medical Nutrition Therapy Practicum Laboratory	Practicum experience under the supervision of a registered dietitian. Application of principles, knowledge, and skills required for the delivery of medical nutrition therapy. Perform nutritional screening, assessment, monitoring, and evaluation for common and complex medical conditions, medical documentation, patient interviewing and counseling, and education in health	Prerequisites: A grade of C or better in (FON125, FON242, and HCC145AA) and (MAT092, or equivalent, or satisfactory score on district placement exam) and permission of Program Director. Corequisites: FON245AA.	LAB 2.5 10.0 0.0
FON246AA	Community Nutrition Practicum	Classroom preparation and training, under the instruction of a registered dietitian. Understanding of principles, knowledge and skills required in the delivery of nutrition services in community-based agencies, outpatient health care settings, and social service agencies. Includes knowledge and understanding of nutrition intervention and wellness promotion for individuals and groups across the lifespan, i.e. infants	Prerequisites: A grade of C or better in (FON125 and FON242) and permission of Program Director. Corequisites: FON246AB.	LEC 2.0 2.0 2.0
FON246AB	Community Nutrition Practicum Laboratory	Practicum experience under the supervision of a registered dietitian. Application of principles, knowledge and skills required in the delivery of nutrition services in community-based agencies, outpatient health care settings, and social service agencies. Includes nutrition intervention and wellness promotion for individuals and groups across the lifespan, i.e. infants through geriatrics	Prerequisites: A grade of C or better in (FON125 and FON242) and permission of Program Director. Corequisites: FON246AA.	LAB 2.0 10.0 0.0

FON247	Weight Management Science	The comprehensive study of obesity as a disease of modern society due to multiple determinants. Use of evidence-based data and methods to assess and manage weight in various settings. Use of client-centered counseling strategies, including behavior change theories. Focus on discovering successful	Prerequisites: A grade of C or better in FON100 or FON241 or permission of Instructor.	LEC 3.0 3.0 3.0
FON250	Nutrition and Dietetic Exam Review	This course is intended to prepare dietetic students for the national exam for the nutrition and dietetic technician, registered (NDTR) credential. An emphasis in food service and medical nutrition therapy will be reviewed to prepare students for national exam content. In addition, nutrition science principles and community nutrition will be covered. The current NDTR study guide	Prerequisites: Permission of Program Director.	LEC 1.0 1.0 1.0
FON270AA	Applied Nutrition Experience for Personal Trainers and Coaches	Applied nutrition course customized around the interests and needs of the individual student enrolled in the Nutrition Certificate for Personal Trainers and Coaches. Eighty (80) hours of designated work per	Prerequisites: Completion of six (6) credits of FON courses with a grade of C or better, and permission of Department/Division Chair and/or the	L+L 1.0 1.8 0.0
FON298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
FON298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
FOR105	Forensic Science: Physical Evidence	Scientific analysis and examination of physical evidence for forensic purposes. Covers fingerprints, shoe prints, tool marks, glass, soil and mineral evidence, firearms identification, paint chips, and arson and explosive evidence. Includes the history of forensic science,	Prerequisites: None.	LEC 4.0 3.0 3.0 LAB 0.0 3.0 3.0

FOR106	Forensic Science: Biological Evidence	Scientific analysis and examination of biological evidence for forensic purposes. Covers blood, bloodstains, other biological fluids and stains, hair, DNA, toxicological evidence, controlled substances and alcohol. Includes the history of forensic science,	Prerequisites: None.	LEC 4.0 3.0 3.0 LAB 0.0 3.0 3.0
FOR286	Principles of Forensic Science	This course examines the diverse disciplines and techniques used by forensic scientists in the major sections recognized by the American Academy of Forensic Sciences (AAFS), which include anthropology, criminalistics, digital and multimedia services, general, engineering and applied sciences, jurisprudence, odontology, pathology/biology, psychiatry, and behavioral science, questioned documents and toxicology. Students will participate in laboratory activities that demonstrate best practices and	Prerequisites: A grade of C or better in (BIO181 or BIO181XT) and [(CHM150 or CHM151) and CHM151LL] or CHM150AA or CHM151AA or permission of Instructor or Department or Division Chair.	LEC 4.0 4.0 4.0 LAB 0.0 3.0 3.0
FRE101	Elementary French I	Basic grammar, pronunciation and vocabulary of the French language. Includes the study of French culture, practice of listening, speaking, reading and writing skills.	Prerequisites: None.	LEC 4.0 4.0 4.0
FRE101AA	Elementary French I	Basic grammar, pronunciation and vocabulary of the French language. Includes the study of French culture, practice of listening, speaking, reading and writing skills.	Prerequisites: None.	L+L 4.0 5.0 5.0
FRE102	Elementary French II	Continued study of grammar and vocabulary of the French language along with the study of French culture. Emphasis on speaking, listening, reading and writing skills.	Prerequisites: A grade of C or better in FRE101 or FRE101AA or permission of Department or Division. Completion of prerequisites within the last three years is required.	LEC 4.0 4.0 4.0
FRE102AA	Elementary French II	Continued study of grammar and vocabulary of the French language along with the study of French culture. Emphasis on speaking, listening, reading and writing skills.	Prerequisites: A grade of C or better in FRE101 or FRE101AA or permission of Department or Division. Completion of prerequisites within the last three years is required.	L+L 4.0 5.0 5.0
FRE115	Beginning French Conversation I	Conversational French. Basic sentence structure, pronunciation and vocabulary necessary to develop speaking ability in French. Designed for students seeking speaking and listening abilities with little	Prerequisites: None.	LEC 3.0 3.0 3.0

FRE116	Beginning French Conversation II	Continued development of speaking and listening skills for effective communication in French.	Prerequisites: A grade of C or better in FRE115 or permission of Department or Division. Completion of prerequisites within the last three	LEC 3.0 3.0 3.0
FRE201	Intermediate French I	Review of essential grammar of the French language and study of French culture. Continued practice and development of reading, writing, and speaking skills.	Prerequisites: A grade of C or better in (FRE102 or FRE102AA) or two years of high school French with an average of C or better or permission of Department or Division. Completion of prerequisites within	LEC 4.0 4.0 4.0
FRE202	Intermediate French II	Review of grammar, continued development of French language skills, and continued study of the French culture.	Prerequisites: A grade of C or better in FRE201 or three years of high school French with an average of C or better. Completion of prerequisites within the last three years is required.	LEC 4.0 4.0 4.0
FRE225	Intermediate French Conversation I	Continued development of skills in conversational French for business or travel.	Prerequisites: A grade of C or better in FRE116 or permission of Department or Division. Completion of prerequisites within the last three	LEC 3.0 3.0 3.0
FRE226	Intermediate French Conversation II	Development of intermediate level skills in conversational French for business and travel.	Prerequisites: A grade of C or better in FRE225 or permission of Department or Division. Completion of prerequisites within the last three	LEC 3.0 3.0 3.0
FRE265	Advanced French I	In-depth exploration of a selected theme related to French culture. Involves reading selections from French literature, writing reports, and discussions in French. Emphasis on enhancing reading, writing and speaking	Prerequisites: A grade of C or better in FRE202 or permission of Department or Division. Completion of prerequisites within the last three	LEC 3.0 3.0 3.0
FRE266	Advanced French II	Continuation of FRE265, Reading selections from French literature, written reports, and discussions in French designed to further develop reading, writing and speaking skills.	Prerequisites: A grade of C or better in FRE265 or permission of Department or Division. Completion of prerequisites within the last three	LEC 3.0 3.0 3.0

FSC101	Introduction to Fire Service Selection and Entry	Overview of the application and selection processes used by various fire departments and fire service organizations. Focus on the skills and abilities required for entry-level positions in the fire department, including oral and written communication skills, mathematical and mechanical skills, problem-solving skills, and physical agility and stamina. Elements of fire service culture and their effects on personal growth and interpersonal relationships. Major components of written application processes, requirements, preparation of resumes and their effect on employment prospects. Preparation for the interview to include communications skills, mental	Prerequisites: None.	L+L 4.0 5.0 5.0
FSC102	Fire Department Operations	Introductory fire science course primarily designed for the fire department recruit. Includes firefighting skills, equipment, and administrative policies, fire department operations, personnel policies, and International Fire Service Accreditation Congress Practical Skills Testing. Satisfies minimum standards for certification testing set	Prerequisites: A grade of C or better in FSC105, FSC130, and permission of Instructor. Corequisites: (FSC134 or FSC234) and FSC174.	L+L 11.0 19.6 19.6
FSC103	Advanced Firefighter	Comprehensive review of Fire Department Standard Operating Procedures, Evaluation of Fitness and Conditioning as they relate to fire ground skills. Emphasis on physical development and hands on activities providing participants with skills necessary to	Prerequisites: Successful completion of the Fire Operations Academy Certified Firefighter I and II through Arizona Fire Marshal and current PASS on Candidate Physical Ability	L+L 7.0 10.6 10.6
FSC105	Hazardous Materials Awareness and Operations	Basic methods of recognition and identification based upon the chemical and physical properties of hazardous materials; basic safety procedures when utilizing specific types of protective clothing and equipment; basic tactical information relating to scene management. Satisfies minimum standards for certification testing set forth by the current ProBoard and/or Arizona State	Prerequisites: None.	L+L 3.0 3.0 3.0
FSC106	Introduction to Fire Protection	History and evaluation of fire department organization. Role of the fire service in the community. Responsibilities of the fire administrator including organization, departmental functions, interdepartmental relationships, management of buildings and equipment; techniques of fire-fighting. Also includes emergency	Prerequisites: None.	LEC 3.0 3.0 3.0

FSC108	Fundamentals of Fire Prevention	Fundamentals of fire prevention. Includes techniques, procedures, regulations, and enforcement. Also includes discussion of hazards in ordinary and special occupancies. Field trips and lectures from industry also	Prerequisites: None.	LEC 3.0 3.0 3.0
FSC109	Emergency Response Team for Industry	Common industrial hazards related to chemicals, gases, fire, energy sources, and spills. Emergency response procedures to control and conclude hazardous	Prerequisites: None.	LEC 3.0 3.0 3.0 LAB 0.0 2.6 2.6
FSC110	Wildland Firefighter	Basic-level course for individuals with little or no experience in the wildland environment. Preparation for performing as a beginning-level wildland firefighter with an organized fire department engine or hand crew. Satisfies minimum standards for certification testing set	Prerequisites: None.	L+L 3.0 3.0 3.0
FSC111	Emergency Vehicle Driver Operator	Emergency vehicle operators training including the problems facing operators; the personal qualities of emergency vehicle operator candidates; legal responsibilities of operators; and physical forces involved in driving an emergency vehicle. Includes	Prerequisites: None.	LEC 2.0 2.0 2.0
FSC112PS	Public Safety Emergency Telecommunications	In-depth coverage of established techniques and procedures for handling routine and emergency public safety telephone calls and radio (contact) communications. Nationally recognized procedures for processing 9-1-1 emergency calls, field unit safety, injury scenarios, and demonstrating positive public relations. Fundamental skills and responsibilities for fire, emergency medical, and law enforcement complaint report processing as well as federal laws regarding proper processing, retention, and dissemination of	Prerequisites: None.	L+L 3.0 3.0 3.0
FSC113	Introduction to Fire Suppression	Introduction to the characteristics and behavior of fire, fire hazard properties of ordinary materials, extinguishing agents, firefighter safety, fire suppression organization and equipment, and basic fire fighting	Prerequisites: None.	LEC 3.0 3.0 3.0 LAB 0.0 1.0 1.0
FSC114	Hazardous Materials First on the Scene/Awareness Level	Designed to assist first responders involved in potential hazardous materials incident. Provides an overview of capabilities and limitations of first responders in the recognition and detection of hazardous materials,	Prerequisites: None.	LEC 0.5 0.5 0.5

FSC115	Community Emergency Response Team (CERT): Level I	Basic skills, including instruction in teamwork and disaster simulations, needed to help oneself, family, and neighbors in the event of a community disaster in accordance with the Federal Emergency Management	Prerequisites: None.	LEC 1.5 1.5 1.5
FSC117	Fire Apparatus	Principles of care, maintenance and operation of fire apparatus and pumps. Includes pump construction and accessories, pumping techniques, power development, and transmission. Driving, troubleshooting and	Prerequisites: None.	LEC 3.0 3.0 3.0
FSC118	Fire Hydraulics	Review of basic mathematics. Hydraulic laws and formulas as applied to the fire service. Application of formulas and mental calculations to hydraulic problems, water supply variables, and discharge requirements for	Prerequisites: None.	LEC 3.0 3.0 3.0
FSC119	Introduction Fire Service Ethics	Ethical issues, standards, and philosophical consideration of moral problems encountered in fire service. Ethical responsibility of fire service personnel	Prerequisites: None.	LEC 3.0 3.0 3.0
FSC125	Hazardous Materials Emergency Scene Management	Emphasis on detection and identification of dangers associated with the release of hazardous materials. Step-by-step guide to the management of response resources for the purpose of mitigating a hazardous	Prerequisites: None.	LEC 1.0 1.0 1.0
FSC126	Refresher Training for Hazardous Materials First Responder Operational	Review of fundamentals of containment, prevention, and knowledge of basic hazard and risk assessment techniques. Topics include protective clothing, containing and controlling specific hazards, vapor suppression, and cooling of tanks. Meets the requirements of Department of Labor Part III; Occupational Safety and Health Act 29; Code of Federal Regulations Part 1910; Hazardous Wast	Prerequisites: A grade of C or better in FSC105.	L+L 1.0 1.0 1.0
FSC127	Codes/Regulations and Contingency Planning for Hazardous Materials Response	Multifaceted approach to the management of a hazardous materials accident at private public sector facility. Includes planning requirements and considerations, fixed-site pre-plan preparation. Overview of federal statutes and national codes used to establish safety, health, and environmental standards for chemical utilization. Highlights Occupational Safety and Health Administration, Department of Transportation, Environmental Protection Agency, Uniform Building Code, Uniform Fire Code, and National Fire Protection Association regulations. Application of laws, regulations,	Prerequisites: None.	LEC 1.0 1.0 1.0

FSC128	Hazardous Materials Air Monitoring/Breathing Protection	Fundamentals of emergency air monitoring and respiratory protection used in response to hazardous materials releases. Theory and practical application. Includes use of monitoring instruments in conjunction with respiratory protection systems for tactical and risk analysis work; respiratory protection devices and their	Prerequisites: None.	LEC 1.0 1.0 1.0
FSC129	Physical Properties of Hazardous Materials	Practical application of physical properties of hazardous materials for risk and hazard analysis. Working knowledge of chemicals, exposure, and physical property nomenclature for the selection of proper decontamination methods and proper personal	Prerequisites: None.	LEC 1.0 1.0 1.0
FSC130	Fitness for Firefighters/CPAT	Skills and abilities required for entry level position in the fire service including physical ability, and stamina. Opportunity to take the accredited International Association of Fire Fighters (IAFF) Candidate Physical Ability Test (CPAT) at the end of the course at a IAFF	Prerequisites: None.	L+L 1.0 1.5 1.5
FSC131	Introduction to Urban Technical Rescue	Practical application of safe rescue practices for urban technical rescue. Includes ropes and rope systems, trench rescue, confined-space rescue, swiftwater	Prerequisites: None.	L+L 3.0 3.0 3.0
FSC132	Personal Protective Equipment for Emergency Spill Control at Hazardous Materials Incidents	Fundamentals of personal protective equipment and practical application of theoretical information. Includes the design, components, interface, use, application, and materials of chemical protective clothing; thermal limitations of chemical protective clothing in flammable and toxic atmospheres; physiological and psychological effects of wearing these types of garments. Fundamentals of basic emergency spill control,	Prerequisites: None.	LEC 1.0 1.0 1.0
FSC134	Fitness and Conditioning for Firefighters	Overview of all aspects of fitness for current and prospective firefighters. Includes physical and mental aspects of performance for optimal achievement on fire department agility tests and fire fighting tasks; individual conditioning strategies, nutritional guidelines, protective clothing concepts, and basic exercise principles. Pre-	Prerequisites: None.	L+L 3.0 4.6 4.6
FSC136	Women Firefighter Preparation	Designed for women firefighter candidates. Includes firefighting techniques and procedure, physical/mental conditioning, health concerns, occupational	Prerequisites: A grade of C or better in FSC134 or Corequisites: FSC134 or permission of Instructor.	L+L 2.0 2.87 2.87

FSC139	Emergency Response to Terrorism	Fundamentals of emergency response to suspected terrorist events. Historical perspective of terrorist activities and methods by which responders can identify and protect themselves and the public from these	Prerequisites: None.	LEC 3.0 3.0 3.0
FSC146	Disaster Recovery Operations	Specialized knowledge and skills for the emergency manager in developing programs and activities associated with disaster recovery assistance and mitigation actions that reduce losses from future	Prerequisites: None.	LEC 3.0 3.0 3.0
FSC147	Emergency Preparedness	Emergency preparedness related to natural and manmade disasters. Planning concepts and the planning process; awareness and education programs and strategies for the general community as well as	Prerequisites: None.	LEC 3.0 3.0 3.0
FSC148	Fundamentals of Emergency Management	Emergency management systems including career opportunities, function, tasks and responsibilities of the emergency management program manager, role of the emergency manager in mitigation, preparedness, response, and recovery. Past civil defense and current	Prerequisites: None.	LEC 3.0 3.0 3.0
FSC149	Hazard Mitigation	Knowledge and skills required to develop programs to reduce losses from future disasters, emergencies, and other extreme events caused by natural and man-made	Prerequisites: None.	LEC 3.0 3.0 3.0
FSC152	Engine Company Officer	Overview of all aspects of engine company operations including the activities and responsibilities performed by the captain as well as mechanisms for developing a personal supervisory style. Designed for the aspiring company officer or anyone having the opportunity for	Prerequisites: None.	LEC 1.0 1.0 1.0
FSC153	Minimum Company Standards for Fire Fighters	Comprehensive review of Standard Operating Procedures as they relate to fire ground skills. Emphasis placed on hands on activities allowing participants to practice necessary skills to safely operate on the fire	Prerequisites: Successful completion of the Fire Operations Academy and current Candidate Physical Ability Test (CPAT).	L+L 2.0 4.0 4.0
FSC158	Advanced Education for Probationary Firefighter	Preparation to advance skill level of the probationary firefighter. Includes preparation for ambulance operations, driver's training and safety issues, fire ground operations, and fire department organizational	Prerequisites: Permission of Instructor.	LEC 3.0 3.0 3.0
FSC159	Ladder Operations	Comprehensive training for members of fire department ladder companies. Emphasis on safety, progressive skills, and equipment review.	Prerequisites: Permission of Instructor.	L+L 1.0 1.0 1.0

FSC160	Advanced Driver Training Instructor Certification	Comprehensive instructor certification course based on information and resources from the National Fire Protection Association Standard for Driver Apparatus; the Arizona Department of Transportation Standards, Commercial Drivers License Requirements; General Motors Advanced Drivers Training; National Highway Traffic and Safety Administration; and the Occupational Health and Safety Administration. Covers compensation for inertia, defensive driving skills, and collision avoidance techniques. Differences between driving passenger vehicles top-heavy or high-profile vehicles.	Prerequisites: Permission of Instructor.	LEC 1.2 1.2 1.2
FSC161	Advanced Driver Training Instructor Re-Certification	Comprehensive recertification for all previously certified Advanced Driver Training (ADT) instructors. Focuses on safety, review of driving skills, comprehension of course dialogue, and instructor presentation skills based on standards established by National Fire Protection Association (1002-Standard for Driver Apparatus); Arizona Department of Transportation, Commercial Drivers License (CDL); General Motors Advanced Driver	Prerequisites: Permission of Instructor.	LEC 3.0 3.0 3.0
FSC162	Utility Truck Operation	Comprehensive review of skills, responsibilities, apparatus familiarization, mechanical and technical aptitudes, and fire department standard operating procedures specific to safe and effective operation of utility trucks. Focuses on practical application of classroom instruction to insure competency of engineers	Prerequisites: Permission of Instructor.	LEC 1.0 1.0 1.0
FSC163	Respiratory Protection Refresher	Use of respiratory protection, including regulations, hazard recognition, limitations of respirators, maintenance requirements, and importance of annual fit testing. Complies with 29CFR (Code of Federal Regulations) 1910.134 Occupational Safety and Health	Prerequisites: Permission of Instructor.	LEC 1.0 1.0 1.0
FSC167	Fire Captain Academy	Roles and responsibilities of a company officer within the fire department system with emphasis on practical application and preparation for the role of company officer in a move-up or out-of-class status. Emphasis on customer service, safety, crew development, discipline, community involvement, and specific engine and ladder company officer functions. Includes fire and emergency	Prerequisites: Permission of Instructor.	LEC 6.0 3.0 3.0 LAB 0.0 3.0 3.0

FSC174	Functions of Command	Basic functions of command in the fire service. Includes brief history and future trends of incident command. Analysis of recent local, national, and international tactical and strategic concerns. Utilizes a Command Training Center to provide real-time, computer- and prop-	Prerequisites: Permission of Instructor. Corequisites: FSC102.	L+L 2.0 3.0 3.0
FSC175	Fireground Survival	On-deck procedures, focusing on implementation, tasks and responsibilities, logistics, and their impact on tactics, strategy, and scene safety. Assignment of Rapid Intervention Company (RIC) responsibilities to the	Prerequisites: Permission of Instructor.	L+L 0.5 0.7 0.7
FSC200	Fire Service Instructor- Level I	Designed to prepare students for Level I Training Officer as defined by the National Fire Protection Association (NFPA) 1041 standards. Includes methods of delivering instructional materials, preparation of lesson plans, instructional aids and evaluation instruments; techniques and strategies for organizing	Prerequisites: None.	LEC 3.0 3.0 3.0
FSC201	Fire Service Instructor- Level II	Designed to prepare students for Level II Training Officer as defined by the National Fire Protection Association (NFPA) 1041 standards. Continued knowledge and skills in methods of delivering instructional materials, preparation of lesson plans, instructional aids and evaluation instruments;	Prerequisites: A grade of C or better in FSC200 or permission of Program Director or Instructor.	LEC 3.0 3.0 3.0
FSC202	Supervisory Training for Firefighters	Administrative methods applied to the fire service, departmental organization, and personnel management. Includes fire alarm signaling systems, fire service planning, and relationships with other city	Prerequisites: None.	LEC 3.0 3.0 3.0
FSC204	Firefighting Tactics and Strategy	Methods of coordinating personnel, equipment, and apparatus on the fireground. Practical methods of controlling and extinguishing structural and other types of fires. Includes simulation exercises.	Prerequisites: A grade of C or better in FSC113 or permission of Instructor or current employment as a firefighter and/or Firefighter I and II Certification and/or related experience as determined by the Program Director.	LEC 3.0 3.0 3.0
FSC205	Command Strategies for Major Emergencies	Effective methods of managing major emergency incidents including multiple alarm structural fires, high rise fires, major brush fires, complex hazardous materials incidents and multi-casualty medical incidents. Includes incidents that require the commitment of resources based on a transitional situation and/or	Prerequisites: A grade of C or better in FSC204.	LEC 3.0 3.0 3.0

FSC208	Firefighter Safety and Building Construction	Actions necessary to provide for the safety of firefighters operating on the fireground. Effects that fire and heat may have on various types of building construction resulting in the loss of structural integrity. Includes signs and symptoms of structural damage.	Prerequisites: A grade of C or better in FSC113 or permission of Instructor or current employment as a firefighter and/or Firefighter I and II Certification and/or related experience as determined by the Program Director.	LEC 3.0 3.0 3.0
FSC209	Fire Investigation I	Methods of determining point of fire origin, path of fire travel, and fire cause. Includes recognizing and preserving evidence; interviewing witnesses; arson laws and types of arson fires; and court testimony, reports,	Prerequisites: None.	LEC 3.0 3.0 3.0
FSC209LL	Fire Investigation I Lab	Practical application of fire investigation techniques. Includes use of the scientific method to investigate various types of fires as well as fire patterns, explosions and evidence documentation. Also covers scene management and examination procedures in addition to	Prerequisites: A grade of C or better in FSC209.	LAB 1.0 2.0 2.0
FSC210	Fire Investigation II	Focus on practical skills for fire investigators. Emphasis on hands-on application with practice examining and recording the fire/arson scene. Includes class room and	Prerequisites: A grade of C or better in FSC209 or permission of Instructor.	L+L 3.0 3.0 3.0
FSC211	Fire Investigation III	Focus on case building for fire investigators. Emphasis on hands-on application, practice examining and recording the fire/arson scene. Includes field exercises with arson task force to investigate a crime scene.	Prerequisites: A grade of C or better in FSC210 or permission of Instructor.	L+L 3.0 3.0 3.0
FSC212	Fire Investigation IV	Skills and information for those responsible for fire investigation. Focus on courtroom and testimony. Includes continuing arson task force team assignment.	Prerequisites: A grade of C or better in FSC211 or permission of Instructor.	L+L 3.0 3.0 3.0
FSC213	Hazard Categorization (HAZ CAT)	Fundamentals of basic chemical identification for field application. Includes demonstration of sampling techniques, safety, key charts, test descriptions and use, and flow charts for tactical application at	Prerequisites: None.	LEC 1.0 1.0 1.0
FSC214	Human Resource Management in Fire Service	Management of fire service personnel functions. Includes selection procedures, employee discipline, performance ratings, elements of supervision. Labor	Prerequisites: A grade of C or better in FSC202 or four years in the fire service.	LEC 3.0 3.0 3.0
FSC215	Customer Service in the Public Sector	Examines the personal and practical skills needed to enhance customer service in the public sector with an emphasis on application, basic management	Prerequisites: None.	LEC 3.0 3.0 3.0

FSC216	Fundamentals of Flammable Hazardous Materials	Fundamentals of chemistry used in fire service, chemistry of flammable hazardous materials, containers used to store and transport flammable hazardous materials, and equipment and materials used in controlling emergencies involving flammables. Also includes tactics for hazardous materials emergencies, and laws at federal, state, and local levels pertaining to	Prerequisites: A grade of C or better in FSC105.	LEC 3.0 3.0 3.0
FSC217	Dangerous and Explosive Hazardous Materials	The chemistry of reactive and unstable hazardous materials, the toxicology of dangerous chemicals, and the measures taken to protect responders, the community, and the environment of chemical accidents. Also includes an introduction to field sampling of	Prerequisites: A grade of C or better in FSC216.	LEC 3.0 3.0 3.0
FSC220	Fire Officer	Administrative methods applied to the fire service, departmental organization, and personnel management. Includes Incident Management System, fire service planning, and relationships with other	Prerequisites: Full time Certified Fire Fighter I & II, or Fire Instructor I, or permission of Instructor.	L+L 5.0 6.0 6.0
FSC221	Ladder Company Officer	Overview of all aspects of ladder company operations including activities, expectations, and responsibilities required of the ladder captain. Designed for the company officer who aspires to the role of ladder	Prerequisites: None.	LEC 1.0 1.0 1.0
FSC224	Incident Command Systems	Methods for managing emergency incidents including command, control and coordination of response to all types of incidents, including hazardous materials, natural hazards, fire and multiple causality incidents. Emphasis on stabilization and protecting life, property,	Prerequisites: None.	LEC 3.0 3.0 3.0
FSC225	Hazard Zone Command	Provides the knowledge, skills and abilities for incident commanders to manage local, National Incident Management System (NIMS) Type 4 and 5 incidents. Prepares Fire Service Company and Command Officers to standardize local incident operations across their organization. The Hazard Zone Command course includes theory and simulation-based case studies. After successful completion of the course, the student	Prerequisites: Firefighter 1 and 2 certification and (a minimum of 5 years of fire service field experience or permission of Instructor).	L+L 5.0 6.0 6.0

FSC226	Incident Safety Officer	Comprehensive review of the critical factors that threaten the safety and well being of operating firefighting crews with an emphasis on the role an Incident Safety Officer has in recognizing, minimizing and mitigating threats. Focus on the Principles and types of construction, building dating, Smoke and Fire size-up, unique building types and standard company operations within Incident Management System providing the framework for effective Incident Safety Officer actions and overall impact on fire ground safety. Safety of Fire companies operating on every other type	Prerequisites: Rank of Fire Captain or Chief Officer.	LEC 3.0 3.0 3.0
FSC230	Fire Officer Leadership II	Management techniques which develop leadership and leadership effectiveness. Written and verbal communication skills, fire service excellence goals, counseling and problem solving methods. Role-playing	Prerequisites: Permission of Instructor.	LEC 3.0 3.0 3.0
FSC231	Battalion Chief Academy	Examine the many roles and responsibilities required of a chief officer. Manage emergency incidents, explore personal and professional growth, view department issues more globally, manage personnel more effectively, manage conflict resolution for positive	Prerequisites: None. FSC202 and FSC204 are suggested but not required.	L+L 3.0 5.0 5.0
FSC234	Fitness and Wellness for Firefighter	Focus on fitness and wellness for firefighter candidates.	Prerequisites: Permission of Instructor.	L+L 3.0 4.6 4.6
FSC238	Vehicular Extrication and Patient Stabilization	Participative course designed for the Emergency Medical Technicians (EMT). Incorporates new knowledge and skills necessary to access, extricate, and care for victims of crash incidents. Provides exposure to scene management, including size-up, disentanglement, victim stabilization for single and multi-victim situations, hazardous materials incidents, integration of local emergency medical services (EMS)	Prerequisites: Basic EMT certification current enrollment in an EMT-Basic program nurse with emergency department experience or law enforcement personnel or permission of Instructor.	LEC 2.0 2.0 2.0
FSC240	Incident Command Officer	Preparation of Incident Command officers in handling local community's emergency situations	Prerequisites: Chief Officer or permission of Instructor.	L+L 3.0 3.0 3.0

FSC258	Victimology and Crisis Management in Public Safety	Victimology, the criminal justice system, techniques of crisis intervention and management, and the importance of a multicultural and global perspective. Includes violent crimes, sexual assault, family violence, post-traumatic stress disorder, the role of substance abuse, developing effective coping skills of victims and responders, appropriate community resources, and the	Prerequisites: None.	LEC 3.0 3.0 3.0
FSC259	Advanced Ladder Operations	Comprehensive training for members of fire department ladder companies. Emphasis on application of techniques, incorporating safety, progressive skills, and	Prerequisites: Permission of Instructor.	L+L 8.0 8.5 8.5
FSC260	Technical Rope Rescue (RR) 1, 2, 3	Concepts, techniques, and skills needed to support technical rope rescue. Meets Arizona Fire Marshal Office requirements for RR1, RR2, RR3 and National Fire Protection Association (NFPA) 1670 Operational	Prerequisites: A grade of C or better in FSC131 or permission of Instructor.	L+L 3.0 3.6 3.6
FSC261	National Fire Protection Agency Rope Technician	Advanced anchor construction, use of elevated anchor points on difficult edges, horizontal rope systems, and study of force multipliers commonly experienced during high angle rope rescue. Meets the certification requirements for the NFPA (National Fire Protection Agency) 1670 for Operational Rope Rescue and NFPA	Prerequisites: A grade of C or better in FSC260 or (the Office of the Arizona State Fire Marshal's Ropes 1 2 and 3 class) or permission of Instructor.	L+L 3.0 3.6 3.6
FSC271	Aircraft Rescue Fire Fighter (ARFF)-Basic	Basic level course for aircraft rescue firefighters. Preparation for performing standard aircraft rescue and firefighting procedures, including roles and responsibilities, basic airport configuration and design, aircraft types, hazardous cargo, safety precautions and	Prerequisites: Permission of Program Director.	LEC 3.0 3.0 3.0
FSC272	Aircraft Rescue Fire Fighter (ARFF) - Advanced	Advanced level course for certification of aircraft rescue firefighters. Integrating, performing and evaluation of standard firefighting skills for airport configuration and design, aircraft types, hazardous cargo, safety	Prerequisites: A grade of C or better in FSC271.	L+L 3.0 4.0 4.0
FSC273	Aircraft Rescue Fire Fighter (ARFF)-Driver	Driver training course for aircraft rescue firefighters. Preparation for performing standard driving procedures for aircraft rescue and firefighting. Includes but not limited to proper handling of apparatus, equipment and tools used in aircraft rescues and communication with	Prerequisites: A grade of C or better in (FSC272 or current employment as an airport firefighter) and permission of Instructor.	L+L 2.0 2.5 2.5
FSC274	Aircraft Rescue Fire Fighter (ARFF) - Incident Command	Incident command certification of aircraft rescue firefighter performing and evaluating standard firefighting skills for airport firefighters. Includes but not limited to aircraft types, hazardous cargo, and safety	Prerequisites: A grade of C or better in FSC273 or permission of Program Director.	LEC 3.0 4.0 3.7

FSC275	Aircraft Rescue Fire Fighter (ARFF) Certification Renewal	Designed to provide recertification for the performance of standard aircraft rescue and firefighting procedures and skills for airport firefighters. Includes but not limited to airport configuration and design, aircraft types,	Prerequisites: A grade of C or better in (FSC272 or current employment as an airport firefighter) and permission of Instructor.	L+L 3.0 4.0 4.0
FSC276	Terrorism Liaison	Provides knowledge and skills required for the Terrorism Liaison Officer (TLO) role to coordinate and communicate with various fire, police, and military agencies in managing threat vulnerability and other	Prerequisites: Permission of Program Director.	L+L 4.0 4.0 4.0
FSC277	Threat Vulnerability Assessment	Provides a historical perspective of threats and the activities and methods used by first responders to identify and mitigate future threats. Introduces and examines threat vulnerability of critical infrastructure within jurisdictions. Provides assessment techniques for	Prerequisites: Permission of Program Director.	L+L 1.0 1.0 1.0
FSC278	Hostile Intent and Intervention Training	Provides knowledge and skills required to detect and anticipate terrorist activities as a member of a Hostile Intent and Intervention Team (HIIT).	Prerequisites: Permission of Program Director.	L+L 2.0 2.0 2.0
FSC279	Field Intelligence Team Training	Provides knowledge and skills required for situational awareness of suspicious activities and the deployment of first responders for mitigation and investigation for	Prerequisites: Permission of Program Director.	L+L 3.0 3.0 3.0
FSC280	Terrorism Hazmat First Responder Training	Provides knowledge and skills to understand the chemistry of reactive and unstable hazardous materials, the toxicology of dangerous chemicals, and the measures taken to protect the safety of responders, the community, and the environment of chemical accidents. Also includes an introduction to field sampling of unknown substances for the Field Intelligence Team	Prerequisites: Permission of Program Director.	L+L 4.0 4.0 4.0
FSC282AA	Service-Learning Experience in Fire Science	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 1.0 1.0 0.0
FSC282AB	Service-Learning Experience in Fire Science	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 2.0 2.0 0.0
FSC282AC	Service-Learning Experience in Fire Science	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 3.0 3.0 0.0
FSC290AA	Arson Investigation	Investigative techniques used in analyzing suspected arson scenes, motives, and collection of physical	Prerequisites: None.	LEC 1.0 1.0 1.0

FSC296WA	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 1.0 5.0 0.0
FSC296WB	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 2.0 10.0 0.0
FSC296WC	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 3.0 15.0 0.0

FSC296WD	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 4.0 20.0 0.0
FSC298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
FSC298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
FSC298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
FYE101	Introduction to College, Career and Personal Success	Focus on student success through exploration of academic, career and life skills. Includes study of goal-setting/success strategies, academic mindset and financial literacy. Develop an education/career plan	Prerequisites: None.	LEC 1.0 1.0 1.0

FYE103	Exploration of College, Career and Personal Success	Focus on student success through exploration of academic, career, and life skills. Includes study of goal-setting/success strategies, academic mindset, interpersonal skills, financial literacy, self-care strategies, diverse perspectives, and campus tools and resources. Develop an education/career plan utilizing career	Prerequisites: None.	LEC 3.0 3.0 3.0
GBS103	Principles of Banking	History, characteristics and significance of American banking system, includes types of accounts, banking services and the relationship of commercial banks to	Prerequisites: None.	LEC 3.0 3.0 3.0
GBS109	Introduction to Esports Management	Introduction to Esports will introduce the business, economics, operations and marketing of the Esports industry. Historical and cultural implications will be examined from the early days of competitive video gaming, to today's billion dollar industry. Global awareness and diverse cultural viewpoints and trends will be studied as they relate to the Esports industry. This course will introduce students to the numerous	Prerequisites: None.	LEC 3.0 3.0 3.0
GBS110	Human Relations in Business and Industry	Exploration of fundamental theories and concepts of human relations in business and industry. Particular emphasis is placed on developing effective interpersonal relationships and leadership skills within	Prerequisites: None.	LEC 3.0 3.0 3.0
GBS120	Workplace Communication Skills	Reviews planning, organization, development, and evaluation of written and oral communication in business settings, including informative and persuasive	Prerequisites: None.	L+L 3.0 3.0 3.0
GBS126	Writing Resumes	Planning, organizing, and writing a professional resume. Focus on presentation skills including format and	Prerequisites: None.	L+L 1.0 1.7 1.7
GBS131	Business Calculations	Review of basic arithmetic and application of mathematics to business problems, includes	Prerequisites: None.	LEC 3.0 3.0 3.0
GBS132	Personal and Family Financial Security	Principles and practices of personal and family financial planning, includes savings, budgeting, credit, buying versus renting, and general principles of consumerism.	Prerequisites: None.	LEC 3.0 3.0 3.0
GBS151	Introduction to Business	Characteristics and activities of current local, national, and international business. An overview of economics, marketing, management and finance	Prerequisites: None.	LEC 3.0 3.0 3.0
GBS175	Professional Development	Examines personal qualities and professional skills needed to find a good job. Explores techniques	Prerequisites: None.	LEC 3.0 3.0 3.0

GBS205	Legal, Ethical, and Regulatory Issues in Business	Legal theories, ethical issues and regulatory climate affecting business policies and decisions.	Prerequisites: None.	LEC 3.0 3.0 3.0
GBS206	Business Law (UCC)	Legal and ethical aspects of contracts, sales, commercial paper, secured transactions, documents of title, letter of credit, bank deposits, and collections	Prerequisites: None.	LEC 3.0 3.0 3.0
GBS207	Business Law (General Corporate)	Legal and ethical aspects of agency, partnerships, corporations, bankruptcy, antitrust, securities, and other	Prerequisites: None.	LEC 3.0 3.0 3.0
GBS211	Legal, Ethical and Regulatory Issues of the Internet Studies	Legal, ethical and regulatory issues of the Internet environment, including personal, commercial and business electronic transactions in cyberspace.	Prerequisites: None.	L+L 3.0 4.0 4.0
GBS220	Quantitative Methods in Business	Business applications of quantitative optimization methods in operations management decisions.	Prerequisites: A grade of C or better in (MAT150 or MAT151 or MAT152) or satisfactory score on the District math placement test.	LEC 3.0 3.0 3.0
GBS221	Business Statistics	Business applications of descriptive and inferential statistics, measurement of relationships, and statistical process management. Includes the use of spreadsheet software for business statistical analysis.	Prerequisites: A grade of C or better in GBS220 or MAT217 or MAT218.	LEC 3.0 3.0 3.0
GBS233	Business Communication	Internal and external business communications, including verbal and nonverbal techniques	Prerequisites: A grade of C or better in ENG101 or ENG107 with grade of C or better or permission of Department or Division.	LEC 3.0 3.0 3.0
GBS261	Investments I	Evaluation of various investment forms including study of inflation, taxation, government securities, stocks and bonds, real estate and retirement plans. Securities industry knowledge and skills for individuals to prepare for careers in Financial Services. Includes capital markets, types of products and their risks, trading, customer accounts, prohibited activities, and regulatory agencies and their functions. Helps to prepare students for the Financial Industry Regulatory Authority (FINRA)	Prerequisites: None. Corequisites: Concurrent enrollment in GBS261LL recommended but not required.	LEC 3.0 3.0 3.0

GBS261LL	Securities Industry Essentials (SIE) Exam Prep	Helps to prepare students for the Financial Industry Regulatory Authority (FINRA) Securities Industry Essentials (SIE) Examination required for prospective securities industry professionals. Focuses on reviewing key concepts, practicing skills, and preparing to successfully demonstrate existing knowledge on the SIE certification exam. The course is designed to provide an overview of exam topics and study and test-taking strategies. It also will include structured study	Prerequisites: None. Corequisites: Concurrent enrollment in GBS261 recommended but not required.	L+L 1.0 1.0 1.0
GBS270AA	Business Internship	General business work experience in a business or industry. Eighty hours of designated work per credit per semester. Maximum of 3 credits allowed	Prerequisites: Permission of Department or Division.	LAB 1.0 1.0 0.0
GBS270AB	Business Internship	General business work experience in a business or industry. Eighty hours of designated work per credit totaling 160 hours per semester. Maximum of 3 credits	Prerequisites: Permission of Department or Division.	LAB 2.0 2.0 0.0
GBS270AC	Business Internship	General business work experience in a business or industry. Eighty hours of designated work per credit.	Prerequisites: Permission of Department or Division.	LAB 3.0 3.0 0.0
GBS282AA	Volunteerism General Business: Service Learning Experience	Service learning field experience within private/public agencies, educational institution, and citizen volunteer groups.	Prerequisites: A grade of C or better in GBS151 and permission of Instructor.	LAB 1.0 1.0 0.0
GBS294	Consumer Credit	Consumer lending by financial institutions	Prerequisites: None.	LEC 3.0 3.0 3.0
GBS296WA	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 1.0 5.0 0.0

GBS296WB	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 2.0 10.0 0.0
GBS296WC	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 3.0 15.0 0.0
GBS296WD	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 4.0 20.0 0.0
GBS298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0

GBS298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
GBS298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
GCU102	Human Geography: Spatial Relationships Between Humans and Culture with Their Environment	Systematic study of the interaction of humans with their environment. Global spatial patterns of various cultures, economic, social, political, urban and perceptual environments.	Prerequisites: None.	LEC 3.0 3.0 3.0
GCU113	United States and Arizona Social Studies	Overview of government, history, and geography of the United States and Arizona. Includes the relationship of Arizona to the U.S. government as well as the influences and developments that have shaped U.S. and Arizona history. Also covers geographical systems,	Prerequisites: None.	LEC 3.0 3.0 3.0
GCU121WG	World Geography: People, Places, and Culture	Description and analysis of spatial variations in culture, social, economic, and political phenomena in major world regions. Emphasis on the major cultural realms of Europe, Asia, North Africa / Middle East, Sub-Saharan	Prerequisites: None.	LEC 3.0 3.0 3.0
GCU194	Special Topics in Cultural Geography	Detailed study of specific regions, topics, or current issues in cultural geography. Topics may include origins, diffusion, and division of cultural areas. Examines cultural patterns and spatial organization which may include population, religion, economic, social and political characteristics. Studies interrelationships between humans and the physical environment (i.e.	Prerequisites: None.	LEC 3.0 3.0 3.0

GCU221	Arizona Geography: Landforms, Climate, Water, People, and Culture	The historical to modern development of Arizona. The spatial patterns of geology, weather, climate, vegetation, water, human settlement, demographics, culture, and economic factors affecting the past,	Prerequisites: None.	LEC 3.0 3.0 3.0
GCU282AA	Service-Learning Experience in Cultural Geography	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 1.0 1.0 0.0
GCU282AB	Service-Learning Experience in Cultural Geography	Unpaid Service-Learning (SL) experience completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 2.0 2.0 0.0
GCU282AC	Service-Learning Experience in Cultural Geography	Unpaid Service-Learning field experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 3.0 3.0 0.0
GCU298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment are available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
GCU298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment are available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
GCU298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment are available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
GER101	Elementary German I	Basic grammar, pronunciation and vocabulary of the German language. Includes the study of German culture, practice of listening, speaking, reading and	Prerequisites: None.	LEC 4.0 4.0 4.0

GER102	Elementary German II	Continued study of grammar and vocabulary of the German language along with the study of German culture. Emphasis on German language skills.	Prerequisites: A grade of C or better in GER101 or permission of Department or Division. Completion of prerequisites within the last three	LEC 4.0 4.0 4.0
GER201	Intermediate German I	Review of essential grammar of the German language and study of the German culture. Continued practice and development of reading, writing, and speaking skills.	Prerequisites: A grade of C or better in GER102 or two years of high school German or permission of Department or Division. Completion of prerequisites within the last three	LEC 4.0 4.0 4.0
GER202	Intermediate German II	Continued development of German language skills and continued study of the German culture.	Prerequisites: A grade of C or better in GER201 or permission of Department or Division. Completion of prerequisites within the last three	LEC 4.0 4.0 4.0
GIS205	Geographic Information Technologies	Introduces modern geographic information technologies, including cartography, Geographic Information System (GIS), remote sensing, global	Prerequisites: None.	LEC 3.0 3.0 3.0
GIS211	Geographic Information Science I	Introduces students to digital map creation including vector and raster data, map elements, and design, symbology, and the geo database using Environmental Systems Research Institute (ESRI) desktop and online	Prerequisites: A grade of C or better in GIS205 or permission of Instructor.	L+L 4.0 4.0 4.0
GIS220	Introduction to ArcPy Scripting	Students will learn how to automate geoprocessing tasks and apply scripting fundamentals using the ArcGIS Python-based scripting language ArcPy. The course emphasizes problem solving using geoprocessing analysis, identifying system integration and data management tasks, determining programming	Prerequisites: A grade of C or better in GIS211.	LEC 3.0 3.0 3.0
GIS222	Geographic Information Science II	Geographic Information Science (GIS) as a basis for microcomputer spatial analysis and synthesis. Includes digitizing, database organization, spatial retrieval and	Prerequisites: A grade of C or better in GIS211 or permission of Instructor.	LEC 3.0 3.0 3.0
GIS223	Introduction to Digital Image Processing	Uses and application of remote sensing and imagery in Geographic Information Systems (GIS). Uses and application of Global Positioning Systems to GIS and	Prerequisites: None.	LEC 3.0 3.0 3.0
GLG101	Physical Geology: Dynamic Earth Lecture	Introduction to Earth's materials, surface and internal geologic processes, plate tectonics and geologic time.	Prerequisites: None.	LEC 3.0 3.0 3.0
GLG101IN	Physical Geology: Dynamic Earth	Introduction to Earth's materials, surface and internal geologic processes, plate tectonics and geologic time. Includes practical experience in rock and mineral identification, topographic maps, and applied problems	Prerequisites: None.	LEC 4.0 3.0 3.0 LAB 0.0 3.0 3.0

GLG102	Historical Geology: Primordial to Present Lecture	The origin and history of the Earth, its dynamic geographic and climatic changes. Evolution and sequence of life recorded in the fossil record; tectonic	Prerequisites: None.	LEC 3.0 3.0 3.0
GLG102IN	Historical Geology: Primordial to Present	The origin and history of the Earth, its dynamic geographic and climatic changes. Evolution and sequence of life recorded in the fossil record; tectonic	Prerequisites: None.	LEC 4.0 3.0 3.0 LAB 0.0 3.0 3.0
GLG103	Physical Geology: Dynamic Earth Lab	Includes practical experience in rock and mineral identification, topographic maps, and applied problems	Prerequisites: None.	LAB 1.0 3.0 3.0
GLG104	Historical Geology: Primordial to Present	The study of minerals, rocks, fossils, geologic maps and structures.	Prerequisites: None.	LAB 1.0 3.0 3.0
GLG105	Introduction to Planetary Science	A survey of solar system objects and their geologic evolution, surfaces, interiors, and atmospheres, and the methods used to study them; weekly laboratory for data analysis and experiments; possible weekend field trip.	Prerequisites: None.	L+L 4.0 6.0 6.0
GLG106	Life in the Universe	Introduction to the search for life in the universe for the non-science major. Earth's location in space and time, nature of life, light and the spectrum, origin and history of the universe, origin of life on Earth and the possibility of life on other planets.	Prerequisites: A grade of C or better in MAT090 or MAT091 or MAT092 or completion of higher level mathematics course, or satisfactory score on placement exam.	LEC 4.0 3.0 3.0 LAB 0.0 3.0 3.0
GLG107	Life in the Universe Laboratory	Astronomy, Biology, and Planetary Science laboratory.	Prerequisites: A grade of C or better in AST/GLG106 and permission of Instructor or Department or Division.	LAB 1.0 3.0 3.0
GLG110	Geological Disasters and the Environment	Acquaints students with the use and importance of geological studies as they apply to the interactions between people and the earth. Includes geological processes and hazards such as earthquakes, volcanoes, floods and landslides. Examines	Prerequisites: None.	LEC 3.0 3.0 3.0
GLG110IN	Geological Disasters and the Environment	Acquaints students with the use and importance of geological studies as they apply to the interactions between people and the Earth. Includes geological processes and hazards such as earthquakes, volcanoes, floods and landslides. Examines	Prerequisites: None.	LEC 4.0 3.0 3.0 LAB 0.0 3.0 3.0
GLG111	Geological Disasters and the Environment Lab	Introduction to geological processes and concepts. Application of basic geologic knowledge to evaluate, interpret and propose solutions for a variety of current and past geology-related environmental disasters and	Prerequisites: None.	LAB 1.0 3.0 3.0
GLG121	Geology of the Grand Canyon	Introduction to the physiography and geology of the Grand Canyon. Includes a hiking field trip to the Grand	Prerequisites: None. GLG103 suggested but not required.	L+L 1.0 2.0 2.0

GLG140	Introduction to Oceanography	Investigates the marine environment in terms of basic scientific concepts. Emphasizes the impact of ocean pollutants, climate fluctuations, and resources from the	Prerequisites: None.	LEC 3.0 3.0 3.0
GLG140IN	Introduction to Oceanography	Introduces students to the physical, chemical, and geological conditions that regulate global ocean phenomena. Topics covered include history of oceanography, physical and chemical properties of ocean water, air-sea interactions, current, wave, and tidal phenomena, origins of the oceans, geologic processes and features, biological influences, and	Prerequisites: None.	LEC 4.0 3.0 3.0 LAB 0.0 3.0 3.0
GLG229AB	Field Studies for Educators	Field trips to selected geological areas in Arizona in order to collect and/or observe geological phenomena. Designed for pre-college teachers.	Prerequisites: None.	LAB 2.0 10.0 2.0
GLG229AC	Field Studies for Educators	Field trips to selected geological areas in Arizona in order to collect and/or observe geological phenomena. Designed for pre-college teachers.	Prerequisites: None.	LAB 3.0 15.0 3.0
GLG230AA	Field Geology of the Southwest	Field trips to selected areas in the Southwest, such as Arizona, Utah, California, and Sonora to observe and interpret various geological features and phenomena.	Prerequisites: None. GLG103 suggested but not required.	LAB 1.0 5.0 1.0
GLG230AB	Field Geology of the Southwest	Field trips to selected areas in the Southwest, such as Arizona, Utah, California, and Sonora to observe and interpret various geological features and phenomena.	Prerequisites: None. GLG103 suggested but not required.	LAB 2.0 10.0 2.0
GLG230AC	Field Geology of the Southwest	Field trips to selected areas in the Southwest, such as Arizona, Utah, California, and Sonora to observe and interpret various geological features and phenomena.	Prerequisites: None. GLG103 suggested but not required.	LAB 3.0 15.0 3.0
GLG231AA	Special Topics in Geology	Exploration of important topics in geology. Specific topic varies.	Prerequisites: None.	LEC 0.5 0.5 0.5
GLG231AB	Special Topics in Geology	Exploration of important topics in geology. Specific topic varies.	Prerequisites: None.	LEC 1.0 1.0 1.0
GLG231AC	Special Topics in Geology	Exploration of important topics in geology. Specific topic varies.	Prerequisites: None.	LEC 2.0 2.0 2.0
GLG231AD	Special Topics in Geology	Exploration of important topics in geology. Specific topic varies.	Prerequisites: None.	LEC 3.0 3.0 3.0
GLG280	Geology of Arizona Lecture	Acquaints students with the physical and historical geology of Arizona, including the origin of present-day land forms and outstanding modern geologic features	Prerequisites: None.	LEC 3.0 3.0 3.0
GLG281	Geology of Arizona Lab	May accompany GLG280. Examples of specific geologic processes and local areas. May require field	Prerequisites: None.	LAB 1.0 3.0 3.0

GLG282AA	Volunteerism for Geology: A Service Learning Experience	Service-learning field experience within human service organizations, government offices, public schools, or hospitals.	Prerequisites: Permission of Instructor.	LAB 1.0 1.0 0.0
GLG296WA	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify) or permission of instructor. Corequisites: Must be concurrent in at least one class which is related to student's major or career interest or with	LAB 1.0 5.0 0.0
GLG296WB	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify) or permission of instructor. Corequisites: Must be concurrent in at least one class which is related to student's major or career interest or with	LAB 2.0 10.0 0.0
GLG296WC	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify) or permission of instructor. Corequisites: Must be concurrent in at least one class which is related to student's major or career interest or with	LAB 3.0 15.0 0.0

GLG296WD	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify) or permission of instructor. Corequisites: Must be concurrent in at least one class which is related to student's major or career interest or with	LAB 4.0 20.0 0.0
GLG298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
GLG298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
GLG298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
GPH111	Physical Geography: Atmosphere, Lithosphere, Water And Hazards Lecture	Earth's physical processes and impacts on human environments via the atmosphere, biosphere, lithosphere and hydrosphere. Topics and practical experiences include severe weather, climate change, biomes / ecosystems, landform processes; mountain building and erosion by rivers, glaciers, waves, wind and	Prerequisites: None.	LEC 3.0 3.0 3.0

GPH112	Physical Geography: Climate, Landforms, Water and Hazards Laboratory	Earth's physical processes and impacts on the human environment via the atmosphere, biosphere, lithosphere and hydrosphere. Practical experiences include earth-sun relationships, weather, climate, biomes, landform processes; mountain building and erosion by rivers,	Prerequisites: A grade of C or better in GPH111 or Corequisites: GPH111.	LAB 1.0 3.0 3.0
GPH113	Physical Geography: Atmosphere, Lithosphere, Water, and Hazards	Earth's physical processes and impacts on human environments via the atmosphere, biosphere, lithosphere and hydrosphere. Topics and practical experiences include severe weather, climate change, biomes / ecosystems, landform processes; mountain building and erosion by rivers, glaciers, waves, wind,	Prerequisites: None.	LEC 4.0 3.0 3.0 LAB 0.0 3.0 3.0
GPH194	Special Topics in Physical Geography	Detailed study of specific regions, topics, or current issues in physical geography. Emphasis on relationships within and between the atmosphere, lithosphere, hydrosphere, biosphere, and how humans relate to their environment. Topics may include environmental ecosystems, physical processes (i.e., weather, climate, geomorphology, oceanography),	Prerequisites: None.	LEC 3.0 3.0 3.0
GPH210	Society and Environment	Principles of physical geography relating to environmental problems pertinent to contemporary society. Pollution, maladjusted land use, resource	Prerequisites: A grade of C or better in ENG101 or ENG107 or equivalent.	LEC 3.0 3.0 3.0
GPH211	Landform Processes	Geographic characteristics of landforms and earth surface processes emphasizing erosion, transportation, deposition and implications for human management of	Prerequisites: None.	LEC 4.0 3.0 3.0 LAB 0.0 3.0 3.0
GPH212	Introduction to Meteorology I	Atmospheric processes and elements. General and local circulation, heat exchange and atmospheric	Prerequisites: None.	LEC 3.0 3.0 3.0
GPH213	Climate and Weather	Study of atmospheric phenomena over periods of time measured in months, years or longer. Includes average weather conditions, infrequent and unusual types of weather, and the influence of weather on the cultural	Prerequisites: None.	LEC 3.0 3.0 3.0
GPH214	Introduction to Meteorology	Explores meteorological operations, including temperatures, precipitation, weather systems, and	Prerequisites: None. Corequisites: GPH212.	LAB 1.0 3.0 3.0
GPH215	Climate and Weather Laboratory	A mathematical, statistical, and spatial analysis of climatological phenomena.	Prerequisites: None. Corequisites: GPH213.	LAB 1.0 3.0 3.0
GPH230	Climate Change	Investigates natural and human effects on global, regional, and local scale climate variability; explores climate reconstruction, chronology, and theory from paleoclimate through modern times, and discusses	Prerequisites: None.	LEC 3.0 3.0 3.0

GPH267	Extreme Weather and Climate	Emphasis on interaction of physical and cultural geography in potentially hazardous weather and climate processes. Exploration of hazard risk analysis.	Prerequisites: A grade of C or better in ENG101 or ENG107.	LEC 3.0 3.0 3.0
GPH282AA	Service-Learning Experience in Physical Geography	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 1.0 1.0 0.0
GPH282AB	Service-Learning Experience in Physical Geography	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 2.0 2.0 0.0
GPH282AC	Service-Learning Experience in Physical Geography	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 3.0 3.0 0.0
GPH298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment are available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
GPH298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment are available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
GPH298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment are available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
GRK101	Elementary Classical Greek I	Introduction to the basic grammar and vocabulary of Ancient Greek. Includes introductory study of Ancient Greek culture. Practice reading and translating Ancient Greek as well as basic translation of English to Ancient	Prerequisites: None.	LEC 4.0 4.0 4.0

GRK102	Elementary Classical Greek II	Continued study of the grammar and vocabulary of Ancient Greek and Ancient Greek culture. Emphasis on reading and translating Ancient Greek to English, culminating in the reading of unadapted ancient texts.	Prerequisites: A grade of C or better in GRK101 or permission of Department or Division. Completion of prerequisites within the last three	LEC 4.0 4.0 4.0
GST201	Game Studies	Introduces concepts, tools, and topics necessary to studying and understanding games, whether analog or digital, as closed systems for definition, analysis, design, development, play, critique, and revision. Surveys games from around the world and introduces concepts, tools, and topics necessary to studying and understanding them, whether analog or digital, as	Prerequisites: A grade of C or better in (RDG100 or RDG100LL) or (RDG100AA and RDG100AB and RDG100AC) or RDG111 or RDG112 or RDG113 or eligibility for ENG101 as indicated by appropriate writing assessment test score.	LEC 3.0 3.0 3.0
GST202	Games, Culture and Aesthetics	Considers games as artifacts and expressions of our basic consciousness, humanity, and potential. Explores through the lens of world cultures such concepts as values, power relations, gender roles, arts, aesthetics, and desire. Compares games across cultural, temporal, geographic, and linguistic divides, for the purpose of examining and appreciating the experiences, contributions, and values of diverse populations, as	Prerequisites: A grade of C or better in (RDG100 or RDG100LL) or (RDG100AA and RDG100AB and RDG100AC) or RDG111 or RDG112 or RDG113 or eligibility for ENG101 as indicated by appropriate writing assessment test score.	LEC 3.0 3.0 3.0
GST245	Games for Teaching and Learning	Survey of past and present games for teaching and learning from multiple cultures and continents. Exploration of the potential for games to help us: face challenges; solve problems; enhance our quality of life; and render our experience of the world in a more meaningful way. Applies theories of learning to determine best practices in game design, development, and production. Demonstrates how to align instructional content with appropriate game-based mechanics and	Prerequisites: A grade of C or better in (ENG101 or ENG107) and (RDG100 or RDG100LL or RDG111 or RDG112 or RDG113) or satisfactory score on District reading placement exam or permission of Instructor.	LEC 3.0 3.0 3.0
GTC104	Manufacturing Processes	Introduces students to manufacturing processes used in conversion of raw materials into useful products. Presents the basic manufacturing processes in logical groups, based on similarities of purpose and	Prerequisites: None.	L+L 4.0 7.0 7.0
GTC106	Industrial Safety	Safety, health management, and accident prevention in industrial work environment. Role of Occupational Safety and Health Administration (OSHA) act, materials handling, electrical safety, machine safety, first response to fire and medical emergencies, safety signs and color codes, recognition of safety and health	Prerequisites: None.	LEC 2.0 2.0 2.0

GTC106AA	Industrial Safety	Safety, health management and accident prevention in industrial work environment. Role of Occupational Safety and Health Administration (OSHA) act, materials handling, electrical safety, machine safety, first response to fire and medical emergencies, safety signs and color codes, recognition of safety and health	Prerequisites: None.	L+L 2.0 3.0 3.0
GTC107	Technical Mathematics I	Mathematical principles to include basic operations, significant digits, exponents, square roots and order of operations. Solve problems using arithmetic, signed numbers, percentages, fractions, exponents, and square root. Use of hand held calculator. Technology	Prerequisites: None.	LEC 3.0 3.0 3.0
GTC108	Technical Mathematics II	Fundamental algebraic operations. Problem solving involving metric measurement, gears, pulleys, simple mechanism problems. Areas and volume calculations of geometric figures. Essentials of trigonometry for solving	Prerequisites: A grade of C or better in GTC107 or permission of Instructor.	LEC 3.0 3.0 3.0
GTC121	Construction Estimating I	Fundamentals of determining quantities of material, equipment and labor for given project. Includes procedures used in applying proper unit costs to these	Prerequisites: None.	LEC 3.0 3.0 3.0
GTC123	Construction Estimating II	Details of job estimates. Includes unit cost considerations and subcontracting. Emphasis on bid preparation	Prerequisites: A grade of C or better in GTC121 or permission of Department or Division.	LEC 3.0 3.0 3.0
GTC127	Beginning Woodworking	Introduction to woodworking fundamentals and applications. Familiarization with the basic woodworking tools emphasizing the safe and proper use of woodworking hand tools and stationary and portable power tools. Class projects develop a working project plan, identify material needs, cost analysis, basic	Prerequisites: None.	L+L 3.0 4.0 4.0
GTC128	Intermediate Woodworking	Further development and application of basic woodworking skills. Complex projects with emphasis on planning and calculating and buying needed materials. Introduction of jointery, complex fitting, more advanced	Prerequisites: A grade of C or better in GTC127 or previous woodworking experience.	L+L 3.0 4.0 4.0
GTC129	Manufacturing Welding	Technical theory, safety considerations, and application of shop and welding processes commonly used in manufacturing, including oxyacetylene welding, brazing, and cutting, SMAW (Elec ARC), GMAW (MIG), GTAW	Prerequisites: None.	L+L 3.0 8.0 8.0

GTC130	Furniture Construction I	Process of building a piece of furniture including calculating and buying needed material, using tools properly and safely (hand tools and machines), joinery, wood preparation and basic finishing techniques.	Prerequisites: A grade of C or better in GTC128 or previous woodworking experience and permission of Instructor.	L+L 3.0 6.0 6.0
GTC131	Furniture Construction II	Continuation of GTC130 including special set-ups on machines, special joints, adhesives, special finishes, panel doors, panel drawers, metal drawer guides and	Prerequisites: A grade of C or better in GTC130 or permission of Instructor.	L+L 3.0 6.0 6.0
GTC132	Wood Finishing	Introduction to the materials, processes, and sequences used in applying a variety of finishes to various wood types. Includes abrasives, stains, fillers, surface coats, tools and equipment, and basic	Prerequisites: None.	L+L 3.0 4.0 4.0
GTC144	Introduction to Cabinetmaking	Techniques and projects to produce complex cabinet projects. Includes project planning, working from plans, material cost analysis, and advanced finishing	Prerequisites: A grade of C or better in GTC130 and permission of Instructor.	L+L 3.0 5.0 5.0
GTC145	Advanced Cabinetmaking	Further exploration of advanced woodworking techniques on complex projects.	Prerequisites: A grade of C or better in GTC144 and permission of	L+L 3.0 5.0 5.0
GTC181	Introduction to Fluid Power	Develops an understanding of the fundamental laws and principles of fluids together with consideration of such fluid devices as valves, cylinders, pumps, sizes of lines, and simple hookups. Includes both hydraulics and	Prerequisites: A grade of C or better in ELE101 or equivalent.	L+L 3.0 6.0 6.0
GTC182	Building Construction Methods I	Basics of building construction from job site selection through exterior finish of the shell. Focuses mainly on residential construction for the consumer. Includes blueprints, estimating materials and labor, work scheduling, job layout, foundations, framing, and exterior finish. Energy conservation, safety, and building	Prerequisites: None.	L+L 3.0 4.0 4.0
GTC185	Electro-Mechanical Devices	Concepts, principles, maintenance, and troubleshooting of mechanical and electro-mechanical devices; mechanical alignment of shafts, pillowblocks, gears, and couplers on mechanical breadboard; transmission devices including lead screws, linkages, worm and worm wheels, gear trains, speed reducers, chain drives, and belt drives; principles of lubrication; operation of dc(direct current), ac(alternating current), and stepping motors; application of tachometers, stepping motors, linear actuators, relays, solenoids, switches, contactors,	Prerequisites: A grade of C or better in ELE101 or GTC108 or (MAT103AA and MAT103AB) or permission of Instructor.	L+L 4.0 6.0 6.0

GTC208	Statistical Process Control	Study of statistical process control concepts and methods. Extraction and application of specific parameters from data retrieved from a process	Prerequisites: A grade of C or better in ELE101 or GTC108 or permission of Department or Division.	LEC 3.0 3.0 3.0
GTC209	Automated Manufacturing	Evolution of automation in manufacturing from fixed (hard) automation to Computer Integrated Manufacturing (CIM) is presented with numerical control (NC); computer-aided design/computer-aided manufacturing (CAD/CAM); automated material handling; automation communication protocol. Manufacturing management strategies include statistical process control (SPC); material requirements planning (MRP); manufacturing resource planning (MRPII); and	Prerequisites: A grade of C or better in ELT131 or ELE131 or equivalent.	L+L 3.0 6.0 6.0
GTC216	Properties of Materials	Study of manufacturing properties of materials, the behavior of materials under load, stress and strain and torsion and qualities of materials other than strength	Prerequisites: None.	LEC 3.0 3.0 3.0
GTC223	Advanced Machine Tools	Advanced machining practices; emphasis on application of machines and tool theory.	Prerequisites: A grade of C or better in GTC102 or MET231.	L+L 3.0 6.0 6.0
GTC236	CAD/CAM Computer Numerical Control (CNC) Programming	Programming of Computer Numerical Control (CNC) machine tools such as CNC Milling Machines, and Turning Centers. Utilizing Computer Aided Drafting and Computer Aided Manufacturing (CAD/CAM) for design and generation of part geometry. Verification of tool	Prerequisites: None.	L+L 3.0 6.0 6.0
GTC272	Automated Control Systems (PLC Applications)	The programmable logic controller as the control unit for the application of sensors, switches, and transducers. Motors, stepper motors, and other prime movers are controlled. Includes both on/off and analog devices.	Prerequisites: A grade of C or better in GTC/MIT209 or permission of Instructor. Xref: GTC209	L+L 3.0 6.0 6.0
GTC273	Industrial Automation Controls and System Integration.	A study in application and implementation of industrial control systems including machine building and system integration	Prerequisites: A grade of C or better in GTC272.	L+L 3.0 6.0 6.0
GTC276	Solids Programming	Parametric modeling, CNC part production, model to CAM system integration, and solid model part representation. Applied CAD/CAM in the role of	Prerequisites: A grade of C or better in GTC266.	L+L 3.0 6.0 6.0

GTC296WA	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 1.0 5.0 0.0
GTC296WB	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 2.0 10.0 0.0
GTC296WC	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 3.0 15.0 0.0

GTC296WD	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 4.0 20.0 0.0
GTC298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
GTC298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
GTC298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
HCC102	Introduction to Safe Patient Handling and Mobility	Introduction to the history and principles of safe patient handling and mobility (SPHM). Introduction to patient mobility bedside assessment. Use of safe patient handling equipment and principles for in-bed movement, transfers to and from stretchers and chairs, exercise, and safe ambulation. Use of equipment for	Prerequisites: None.	L+L 0.5 0.5 0.5

HCC109	CPR for Health Care Provider	Current American Heart Association standards for one and two rescuer cardiopulmonary resuscitation (CPR) and obstructed airway procedures on the adult, infant, and pediatric victim. Use of automatic, external	Prerequisites: None.	LEC 0.5 0.5 0.5
HCC109AA	CPR for Healthcare Providers Practice and Testing	Knowledge and skills refreshment for renewal of a current American Heart Association (AHA) Healthcare Provider (HCP) card or completion of eLearning practice and testing. Including one and two rescuer Cardiopulmonary Resuscitation (CPR) and obstructed airway procedures on the adult, infant, and pediatric victim. Automated external defibrillation (AED)	Prerequisites: Valid Healthcare Provider CPR card at time of course or Part 1 Completion Certificate from an AHA HCP eLearning online course.	LEC 0.25 0.25 0.25
HCC130	Fundamentals in Health Care Delivery	Overview of current and recent development of health care professions, including career and labor market information, health care delivery systems, third party payers, and facility ownership. Health organization structure, patient rights and quality care. Health care and life values. Definition and importance of values, ethics, and essential behaviors in the workplace. Worker rights and responsibilities. Healthful living practices to include nutrition, stress management and exercise. Occupational Safety and Health Administration (OSHA) standard precautions and facility safety. Use of principles of body mechanics in daily living activities. Basic communication skills which facilitate inter-professional teamwork in the health care setting. Focus	Prerequisites: None.	LEC 3.0 3.0 3.0
HCC145	Medical Terminology for Health Care Professionals	Medical terminology used in health care, with special care populations and in special services. Body systems approach to terms related to structures, functions, diseases, procedures, and diagnostic tests. Building and analyzing terms using word parts. Medical	Prerequisites: None.	LEC 3.0 3.0 3.0
HCC145AA	Medical Terminology for Health Care Professionals I	Introduction to medical terms used in health care. Body systems approach to selected terms related to structures, functions, diseases, procedures, and diagnostic tests. Building and analyzing selected terms using basic word parts. Selected medical abbreviations	Prerequisites: None.	LEC 1.0 1.0 1.0

HCC145AB	Medical Terminology for Health Care Professionals II	Selected medical terms used in health care. Body systems approach to more detailed terms related to structures, functions, diseases, procedures, and diagnostic tests. Building and analyzing selected terms using standard word parts. Selected abbreviations and	Prerequisites: A grade of C or better in HCC145AA.	LEC 1.0 1.0 1.0
HCC145AC	Medical Terminology for Health Care Professionals III	Medical terminology used with special care populations and in special services. Includes obstetric, pediatric, mental health, diagnostic imaging, oncology, and surgery terms. Use of special care populations and	Prerequisites: A grade of C or better in HCC145AA and HCC145AB or HCC146.	LEC 1.0 1.0 1.0
HCC146	Common Medical Terminology for Health Care Professionals	Common medical terms used in health care. Body systems approach to common terms related to structures, functions, diseases, procedures, and diagnostic tests. Building and analyzing common terms	Prerequisites: None.	LEC 2.0 2.0 2.0
HCC164	Pharmacology for Allied Health	Chemical, generic, and trade names for drugs. Use of drug references. Pharmacological principles of drugs. Routes of drug administration. Federal and Arizona regulations. Classification of drugs. Abbreviations and	Prerequisites: A grade of C or better in HCC130, or work experience, or equivalent course education as evaluated by the Health Core	LEC 0.5 0.5 0.5
HCC200	Basic Client Care for Allied Health	Safety procedures for the hospitalized client. Transfer, moving and positioning techniques. Client assessment methods and procedures. Protection of airways, drains, tubes, intravenous lines, and infusion pumps. Care of patient in traction and those with limitations to	Prerequisites: A grade of C or better in HCC130 or equivalent.	LAB 0.5 1.5 1.5
HCC204	Clinical Pathophysiology	Causes of disease and their impact on the human body. Common physiologic effects of disease on body systems. Roles of the multidisciplinary health care team in the diagnosis and treatment of disease. Cultural	Prerequisites: A grade of C or better in HCC130 or equivalent, and (BIO160 or BIO201).	LEC 3.0 3.0 3.0
HCC208	Health Care Leadership	Introduction to concepts and skills required of health care leaders. Discussion of leadership styles and conflict management. Application of motivation, delegation, and communication techniques to teamwork	Prerequisites: A grade of C or better in HCC130 or equivalent.	LEC 1.0 1.0 1.0
HCC218	Venous Access for Diagnostic Agents and Pharmaceuticals	Scope of practice and regulations governing venipuncture. Anatomy and physiology of the vascular system. Occupational Safety and Health Administration (OSHA) guidelines. Theory and practice of basic venipuncture for diagnostic agents and pharmaceuticals including equipment and procedures.	Prerequisites: A grade of C or better in HCC130, or work experience or equivalent course education as evaluated by the Health Core Curriculum Coordinator, or currently credentialed as a health care	LAB 0.5 1.5 1.5

HCC298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
HCC298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
HCC298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
HCR100	Care of the Medically Complex Child	Course content will cover the orientation materials and fundamental concepts of foster parents caring for a medically complex child. The course will cover the common disorders and disease processes of children	Prerequisites: None.	LEC 1.0 1.0 1.0
HCR210	Clinical Health Care Ethics	An introduction to health care ethics with emphasis on analysis and ethical decision making at both the clinical and health policy levels for health care professionals. Theoretical foundation of bioethics reviewed within	Prerequisites: A grade of C or better in ENG102 or ENG108 or permission of Instructor.	LEC 3.0 3.0 3.0
HCR220	Introduction to Nursing and Health Care Systems	Introduction to the social, political, and economic contexts of the nursing profession and health care systems in the United States.	Prerequisites: A grade of C or better in ENG102 or ENG108 or permission of Instructor.	LEC 3.0 3.0 3.0
HCR230	Culture and Health	Relation between cultures of diverse groups and health/illness. Emphasis on cross-cultural communication, including awareness of own cultural influences and indigenous and complementary healing	Prerequisites: None.	LEC 3.0 3.0 3.0

HCR240	Human Pathophysiology	Chemical, biological, biochemical, and psychological processes as a foundation for the understanding of alterations in health. The structural and functional pathophysiology of alterations in health; selected	Prerequisites: A grade of C or better in BIO202 or BIO205, or permission of Instructor.	LEC 4.0 4.0 4.0
HCR240AA	Human Pathophysiology I	Chemical, biologic, biochemical, and psychological processes as a foundation for the understanding of alterations in health. The structural and functional pathophysiology of alterations in health; selected	Prerequisites: A grade of C or better in BIO202 or BIO205 or permission of Instructor. Corequisites: HCR240AB or permission of	LEC 2.0 2.0 2.0
HCR240AB	Human Pathophysiology II	Chemical, biologic, biochemical, and psychological processes as a foundation for the understanding of alterations in health. The structural and functional pathophysiology of alterations in health; selected	Prerequisites: A grade of C or better in BIO202 or BIO205 or permission of Instructor. Corequisites: HCR240AA or permission of	LEC 2.0 2.0 2.0
HCR298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
HCR298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
HCR298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0

HCS100	Fundamentals of Surgical Services	Preparation for the Certified Registered Central Service Technician (CRCST) role. Central Service work flow, job responsibilities, growth and development in the field, anatomy and physiology, microbiology for Central Service regulations and standards, infection prevention and control, tools for cleaning, decontamination, cleaning and decontamination, disinfection, sterile packaging and storage, processing, sterilization, management of patient care equipment, tracking	Prerequisites: Admission into the Hospital Central Service Technology or Surgical Technology program or permission of the Program Director.	LEC 5.0 3.0 3.0 LAB 0.0 6.0 6.0
HCS101	Medical Terminology for Surgical Services	Medical Terminology for patient care in surgery related areas. Use of word parts, term spelling, pronunciation and abbreviations related to all surgical specialties.	Prerequisites: None. Corequisites: HCS/SGT100. Xref: HCC100	LEC 1.0 1.0 1.0
HCS102	Basic Surgical Instrumentation for Surgical Services	History, construction and assembly of surgical instrumentation, categories, instrument set assembly, soft tissue foundation sets, general surgery instrumentation sets.	Prerequisites: Admission into the Hospital Central Service Technology or Surgical Technology program or permission of the Program Director.	LEC 2.0 1.0 1.0 LAB 0.0 3.0 3.0
HCS107	Equipment and Supplies for Surgical Services	Introduction to the surgical equipment and supplies used in surgical services areas.	Prerequisites: Admission into the Hospital Central Service Technology or Surgical Technology program or permission of the Program Director.	L+L 1.0 1.0 1.0
HCS152	Advanced Surgical Instruments for Surgical Services	Surgical specialty instrumentation care and assembly of instruments to include plastic, gynecologic, urologic, basic bone and joint, head and neck, neurosurgery, cardiovascular and thoracic, microscopic, endoscopes,	Prerequisites: A grade of C or better in HCS/SGT102. Xref: HCS102	LEC 2.0 1.0 1.0 LAB 0.0 3.0 3.0
HCS154	Hospital Central Service Practicum	Direct supervision of students applying knowledge of Hospital Central Service to include communication, policy and procedures, aseptic and sterile technique, instrument trays and packs, sterilization equipment and	Prerequisites: A grade of C or better in HCS/SGT100 or permission of Instructor. Corequisites: HCS/SGT152. Xref: HCS100	LAB 7.0 36.0 0.0
HES100	Healthful Living	Examines health-related behaviors and issues associated with a modern lifestyle. Explores current topics of interest related to mental, physical, social and environmental health such as stress management, nutrition, and fitness. Identifies and evaluates personal	Prerequisites: None.	LEC 3.0 3.0 3.0
HES105	Finding Health Information Online	Development of skills and competency in accessing, evaluating, and using online medical and health	Prerequisites: None.	LEC 1.0 1.0 1.0

HES110	Introduction to Global Health Issues and Disease	Introduction to global health challenges and diseases from throughout the world. Focus is on biological and social aspects of major health issues, infectious disease, nutrition and environmental health. Includes review of groups that are at increased risk of poor	Prerequisites: None.	LEC 3.0 3.0 3.0
HES120	Principles of Physical Fitness and Wellness	Stress basic, lifetime health and skill-related components of fitness to achieve total wellness. Topics include nutrition, weight control, exercise and aging, cardiovascular and cancer risk reduction, stress management, prevention of sexually transmitted diseases, substance abuse control, and overall	Prerequisites: None.	LEC 3.0 3.0 3.0
HES124	Environmental Wellness	Overview of critical global environmental challenges and the impacts of these issues to human health. Topics to be covered include issues such as transportation options, alternative energy, food production, and air and water issues. Acquire skills, knowledge, and wisdom specific to sustainability which may be applied in many professions, occupations, social institutions, or organizations. At an individual level, learn specific ways	Prerequisites: None.	LEC 3.0 3.0 3.0
HES144	Strategies in Diabetes Management	Introduction to strategies in diabetes mellitus management and prevention for individuals diagnosed with diabetes and their caretakers. Includes a physical	Prerequisites: None.	L+L 3.0 5.0 5.0
HES201	Substance Abuse and Behavior	Principles and factual bases of drug use and abuse. Physiological and socio-psychological effects of drug use and law enforcement of drug abuse. Consultants	Prerequisites: None.	LEC 3.0 3.0 3.0
HES210	Cultural Aspects of Health and Illness	Examines how culture influences health, illness, health maintenance practices, barriers to health care, interactions with healthcare professionals, and health	Prerequisites: None.	LEC 3.0 3.0 3.0
HES282AA	Service-Learning Experience in Health Science	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 1.0 1.0 0.0
HES282AB	Service-Learning Experience in Health Science	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 2.0 2.0 0.0
HES282AC	Service-Learning Experience in Health Science	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 3.0 3.0 0.0

HES296WA	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 1.0 5.0 0.0
HES296WB	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 2.0 10.0 0.0
HES296WC	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 3.0 15.0 0.0

HES296WD	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 4.0 20.0 0.0
HES298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
HES298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
HES298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
HFA101	Introduction to Insulation	Insulators' union history, significance and benefits. Successful and efficient labor relations. Insulation in relation to other construction trades. Safe and proper use of hand and power tools. Safe work habits, job site safety and first aid. Advanced first aid. Occupational Safety and Health Administration (OSHA) safety training	Prerequisites: Registered Apprentice status with the Heat Frost and Asbestos Workers Joint Apprenticeship Training Committee (JATC) or permission of the Apprenticeship Coordinator.	LEC 5.0 5.0 5.0

HFA102	Insulation Tools and Equipment: Use and Care	Identify tools and equipment used for installation of mechanical insulation, finishes, and accessories. Proper methods for use and care of various tools and	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	L+L 3.0 3.0 3.0
HFA110	Math for Heat and Frost Technology	Fundamentals of the metric system. Fundamental operations with whole numbers, common fractions, decimals, percentages and ratios and proportions. Algebraic expressions, operations, powers and roots. Compute measurements of geometric figures.	Prerequisites: Registered Apprentice status with the Heat Frost and Asbestos Workers Joint Apprenticeship Training Committee (JATC) or permission of the	LEC 5.0 5.0 5.0
HFA115	Fundamental Insulation Skills: Piping I	Principles of insulation. Materials and methods of insulation. Insulating straight piping. Application of specific types of insulation. Insulation irregular surfaces. Seal and finish insulated pipe.	Prerequisites: Registered Apprentice status with the Heat Frost and Asbestos Workers Joint Apprenticeship Training Committee (JATC) or permission of the	LEC 5.0 5.0 5.0
HFA150	Shop Fabrication: Layout and Pattern-making for Insulators I	Shop fabrication for the heat, frost and asbestos trades related to insulation. Draw, bisect, trisect, divide and construct geometric linear and curvilinear geometric constructions. Layout and design templates and patterns for tees, valves, flanges, and endcaps.	Prerequisites: Registered Apprentice status with the Heat Frost and Asbestos Workers Joint Apprenticeship Training Committee (JATC) or permission of the	LEC 5.0 5.0 5.0
HFA204	Scaffolding for Insulators	Occupational Safety and Health Association (OSHA) Scaffolding Standard Subpart L, scaffolding terms, safety, erection, and various types of scaffolding used.	Prerequisites: Registered apprenticeship status or permission of the Apprenticeship Coordinator.	L+L 2.0 2.0 2.0
HFA215	Fundamental Insulation Skills: Piping II	Insulation for piping for cryogenic service. Insulation materials, coverings, finishes, and sealants for underground piping. Measure and cut rigid insulation using hand and table saws. Score block and board. Insulation of vertical and horizontal cylinders, finished heads and finished bodies using wired, bands, pins, stick clips, and washers. Insulate duct work in an air-	Prerequisites: A grade of C or better in HFA115.	LEC 5.0 5.0 5.0
HFA250	Shop Fabrication: Layout and Pattern-making for Insulators II	Shop fabrication for the heat, frost and asbestos trades related to insulation. Advanced layout patterns for long and short radius elbows, cones, bevels, and tank heads. Specifications for selecting fittings and	Prerequisites: A grade of C or better in HFA150.	LEC 5.0 5.0 5.0

HFA260	Blueprints and Firestopping	Contents of a set of plans. Major divisions in a set of drawings and title blocks. Bidding requirements, contract forms and conditions of contract. Architect's scale. Architectural, isometric, structural, plumbing, electrical, mechanical, and ductwork drawings. Symbols and abbreviations. Heating, Ventilating, and Air Conditioning system operations. Calculate materials for	Prerequisites: Registered Apprentice status with the Heat Frost and Asbestos Workers Joint Apprenticeship Training Committee (JATC) or permission of the Apprenticeship Coordinator.	LEC 5.0 5.0 5.0
HFA270	Supervision for Foremen	Foreman's role on the job site. Management and leadership using functional, adaptive and technical skills. Effective supervision and communication skills. Maslow's Motivational Theory. Short term motivators. Foreman responsibilities in area of performance and production. Traits and habits of effective leaders	Prerequisites: Registered Apprentice status with the Heat Frost and Asbestos Workers Joint Apprenticeship Training Committee (JATC) or permission of the Apprenticeship Coordinator.	LEC 5.0 5.0 5.0
HFA298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
HFA298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
HFA298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0

HIM101	Introduction to Health Information Management	Provides detailed investigation of the history, development, and evolution of the health information management (HIM) profession. Topics include health care delivery systems, HIM career paths, HIM functions, and HIM in acute and alternative care settings.	Prerequisites: Acceptance into the (Medical Coding: Hospital-Based, or Medical Billing and Coding: Physician-Based, or Health Information Technology) program, and	LEC 3.0 4.0 3.7
HIM103	Long Term Care Delivery	Provides a survey of the Long-Term Care (LTC) continuum and the health information management function in long term care. Topics include long term care services provided in acute, ambulatory, and alternative care settings; LTC ethics and policy considerations;	Prerequisites: Acceptance into the Health Information Technology program and permission of Program Director.	LEC 4.0 4.0 4.0
HIM105	Computers in Healthcare and Health Record Systems	Introduction to computer applications in healthcare settings including electronic health records, health record content, structure, and origin of clinical information for various healthcare settings. A basic review of federal, state, and organizational documentation guidelines. Legal and ethical issues	Prerequisites: (Acceptance into either the Medical Coding: Hospital-Based or the Medical Billing and Coding: Physician-Based program) and a grade of C or better in HCC130 or permission of Program	LEC 2.0 2.0 2.0
HIM106	Legal and Ethical Aspects of Health Information Management	Overview of legal and ethical principles in health care and health information management. Topics include federal and state court systems; legal terminology; health care law; privacy, confidentiality, and security; release of information guidelines; ethics, bioethics, and	Prerequisites: Acceptance into the Health Information Technology program and permission of Program Director.	LEC 3.0 3.0 3.0
HIM160	Health Data and Content	Introduction to data collection methods for health information systems. Overview of data structure, content, and standards, datasets and databases used in various health care settings, and registries and	Prerequisites: A grade of C or better in (BPC110 or CIS105) or permission of Program Director.	L+L 2.0 3.0 3.0
HIM180	Introduction to Medical Billing and Reimbursement	Overview of the medical billing profession, the revenue management process, and federal billing guidelines. Topics include Medicare, Medicaid, third party payers, management care models, and national insurance	Prerequisites: Permission of Program Director.	LEC 2.0 2.0 2.0
HIM181	Medical Claims Processing	Provides in-depth analysis of the medical claims process in ambulatory care settings. Topics include electronic data interchange, claims management, confidentiality, data retention, and the claims review and appeals process.	A grade of C or better required in all Prerequisites. Prerequisites: [(BPC110 or CIS105) and HIM180] or permission of Program Director. Prerequisites or Corequisites: HIM208 or permission of Program	L+L 3.0 5.0 5.0

HIM182	Human Diseases for Coding in Long Term Care Settings	Overview of diseases commonly treated in long term, home health, and hospice settings. Systems approach to causes, signs, symptoms, manifestations, diagnosis, and treatment of these diseases as required for	Prerequisites: A grade of C or better in (BIO160 and HCC146) or permission of Program Director.	LEC 2.0 2.0 2.0
HIM183	Diagnostic Coding in Long Term Care Settings	Introduction to the International Classification of Diseases (ICD) in long term care, home health and hospice settings. Topics include principles for diagnostic coding, standards of ethical coding, and diagnostic coding for reimbursement and coding compliance.	A grade of C or better required in all Prerequisites. Prerequisites: (BIO201 and HCC145) or permission of Program Director. Prerequisites or Corequisites: HIM200 or permission	L+L 4.0 6.0 6.0
HIM200	Human Pathophysiology and Pharmacology for Health Information Management (HIM) Professionals	Surveys common disease states and conditions that impact each of the major body systems and the reproductive process. Explores how the study of diseases, conditions, and treatments are connected to the health information management function. Topics include disease etiology; signs and symptoms of diseases and conditions; prognosis of diseases and conditions; and pharmacological concepts related to	Prerequisites: A grade of C or better in (HCC145 and BIO201) or permission Program Director.	LEC 3.0 4.0 3.7
HIM203	Healthcare Statistics and Data Analytics	Emphasizes the role of Health Information Management professionals in calculating, mining, and reporting healthcare statistics for data analytics, research, quality assurance, financial, and other purposes. Topics include health statistics, morbidity, mortality, quality	Prerequisites: A grade of C or better in (CIS114DE, HIM160 and MAT112) or permission of Program Director.	L+L 3.0 4.0 4.0
HIM205	Managing Health Information in Long Term Care Settings	Provides an in depth analysis of the health information management function in Long Term Care (LTC) settings. Topics include long term care health record systems; LTC regulatory compliance standards and guidelines; common technologies used in LTC; and	Prerequisites: A grade of C or better in HIM103. Corequisites: BPC110 or permission of Program Director.	L+L 2.0 4.0 4.0
HIM207	Health Information Organizational Resource Management	Provides an overview of principles and practices essential to the efficient use of human, financial, and physical resources within health information management services. Topics include team building,	Prerequisites: A grade of C or better in (HIM101 and HIM106) or permission of Program Director.	LEC 3.0 3.0 3.0
HIM208	ICD-CM Diagnostic Coding	Introduction to the International Classification of Diseases, Clinical Modification (ICD-CM) coding system. Topics include application of current ICD-CM guidelines and conventions for symptoms, signs, and abnormal clinical and laboratory findings, diseases, conditions, and external causes of morbidity in inpatient and	A grade of C or better required in all Prerequisites. Prerequisites: (BIO202, HCC145, and HIM200) or permission of Program Director. Prerequisites or Corequisites: HIM180 or permission of Program	L+L 2.0 4.0 4.0

HIM209	Procedural Coding Systems for Non-Coders	Surveys major procedural coding systems used in acute, ambulatory, and alternative care settings. Structure, content, and guidelines for the current International Classification of Diseases, Procedure Coding System (ICD-PCS), Current Procedural Terminology (CPT), and Healthcare Common Procedure Coding System (HCPCS) classification systems are explored. Topics include purpose and function of	A grade of C or better required in all Prerequisites. Prerequisites: HIM200 and BIO202. Prerequisites or Corequisites: HIM208 or permission of Program Director.	L+L 3.0 6.0 6.0
HIM210	ICD-PCS Coding and ICD Applications	Introduction to the International Classification of Diseases, Procedure Coding System (ICD-PCS). Topics include application of the current ICD-PCS guidelines and conventions for procedures in inpatient settings	A grade of C or better required in all Prerequisites. Prerequisites: BIO202 and HIM200. Prerequisites or Corequisites: HIM208 or permission	L+L 2.0 4.0 4.0
HIM211	Advanced Applications of Coding and Reimbursement	Provides foundation for advanced coding application including the use of references, source documents, and technology. Topics include Uniform Hospital Discharge Data Set; diagnostic-related groups; federal regulations for hospital-based settings; coding conventions for home health, long term care, rehabilitation, and other health care settings; and the use of codes for	Prerequisites: A grade of C or better in (HIM208 and HIM210) or permission of Program Director.	L+L 4.0 6.0 6.0
HIM213	CPT and HCPCS Coding	Provides students with the foundation for using the Current Procedural Terminology (CPT) and the Healthcare Common Procedure Coding System (HCPCS). Topics include coding guidelines, healthcare reimbursement, coding technologies, ethical coding,	Prerequisites: A grade of C or better in BIO202, HCC145, and HIM200.	L+L 3.0 6.0 6.0
HIM215	Physician-Based Billing and Coding Seminar	Guidance in the development of physician-based billing and coding compliance programs.	A grade of C or better required in all Prerequisites. Prerequisites: HIM213 or permission of Program Director. Prerequisites or Corequisites: HIM211, current CPR at BLS Healthcare Provider Level through the American Heart Association, and permission of Program Director. Corequisites: HIM216 or permission	LEC 1.0 1.0 1.0

HIM216	Professional Practice in Physician-Based Billing and Coding	Practical application of billing and coding guidelines, conventions, and regulations under the supervision of a preceptor in an ambulatory care setting.	A grade of C or better required in all Prerequisites. Prerequisites: HIM213 or permission of Program Director. Prerequisites or Corequisites: HIM211, current CPR at BLS Healthcare Provider Level through the American Heart Association, and permission of Program Director. Corequisites: HIM215 or permission	LAB 1.0 5.0 0.0
HIM219	Health Information Management Systems	Overview of the fundamental concepts, terminology, and structure of health information systems with an emphasis on applications used to manage electronic health information. Topics include health informatics; health information systems; electronic claims processing; electronic health records; electronic data	Prerequisites: A grade of C or better in HIM160, and (BPC110 or CIS105).	L+L 3.0 3.0 3.0
HIM221	Medical Coding Seminar	Guides students in the development of hospital-based coding compliance programs. Explores career development tools for medical billers and coders.	A grade of C or better required in all Prerequisites. Prerequisites: HIM213 or permission of Program Director. Prerequisites or Corequisites: HIM211 or permission of Program Director. Corequisites: HIM222 or permission of Program Director.	LEC 1.0 1.0 1.0
HIM222	Professional Practice in Medical Coding	Practical application of coding guidelines, conventions, and regulations under the supervision of a preceptor in an acute care setting.	A grade of C or better required in all Prerequisites. Prerequisites: HIM213 or permission of Program Director. Prerequisites or Corequisites: HIM211, current CPR at BLS Healthcare Provider Level through the American Heart Association, and permission of Program Director. Corequisites: HIM221 or permission	LAB 1.0 5.0 0.0
HIM225	Health Data Analytics	Provides students with integral tools and skills to analyze data commonly used in healthcare provision. Topics include data analysis, organization, and preparation tools; statistical techniques and variables; study design; benchmarking; and quality and	Prerequisites: A grade of C or better in (CIS114DE and HIM203).	L+L 3.0 4.0 4.0

HIM231	Health Data Management Seminar	Designed for students pursuing skills and knowledge in health data management. Topics include career development, team building, health data systems management and preparation for the professional	Prerequisites: A grade of C or better in CIS114DE, HIM203, HIM208, and HIM209. Corequisites: HIM232.	LEC 1.0 3.0 2.4
HIM232	Health Data Management Professional Practice	Practical application of health data management knowledge and skills under the supervision of a preceptor in an acute, ambulatory, and/or alternative care setting.	Prerequisites: A grade of C or better in CIS114DE, HIM203, HIM208, HIM209 and current CPR certification at Basic Life Support (BLS) Healthcare Provider level through the American Heart Association.	LAB 1.0 5.0 0.0
HIM233	Revenue Cycle Management Seminar	Prepares students for the workforce in the field of revenue cycle management. Topics include strategies for team building, project collaboration, career development, and preparation and review for	Prerequisites: A grade of C or better in (HIM208 and HIM210) or permission of Program Director. Corequisites: HIM234 and permission	LEC 1.0 3.0 2.4
HIM234	Revenue Cycle Data Management Professional Practice	Practical application of revenue cycle management knowledge and skills under the supervision of a preceptor in an acute, ambulatory, and/or alternative care setting.	Prerequisites: A grade of C or better in (HIM208 and HIM210) or permission of Program Director, and CPR at BLS Healthcare Provider level through the American Heart Association. Corequisites: HIM233 and permission of Program Director.	LAB 1.0 5.0 0.0
HIM298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
HIM298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0

HIM298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
HIS100	History of Western Civilization to Middle Ages	Survey of the origin and development of Western civilization and its institutions from prehistory through the Ancient World and the Middle Ages.	Prerequisites: None.	LEC 3.0 3.0 3.0
HIS101	History of Western Civilization Middle Ages to 1789	Survey of the history of the Western world from the emergence of Western civilization in the Middle Ages to the start of the French Revolution.	Prerequisites: None.	LEC 3.0 3.0 3.0
HIS102	History of Western Civilization 1789 to Present	Survey of the history of the Western world from the French Revolution to the present.	Prerequisites: None.	LEC 3.0 3.0 3.0
HIS103	United States History to 1865	The political, economic, and social development of the United States from the Pre-Columbian period through	Prerequisites: None.	LEC 3.0 3.0 3.0
HIS104	United States History 1865 to Present	The political, economic, and social development of United States from 1865 to the present time.	Prerequisites: None.	LEC 3.0 3.0 3.0
HIS105	Arizona History	The history of Arizona covering the Native American experience, Spanish colonial times, the Mexican national period, the U.S. federal territorial years, and its political and economic developments as a state.	Prerequisites: None.	LEC 3.0 3.0 3.0
HIS106	Southwest History	Historical survey of the American Southwest including ecological/environment, political, economic, religious and social developments. Includes the unique role of the region in national and global events.	Prerequisites: None.	LEC 3.0 3.0 3.0
HIS107	Selected Issues in History	In-depth survey of selected issues in history. Includes examination of the relationships among events, ideas, and artifacts relevant to the selected topic. Incorporates various historical lenses pertinent to the topic.	Prerequisites: None.	LEC 3.0 3.0 3.0
HIS108	United States History 1945 to the Present	Survey of American history from 1945 to the present. Focuses on the political, social, economic and cultural history of the United States from the end of World War II to the present time. Includes domestic developments	Prerequisites: None.	LEC 3.0 3.0 3.0

HIS109	Mexican American History and Culture	Examination of the origins and development of Mexican American peoples. Including culture, history and contributions within the United States. Emphasis on educational, social, and economic conditions of	Prerequisites: None.	LEC 3.0 3.0 3.0
HIS110	World History to 1500	A global survey of the economic, social, cultural, environmental, and political elements of world history to	Prerequisites: None.	LEC 3.0 3.0 3.0
HIS111	World History 1500 to the Present	A survey of the economic, social, cultural, and political elements of world history from 1500 to the present.	Prerequisites: None.	LEC 3.0 3.0 3.0
HIS113	History of Eastern Civilizations to 1850	An examination of the development of civilizations, religions and philosophies in the Near East, India, Far East, and Southeast Asia from ancient times to the mid-	Prerequisites: None.	LEC 3.0 3.0 3.0
HIS114	History of Eastern Civilizations 1850 to Present	Examination of characteristics and development of civilizations of Middle East, India, Far East, and Southeast Asia, from mid-nineteenth century to present.	Prerequisites: None.	LEC 3.0 3.0 3.0
HIS140	American Indian History	Survey of American Indian history with emphasis on the last 200 years. Focuses on cultural, economic, political and social continuity and changes. Topics include how federal policies impacted and were shaped by Indigenous peoples and how Indigenous individuals, communities, and nations have maintained cultural	Prerequisites: None.	LEC 3.0 3.0 3.0
HIS145	History of Mexico	Survey of the major forces that shaped the history of Mexico and its culturally diverse communities from pre-Columbian times to the present. Also examines how these historical forces continue to shape contemporary	Prerequisites: None.	LEC 3.0 3.0 3.0
HIS170	American Indian History of the Southwest	Covers history of American Indian Peoples of the Southwestern United States from pre-European contact era to the present. Includes historical events, the development and implementation of non-Indigenous policies and their impact on American Indian Peoples in	Prerequisites: None.	LEC 3.0 3.0 3.0
HIS173	United States (U.S.) Military History 1603 to Present	Examines the history of the United States (U.S.) in war and peace from the colonial era to the present and the role of the military in the nation's development.	Prerequisites: None.	LEC 3.0 3.0 3.0
HIS175	Global History of World War II	Global survey of World War II (WWII), focusing on its origins, major military confrontations and events, conclusion, and historical significance.	Prerequisites: None.	LEC 3.0 3.0 3.0
HIS190	Environmental History	Historical overview of the interactions between humans and the natural environment in various time periods and	Prerequisites: None.	LEC 3.0 3.0 3.0

HIS200	Introduction to Africana Studies	Survey of the social, economic, political, environmental, and cultural developments of various African communities from the beginning of human civilization to the present, including the development of the African diaspora as well as the historical and cultural impacts of	Prerequisites: None.	LEC 3.0 3.0 3.0
HIS201	History of Women in America	Introduction to women's history from the colonial period to the present. Explores changes and developments which have influenced the lives of women.	Prerequisites: None.	LEC 3.0 3.0 3.0
HIS203	African-American History to 1865	History and cultural heritage of African-Americans from ancestral origins in Ancient Africa through the experience of chattel slavery in the Americas to eventual emancipation and participation in the	Prerequisites: None.	LEC 3.0 3.0 3.0
HIS204	African-American History 1865 to Present	The multifaceted history and cultural heritage of African-American communities since the Civil War, presented within the broader context of U.S. history. This course explores the social, economic, political, and cultural history of African-American communities, including the historical and cultural impacts of slavery and discrimination, and the collective struggle for freedom,	Prerequisites: None.	LEC 3.0 3.0 3.0
HIS209	The Chicana/o in 20th and 21st Century America	Analysis of the 20th and 21st century Chicano experience. Interdisciplinary approach to contemporary Mexican American history and culture in the	Prerequisites: None.	LEC 3.0 3.0 3.0
HIS212	History of Religion	Survey of the historical contexts in which the major religions have emerged and evolved. Focuses on social and political events throughout history and their impact	Prerequisites: None.	LEC 3.0 3.0 3.0
HIS251	History of England to 1700	Analysis of the major political, social, economic, and cultural/intellectual factors in English historical development from Celtic times to the end of the 17th	Prerequisites: None.	LEC 3.0 3.0 3.0
HIS252	History of England 1700 to Present	Analysis of the major political, cultural, social, and intellectual factors in English historical development	Prerequisites: None.	LEC 3.0 3.0 3.0
HIS277	The Modern Middle East	Survey of the political, religious and economic development of the Middle East since 1500. Emphasis on the decline of the Moslem empire(s), the resurgence of contemporary Pan- Arabism, the Palestinian-Israeli question, jihadism, fundamentalist terrorism, the Taliban and Al Qaeda, and the impact of oil production on the	Prerequisites: None.	LEC 3.0 3.0 3.0
HIS279	Creating and Telling Fact-Based Historical	Creating and telling fact-based stories and stories from history.	Prerequisites: A grade of C or better in EDU/HUM/STO292. Xref: EDU292	LEC 3.0 3.0 3.0

HIS298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
HIS298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
HIS298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
HLC130	Fundamentals in Health Care Delivery	Overview of current and recent development of health care professions, including career and labor market information, health care delivery systems, third party payers, and facility ownership. Health organization structure, patient rights and quality care. Health care and life values. Definition and importance of values, ethics, and essential behaviors in the workplace. Worker rights and responsibilities. Healthful living practices to include nutrition, stress management and exercise. Occupational Safety and Health Administration (OSHA) standard precautions and facility safety. Use of principles of body mechanics in daily living activities. Basic communication skills which facilitate inter-professional teamwork in the health care setting. Focus	Prerequisites: Admission to program, and successful completion of RDG100 or higher or appropriate reading placement into CRE101.	30

HLC130	Fundamentals in Health Care Delivery	Overview of current and recent development of health care professions, including career and labor market information, health care delivery systems, third party payers, and facility ownership. Health organization structure, patient rights and quality care. Health care and life values. Definition and importance of values, ethics, and essential behaviors in the workplace. Worker rights and responsibilities. Healthful living practices to include nutrition, stress management and exercise. Occupational Safety and Health Administration (OSHA) standard precautions and facility safety. Use of principles of body mechanics in daily living activities. Basic communication skills which facilitate inter-professional teamwork in the health care setting. Focus	Prerequisites: Admission to program, and successful completion of RDG100 or higher or appropriate reading placement into CRE101.	20
HLC145	Medical Terminology for Health Care Professionals	Medical terminology used in health care, with special care populations and in special services. Body systems approach to terms related to structures, functions, diseases, procedures, and diagnostic tests. Building and analyzing terms using word parts. Medical	Prerequisites: A grade of C or better is required in HLC130.	105
HMC100	Medical Billing and Coding Examination Review	This course reviews separate subjects that will be taught in preparation for the National Certified Professional Coder (CPC) Examination administered through the American Academy of Professional Coders	Prerequisites: A grade of C or better is required in HMC213 or permission of Instructor.	48
HMC100	Medical Billing and Coding Examination Review	This course reviews separate subjects that will be taught in preparation for the National Certified Professional Coder (CPC) Examination administered through the American Academy of Professional Coders	Prerequisites: A grade of C or better is required in HMC213 or HMC213DC permission of Instructor.	30
HMC100DC	Medical Billing and Coding Examination Review	This course reviews separate subjects that will be taught in preparation for the National Certified Professional Coder (CPC) Examination administered through the American Academy of Professional Coders	Prerequisites: A grade of C or better is required in HMC213 or permission of Instructor.	40
HMC105	Computers in Healthcare and Health Record Systems	Introduction to computer applications in healthcare settings including electronic health records, health record content, structure, and origin of clinical information for various healthcare settings. A basic review of federal, state, and organizational documentation guidelines. Legal and ethical issues	Prerequisites: A grade of C or better is required in HMC181 and HMC213.	36

HMC105	Computers in Healthcare and Health Record Systems	Introduction to computer applications in healthcare settings including electronic health records, health record content, structure, and origin of clinical information for various healthcare settings. A basic review of federal, state, and organizational documentation guidelines. Legal and ethical issues	Prerequisites: A grade of C or better is required in HMC181 or HMC181DC and HMC213 or HMC213DC.	30
HMC105DC	Computers in Healthcare and Health Record Systems	Introduction to computer applications in healthcare settings including electronic health records, health record content, structure, and origin of clinical information for various healthcare settings. A basic review of federal, state, and organizational documentation guidelines. Legal and ethical issues	Prerequisites: A grade of C or better is required in HMC181DC and HMC213DC.	40
HMC180	Introduction to Medical Billing and Reimbursement	This course provides an overview of the medical billing profession and the revenue management process. Topics include Medicare, Medicaid, third-party payers, managed care models, and national insurance	Prerequisites: A grade of C or better is required in HMC200.	48
HMC180	Introduction to Medical Billing and Reimbursement	This course provides an overview of the medical billing profession and the revenue management process. Topics include Medicare, Medicaid, third-party payers, managed care models, and national insurance	Prerequisites: A grade of C or better is required in HMC200 or HCM20DC.	40
HMC180DC	Introduction to Medical Billing and Reimbursement	This course provides an overview of the medical billing profession and the revenue management process. Topics include Medicare, Medicaid, third-party payers, managed care models, and national insurance	Prerequisites: A grade of C or better is required in HMC200.	45
HMC181	Medical Claims Processing	This course provides an in-depth analysis of the medical claims process in ambulatory care settings. Topics include electronic data interchange, claims management, confidentiality, data retention, and the	Prerequisites: A grade of C or better is required in HMC180.	54
HMC181DC	Medical Claims Processing	This course provides an in-depth analysis of the medical claims process in ambulatory care settings. Topics include electronic data interchange, claims management, confidentiality, data retention, and the	Prerequisites: A grade of C or better is required in HMC180 or HMC180DC.	50
HMC200	Human Pathophysiology and Pharmacology for HMC	This course surveys common disease states and conditions that impact each of the major body systems and the reproductive process. Topics include disease etiology; signs and symptoms of diseases and conditions; prognosis of diseases and conditions; and pharmacological concepts related to drug	Prerequisites: A grade of C or better is required in HLC145.	180

HMC200DC	Human Pathophysiology and Pharmacology for HMC	This course surveys common disease states and conditions that impact each of the major body systems and the reproductive process. Topics include disease etiology; signs and symptoms of diseases and conditions; prognosis of diseases and conditions; and pharmacological concepts related to drug	Prerequisites: A grade of C or better is required in HLC145.	150
HMC208	ICD-CM Diagnostic Coding	This course introduces students to the International Classification of Diseases, Clinical Modification (ICD-CM) coding system. Topics include application of current ICD-CM guidelines and conventions for symptoms, signs, and abnormal clinical and laboratory findings, diseases, conditions, and external causes of morbidity in inpatient	Prerequisites: A grade of C or better is required in ISP110PC.	90
HMC208DC	ICD-CM Diagnostic Coding	This course introduces students to the International Classification of Diseases, Clinical Modification (ICD-CM) coding system. Topics include application of current ICD-CM guidelines and conventions for symptoms, signs, and abnormal clinical and laboratory findings, diseases, conditions, and external causes of morbidity in inpatient	Prerequisites: A grade of C or better is required in HMC181DC.	100
HMC213	CPT and HCPCS Coding	This course provides students with the foundation for using the Current Procedural Terminology (CPT) and the Healthcare Common Procedure Coding System (HCPCS) coding systems. Topics include coding guidelines, healthcare reimbursement, coding	Prerequisites: A grade of C or better is required in HMC208.	216
HMC213	CPT and HCPCS Coding	This course provides students with the foundation for using the Current Procedural Terminology (CPT) and the Healthcare Common Procedure Coding System (HCPCS) coding systems. Topics include coding guidelines, healthcare reimbursement, coding	Prerequisites: A grade of C or better is required in HMC208 or HMC208DC.	175
HMC213DC	CPT and HCPCS Coding	This course provides students with the foundation for using the Current Procedural Terminology (CPT) and the Healthcare Common Procedure Coding System (HCPCS) coding systems. Topics include coding guidelines, healthcare reimbursement, coding	Prerequisites: A grade of C or better is required in HMC208DC.	215

HON190	The Honors Experience	Interdisciplinary studies of selected issues confronting the individual and society and overall human experience. Critical inquiry of specific themes from a wide variety of academic viewpoints. Comprehensive and interdisciplinary review of global, historical, and cultural trends, supplemented by readings and	Prerequisites: Admission to the college honors program or permission of Instructor.	LEC 3.0 3.0 3.0
HON201	Leadership Development: Historical and Contemporary	Interdisciplinary study of leadership focusing on development of leadership skills.	Prerequisites: Admission to the college honors program or permission of Instructor.	LEC 3.0 3.0 3.0
HRC101	Overview of Healthcare Compliance	Introduction and overview of healthcare compliance; evolution of the field as a profession. Exploration of federally legislated mandates for a Compliance Program. Program elements. Organizational steps for	Prerequisites: None.	LEC 1.0 1.0 1.0
HRC228	Healthcare Industry Regulation	Comprehensive review and study of laws that regulate the healthcare delivery industry including fraud and abuse, patient privacy, Protected Health Information (PHI) and electronic Protected Health Information (ePHI), and occupational safety for workforce members,	Prerequisites: None.	LEC 3.0 3.0 3.0
HRC230	Healthcare Corporate Compliance Program Design	Creation, management, and evaluation of all aspects of a formal health care corporate compliance program. Compliance officers, compliance committee. Risk analysis, recommendations for corrective action.	Prerequisites: None.	LEC 3.0 3.0 3.0
HRC232	Health Care Regulatory Compliance Program Design	Creation, management and evaluation of a health care regulatory compliance program including the work plan. Address the Health Insurance Portability and Accountability Act (HIPAA) Privacy and Breach Rules, HIPAA Security and Meaningful Use Attestation, Occupational Safety and Health Plan for workforce members, patients, and visitors. Occupational Safety and Health Administration (OSHA), Arizona Division of Occupational Safety and Health (ADOSH), Medicare/Medicaid Fraud and Abuse, Human	Prerequisites: None.	LEC 3.0 3.0 3.0

HRC234	Health Care Regulatory Enforcement Case Studies	Comprehensive review of case studies involving litigation and enforcement of health care law including review of landmark and contemporary cases brought by the United States Office of the Inspector General (Fraud and Abuse); the Office of Civil Rights; the Health Insurance Portability and Accountability Act (HIPAA) Privacy and Security Laws. Application of knowledge	Prerequisites: None.	LEC 3.0 3.0 3.0
HRM110	Introduction to Hospitality and Tourism Management	A fundamental overview of the hotel, restaurant, and tourism segments of the hospitality and tourism industry. Provides an overview of the operational sectors of the industry and reviews management components and skills. Contains components to develop a professional	Prerequisites: None.	LEC 3.0 3.0 3.0
HRM120	Hotel Facility Management	Fundamental duties and responsibilities of hotel facility management. Emphasis on detail tasks, including personnel, cleaning, purchasing, equipment, textiles, maintenance, and safety. Examines basic systems for	Prerequisites: None.	LEC 3.0 3.0 3.0
HRM130	Guest Services Management	Examines organization and management of the hotel front office and guest service operations. Explores key front office functions and related systems and skills necessary to ensure guest satisfaction and efficient	Prerequisites: None.	LEC 3.0 3.0 3.0
HRM140	Food Production Concepts	Concepts related to preparation of hot foods, pantry, and bakery items for commercial kitchens. Emphasis on essential components and techniques of food production, food cost control, setting standards,	Prerequisites: None.	LEC 3.0 3.0 3.0
HRM142	Wine: From Vine to Table	An overview of the history, culture, viticulture techniques, production, distribution, control, and consumption in the wine industry. Provides an overview of wine and health issues, interpreting wine labels,	Prerequisites: None.	LEC 3.0 3.0 3.0
HRM145	Events Management	Introduction to organizing all event concepts through to completion, including goals and objectives, events design and vision, coordination, marketing, financing, budgeting, strategic planning and risk management, and assessing food and beverage needs. Provides an overview of the goals and objectives, and logistical functions involved in staging and managing events,	Prerequisites: None.	LEC 3.0 3.0 3.0

HRM146	International Meetings, Conventions and Exhibitions	Introduces the planning and executing of multinational and multicultural meetings, conventions and exhibitions. Emphasizes coordination, logistics, venue selection, budgeting and cultural competencies critical to a global	Prerequisites: A grade of C or better in HRM110.	LEC 3.0 3.0 3.0
HRM150	Hospitality and Tourism Information Systems I	Overview of current computer technology, concepts and terminology as it applies to the hospitality and tourism industry. Use of software applications including word processing, spreadsheet, database and presentation graphics. Discussion of social and ethical issues related to computers. Exploration of relevant and emerging	Prerequisites: None.	LEC 3.0 3.0 3.0
HRM160	Tourism Principles and Practices	Explores the multifaceted nature of tourism from social-behavioral science perspectives with a global awareness angle. Includes the economic, historical, political, psychological, and sociological dimensions of tourism. Evaluates the diverse nature of world travel destinations, cultures, and ecology. Includes contemporary world cultures, their relationship with	Prerequisites: None.	LEC 3.0 3.0 3.0
HRM170	Hospitality in Healthcare and Life Care Management	Provides an overview of the role of hospitality in healthcare facilities and life care communities. Topics include history and future growth, customer service in these high-touch environments, facility design and housekeeping requirements, medical and health management, sensitivity to those healing and dealing with end-of-life issues, overall providing a strong	Prerequisites: None.	LEC 3.0 3.0 3.0
HRM220	Hospitality Managerial Accounting	Study of financial statement analysis, asset management, ratio analysis, analytical techniques, and investment decision making. Emphasis on planning,	Prerequisites: A grade of C or better in ACC111 or ACC211 or HRM265.	LEC 3.0 3.0 3.0
HRM230	Beverage Management	Identification, production, purchasing, and service of spirits, wine and beer products. Marketing, menu development, and cost controls of a beverage operation. Special emphasis on staffing training, and	Prerequisites: None.	LEC 3.0 3.0 3.0
HRM235	Club Management	Examines organization and management of private clubs. Emphasis on member services and operations management. Explores key functions including food and beverage, golf operations, fitness and recreation	Prerequisites: A grade of C or better in HRM110.	LEC 3.0 3.0 3.0
HRM240	Commercial Food Production	Application of food preparation principles, procedures, and techniques to small and large quantity food production. Emphasis on techniques and procedures	Prerequisites: A grade of C or better in HRM110 and HRM140.	L+L 3.0 4.0 4.0

HRM250	Hospitality and Tourism Information Systems II	Use of computer systems to generate information needed for management of lodging, tourism and food service businesses. Emphasis on computer-based hotel property and restaurant management systems. Includes	Prerequisites: A grade of C or better in (HRM110 and HRM150) or permission of Instructor.	LEC 3.0 3.0 3.0
HRM260	Hospitality Human Resource Management	Examines concepts and applications of human resource management in the hospitality industry. Topics include recruitment, selection, training and evaluation. Emphasis on current management methods and	Prerequisites: A grade of C or better in HRM110 or permission of Instructor.	LEC 3.0 3.0 3.0
HRM265	Financial Management for Hospitality and Tourism	Examines financial management concepts, analytical techniques and decision making processes essential to hospitality and tourism management. Provides an applied management approach to managing profitability, financing growth, and using financial	Prerequisites: A grade of C or better in HRM110. MAT140 or MAT141 or MAT142 recommended but not required.	LEC 3.0 3.0 3.0
HRM270	Hospitality Marketing	Essential skills of defining a service market, developing a market plan, and directing personnel to follow market plan. Emphasis on marketing in the hospitality industry and understanding segmentation, positioning and	Prerequisites: A grade of C or better in HRM110.	LEC 3.0 3.0 3.0
HRM275	Restaurant Management	Overview of restaurant industry with focus on the major segments. Emphasis on developing plans for: marketing, accounting system, staffing, training, menu development and cost controls for restaurant operation. Special emphasis on safety and sanitation, and legal	Prerequisites: None.	LEC 3.0 3.0 3.0
HRM280	Hospitality and Tourism Law	Examines legal aspects of hotel, restaurant and tourism management. Uses case study approach to develop understanding of the laws and regulations governing guest relationships, contracts, employee relations, civil	Prerequisites: A grade of C or better in HRM110.	LEC 3.0 3.0 3.0
HRM290	Ecotourism	Overview of ecotourism planning and development with emphasis on contemporary issues associated with environmentally sound, culturally sensitive and economically viable tourism development. Examines the history and emergence of ecotourism and the establishment of policies and management practices	Prerequisites: A grade of C or better in HRM110.	LEC 3.0 3.0 3.0
HRM295AA	Hospitality Internship	Hospitality and/or tourism work experience in a business or industry. Eighty hours of designated work per credit.	Prerequisites: Permission of Department or Division.	LAB 1.0 1.0 0.0
HRM295AB	Hospitality Internship	Hospitality and/or tourism work experience in a business or industry. Eighty hours of designated work per credit	Prerequisites: Permission of Department or Division.	LAB 2.0 2.0 0.0
HRM295AC	Hospitality Internship	Hospitality and/or tourism work experience in a business or industry. Eighty hours of designated work per credit	Prerequisites: Permission of Department or Division.	LAB 3.0 3.0 0.0

HRM296WA	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 1.0 5.0 0.0
HRM296WB	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 2.0 10.0 0.0
HRM296WC	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 3.0 15.0 0.0

HRM296WD	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 4.0 20.0 0.0
HRM298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
HRM298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
HRM298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
HSE101	Teaching Foundations in Healthcare Education	Examination of teaching foundations essential to understanding healthcare education as a discipline. Orientation to health professions concepts such as patient-centered care, interdisciplinary teams and evidence-based practice. Exploration of differences in healthcare education versus educational practices to	Prerequisites: None.	LEC 3.0 3.0 3.0

HSE102	Ethics and Diversity in Healthcare Educational Settings	Exploration of topics related to ethics and diversity within the educational setting as it relates to healthcare programs. Examination of the role of prejudice, stereotyping, and cultural incompatibilities in healthcare education. Reiterating topics of professionalism, legal knowledge, code of conduct, and other issues that are	Prerequisites: None.	LEC 3.0 3.0 3.0
HSE103	Curriculum Design and Teaching in Healthcare Education	Introduction to curriculum design for healthcare education coursework derived from formal career and clinical knowledge. Examination and application of learning and teaching theories and curriculum models within the classroom, laboratory, or clinical learning	Prerequisites: None.	LEC 2.0 2.0 2.0
HSE104	Assessment and Evaluation in Clinical Education	Application and determination of student performance using various methods. Methodologies will be explored on how to gauge the students' comprehension and understanding, and this feedback will help inform	Prerequisites: None.	LEC 3.0 3.0 3.0
HSE105	Technology Integration and Design for Healthcare Education	Explore and apply various forms of tools and technology in the teaching and learning processes, and how to engage these processes in the classroom. Introduction to Learning Management Systems (LMSs)	Prerequisites: None.	LEC 2.0 2.0 2.0
HSE106	Introduction to HIPAA Privacy Rule	Purpose and intent of the Health Insurance Portability and Accountability Act (HIPAA) Privacy Rule. Regulation interpretation and application in the health care environment. Guidelines for development of key	Prerequisites: Knowledge of basic operations of a medical practice or other health care environment.	LEC 2.0 2.0 2.0
HSE107	Research Methods for Healthcare Education	Introduction of qualitative, quantitative, and mixed methods research in the study of education within the health professions. Explores ethical issues, human subject protection, and institutional review boards associated with research in higher education. Enables	Prerequisites: None.	LEC 1.0 1.0 1.0
HSE108	Practicum in Healthcare Education	Capstone course including curriculum, design, and assessment. Facilitates role transition from student to healthcare educator. Focus on student presentations to a panel of students or peers.	Prerequisites: A grade of C or better in HSE101, HSE102, HSE103, HSE104, HSE105, and HSE107, or permission of Program Director.	LAB 3.0 3.0 3.0
HSE110	Successful Grant Writing	Grant seeking and grant writing processes for the beginning grant writer. Pre-application preparation, application development, and grant proposal evaluation and follow-up. Includes development of grant	Prerequisites: None.	LEC 0.5 0.5 0.5

HSM122	Health Services Supervision	Skills and techniques for the leadership and supervision of health services employees. Emphasis placed on assertive supervision, effective human relations skills, and the enhancement of oral and written workplace	Prerequisites: None.	LEC 3.0 3.0 3.0
HSM125	Current Issues in Health Services Management	Overview of the inner workings of the health care industry and the forces that drive and control the delivery of health services. Explores financial, technological and human resources, regulatory	Prerequisites: None.	LEC 3.0 3.0 3.0
HSM207	Health Service Management Internship	Application of leadership, supervisory and managerial skills and observation of administrative function in a specific health services setting.	Prerequisites: A grade of C or better in Any three (3) of the following four (4) courses: HSM122, or HSM125, or HSM222, or HSM226, or permission	LAB 3.0 15.0 0.0
HSM222	Health Services Management	The role and functions of management in understanding and building organizational effectiveness. Focuses on the manager as a leader and planner capable of developing motivated and	Prerequisites: None.	LEC 3.0 3.0 3.0
HSM226	Ethics and Legalities of Health Services Management	Identification, analysis, and problem solving related to legal and ethical issues in health services management. Includes an emphasis on employment law, confidentiality issues, accurate financial reporting and	Prerequisites: None.	LEC 3.0 3.0 3.0
HSM230	Healthcare Strategic Planning and Deployment	A comprehensive look at the development and implementation of strategic plans within healthcare business environments. This course explores essential techniques, tools, data, and communication strategies for developing strategic plans in order to make better recommendations for initiatives across the continuum of	Prerequisites: None.	LEC 3.0 3.0 3.0
HSM282AA	Volunteerism for Health Services Management: A Service Learning	Service learning field experience within private/public agencies, and citizen volunteer groups.	Prerequisites: A grade of C or better in Any three (3) of the following four (4) courses: HSM122, or HSM125, or HSM222, or HSM226, or permission	LAB 1.0 1.0 0.0

HST180	Overview of Histology (Anatomic) Laboratory	Overview of anatomic laboratory services, anatomic laboratory professionals, and the role of the histology technician. Emphasis on certification, accreditation, and regulatory agencies. Application of process improvement, quality control, laboratory mathematics, infection control, sharps/mechanical hazards, documentation, medico-legal implications, and chemical hygiene principles. Includes information management in anatomic laboratories. Importance of management and	Prerequisites: Admission to Histologic Technology program or permission of Program Director.	LAB 2.0 2.0 2.0
HST181	Chemistry of Fixation	Principles of fixation and fixative solutions. Anatomic laboratory instrumentation and specimen handling, identification, and tracking protocols. Emphasis on gross examination processes, tissue processing	Prerequisites: Admission to Histologic Technology program or permission of Program Director, and a grade of C or better in HST180.	L+L 3.0 4.0 4.0
HST182	Microtomy	Emphasis on decalcification techniques, ergonomic safety practices for microtomy, and frozen section techniques. Application of embedding orientation by tissue type. Procedures for paraffin embedding station, cryostat and rotary microtome set-up and maintenance, and sharps safety practices for the microtome. Includes techniques for microtomy, specialized microtomy, frozen	Prerequisites: A grade of C or better in HST181.	L+L 5.0 5.0 5.0
HST183	Practicum: Chemistry of Fixation	Practicum in histology techniques performed in an anatomic laboratory. Application of clinical skills for specimen handling, identification, and tracking protocols. Use of anatomic laboratory instrumentation. Study of gross examination protocols. Demonstration of fixation techniques, paraffin processing protocols, and specialized processing techniques. Performance of clerical and computer functions using medico-legal	Prerequisites: A grade of C or better in HST181 or permission of Program Director.	LAB 1.0 4.5 0.0
HST184	Practicum: Microtomy	Practicum in histology techniques performed in an anatomic laboratory. Use of decalcification and frozen section techniques. Includes embedding orientation by tissue type and ergonomic safety practices for microtomy. Procedures for the paraffin embedding station, cryostat and rotary microtome set-up and maintenance, and sharps safety practices for the microtome. Emphasis on techniques for microtomy,	Prerequisites: A grade of C or better in HST182.	LAB 1.0 4.5 0.0

HST185	Cellular Biological Staining	Recognition of basic cellular structure. Identification of carbohydrates classification, pigments, minerals, and lipids in tissues and connective tissue structures. Explanation of chemical staining theory. Stain principles and procedures for nuclear and cytoplasmic structures, carbohydrates and lipids, connective tissue, and tissue	Prerequisites: A grade of C or better in HST182. Corequisites: HST187.	L+L 5.0 5.0 5.0
HST186	Cellular Biological and Immunohistochemical Staining	Identification of pathologic organisms and neurological structures. Use of stains for microorganisms and neurological structures. Explanation of theories of histochemical and immunohistochemical staining. Procedures for histochemical and immunohistochemical stains. Overview of specimens for electron microscopy and autopsy procedures. Emphasis on assessing histology workflow processes, laboratory procedure	Prerequisites: A grade of C or better in HST185.	L+L 5.0 5.0 5.0
HST187	Practicum: Cellular Biological Staining	Practicum in histology techniques performed in an anatomic laboratory. Recognition of basic cellular structure, carbohydrate structures, connective tissue, lipid structures, and pigments and minerals in tissues. Application of chemical staining. Emphasis on stains for nuclear and cytoplasmic structures, carbohydrates and	Prerequisites: A grade of C or better in HST185.	LAB 1.0 4.5 0.0
HST188	Practicum: Cellular Biological and Immunohistochemical Staining	Practicum in histology techniques performed in an anatomic laboratory. Identification of pathologic organisms and neurological structures. Use of stains for microorganisms and neurological structures. Application of histochemical and immunohistochemical stains. Observation of electron microscopy and autopsy procedures. Emphasis on histology workflow processes,	Prerequisites: A grade of C or better in HST186.	LAB 1.0 4.5 0.0
HTM150	Introduction to Healthcare IT and Systems	Introduction to current and emerging Healthcare IT systems with particular emphasis on healthcare information and data, governance, information systems and technologies, and industry challenges in a value-	Prerequisites: A grade of C or better in CIS105 or permission of Instructor.	LEC 3.0 3.0 3.0
HTM200	Healthcare IT Software Infrastructure: Interoperability, Security and mHealth	Application of industry-specific IT skills to entry-level Healthcare IT software development projects, with particular skills emphasis on high-growth areas such as interoperability, security and Mobile Health (mHealth).	Prerequisites: A grade of C or better in [(CIS133AA and CIS133BA and CIS133CA) or CIS133DA] and CIS150AB and HTM150 and permission of Program Director.	L+L 3.0 4.0 4.0

HTM230	Healthcare Data Analytics, Artificial Intelligence (AI) and Machine Learning	Overview of theories and practical applications of Data Analytics, Artificial Intelligence (AI), and Machine Learning. A focus on trends, opportunities, and emerging uses, as well as best practices, limitations, and ethical implications. Hands-on practice with current	Prerequisites: A grade of C or better in (BPC110 or CIS105) and HTM150.	L+L 3.0 4.0 4.0
HTM250	Healthcare IT Systems Development Life Cycle (SDLC)	Introduction to the Systems Development Life Cycle (SDLC) methodologies and tools currently used on healthcare Information Technology (IT) projects, with particular emphasis on software development. Experience with application development and testing	Prerequisites: A grade of C or better in CIS224 and HTM200 or Corequisites: CIS224 and HTM200.	L+L 3.0 4.0 4.0
HTM270	Healthcare IT Systems Capstone	Culminating application of the skills, knowledge, communication and critical thinking skills from the Healthcare Technology Systems program to address industry-specific challenges. Includes investigation and	Prerequisites: A grade of C or better in HTM250.	L+L 3.0 4.0 4.0
HTM280	Healthcare Technology Systems Career Strategies	Overview of the career exploration and planning process designed to assist students interested in healthcare technology systems and related fields to transition into the professional world. Focuses on current occupational trends and career decision-making strategies with a special emphasis on experiences within the field. Includes practice with self-presentation in the professional world such as effective resumes,	Prerequisites: A grade of C or better in HTM150.	L+L 3.0 2.0 2.0
HUM101	General Humanities	A general humanities course concentrating on three great ages of outstanding human achievement: The Golden Age of Greece, the Renaissance and the 20th	Prerequisites: None.	LEC 3.0 3.0 3.0
HUM107	Humanities Through the Arts	Introduction to humanities including film, drama, music, literature, painting, sculpture, and architecture	Prerequisites: None.	LEC 3.0 3.0 3.0
HUM108	Contemporary Humanities	An exploration of human expression in contemporary arts and sciences.	Prerequisites: None.	LEC 3.0 3.0 3.0
HUM201	Humanities: Universal Themes	Study of worldviews in a variety of historical and contemporary world cultures, including analysis of origin and creation myths, artistic expression, spirituality, and	Prerequisites: None.	LEC 3.0 3.0 3.0
HUM202	Humanities: Universal Themes	The hero/heroine; fool, the social world, and the future as themes in the humanities	Prerequisites: None.	LEC 3.0 3.0 3.0
HUM205	Introduction to Cinema	Survey of the history and development of the art of motion pictures, including criticism of aesthetic and	Prerequisites: None.	LEC 3.0 3.0 3.0
HUM206	Introduction to Television Arts	History and development of electronic media and its impact on popular arts.	Prerequisites: None.	LEC 3.0 3.0 3.0

HUM209	Women and Films	Analysis of images of women in films from both historical and contemporary perspectives	Prerequisites: None.	LEC 3.0 3.0 3.0
HUM210	Contemporary Cinema	A study of contemporary films, directors and critics with emphasis on evaluating film as an art form.	Prerequisites: None.	LEC 3.0 3.0 3.0
HUM211AA	Foreign Films: Classics	Analysis of contributions of foreign directors to the art and history of motion pictures through a study of	Prerequisites: None.	LEC 3.0 3.0 3.0
HUM211AE	Foreign Films: Italian	Analysis of contributions of Italian directors to the art and history of motion pictures through a study of	Prerequisites: None.	LEC 3.0 3.0 3.0
HUM212	Documentary Film	Survey of documentary or non-fiction film. Emphasis on the interplay between form, subject, cultural context and filmmaker perspective. Focuses on primary types of documentary film, such as poetic, observational, expository reflexive, participative, and performative.	Prerequisites: A grade of C or better in ENG101 or ENG107.	LEC 3.0 3.0 3.0
HUM213	Hispanic Film	Analysis of Hispanic film as art form and as social	Prerequisites: None.	LEC 3.0 3.0 3.0
HUM214	African-Americans in Film	Study of films featuring African-American performers and directors from the Silent Era to the present. Emphasis on the historical and social elements of	Prerequisites: None.	LEC 3.0 3.0 3.0
HUM215	Film Comedy	Explores the basics of humor in film by tracing its roots through a historical examination of a variety of arts, artists, and theorists. Focuses on films' unique contributions to the world of laughter. Investigates how comedy, and film comedy in particular, provides an	Prerequisites: None.	LEC 3.0 3.0 3.0
HUM216	The Films and Career of Alfred Hitchcock	Focuses on the career, films, and cinematic and cultural influence of acclaimed director Alfred Hitchcock. Includes the director's cinematic innovations, techniques, major films, and his influence on modern	Prerequisites: None.	LEC 3.0 3.0 3.0
HUM220	History and Film	Presents historically based films and analyzes their accuracy, filmmaking techniques, and their value as cinematic historical records of U.S. and global events.	Prerequisites: A grade of C or better in ENG101 or ENG107.	LEC 3.0 3.0 3.0
HUM225	Introduction to Popular Culture	Introduction to major topics in the field of popular culture studies. Includes basic theories, methods, and concepts used to analyze popular culture texts and	Prerequisites: A grade of C or better in ENG101 or ENG107.	LEC 3.0 3.0 3.0
HUM235	Disability Studies	Considers representations of disability as artifacts of Western and non-Western cultures against changing backdrops in knowledge, ideas, beliefs, values, and practices. Works to build awareness, understanding, and empathy in regards to diverse forms of humanity	Prerequisites: A grade of C or better in ENG101 and (RDG100 or RDG100LL or RDG111 or RDG112 or RDG113 or eligibility for CRE101 as indicated by appropriate reading	LEC 3.0 3.0 3.0

HUM245	Introduction to Holocaust Studies	Introduction to essential information about the Holocaust. Provides theological, social and political background to establish contexts of anti-Semitism, especially in 19th and 20th centuries, with particular attention to National Socialist ideologies. Ghetto and camp life, including resistance, are explored. Emphasis is on texts of the Holocaust, including historical documents, participant testimonies, fiction, creative non-fiction, and poetry, much of which involves theological	Prerequisites: None. CRE101 or equivalent as indicated by appropriate reading placement recommended but not required.	LEC 3.0 3.0 3.0
HUM250	Ideas and Values in the Humanities: Early Civilizations to the Renaissance	An historical analysis of the interrelationships of art, architecture, literature, music, and philosophy from the early civilizations to the Renaissance, including western and non-western cultures.	Prerequisites: A grade of C or better in ENG101.	LEC 3.0 3.0 3.0
HUM251	Ideas and Values in the Humanities: Renaissance to the Contemporary World	An historical analysis of the interrelationships of art, architecture, literature, music, and philosophy from the Renaissance to modern period, including Western and Non-Western cultures.	Prerequisites: A grade of C or better in ENG101.	LEC 3.0 3.0 3.0
HUM260	Intercultural Perspectives	Cultural, literary, and artistic expressions of Native, Hispanic, and African Americans. Includes traditional and modern work and contribution to American	Prerequisites: None.	LEC 3.0 3.0 3.0
HUM261	Asian Ideas and Values	An examination of Asian cultural traditions for their humanistic ideas and values: the arts, music, literature, religions, and philosophies of Asia, with emphasis on India and its sphere of influence in southeast Asia, and	Prerequisites: None.	LEC 3.0 3.0 3.0
HUM292	The Art Of Storytelling	Explore the art and origin of storytelling. Provide a variety of storytelling techniques, styles and exercises to enhance the delivery of telling stories. Assist in the integration and application of storytelling to the learning	Prerequisites: None.	LEC 3.0 3.0 3.0
HUM298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0

HUM298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
HUM298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
HVA101	HVAC for Residential Systems I	Introduction to major components and functions of residential heating, ventilation, and air conditioning (HVAC) systems, to include heat flow and basic	Prerequisites: None.	L+L 4.0 5.0 5.0
HVA102	HVAC for Residential Systems II	Applications of theory and basic principles of refrigeration in residential heating, ventilation, and air conditioning (HVAC) systems. Includes installations, diagnostics, preventative and predictive maintenance,	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: FAC/HVA101 or permission of Department or Division.	L+L 5.0 7.0 7.0
HVA104	EPA Section 608 Technician Preparation and Certification	Laws, standards and procedures for the preparation to complete the certification for the Environmental Protection Agency (EPA) SECTION 608 - stationary equipment. Core certification requirements for Type I Technicians, Type II Technicians, Type III Technicians, and Universal Technicians. Type I Technician - primarily works on small appliances. Type II Technician - primarily works on appliances/equipment using high and very high pressure refrigerant. Type III Technician - primarily	Prerequisites: None.	LEC 1.0 1.0 1.0
HVA120	HVAC Installation	Introduction to installation of residential heating, ventilation, and air conditioning (HVAC) systems. Includes startup and verification of proper equipment	Prerequisites: A grade of C or better in HVA102 or permission of Department.	L+L 4.0 6.0 6.0
HVA130	HVAC Troubleshooting	Introduction to troubleshooting the components of residential heating, ventilation, and air conditioning (HVAC) systems, to assure proper equipment operation.	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: HVA120 or permission	L+L 4.0 6.0 6.0

HVA131	Electrical Systems	Electricity related to residential and light commercial applications, to include common electrical components, AC and DC circuits, and electrical safety. Provides an introduction to reading, interpreting, and creating wiring diagrams and the application of electrical power. Operation and use of specific meters, tools, and an	Prerequisites: None.	L+L 3.5 4.0 4.0
HVA170	Construction Trades: H.V.A.C.r	Introduction to major components and functions of residential heating, ventilation, air conditioning, and refrigeration (H.V.A.C.r) systems, including heat flow and basic electrical concepts. Introduction to installation of residential heating, ventilation, air conditioning, and refrigeration (H.V.A.C.r) systems. Includes startup and verification of proper equipment operation. Includes installations, diagnostics, preventative and predictive maintenance, and customer service. Introduction to troubleshooting the components of residential heating, ventilation, air conditioning, and refrigeration (H.V.A.C.r) systems to ensure proper equipment operation.	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: [(CON103 or CON271) and (CON102 or (CON102AA, CON102AB, and CON102AC))], or permission of Instructor.	L+L 9.0 12.0 12.0
HVA170AA	Construction Trades: Introduction to H.V.A.C.r for Residential Systems	Introduction to major components and functions of residential heating, ventilation, air conditioning, and refrigeration (H.V.A.C.r) systems, to include heat flow and basic electrical concepts. Examines federal laws, standards and procedures for the preparation to complete the certification for the Environmental	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: [(CON103 or CON271) and (CON102 or (CON102AA, CON102AB, and CON102AC))], or permission of Instructor.	L+L 3.0 4.0 4.0
HVA170AB	Construction Trades: H.V.A.C.r Installation	Installation of residential heating, ventilation, air conditioning, and refrigeration (H.V.A.C.r) systems. Includes startup and verification of proper equipment operation. Includes installations, diagnostics, preventative and predictive maintenance, and customer	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: [(CON103 or CON271) and (CON102 or (CON102AA, CON102AB, and CON102AC))], or	L+L 4.0 3.0 3.0
HVA170AC	Construction Trades: H.V.A.C.r Troubleshooting	Introduction to troubleshooting the components of residential heating, ventilation, air conditioning, and refrigeration (H.V.A.C.r) systems, to assure proper equipment operation.	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: [(CON103 or CON271) and (CON102 or (CON102AA, CON102AB, and CON102AC))], or	L+L 4.0 3.0 3.0

HVA210	Facilities Air Conditioning Systems	Fundamental principles of air conditioning including all-air, all-water (hydronic) and air-water combination systems. Overview of the physical principles, including air distribution systems and heating and cooling load calculation. System components and application theory for boilers, chillers, pumps, fans, and cooling towers. Theory and application of central air conditioning systems, air cleaning and humidification devices, pressure boosting, heat storage, expansion and pressurization equipment. Properties of water, pressure distribution in hydronic systems, flow in pipes, pressure	Prerequisites: A grade of C or better in HVA130 or permission of Department.	L+L 4.0 6.0 6.0
HVA231	Codes	Local codes, Federal Housing Administration and Urban Development standards. Acceptable building practices based on the Uniform Building Code, National Electric Code, Uniform Mechanical Code, and the Uniform Plumbing Code. Impact of American with Disabilities Act	Prerequisites: None.	L+L 3.0 5.0 5.0
HVA296WA	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 1.0 5.0 0.0
HVA296WB	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 2.0 10.0 0.0

HVA296WC	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 3.0 15.0 0.0
HVA296WD	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 4.0 20.0 0.0
HVA298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
HVA298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0

HVA298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
HVC101	HVAC for Residential Systems I	Introduction to major components and functions of residential heating, ventilation, and air conditioning (HVAC) systems, to include heat flow and basic	Prerequisites: None.	130
HVC102	HVAC for Residential Systems II	Applications of theory and basic principles of refrigeration in residential heating, ventilation, and air conditioning (HVAC) systems. Includes installations, diagnostics, preventative and predictive maintenance,	Prerequisites: None.	130
HVC120	HVAC Installation	Introduction to installation of residential heating, ventilation, and air conditioning (HVAC) systems. Includes startup and verification of proper equipment	Prerequisites: A grade of C or better in HVC102 or permission of department.	130
HVC130	HVAC Troubleshooting	Introduction to troubleshooting the components of residential heating, ventilation, and air conditioning (HVAC) systems, to assure proper equipment operation.	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: HVC120 or permission	130
HWC101	Health and Wellness Coaching	Provides the foundational practical skills for the application of the appropriate structure and processes of health and wellness coaching. Fundamental techniques and concepts used in coaching to establish effective coach-client partnerships, build trust and rapport, assess client readiness, and ensure ethical and professional considerations in coaching. Satisfies	Prerequisites: None. It is recommended that HES100 be completed prior to or concurrent with this course.	L+L 3.0 4.0 4.0
HWC290	Health and Wellness Coaching Internship	Work-based experience in health and wellness coaching. Eighty hours of designated work per credit.	Prerequisites: A grade of C or better in HES100 and HWC101.	LAB 1.0 1.0 0.0
IBS101	Introduction to International Business	A basic overview of international business to introduce students to international trade concepts. Focus of the course is on international business environment issues that influence global business practices, decisions and	Prerequisites: None.	LEC 3.0 3.0 3.0
IBS104	International Finance	The development of foreign exchange and international banking is examined. Methods of export financing, including both short- and medium-term credit and an in-depth review of application to and administration of government loan programs are covered. Important	Prerequisites: None.	LEC 1.0 1.0 1.0

IBS105	International Law	Introduction to the legal aspects and ramifications of international trade topics including multinational enterprises, sovereignty, technology transfer,	Prerequisites: None.	LEC 2.0 2.0 2.0
IBS108	Basics of Import/Export Operations	An overview of the steps involved in importing and exporting a product or service from beginning to end. Course includes an introduction to the United States Customs Service, what customs brokers do, duty rate structure and determination, basic laws affecting imports, currency exchange and letters of credit. Practical advice about storage and transportation of shipments after they have cleared customs. Other topics will include marketing, organization, regulations, terms of sale, documentation, shipment and financing	Prerequisites: None.	LEC 2.0 2.0 2.0
IBS109	Cultural Dimension for International Trade	The importance of cultural sensitivity in international business relations investigated by studying the impact of geography, history, religion, politics, customs and	Prerequisites: None.	LEC 3.0 3.0 3.0
IBS116	Export/Import Management	Basics of importing and exporting processes with focus on documentation and procedures. Includes transportation and distribution options, freight forwarders, International Common Terms (INCO) shipping terms, packaging strategies, contract	Prerequisites: A grade of C or better in IBS101 or permission of Instructor.	LEC 3.0 3.0 3.0
IBS118	International Marketing Management	Planning, implementing, and managing international marketing strategies through application of international marketing research and evaluation in diverse cultural, economic, and political environments. Emphasis on implementation of product, price, promotion, and	Prerequisites: A grade of C or better in IBS101 or permission of Instructor.	LEC 3.0 3.0 3.0
IBS123	U.S. Customs and Export Licensing Regulations	Requirements for importing into the United States, and for export clearance, licensing, and foreign entry. Includes role of customs brokers, duty rate structure and determination as well as Commerce Control List (CCL) and Export Control Commodity Numbering	Prerequisites: A grade of C or better in IBS101 or permission of Instructor.	LEC 3.0 3.0 3.0
IBS140	International Financial Management	Development of foreign exchange and international banking, including methods of payment, export financing, and application for and administration of government loan programs, country risk analysis, and negotiation and processing of letter of credit and other	Prerequisites: A grade of C or better in IBS101 or permission of Instructor.	LEC 3.0 3.0 3.0

IBS298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
ICE220	Sectional Anatomy	Sectional human anatomy in the transverse, sagittal and coronal planes. Emphasis on the brain, neck, chest, abdomen and pelvic cavity.	Prerequisites: A grade of C or better in (BIO160 or BIO201) and (HCC145 or HCC146), or a graduate of a related medical program of study or currently registered as a technologist in radiography, nuclear medicine, radiation therapy or sonography OR Admission to the Medical Radiography Program or permission	LEC 3.0 3.0 3.0
ICE223	Introduction to Computed Tomography	Overview of the principles and operation of computed tomography (CT) scanner. Content includes history, physics processes, instrumentation components, imaging acquisition, reconstruction and display for	Prerequisites: Admission to the Medical Radiography Program or permission of Instructor.	LEC 1.0 1.0 1.0
ICE229	Magnetic Resonance (MR) Multi-Planar Sectional Anatomy	Three dimensional anatomy presented in transverse, sagittal and coronal planes of specified regions of the human body as viewed from magnetic resonance imagery. Includes structure identification of the bones, muscles, vascular system, organs, soft tissue components and weighted imaging.	Prerequisites: [(Certified by American Registry of Radiologic Technologists (ARRT) in Radiography or in Radiation Therapy), or (certified by ARRT or the Nuclear Medicine Technology Certification Board (NMTCB) in Nuclear Medicine), or (certified by American Registry of Diagnostic Medical Sonography (ARDMS) or ARRT in Diagnostic Medical Sonography), or (Radiography, Radiation Therapist, Nuclear Medicine, or Sonography student currently enrolled at	LEC 2.0 2.0 2.0

ICE231	Professional and Patient Interactions	Principles of verbal and non-verbal communication skills through the development of understanding self, patients, colleagues and others. Includes verbal communication, written instructions, communications devices, telephone protocol, resume writing and job	Prerequisites: None.	LEC 2.0 2.0 2.0
ICE233	Fundamentals of Magnetic Resonance Imaging (MRI)	Overview of magnetic resonance imaging, program policies and student responsibilities. Includes fundamental principles of magnetic resonance imaging (MRI), primary and secondary equipment, and MRI terminology. Imaging parameters, clinical applications overview for MRI and preparation for physics, instrumentation, and safety coursework. Basic overview of safety issues and MRI contrast agents.	Prerequisites: (Certified by American Registry of Radiologic Technologists (ARRT) in Radiography or in Radiation Therapy) or (certified by ARRT or the Nuclear Medicine Technology Certification Board (NMTCB) in Nuclear Medicine) or (certified by American Registry of Diagnostic Medical Sonography (ARDMS) or ARRT in Diagnostic Medical Sonography) or (Radiography, Radiation Therapist, Nuclear Medicine or Sonography student currently enrolled at GateWay) or registry eligible	LEC 1.0 1.0 1.0
ICE240	Fundamentals of Positron Emission Tomography	Overview of Positron Emission Tomography (PET). Comparison to other diagnostic imaging modalities. History of PET, applications and importance. Introduction to PET radiation safety.	Prerequisites: Completion of Associate in Applied Science in Medical Radiography or completion of Associate in Applied Science in Nuclear Medicine Technology or completion of Certificate of Completion in Radiation Therapy program or Corequisites:	LEC 1.0 1.0 1.0

ICE248	Computed Tomography (CT) Multi-Planar Sectional Anatomy	Sectional human anatomy in the transverse, sagittal and coronal planes. Multi-planar emphasis on the musculoskeletal system to include multi-planar imaging of the facial bones, cervical, thoracic and lumbar spine, and extremities; and the heart and vascular structures.	Prerequisites: [(Certified by American Registry of Radiologic Technologists (ARRT) in Radiography or in Radiation Therapy) or (certified by ARRT or the Nuclear Medicine Technology Certification Board (NMTCB) in Nuclear Medicine) or (Radiography or Nuclear Medicine student currently enrolled at GateWay) or registry eligible graduates] and DMS/ICE220 and (DMI/ICE223 or NUC250) with a	LEC 2.0 2.0 2.0
ICE250	Mammography	Screening and diagnostic mammography. Includes anatomy, positioning, equipment, patient history, clinical breast examination, and image evaluation related to mammography. Breast pathology along with advanced testing and treatments, including other imaging	Prerequisites: American Registry of Radiologic Technologists (A.R.R.T.) certification or permission of Program Director.	LEC 3.0 3.0 3.0
ICE254	Advanced Imaging Practicum	Advanced imaging procedures for the Graduate Radiologic Technologist from American Registry of Radiologic Technologists (ARRT) or registry eligible graduate performed under strict supervision. Use of correct technical and positioning techniques. Apply safety measures and procedures established by the institution and college. Observe ethical and legal guidelines and use of effective communication skills.	Prerequisites: [(Certified by American Registry of Radiologic Technologists (ARRT) in Radiography or in Radiation Therapy), or (certified by ARRT or the Nuclear Medicine Technology Certification Board (NMTCB) in Nuclear Medicine), or (Radiography or Nuclear Medicine student currently enrolled at GateWay), or registry eligible	LAB 1.0 6.0 0.0

ICE263	Computed Tomography Physics and Instrumentation	Overview and evolution of Computed Tomography (CT) in medical imaging to include: X ray production, CT principles, system components and operation; image acquisition, processing, reconstruction, and display; artifacts, quality assurance, radiation dosimetry and patient safety; contrast administration, imaging protocols; and competencies as outlined by American Registry of Radiologic Technologists (ARRT) for the CT Certification Examination.	Prerequisites: [(Certified by American Registry of Radiologic Technologists (ARRT) in Radiography or in Radiation Therapy) or (certified by ARRT or the Nuclear Medicine Technology Certification Board (NMTCB) in Nuclear Medicine) or (Radiography or Nuclear Medicine student currently enrolled at GateWay) or registry eligible graduates] and DMS/ICE220 and (DMI/ICE223 or NUC250) with a	LEC 3.0 3.0 3.0
ICE264	MRI Physics, Instrumentation and Safety	An overview into the physics, equipment, physical design, and image characteristics of Magnetic Resonance Imaging (MRI) systems.	Prerequisites: [(Certified by American Registry of Radiologic Technologists (ARRT) in Radiography or in Radiation Therapy) or (certified by ARRT or the Nuclear Medicine Technology Certification Board (NMTCB) in Nuclear Medicine) or (certified by American Registry of Diagnostic Medical Sonography (ARDMS) or ARRT in Diagnostic Medical Sonography) or (Radiography, Radiation Therapist, Nuclear Medicine, or Sonography student currently enrolled at	LEC 3.0 3.0 3.0
ICE265	Computed Tomography Procedure Protocols	Standard procedures and protocols for Computed Tomography (CT) imaging in alignment with the American Society of Radiologic Technologists (ASRT) examination curriculum outline. Includes patient preparation and safety, choosing appropriate protocols, interventional procedures, contrast indicators, post-exam processing quality issues, and adapting to atypical scanning situations.	Prerequisites: [(Certified by American Registry of Radiologic Technologists (ARRT) in Radiography or in Radiation Therapy) or (certified by ARRT or the Nuclear Medicine Technology Certification Board (NMTCB) in Nuclear Medicine) or (Radiography or Nuclear Medicine student currently enrolled at GateWay) or registry eligible graduate] and (DMI/ICE223 or NUC250) and ICE248 and ICE263	LEC 3.0 3.0 3.0

ICE267	Computed Tomography Advanced Imaging Practicum	Computed Tomography advanced imaging clinical practicum for those certified by American Registry of Radiologic Technologists (ARRT) in Radiography or in Radiation Therapy, or certified by ARRT or the Nuclear Medicine Technology Certification Board (NMTCB) in Nuclear Medicine, or current Radiography or Nuclear Medicine student, or registry eligible graduates to perform under strict supervision. Use of correct computed tomography instrumentation, protocol implementation and positioning techniques. Apply patient safety measures and follow As Low As Reasonably Achievable (ALARA) practices to reduce	Prerequisites: Currently enrolled in the Computed Tomography Program.	LAB 2.0 12.0 0.0
ICE268	MRI Advanced Imaging Practicum	Advanced Magnetic Resonance imaging (MRI) clinical practicum is for those certified by the American Registry of Radiologic Technologists (ARRT) in Radiography, Radiation Therapy, or Sonography, or certified by ARRT of the Nuclear Medicine Technology Certification Board (NMTCB) in Nuclear Medicine. Use of correct magnetic resonance imaging instrumentation, protocol implementation and positioning techniques. Apply MRI	Prerequisites: Currently enrolled in the Magnetic Resonance Imaging Program.	LAB 2.0 12.0 0.0
ICE269	Magnetic Resonance Procedure Protocols	Imaging techniques related to the central nervous system (CNS), neck, thorax, musculoskeletal system and abdominopelvic regions. Specific clinical application, available coils and use. Considerations in scan sequences, specific choices in protocols including slice thickness, phase direction, flow compensation, and positioning criteria. Anatomical structures and plane that best demonstrates anatomy. Signal characteristics of normal and abnormal structures.	Prerequisites: [(Certified by American Registry of Radiologic Technologists (ARRT) in Radiography or in Radiation Therapy), or (certified by ARRT or the Nuclear Medicine Technology Certification Board (NMTCB) in Nuclear Medicine), or Certified by the American Registry of Diagnostic Medical Sonography (ARDMS) or (Radiography or Nuclear Medicine student) or registry eligible graduate] and ICE233 and ICE264	LEC 3.0 3.0 3.0
ICE270	Contrast Media	Functions and applications of contrast media used in diagnostic radiographic imaging procedures. Chemical characteristics and properties of contrast media. Indications and contraindications including potential hazards of contrast media administration. Adverse reactions, patient care associated with reactions and	Prerequisites: Graduate radiologic technologist or permission of Instructor.	LEC 0.5 0.5 0.5

ICE271	Physiologic Monitoring	Physiologic monitoring to include electrophysiology of the heart, electrocardiography, rhythms and dysrhythmias. Hemodynamic monitoring including equipment, parameters, and cardiovascular pressures.	Prerequisites: Graduate radiologic technologist or permission of Instructor.	LEC 0.5 0.5 0.5
ICE272	Magnetic Resonance Pathology	Common pathologies found in magnetic resonance imaging, their appearance with various imaging protocols including all commonly imaged body systems and areas. Case studies and images of the pathologies to reinforce the lectures.	Prerequisites: [(Certified by American Registry of Radiologic Technologists (ARRT) in Radiography or in Radiation Therapy), or (certified by ARRT or the Nuclear Medicine Technology Certification Board (NMTCB) in Nuclear Medicine), or Certified by the American Registry of Diagnostic Medical Sonography (ARDMS) or (Radiography or Nuclear Medicine student), or registry eligible graduate] and ICE233 and ICE229	LEC 3.0 3.0 3.0
ICE273	Computed Tomography Pathology	Common diseases diagnosed using Computed Tomography (CT) imaging. Appearance of pathology on CT to include: physiology, etiology, indications for exam, findings, and diagnosis. Case studies, images, and descriptions of pathologic conditions in various body systems will be presented in alignment with CT certification guidelines published by the American Registry of Radiologic Technologists (ARRT).	Prerequisites: [(Certified by American Registry of Radiologic Technologists (ARRT) in Radiography or in Radiation Therapy), or (certified by ARRT or the Nuclear Medicine Technology Certification Board (NMTCB) in Nuclear Medicine), or (Radiography or Nuclear Medicine student currently enrolled at GateWay), or registry eligible graduate] and DMS/ICE220 and	LEC 3.0 3.0 3.0
ICE290	Registry and Board Examinations Preparation	Preparation for the American Registry of Radiologic Technologist (ARRT) and the Medical Radiologic Technology Board of Examiners (MRTBE) examinations. Review of the ARRT and MRTBE content specifications, techniques for preparation and review of current	Prerequisites: Qualified individuals preparing for the ARRT and MRTBE or permission of Department or Division.	LEC 1.0 1.0 1.0
ICE291	Computed Tomography Registry and Board Exam	Discussion of concepts outlined in the American Registry of Radiologic Technologists (ARRT) published content specifications for their post-primary certification	Prerequisites: Permission of the Program Director or Instructor.	LEC 1.0 1.0 1.0

ICE292	MRI Board Exam Review Preparation	Preparation for the American Registry of Radiologic Technologists (ARRT) Medical Resonance Imaging (MRI) examination. Review of elements required to pass the AART examination, including patient care and safety, imaging procedures, data acquisition, and	Prerequisites: A grade of C or better in DMS/ICE220, ICE229, ICE233, ICE264, ICE269 and ICE272. Corequisites: ICE254. Xref: DMS220	LEC 1.0 1.0 1.0
ICE293	Registry Examination Preparation in Vascular-Interventional Radiography	Preparation for the American Registry of Radiologic Technologist (ARRT) in Vascular Interventional Radiography examination. Review of the ARRT content specifications, techniques for preparation, and review of current literature.	Prerequisites: Registered Radiographers preparing for the American Registry of Radiologic Technologist (ARRT) Vascular Interventional Radiography	LEC 1.0 1.0 1.0
ICE298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: None.	LAB 1.0 1.0 0.0
ICE298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: None.	LAB 2.0 2.0 0.0
ICE298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: None.	LAB 3.0 3.0 0.0
IEC101	Basic Electricity	Electrical and first aid safety. Introduction to electricity, trade math, wiring techniques. Introduction to the	Prerequisites: None.	LEC 5.0 5.0 5.0
IEC102	Electrical Residential	Series-parallel circuits, governing bodies, residential wiring practices, Kirchhoff's Law, kitchen outlets, heating systems, low voltage systems, service entrance	Prerequisites: A grade of C or better in IEC101 or permission of Instructor.	LEC 5.0 5.0 5.0
IEC104	Wiring Motors and Transformers	Sizes of wire, conduit and boxes; National Electric Code, sizing service and feeders, sizing transformers	Prerequisites: Permission of Instructor.	LEC 5.0 5.0 5.0

IEC105	Electric Blueprint Reading	Three-phase systems, transformers, and blueprint reading, construction process, plumbing, masonry and welding blueprints as well as mechanical systems;	Prerequisites: A grade of C or better in IEC104 or permission of Instructor.	L+L 5.0 5.0 5.0
IEC106	Electric Motor Controls	Motor Control system, alternating current (AC) and direct current (DC) contactors and magnetic motor starters; time delay circuits, reversing circuits, power distribution systems and hazardous locations, signs and fiber	Prerequisites: A grade of C or better in IEC105 or permission of Instructor.	L+L 5.0 5.0 5.0
IEC108	Alarm Systems and Codes	Fire and signaling systems. Installation and start-up of fire alarm systems, fire alarm maintenance and troubleshooting. Wiring methods and materials, circuits and equipment protection, motors and air conditioning circuits, transformers and generating. Dwelling occupancies, industrial and commercial locations,	Prerequisites: Permission of Instructor.	LEC 5.0 5.0 5.0
IEC298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
IEC298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
IEC298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
IFS110	Critical Research for College Success	Understand the research process and how to access, evaluate, and incorporate sources appropriately into	Prerequisites: None.	LEC 1.0 1.0 1.0

IFS112	College Research Foundations	Development of research skills and competencies essential for college success including accessing, evaluating, and incorporating information sources into academic projects. Examination of information ecosystems, online presence, and the implications of	Prerequisites: None.	LEC 3.0 3.0 3.0
IFS150	Social Media, Society, and Ourselves	Introduction to the role of social media in historical, social, cultural, and political contexts. Examine social media experience through the lens of creator and consumer. Analysis of the impact of social media on information and communication, including its influence	Prerequisites: None.	LEC 3.0 3.0 3.0
IFS201	Information in a Post-Truth World	Develop a critical approach to using information as both a consumer and creator. Explore the impact of culture and worldview on how information is created, shared, understood, and used. Utilize analysis, evaluation, interpretation, and synthesis through substantial writing	Prerequisites: A grade of C or better in ENG101 or ENG107.	LEC 3.0 3.0 3.0
IFS210	Digital Information and Access in a Global Society	An investigation into digital information access in a global environment. Explores the evolving cultures and socioeconomic factors related to the digital flow of information. Examines emerging technologies to	Prerequisites: None.	LEC 3.0 3.0 3.0
IFS213	Hacking and Open Source Culture	Focus on the multi-dimensions of hacking and open source culture, including rule-breaking, innovation, and creative use of programming/technology. Social, economic, cultural, and political implications of hacking and technology, in historical and contemporary contexts	Prerequisites: None.	LEC 3.0 3.0 3.0
IGS290	Integrated Studies	Integrated nature of human experience. Critical inquiry of a particular theme from a wide variety of academic viewpoints. Synthesis of knowledge and skills. Evaluation of experience and decisions from ethical, aesthetic, and intellectual perspectives. Preparation of	Prerequisites: A grade of C or better in ENG101 or ENG107 or equivalent.	LEC 3.0 3.0 3.0
IGS290AA	Integrated Studies	Integrated nature of human experience. Critical inquiry of a particular theme from a wide variety of academic viewpoints. Synthesis of knowledge and skills. Evaluation of experience and decisions from ethical, aesthetic, and intellectual perspectives. Preparation of	Prerequisites: None.	LEC 2.0 2.0 2.0
IGS290AB	Integrated Studies	Preparation of a formal paper related to IGS290AA that demonstrates competency in gathering, interpreting and	Prerequisites: A grade of C or better in IGS290AA or Corequisites:	LEC 1.0 1.0 1.0

IGS291	Studies in Global Awareness	Interdisciplinary examination of selected topics in global awareness. Study of the human organization and modern global interdependence. Selected topics vary	Prerequisites: A grade of C or better in ENG101 or ENG107 or equivalent.	LEC 3.0 3.0 3.0
IGS291AA	Studies in Global Awareness	Interdisciplinary examination of selected topics in global awareness. Study of the human organization and modern global interdependence. Selected topics vary.	Prerequisites: None.	LEC 1.0 1.0 1.0
IGS292	Studies in Cultural Diversity	Interdisciplinary examination of selected topics in cultural diversity. Study of the interrelationships among diverse cultures within the contemporary United States.	Prerequisites: A grade of C or better in ENG101 or ENG107 or equivalent.	LEC 3.0 3.0 3.0
IGS292AA	Studies in Cultural Diversity	Interdisciplinary examination of selected topics in cultural diversity. Study of the interrelationships among diverse cultures within the contemporary United States.	Prerequisites: None.	LEC 1.0 1.0 1.0
IGS293	Studies in Historical Awareness	Interdisciplinary examination of selected topics in historical awareness. Study of the historical method and of human events that have created modern life.	Prerequisites: A grade of C or better in ENG101 or ENG107 or equivalent.	LEC 3.0 3.0 3.0
IGS293AA	Studies in Historical Awareness	Interdisciplinary examination of selected topics in historical awareness. Study of the historical method and of human events that have created modern life.	Prerequisites: None.	LEC 1.0 1.0 1.0
IGS294	Integrative Study of the Future	Integrative and interdisciplinary study of the future. Critical inquiry of the future from historical, philosophical, literary, scientific, social, psychological, and religious perspectives. Comprehensive review of contemporary scientific- technological, environmental, and global and cultural trends and possible directions in the future.	Prerequisites: A grade of C or better in ENG101 or ENG107 or equivalent.	LEC 3.0 3.0 3.0
IMC112	Introduction to Mechanical Trades Construction	Theories and concepts for mechanical trades construction: Basic safety, materials handling and construction math. Application and maintenance of hand and power tools, and basic rigging. Types and interpretation of construction drawings. Introduction to	Prerequisites: Registered apprenticeship status or permission of Apprenticeship Coordinator.	L+L 6.0 6.0 6.0
IMC114	Overview of Mechanical Trades: Sheet Metal, Pipefitting, and	Overview of the work performed in the mechanical trades. Theories and concepts of care, use, and safety procedures related to hand and power tools motorized equipment. Introductory concepts in construction	Prerequisites: Registered apprenticeship status or permission of Apprenticeship Coordinator.	L+L 6.0 6.0 6.0
IMC120	Plumbing, Drain, and Waste Piping	Interpretation and grade requirements for drain piping. Planning, testing, and installation of specific types of	Prerequisites: None.	L+L 3.0 3.0 3.0

IMC122	Multiple Trades Cross Training: Tubes, Fittings and Piping Systems	Principles of architectural sheet metal, copper tube and fittings, carbon steel pipe and fittings, mechanical piping systems, and plastic pipe and fittings. Introductory concepts of drain, waste and vent (DWV) systems,	Prerequisites: Registered apprenticeship status or permission of Apprenticeship Coordinator.	L+L 6.0 6.0 6.0
IMC124	Multiple Trades Cross Training: Standards	Fundamentals and theories of trade standards for sheet metal, plumbing systems, and mechanical piping systems installation.	Prerequisites: Registered apprenticeship status or permission of Apprenticeship Coordinator.	L+L 6.0 6.0 6.0
IMC231	Mechanical Trades Construction: Plumbing Intermediate Principles and	Intermediate principles and concepts for the plumbing trade related to commercial drawings and calculations. Installation of fixtures, valves, faucets, roof, floor and area drain. Types of drains and fuel gas systems.	Prerequisites: Registered apprenticeship status or permission of Apprenticeship Coordinator.	L+L 6.0 6.0 6.0
IMC233	Mechanical Trades Construction: Sheet Metal Intermediate Principles and	Intermediate principles and concepts for the sheet metal trade related to duct fabrication standards, air properties, bend allowances, field measuring, and triangulation.	Prerequisites: Registered apprenticeship status or permission of Apprenticeship Coordinator.	L+L 6.0 6.0 6.0
IMC235	Mechanical Trades Construction: Pipefitting Intermediate Principles	Intermediate principles and concepts for the pipefitting trade related to trade calculations, motorized equipment, above ground pipe installation. Emphasis on field routing, vessel trim, pipe hangers and support,	Prerequisites: Registered apprenticeship status or permission of Apprenticeship Coordinator.	L+L 6.0 6.0 6.0
IMC236	Mechanical Trades Construction: Plumbing Advanced Principles and	Advanced principles and concepts for the plumbing trade related to water supply piping installation, testing, and sizing. Application of advanced trade calculations and fundamentals of backflow prevention and types of	Prerequisites: Registered apprenticeship status or permission of Apprenticeship Coordinator.	L+L 6.0 6.0 6.0
IMC237	Mechanical Trades Construction: Sheet Metal Advanced Principles and	Advanced principles and concepts for the sheet metal trade related to piping practices, radial line development, layout and fabrication. Emphasis on air systems, shop production and organization.	Prerequisites: Registered apprenticeship status or permission of Apprenticeship Coordinator.	L+L 6.0 6.0 6.0
IMC238	Mechanical Trades Construction: Pipefitting Advanced Principles and	Advanced principles and concepts for the pipefitting trade relative to blueprint reading, drawing, and detail sheets. Advanced application of weld pipe fabrication, rigging, standards, and specifications.	Prerequisites: Registered apprenticeship status or permission of Apprenticeship Coordinator.	L+L 6.0 6.0 6.0
IMC241	Mechanical Trades Construction: Plumbing Advanced	Application and review of advanced principles for drain, waste and vent (DWV) systems, pumps, compressed air systems, and potable water treatment. Fundamentals of	Prerequisites: Registered apprenticeship status or permission of Apprenticeship Coordinator.	L+L 6.0 6.0 6.0
IMC243	Mechanical Trades Construction: Sheet Metal Advanced Skill Building	Application and review of advanced sheet metal layout, fabrication, and installation. Review principles of airflow, air distribution systems, standards, comprehensive planning and specification reading.	Prerequisites: Registered apprenticeship status or permission of Apprenticeship Coordinator.	L+L 6.0 6.0 6.0

IMC245	Mechanical Trades Construction: Pipefitting Advanced	Application and review of advanced principles and concepts for valve maintenance, hot taps, special piping, and pipe fabrication.	Prerequisites: Registered apprenticeship status or permission of Apprenticeship Coordinator.	L+L 6.0 6.0 6.0
IMC246	Mechanical Trades Construction: Plumbing Advanced Applications and Techniques	Application and review of advanced plumbing techniques for water pressure boosters, recirculation systems, review and function of codes for indirect and special wastes and the plumbing industry. Introduction to hydronic and solar heating systems, servicing piping	Prerequisites: Registered apprenticeship status or permission of Apprenticeship Coordinator.	L+L 6.0 6.0 6.0
IMC247	Mechanical Trades Construction: Sheet Metal Advanced Applications and Techniques	Application and review of advanced sheet metal techniques for air testing and balancing. Review of codes and specifications pertaining to fume and exhaust system design including review and practice of lay out patterns, fabrication and selection of sheet	Prerequisites: Registered apprenticeship status or permission of Apprenticeship Coordinator.	L+L 6.0 6.0 6.0
IMC248	Mechanical Trades Construction: Pipefitting Advanced Applications and	Application and review of advanced pipefitting techniques for advanced blueprint reading, steam systems, stress relieving and aligning. Purpose and function of in-line specialties and an introduction to	Prerequisites: Registered apprenticeship status or permission of Apprenticeship Coordinator.	L+L 6.0 6.0 6.0
IND110	Introduction to the Printing Industry	Brief history/introduction of graphic arts technologies including printing, photography, graphics and text. Safety and health practices, job estimating and trade customs as well as legal restrictions and requirements	Prerequisites: None.	LEC 1.0 1.0 1.0
IND111	Paper, Binding and Finishing Techniques	Finishing techniques and binding styles of paper. Covers paper properties, requirements, and grades. Various finishing and binding styles emphasized	Prerequisites: None.	L+L 3.0 4.0 4.0
IND112	Lithographic Inks and Offset Press	Basic overview of lithographic inks and offset press operations. Sheet-fed and web-fed offset presses	Prerequisites: None.	L+L 2.0 3.0 3.0
IND133AB	Speaking in Business - Delivering Communication	Practical, effective speech techniques for everyday business interactions. Examination of effective message preparation skills and communication styles and	Prerequisites: None.	LEC 1.0 1.0 1.0
IND135	Interpersonal Skills and Leadership in Construction	Values and expectations of the workforce, building relationships, satisfying stakeholders. Effective communication, management grid, creating a leadership environment. Behavioral interviewing and professional	Prerequisites: None.	LEC 1.0 1.0 1.0
IND136	Communications in Construction	Communication in the construction industry. Positive direct communication, written communication, active listening, understanding, negotiation, and dealing with difficult people. Communication skills at all organizational levels, with groups, combining oral and	Prerequisites: None.	LEC 1.0 1.0 1.0

IND138	Introduction to Project Management and Resource Control	Technical and management skills such as preconstruction planning, cost and risk control and policy development. Criteria for project layout purchasing, subcontractor management, project layout. Preparation process for project start up, close out and alternate project delivery methods. Major factors which	Prerequisites: None.	LEC 1.0 1.0 1.0
IND140	Construction Scheduling and Time Management	Fundamental training in scheduling, including listing and sequencing, bar charts, network diagrams and methods of managing resources. Importance of formal schedules, job planning, and establishing priorities and	Prerequisites: None.	LEC 1.0 1.0 1.0
IND142	Construction Safety/Loss Prevention	Construction safety and loss prevention from the perspective of the construction superintendent. Includes communication and motivation for safety and loss prevention, project security and traffic control, and scheduling planning to prevent losses. Also includes loss prevention documents and inventories, assigning responsibility for safety and equipment maintenance,	Prerequisites: None.	LEC 1.0 1.0 1.0
IND144	Improving Construction Productivity	Techniques for improving the productivity of construction projects including external factors influencing productivity, planning and communications as functions of a productive project, and the relationship of motivation and job satisfaction to productivity. Also presents techniques for evaluating methods improvement, including the use of time lapse	Prerequisites: None.	LEC 1.0 1.0 1.0
IND150	Construction Foreman	Examine the basic supervisory and leadership concepts and skills needed to manage a construction project. Includes basic theories of motivation, role of communications in construction project management, decision making process, planning and organizing, strategies, developing production schedules	Prerequisites: None.	LEC 2.0 2.0 2.0
IND170AA	Training for Business, Industry, and Government - AA	Customized one credit lecture course to meet the immediate training needs of business, industry, and government within Maricopa County.	Prerequisites: None.	LEC 1.0 1.0 1.0
IND170AB	Training for Business, Industry, and Government - AB	Customized two credit lecture course to meet the immediate training needs of business, industry, and government within Maricopa County.	Prerequisites: None.	LEC 2.0 2.0 2.0

IND170AC	Training for Business, Industry, and Government - AC	Customized three credit lecture course to meet the immediate training needs of business, industry, and government within Maricopa County.	Prerequisites: None.	LEC 3.0 3.0 3.0
IND170AD	Training for Business, Industry, and Government - AD	Customized two credit lecture/lab course to meet the immediate training needs of business, industry, and government within Maricopa County.	Prerequisites: None.	L+L 2.0 4.0 4.0
IND170AE	Training for Business, Industry, and Government - AE	Customized three credit lecture/lab course to meet the immediate training needs of business, industry, and government within Maricopa County.	Prerequisites: None.	L+L 3.0 5.0 5.0
IND170AF	Training for Business, Industry, and Government - AF	Customized four credit lecture/lab course to meet the immediate training needs of business, industry, and government within Maricopa County.	Prerequisites: None.	L+L 4.0 6.0 6.0
IND170AG	Training for Business, Industry, and Government - AG	Customized one-half credit lecture course to meet the immediate training needs of business, industry, and government within Maricopa County.	Prerequisites: None.	LEC 0.5 0.5 0.5
IND170AH	Training for Business, Industry, and Government - AH	Customized four credit lecture course to meet the immediate training needs of business, industry, and government within Maricopa County.	Prerequisites: None.	LEC 4.0 4.0 4.0
IND170AI	Training for Business, Industry, and Government - AI	Customized five credit lecture course to meet the immediate training needs of business, industry, and government within Maricopa County.	Prerequisites: None.	LEC 5.0 5.0 5.0
IND170AJ	Training for Business, Industry, and Government - AJ	Customized one and one-half credit lecture course to meet the immediate training needs of business, industry, and government within Maricopa County.	Prerequisites: None.	LEC 1.5 1.5 1.5
IND170AK	Training for Business, Industry, and Government - AK	Customized two and one-half credit lecture course to meet the immediate training needs of business, industry, and government within Maricopa County.	Prerequisites: None.	LEC 2.5 2.5 2.5
IND170AL	Training for Business, Industry, and Government - AL	Customized three and one-half credit lecture course to meet the immediate training needs of business, industry, and government within Maricopa County.	Prerequisites: None.	LEC 3.5 3.5 3.5
IND170AM	Training for Business, Industry, and Government - AM	Customized four and one-half credit lecture course to meet the immediate training needs of business, industry, and government within Maricopa County.	Prerequisites: None.	LEC 4.5 4.5 4.5
IND170AN	Training for Business, Industry, and Government - AN	Customized one quarter credit lecture course to meet the immediate training needs of business, industry, and government within Maricopa County.	Prerequisites: None.	LEC 0.25 0.25 0.25

IND170AO	Training for Business, Industry, and Government - AO	Customized one credit lecture/lab course to meet immediate training needs of business, industry and government within Maricopa County.	Prerequisites: None.	L+L 1.0 2.0 2.0
IND170AP	Training for Business, Industry, and Government - AP	Customized two credit lecture/lab course to meet the immediate training needs of business, industry, and government within Maricopa County.	Prerequisites: None.	L+L 2.0 3.0 3.0
IND170AQ	Training for Business, Industry, and Government - AQ	Customized three credit lecture/lab course to meet the immediate training needs of business, industry, and government within Maricopa County.	Prerequisites: None.	L+L 3.0 4.0 4.0
IND170AR	Training for Business, Industry, and Government - AR	Customized one credit lab course to meet immediate training needs of business, industry and government within Maricopa County.	Prerequisites: None.	LAB 1.0 2.0 2.0
IND170AS	Training for Business, Industry, and Government - AS	Customized 1.75 credit L+L course to meet immediate training needs of business, industry and government within Maricopa County.	Prerequisites: None.	L+L 1.75 1.75 1.75
IND170AT	Training for Business, Industry, and Government - AT	Customized 1.25 credit L+L course to meet immediate training needs of business, industry and government.	Prerequisites: None.	L+L 1.25 1.25 1.25
IND170AU	Training for Business, Industry, and Government-AU	Customized two credit lab course to meet immediate training needs of business, industry and government within Maricopa County.	Prerequisites: None.	LAB 2.0 6.0 6.0
IND170AV	Training for Business, Industry and Government-AV	Customized three credit lab course to meet immediate training needs of business, industry and government within Maricopa County.	Prerequisites: None.	LAB 3.0 9.0 9.0
IND170AW	Training for Business, Industry, and Government-AW	Customized one credit lab course to meet immediate training needs of business, industry and government within Maricopa County.	Prerequisites: To be specified.	LAB 1.0 3.0 3.0
IND170AX	Training for Business, Industry, and Government-AX	Customized twelve credit lecture course to meet immediate training needs of business, industry and government within Maricopa County.	Prerequisites: To be specified.	LEC 12.0 12.0 12.0
IND170BA	Training for Business, Industry, and Government-BA	Customized two credit lecture with zero credit laboratory course to meet immediate training needs of business, industry and government within Maricopa County.	Prerequisites: To be specified.	LEC 2.0 1.5 1.5 LAB 0.0 1.5 1.5
IND170BB	Training for Business, Industry, and Government-BB	Customized two credit lecture with zero credit laboratory course to meet immediate training needs of business, industry and government within Maricopa County.	Prerequisites: To be specified.	LEC 4.0 2.0 2.0 LAB 0.0 6.0 6.0

IND170BC	Training for Business, Industry, and Government-BC	Customized four credit lecture with zero laboratory course to meet immediate training needs of business, industry and government within Maricopa County.	Prerequisites: To be specified.	LEC 4.0 2.5 2.5 LAB 0.0 1.5 1.5
IND170BD	Training for Business, Industry, and Government-BD	Customized L+L 4.0 credits, 4.5 periods, 5.0 load course to meet immediate training needs of business, industry and government within Maricopa County.	Prerequisites: To be specified.	L+L 4.0 4.5 5.0
INS100	Insurance Industry Profession	Introduction to the insurance industry profession and environment. Includes identification of personal career goals, effective workplace behaviors and professionalism in the workplace in addition to strategies for problem solving and conflict management. Also covers the importance of integrity and ethical	Prerequisites: None.	LEC 3.0 3.0 3.0
INS140	Review for the Property and Casualty Insurance Agent Licensing Exam	Preparation for the Property and Casualty Insurance Producer licensing exam required by the State of Arizona Department of Insurance for licensure as a Property/Casualty Insurance Agent. Covers the basic principles and legal parameters of property and casualty insurance including homeowners, auto, and business policies. Designed for students with no prior experience in the insurance field as well as those seeking to	Prerequisites: None.	LEC 1.0 1.0 1.0
INS150	Introduction to Personal Lines Policies	Introduction to personal lines policies for the customer service representative. Includes principles of insurance, contracts, and the role of regulation in the insurance industry. Covers various types of personal insurance including property, liability, dwelling, homeowner, and	Prerequisites: Permission of Department or Division.	LEC 3.0 3.0 3.0
INS151	Introduction to Commercial Property Policies	Introduction to commercial property policies for the customer service representative. Includes principles of commercial property, business owner, and commercial insurance for businesses. Covers terminology, forms, and procedures for policy coverages, declarations,	Prerequisites: Permission of Department or Division.	LEC 3.0 3.0 3.0
INS155	Fire Product Procedures	Customer service emphasis on fire product procedures. Covers types of coverage, endorsements, discounts, and eligibility in addition to fair access concerns. Also includes procedures for quoting watercraft and homeowner fire coverage and use of state-specific	Prerequisites: Permission of Department or Division.	L+L 2.0 3.0 3.0
INS200	Principles of Property and Liability Insurance	Basic principles of insurance. Introduction to insurance contracts. Overview of company functions and operations including ratemaking, underwriting, claims,	Prerequisites: None.	LEC 3.0 3.0 3.0

INS205	Personal Insurance	Analysis of personal loss exposures and personal insurance coverages including homeowner's, other dwelling coverages, personal liability, auto, life, health,	Prerequisites: A grade of C or better in INS200 or permission of Instructor.	LEC 3.0 3.0 3.0
INS210	Commercial Insurance	Analysis of commercial coverages including property, business income, inland marine, ocean marine, crime, boiler, general liability, auto, and worker's compensation. Analysis of loss exposures and	Prerequisites: A grade of C or better in INS200 or permission of Instructor.	LEC 3.0 3.0 3.0
INS241	Risk in an Evolving World	Introduction to the risk management process and its role in identifying and managing exposure to loss. Process for establishing a framework for hazard identification and the use of analytical and technology	Prerequisites: A grade of C of better in INS210.	LEC 3.0 3.0 3.0
INS242	Holistically Assessing Risk	Examination of various risk identification and assessment techniques implemented by business to control potential loss exposures. Emphasis on understanding the impact of operational decisions and employee actions on losses and steps used to mitigate financial consequences. Detailed analysis of property, liability, management liability, cyber, and loss exposures	Prerequisites: A grade of C of better in INS241.	LEC 3.0 3.0 3.0
INS243	Successfully Treating Risk	Evaluation of risk financing techniques available to organizations to provide funds to pay for losses incurred. Overview of financial elements of insurance, self-insurance, captives, and non-insurance transfers. Examination of non-traditional methods of financing including reinsurance, derivatives, catastrophe bonds, and insurance linked securities and their implementation	Prerequisites: A grade of C of better in INS241.	LEC 3.0 3.0 3.0
INS280	Insurance Studies Internship Preparation	Overview of essential skills necessary for an insurance studies student preparing to enter in the internship environment. Covers essential skills, self-evaluation,	Prerequisites: A grade of C or better in INS200 and permission of Department or Division.	L+L 1.0 1.0 1.0
INS290AA	Internship for Insurance Studies	Insurance work experience in industry. Eighty (80) hours of designated work per credit.	Prerequisites: Permission of Department or Division.	L+L 1.0 1.0 1.0
INS290AB	Internship for Insurance Studies	Insurance work experience in industry. Eighty (80) hours of designated work per credit.	Prerequisites: Permission of Department or Division.	L+L 2.0 2.0 2.0

INT100	Interior Design Drafting	Basic manual drafting techniques used in the interior design industry. Focus on industry standards of equipment use, lettering, line work, dimensioning, scaling, and annotation. Introduction and practice of industry-specific drawing types, including floor plans, elevations, sections, details, multi-view projection, and paraline. Brief exploration of hand sketching and	Prerequisites: None.	L+L 3.0 6.0 6.0
INT101	Introduction to Interior Design	Overview of interior design and related professions, the design process, elements and principles of design, color theory, and basic concepts of space planning and furniture layout. Development of design vocabulary relative to architectural details, furnishings, and finishes.	Prerequisites: None.	LEC 3.0 3.0 3.0
INT110	Revit - Introduction	Basic skills required to complete architectural drawings with Revit software; simplified overview of the software program and operations gained through completing typical plan, elevation, sectional, and 3D views, using	Prerequisites: None.	L+L 3.0 6.0 6.0
INT111	Architectural Computer Aided Design I: Introduction	Introduction to Computer-aided drafting (CAD) for the creation of construction documents including: annotated plans, elevations, schedules and schematic section views. Dimensions, notes, and symbols to be	Prerequisites: None.	L+L 3.0 6.0 6.0
INT112	Architectural Computer Aided Design II: Plans and Elevations	Computer-aided drafting (CAD). Creation of a fully annotated plan, elevation, and schematic section views including dimensions, notes, symbols, and schedule, using a computer aided drafting software such as AutoCAD. Includes an introduction to three-dimensional (3D) CAD using SketchUp and Building Information	Prerequisites: A grade of C or better in ARC/INT111. Completion of prerequisites within the last three years is required unless current work experience to override this time constraint is approved with	L+L 3.0 6.0 6.0
INT115	Historical Architecture and Furniture	Historical survey of the development of architecture, interiors, furniture, and decorative arts from antiquity to	Prerequisites: None.	LEC 3.0 3.0 3.0
INT120	Modern Architecture and Furniture	Survey of the development of architecture, interiors, furniture, and decorative arts from the Industrial Revolution to the present. Emphasis is on modern	Prerequisites: None.	LEC 3.0 3.0 3.0
INT122	Digital Visualization for Design	Introduction to the utilization of leading interior design industry software such as Adobe Photoshop, Illustrator, and InDesign for digital rendering and the development of interior design drawings and presentations.	Prerequisites: None.	L+L 3.0 6.0 6.0

INT126	Sewing for the Home	Provides students systemic skills and knowledge to plan and construct draperies, shades, pillows, bedding and other home furnishings through instructional projects. Emphasizes techniques used in producing textile goods	Prerequisites: None.	LEC 3.0 3.0 3.0
INT145	Drawing and Rendering Studio	Development of basic freehand sketching and perspective rendering skills. Explores drawing styles and techniques through quick sketching and the use of digital tools to create presentation drawings as used in	A grade of C or better required in all Prerequisites. Prerequisites: INT101. Prerequisites or Corequisites: INT122.	L+L 3.0 6.0 6.0
INT145AA	Sketching and Visualization	Development of basic freehand sketching and perspective drawing skills. Explores styles and techniques with emphasis on quick sketch and	Prerequisites: None. Corequisites: INT145AB.	L+L 1.5 3.0 3.0
INT145AB	Rendering	Development of basic digital sketching and perspective drawing skills. Explores styles and techniques with emphasis on quick sketch and presentation type	Prerequisites: None. Corequisites: INT145AA.	L+L 1.5 3.0 3.0
INT156	Furniture Upholstery I	Techniques of general furniture upholstery, operations of webbing, springing, stuffing, trimming, sewing and cushion making on approved student-selected projects.	Prerequisites: None.	L+L 3.0 5.0 5.0
INT157	Furniture Upholstery II	Application and use of modern materials and tools, button tufting, channel construction, and special trim effects.	Prerequisites: A grade of C or better in INT156 or permission of Department or Division.	L+L 3.0 5.0 5.0
INT158	Furniture Upholstery III	Advanced techniques in upholstering of furniture and other needle-trade items; time and money saving shortcuts in layout; fabric cutting and sewing.	Prerequisites: A grade of C or better in INT157 or permission of Department or Division.	L+L 3.0 5.0 5.0
INT159	Furniture Upholstery IV	Advanced techniques of furniture upholstery for students interested in entering the upholstery trade; modern production techniques for sewing; stuffing; and finishing; job estimating; equipment selection and	Prerequisites: A grade of C or better in INT158.	L+L 3.0 5.0 5.0
INT160	Fabrics for Interiors	Study of the properties, design, and performance characteristics of interior fabrics. Psychological and cultural impact of textiles on the built environment. Role of the interior designer in working with textiles.	Prerequisites: None.	LEC 3.0 3.0 3.0
INT165	Space Planning Studio	Study of creative, critical, analytical, and strategic thinking as it relates to human behavior and the built environment. Emphasis on design process, and functional application. Considerations for space utilization including anthropometrics and ergonomics.	A grade of C or better required in all Prerequisites. Prerequisites: INT101, INT122, and ARC/INT111. Prerequisites or Corequisites: INT145 and ARC/INT112.	L+L 3.0 6.0 6.0

INT201	Color and Design Communication Studio	The application of color theory to professional interior design projects. Emphasis on utilizing leading industry software for the development and delivery of presentations as used in the professional interior design	Prerequisites: A grade of C or better in INT101, INT122, INT145, and INT165.	L+L 3.0 6.0 6.0
INT205	Custom Design Studio	The development of custom interior design furnishings, millwork, and architectural features. Exposure to the process of manufacturing custom design elements. Emphasis on the visualization of concepts through sketching and the use of digital tools to create shop	Prerequisites: A grade of C or better in ARC/INT111, INT101, INT122, and INT145.	L+L 3.0 6.0 6.0
INT210	Interior Materials Studio	Exploration of interior finishes, including their properties, performance, maintenance, sustainability, and general characteristics. Emphasis on appropriate material selection and specification. The utilization of digital tools to create specification documents as used in the	A grade of C or better in all Prerequisites. Prerequisites: ARC/INT111 and INT122. Prerequisites or Corequisites: ARC/INT112.	L+L 3.0 6.0 6.0
INT211AA	Interior Materials	Properties, performance, maintenance, sustainability and general characteristics of interior finishes.	A grade of C or better required in all Prerequisites. Prerequisites: ARC/INT111 or permission of Instructor. Prerequisites or Corequisites: INT211AB and [INT222	L+L 1.5 3.0 3.0
INT211AB	Material Specifications	Emphasis on selection, basic estimating, and writing specifications.	A grade of C or better required in all Prerequisites. Prerequisites: ARC/INT111 or permission of Instructor. Prerequisites or Corequisites: INT211AA and [INT222	L+L 1.5 3.0 3.0
INT212	Kitchen and Bath Studio	Exploration into the specific requirements associated with kitchen and bath design and their practical application. Emphasis on the design process and functional application utilizing professional interior	A grade of C or better required in all Prerequisites. Prerequisites: INT101, INT122, INT145, INT165, and ARC/INT112. Prerequisites or	L+L 3.0 6.0 6.0
INT222	Residential Design Studio	The use of the design process to create design solutions for a residential remodel. Functional and aesthetic analysis of interior components. Includes kitchen and bath design; residential furnishings, fixtures, and equipment (FF&E); and environmental considerations. Advanced application of professional	A grade of C or better required in all Prerequisites. Prerequisites: INT122, INT145, and INT165. Prerequisites or Corequisites: INT210 and ARC/INT112.	L+L 3.0 6.0 6.0
INT225	History of Decorative Arts	Survey of historical art, furniture and interiors with an emphasis on decorative arts from various cultures.	Prerequisites: A grade of C or better in INT115 and INT120.	LEC 3.0 3.0 3.0

INT230	Presentation Techniques	Advanced freehand sketching and perspective drawing skills. Explores a variety of styles and techniques with emphasis on presentation type drawings and portfolio development techniques used by design professionals.	A grade of C or better required in all Prerequisites. Prerequisites: [INT145 or (INT145AA and INT145AB)] and ARC/INT111. Prerequisites or Corequisites: INT122 or	L+L 3.0 6.0 6.0
INT235	Universal Design	The study of innovative, strategic, problem-solving and crucial design principles as it pertains to the constructed surroundings and those using space. Prominence will be placed on Universal Design principles and how they relate to the design process and tasks to be performed within the environment. Emphasis on the creative	Prerequisites: A grade of C or better in INT190 or permission of Instructor.	LEC 3.0 3.0 3.0
INT240AA	Bath Design	Exploration into the specific requirements associated with bath design. Emphasis on the design process and computer-based tools for interior design.	A grade of C or better required in all Prerequisites. Prerequisites: INT165 and ARC/INT111. Prerequisites or Corequisites: [INT210 or (INT211AA and INT211AB)] and INT240AB.	L+L 1.5 3.0 3.0
INT240AB	Kitchen Design	Exploration into the specific requirements associated with kitchen design. Emphasis on the design process and computer-based tools for interior design.	A grade of C or better required in all Prerequisites. Prerequisites: INT165 and ARC/INT111. Prerequisites or Corequisites: [INT210 or (INT211AA and INT211AB)] and INT240AA.	L+L 1.5 3.0 3.0
INT241	Advanced Kitchen and Bath Design	Advanced approaches to kitchen and bath design using National Kitchen and Bath Association (NKBA) planning guidelines. Mastery in the development of a design concept, producing construction documents and 3-D model drawings, verbally and visually presenting the solution, and processing necessary documentation	Prerequisites: A grade of C or better in INT240, or (INT240AA and INT240AB), or permission of Program Director.	L+L 3.0 6.0 6.0
INT242	Interior Design Professional Practices	Examination of marketing, business processes, and ethical issues in the interior design industry. Create materials for use in the profession including a portfolio, resume, and online presence. Exposure to industry	Prerequisites: A grade of C or better in INT212.	L+L 3.0 6.0 6.0
INT245	Color Rendering	Development of color rendering techniques. Emphasis on producing two-dimensional and three-dimensional renderings utilizing various media.	Prerequisites: AAS Degree in Interior Design or permission of Department or Division.	L+L 3.0 6.0 6.0

INT251	SketchUp - Introduction	Provides students with introductory level instruction utilizing Sketchup rendering software for school and workplace applications. Addresses basic drawing/rendering commands, accessing external drawing files, and plotting through the creation of both	Prerequisites: None. Previous CAD experience recommended but not required.	L+L 3.0 6.0 6.0
INT255	Advanced Custom Design	Covers advanced custom design for interior designers. Uses creative problem solving, design theories, and the design process to visualize custom design elements such as interior materials, furnishings, and details, through three-dimensional digital technology and	Prerequisites: A grade of C or better in ARC140, ARC/INT250, ARC265/INT251, (INT145 or (INT145AA and INT145AB)), INT150, INT175 and INT190. Xref: ARC250	L+L 3.0 6.0 6.0
INT260	Interior Codes and Regulations	Study of interior building codes, regulations, and standards and their impact on the health, safety, and welfare of the public. Emphasis on occupancy classifications, means of egress, fire protection, finish/furniture standards and testing, and Americans with Disabilities Act Accessibility Guidelines (ADAAG). This course is an exploration of codes and regulations	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: INT140 or ARC141 or permission of Program Director.	LEC 3.0 3.0 3.0
INT265	Building Systems	Overview of technical building systems including structural, mechanical, electrical, plumbing, and other building components, and how they relate to an interior design project. Emphasis on sustainability and the communication between interior designers and other	Prerequisites: A grade of C or better in ARC141 or INT131.	LEC 3.0 3.0 3.0
INT266	Current Topics in Interior Design	Presentation of current topics related to the interior design industry. Emphasis on practical applications of historical, technical, business, social, or creative aspects of the field. Includes demonstration or in-depth	Prerequisites: Permission of Program Director.	L+L 1.0 2.0 2.0
INT267	Sketchup II: Advanced Rendering Techniques	Provides students with advanced instruction utilizing Sketchup, Google Earth, Sandbox and Podium rendering software for school and workplace applications. Creation of photo-realistic rendered three-	Prerequisites: A grade of C or better in ARC265/INT251 or permission of Instructor.	L+L 3.0 6.0 6.0
INT268	Lighting Design	Study of the technical and creative approaches to lighting for residential and commercial interior design projects. Advanced application of professional interior design digital tools. Emphasis on environmental considerations, product sourcing, and the development	Prerequisites: A grade of C or better in INT165.	L+L 3.0 6.0 6.0

INT270	Commercial Design	The use of the design process to create design solutions for commercial interiors. Functional and aesthetic analysis of interior components. Includes furnishings, fixtures, and equipment (FF&E), building codes, and environmental considerations. Focuses on	A grade of C or better required in all Prerequisites. Prerequisites: INT122. Prerequisites or Corequisites: INT268.	L+L 3.0 6.0 6.0
INT271AA	Interior Design Internship	Interior design work experience in the interiors industry. Required to work 80 hours. Supervised and evaluated	Prerequisites: Permission of Department or Division.	LAB 1.0 5.0 0.0
INT271AB	Interior Design Internship	Interior design work experience in the interiors industry. Required to work 160 hours. Supervised and evaluated	Prerequisites: Permission of Department or Division.	LAB 2.0 10.0 0.0
INT271AC	Interior Design Internship	Interior design work experience in the interiors industry. Required to work 240 hours. Supervised and evaluated	Prerequisites: Permission of Department or Division.	LAB 3.0 15.0 0.0
INT274AA	Interior Design Study Tour	A tour of the interior design industry outside of the metropolitan Phoenix area. Includes a variety of experiences and activities to enhance knowledge about	Prerequisites: Permission of Department or Division.	LAB 1.0 5.0 0.0
INT274AB	Interior Design Study Tour	A tour of the interior design industry outside of the metropolitan Phoenix area. Includes a variety of experiences and activities to enhance knowledge about	Prerequisites: Permission of Department or Division.	LAB 2.0 10.0 2.0
INT274AC	Interior Design Study Tour	A tour of the interior design industry outside of the metropolitan Phoenix area. Includes a variety of experiences and activities to enhance knowledge about	Prerequisites: Permission of Department or Division.	LAB 3.0 15.0 3.0
INT282AA	Service-Learning Experience in Interior Design	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 1.0 1.0 0.0
INT282AB	Service-Learning Experience in Interior Design	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 2.0 2.0 0.0
INT282AC	Service-Learning Experience in Interior Design	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 3.0 3.0 0.0
INT285	Interior Design Portfolio	Design, produce, and present a professional portfolio appropriate to the field of Interior Design. Includes content selection, organization, and presentation formatting utilizing professional interior design digital	Prerequisites: A grade of C or better in INT212, or permission of Program Director.	LAB 1.0 1.5 1.35
INT290	Advanced Commercial Design	Use of design process to create solutions for medium to large multi-story commercial interiors. Focuses on issues affecting the health, safety, and welfare of the public	Prerequisites: A grade of C or better in INT270.	L+L 3.0 6.0 6.0

INT296WA	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 1.0 5.0 0.0
INT296WB	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 2.0 10.0 0.0
INT296WC	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 3.0 15.0 0.0

INT296WD	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 4.0 20.0 0.0
INT298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
INT298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
INT298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
IPH101	Introduction to Public Health	Introduction to Public Health introduces students to the broad discipline of public health and how it influences community and individual health status. Includes sciences of public health, historical context of public health, role of various public health agencies, core functions, methods of measurement and evaluation, major public health issues in the United States, public	Prerequisites: None.	LEC 3.0 3.0 3.0

IPH105	Introduction to Community Health Work	Basic concepts of patient navigation including disease prevention and community health, health insurance navigation, as well as accessing and analyzing health information. Training in assisting individuals with limited health literacy to access the maximum array of benefits	Prerequisites: None.	LEC 3.0 3.0 3.0
IPH106	Cultural Aspects of Health for Community Health Work	Understanding and addressing cultural aspects of health is crucial for Community Health Workers (CHWs) as they work closely with diverse communities. This course provides a broad overview of health beliefs and practices across cultures, and defines what "being healthy" means from a cultural standpoint. Cultural adaptations and competence, effective communication across cultures, cultural considerations, cultural stigma,	Prerequisites: None.	LEC 3.0 3.0 3.0
IPH110	Principles of Health and Behavior Change	Introduction to the social and behavioral science theories used in public health. Provides an overview of health promotion principles and various theories and models developed to change health behavior and	Prerequisites: None.	LEC 3.0 3.0 3.0
IPH111	Public Health Across the Lifespan	Introduction to evidence-based research of trends and developments in health throughout the lifespan, dealing with the prenatal period through advanced age. Training in the individual, social, and environmental factors to determine and address health status and health inequities across the lifespan and in public	Prerequisites: None.	LEC 3.0 3.0 3.0
IPH112	Community-Based Health Education in Health and Illness	Provides the student with a basic understanding of the application of public health principles to community-based health education interventions. Includes an overview of public health, factors impacting health, health education theories and ethical considerations, the community needs assessment process, the program planning process, health communication, interventions	Prerequisites: A grade of C or better in IPH101, IPH105, and IPH106 or permission of Program Director.	LEC 3.0 3.0 3.0
IPH115	Introduction to Health Administration and the U.S. Health System	Introduction to the U.S. health care delivery system including knowledge and skills needed to navigate health care within a health care organization.	Prerequisites: None.	LEC 3.0 3.0 3.0

IPH136	Medical Terminology for Community Health Work	Common medical terms used in community health work. Requires a practical, clear, and accessible approach that focuses on essential medical terms relevant to their role in serving communities. Key concepts, topics, abbreviations, terms, skills, and body systems. Includes basic medical terminology, common medical terms and conditions, medical abbreviations and acronyms, body systems and related terminology, medical terminology for the social determinants of health, cultural sensitivity	Prerequisites: A grade of C or better in IPH101, IPH105, and IPH106 or permission of Program Director.	LEC 2.0 2.0 2.0
IPH201	Introduction to Epidemiology	Introduction to epidemiology and its role in public health. Training in the application of epidemiologic concepts and methods such as disease causation, terminology, and control principles relating to the spread, prevention, and control of communicable	Prerequisites: A grade of C or better in (MAT206, PSY230 or PSY230WL).	LEC 3.0 3.0 3.0
IPH205	Chronic Disease Management	Focuses on the prevention and management of chronic disease as a critical priority for health systems around the world. Provides participants with an overview of the prevention and management of chronic disease in community settings. Identifies effective programs and policies to reduce the risk of chronic disease, or to control their consequences. Develops practical skills in analyzing and evaluating approaches to chronic disease in a variety of settings. Helps to identify capacities and opportunities for change. The focus on	Prerequisites: A grade of C or better in IPH101, IPH105, and IPH106 or permission of Program Director.	LEC 3.0 3.0 3.0
IPH220	Introduction to Mobile Integrated Health Care	Students learn components of patient-centered health care defined specifically for needs of the community. Training in determinants of health, health status indicators, cultural competence, health disparities, and bridging the gap of patient health care needs with social service resources and referrals. Additional topics include legal and ethical issues of mobile care, health	Prerequisites: None.	LEC 3.0 3.0 3.0
IPH275	Community Health Work Practicum	Provides students with hands-on experience in the role of the community health worker in the public health field, including guiding patients through various types of health care situations. Provides 45 hours of workplace	Prerequisites: A grade of C or better in IPH101, IPH105, IPH106, IPH112, IPH136, and IPH205 or permission of Program Director.	LAB 1.0 5.0 0.0

IPH280	Health Education Practicum	Provides students with hands-on experience in the role of the health educator professional in the public health field, including assessing health education needs and developing and delivering health education programs.	Prerequisites: A grade of C or better in [COM270, FON241, (HCR230 or HES210), HTM150, IPH101, IPH110, IPH111, IPH112, and IPH201] or permission of Instructor.	LAB 3.0 15.0 0.0
IPH285	Health Administration Practicum	Provides students with hands-on experience in the role of the health administrator professional in the public health field, including applying managerial functions within a health care agency.	Prerequisites: A grade of C or better in [(HCR230 or HES210), HSM222, HTM150, IPH101, IPH115, and IPH201] or permission of Instructor.	LAB 3.0 15.0 0.0
IPH290	Mobile Integrated Health Practicum	Provides students with hands-on experience in the role of the mobile integrated health professional in the public health field, including using evidence-based health care interventions and guiding patients through	Prerequisites: A grade of C or better in [COM270, FON241, (HCR230 or HES210), HTM150, IPH101, IPH201, and IPH220] or permission of	LAB 3.0 15.0 0.0
IPP198	Careers in Deaf Studies: Observation	Provides experience through observation to the world of work of a professional interpreter. Observation of professional interpreters in a variety of work settings, including but not limited to professional principles, standards and ethics applied to everyday interpreting	Prerequisites: A grade of C or better in IPP205 or permission of Department or Division. Completion of prerequisites within the last three years is required.	L+L 1.0 1.0 1.0
IPP205	Introduction to Interpreting	Theories of role, function, responsibilities, and communication strategies of the American Sign Language (ASL)/English interpreter. Covers application and implementation of the National Registry of Interpreters for the Deaf (R.I.D.) and National Association of the Deaf (N.A.D.) Code of Professional Conduct. Additional topics addressed include	Prerequisites: A grade of C or better in ASL201 or permission of Department or Division. Completion of prerequisites within the last three years is required.	LEC 3.0 3.0 3.0
IPP207	Ethics and Decision Making for ASL/English Interpreters	Guided exploration of factors that impact decisions within interpreted contexts, including strategies, theory, and models for decision making. Application and implementation of the National Association of the Deaf (N.A.D.)-Registry of Interpreters for the Deaf (R.I.D.) Code of Professional Conduct.	A grade of C or better required in all Prerequisites. Prerequisites: ASL201 or permission of Department or Division. Prerequisites or Corequisites: IPP205 or permission of Program Director. Completion of prerequisites within the last three	LEC 2.0 2.0 2.0
IPP208	Advanced American Sign Language Discourse	Advanced study of terminology and discourse in various fields such as medical, judicial, technological, as well as financial and business transactions. Use of specialized terminology/concepts in dialogues, discussions, and narratives. Advanced use of classifiers, structuring of	Prerequisites: A grade of B or better in ASL203. Completion of prerequisites within the last three years is required.	LEC 4.0 4.0 4.0

IPP209	Introduction to Educational Interpreting	Principles, vocabulary, and techniques used specifically in educational (K-12) interpreting and transliterating. Introduces students to the scope of work and issues in primary, secondary, and vocational educational settings. Covers sign systems, technical signs, and	Prerequisites: A grade of B or better in IPP205 or permission of Department or Division. ASL200 recommended.	LEC 2.0 2.0 2.0
IPP210	Research in Interpreting	Overview of theory and methodological practice in Interpretation with particular attention to research methods. Emphasis on development of critical thinking skills through active participation in the research	Prerequisites: A grade of C or better in COM225, CRE101, ENG102, and IPP207.	LEC 3.0 3.0 3.0
IPP211	Preparation for Interpreting	Development of pre-interpreting skills, cognitive processing and analysis of interpreting process theories. Pre-interpreting skills include memory, cloze, identifying meaning, paraphrasing and summarization. Source language analysis and target language	Prerequisites: Acceptance into the Interpreter Preparation Program or permission of Department or Division.	L+L 1.0 2.0 2.0
IPP215	ASL to English Consecutive Interpreting	Sequential development of consecutive interpreting skills from American Sign Language (ASL) to English. Source language analysis and target language equivalents emphasized. Analysis of texts and contexts of naturally occurring monologues, guidance for discovering personal filters, practice of skills, techniques	Prerequisites: (Acceptance into the Interpreter Preparation Program or permission of Department or Division) and a grade of B or better in IPP211.	L+L 2.0 3.0 3.0
IPP216	ASL to English Simultaneous Interpreting	Sequential development of simultaneous interpreting skills from American Sign Language (ASL) to English. Source language analysis and target language equivalents emphasized. Analysis of texts and contexts of naturally occurring monologues from different genres with increasing length and difficulty, practice of skills,	Prerequisites: A grade of B or better in IPP215 and permission of Program Director.	L+L 3.0 4.0 4.0
IPP218	English to ASL Consecutive Interpreting	Sequential development of consecutive interpreting skills from English to American Sign Language (ASL). Source language analysis and target language equivalents emphasized. Analysis of texts and contexts of naturally occurring monologues, guidance for discovering personal filters, practice of skills, techniques	Prerequisites: (Acceptance into the Interpreter Preparation Program or permission of Department or Division) and a grade of B or better in IPP211. IPP215 suggested but not required.	L+L 2.0 3.0 3.0
IPP219	English to ASL Simultaneous Interpreting	Sequential development of simultaneous interpreting skills from English to American Sign Language (ASL). Source language analysis and target language equivalents emphasized. Analysis of texts and contexts of naturally occurring monologues from differing genres with increasing length and difficulty, practice of skills,	Prerequisites: A grade of B or better in IPP218, and permission of Program Director. Completion of prerequisites within the last three years is required.	L+L 3.0 4.0 4.0

IPP220	Interactive Interpreting I	Sequential development of interactive interpreting skills from English to American Sign Language (ASL) and from ASL to English. Perform source language analysis, apply cognitive processing techniques, and produce target language equivalents. Analysis of texts and contexts of naturally occurring dialogues, practice of	Prerequisites: A grade of B or better in IPP211 or permission of Department or Division. Completion of prerequisites within the last three years is required.	L+L 3.0 4.0 4.0
IPP221	Interactive Interpreting II	Continued development of interactive interpreting skills from English to American Sign Language (ASL) and from ASL to English. Perform source language analysis, apply cognitive processing techniques, and produce target language equivalents. Analysis of texts and contexts of naturally occurring dialogues, practice of	Prerequisites: A grade of B or better in IPP220, and permission of Program Director. Completion of prerequisites within the last three years is required.	L+L 3.0 4.0 4.0
IPP229	Interpreter Preparation Internship Seminar	Classroom portion of the Interpreter Preparation Program internship. Emphasizes the blend of job-related activities including career exploration, employment application procedures, interpersonal skills,	Prerequisites: Acceptance into the Interpreter Preparation Program and/or program director approval. Corequisites: IPP230AA or	LEC 1.0 1.0 1.0
IPP230AA	Interpreter Preparation Program Internship	Laboratory portion of the Interpreter Preparation Program seminar. Eighty (80) clock hours of work required. Practical experience in settings such as educational, rehabilitation, community service centers, and agencies serving children, adolescents, and/or adults who are deaf or hard of hearing. Designed to provide students with the opportunity to synthesize practical and academic experiences gained during the in-classroom portion of the program. Site, supervision, and plan of activity mutually agreed upon by the	Prerequisites: Acceptance into the Interpreter Preparation Program and Program Director approval. Corequisites: IPP229.	LAB 1.0 5.0 0.0
IPP242	Educational Interpreting Skills	Skill development and application of techniques used specifically in educational (K-12) interpreting and transliterating. Covers sign systems, technical signs, and methods of non-standard sign incorporation.	Prerequisites: A grade of B or better in (IPP209 and IPP211) and permission of Program Director.	L+L 1.0 2.0 2.0
IPP250AA	Special Topics: Interpreter Preparation	Explores a special topic related to interpreter preparation. Topics vary and include concepts relevant to those pursuing career in (American Sign Language)	Prerequisites: Acceptance into the Interpreter Preparation Program or permission of Program Director.	L+L 1.0 1.0 1.0
IPP250AB	Special Topics: Interpreter Preparation	Explores a special topic related to interpreter preparation. Topics vary and include concepts relevant to those pursuing career in (American Sign Language)	Prerequisites: Acceptance into the Interpreter Preparation Program or permission of Program Director.	L+L 2.0 2.0 2.0

IPP250AC	Special Topics: Interpreter Preparation	Explores a special topic related to interpreter preparation. Topics vary and include concepts relevant to those pursuing career in (American Sign Language)	Prerequisites: Acceptance into the Interpreter Preparation Program or permission of Program Director.	L+L 3.0 3.0 3.0
IRW101	Ironworking: Orientation	Overview of the Ironworker labor history, green construction, work place issues and sexual harassment. Basic safety, measuring, tools and rigging. Types of	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	LEC 3.0 3.0 3.0
IRW102	Safety and Health for Ironworking	Safety, health, and accident prevention in the construction work environment related to ironworking. Proper erection, use, and dismantling of scaffolds. Selection, inspection, and use of fall protection including safe operation of forklifts and First Aid/Automated External Defibrillator/Cardiopulmonary	Prerequisites: Registered Apprentice status with the Ironworkers Apprenticeship and Training Program or permission of Apprenticeship Coordinator.	L+L 3.0 3.0 3.0
IRW103	Science, Rigging and Hoisting	Science and mechanics related to the plumbing trade. Properties of water and matter, hydraulic and pneumatic mechanics, metals and alloys. Corrosion. Rigging procedures including the use of fiber and wire rope for knots, hitches and slings. Use of hoisting equipment, and cranes. Hoisting with helicopters. Safe and proper loading and unloading of hoisting equipment.	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	LEC 6.0 6.0 6.0
IRW104	Ironworking: Blueprint Reading	Basic elements of construction drawings including characteristics of various types of blueprints for ironworkers. Drawing interpretation, general abbreviations, acronyms, and basic symbols recognition	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	L+L 1.5 1.5 1.5
IRW105	Ironworking III: History	Historical factors, events and activities leading to the founding of the International Ironworkers Labor Union. Circumstances and events between 1906-1912 related to labor unionization. Conspiracy trials involving unionization of Ironworkers, Carpenters, Machinists and the Building Trades. World War II and postwar struggles related to the labor movement. Factors of labor movement growth. The Occupational Health and Safety Administration (OSHA), nuclear power, foreign	Prerequisites: None.	LEC 3.0 3.0 3.0
IRW112	Lead Hazard Training	Background of lead and its uses including health effects caused by lead exposure. Occupational Safety and Health Administration (OSHA) regulations that apply to lead exposure, hazard communication and workers legal rights. Personal protective equipment (PPE) and work methods on steel structures. General	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	L+L 3.0 3.0 3.0

IRW120	Structural Steel Erection I	History and manufacture of iron and steel. Tools, equipment, materials, and trade procedures. Safety precautions. ;Raising gang members, erecting columns, beams, girders, trusses, nets, and railings. Fastening	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	L+L 3.0 4.0 4.0
IRW121	Structural Steel Erection II	Tools, equipment and trade procedures. Advanced structural steel welding and burning. Mobile and tower cranes. Bolted, riveted and pinned connections. Bar joists, and bridging. Detailing stairways, ladders,	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	L+L 3.0 4.0 4.0
IRW122	Cranes	Cause of fatalities. Load charts, wire rope, capacity, hook loads. Ground pressure, minimum and maximum clearances, list and trim. Floating cranes.	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	L+L 3.0 3.0 3.0
IRW130	Reinforcing: Rebar	Reinforced concrete; manufacture of reinforcing steel; tools, ties, and safety; types of reinforcing used in building construction; bridge construction; purpose and location of reinforcing steel in concrete; fabricating, unloading, handling, and storing, reinforcing steel,	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	L+L 3.0 4.0 4.0
IRW131	Reinforcing: Post Tensioning Monostrand	Principles, theory, and terminology of post-tensioning. Stressing equipment, hand tools, document control. Installation of monostrand post-tensioned floor systems, tendons. Troubleshooting, encapsulated systems, barrier cables, slabs-on-ground, and field placement	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	L+L 3.0 4.0 4.0
IRW142	Conveyors and Industrial Maintenance	History of conveyors, safety and tools. Overview and installation of overhead and floor conveyor systems. Bulk handling, conveyor drawings and maintenance	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	L+L 3.0 3.0 3.0
IRW150	Rigging I	Rigging history, principles and blocks. Rigging safety. Fabric and wire rope, steal chain, sockets, slings, rigging hardware. Slicing techniques. Reeving systems	Prerequisites: Apprentice status or permission of the Apprenticeship Coordinator.	L+L 3.0 4.0 4.0
IRW151	Rigging II	Safety rules and information for operation of rigging equipment; operation and assembly of cranes; examples of rigging jobs; use of helicopters in construction; miscellaneous rigging equipment; skids	Prerequisites: A grade of C or better in IRW150 and apprentice status, or permission of the Apprenticeship Coordinator.	LEC 3.0 3.0 3.0
IRW160	Architectural Ironworking I	Curtain, window wall systems, skylights, storefronts, entranceways, cable walls, sealants, glazing, rails, doors, anchors and fasteners, stairs and ladders, catwalks, grating, fence and guardrails, detention	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	L+L 3.0 4.0 4.0

IRW161	Architectural Ironworking II	Introduction to layout, basic tools, mathematics, automatic levels, lasers, theodolites and transits including total station.	Prerequisites: A grade of C or better in IRW160 and registered apprentice status or permission of the Apprenticeship Coordinator.	L+L 3.0 4.0 4.0
IRW175	Precast Concrete, Metal Buildings, and Scaffolding	Preconstruction planning including loading, method of transportation, timing, tolerances, safety, and quality control. Handling, erection and storage including hazards awareness. Use of cranes, hoists, and other specialized equipment. Pre-engineered metal building systems, site evaluation and preparation. Framing systems, insulation, walls, metal roofing, repairs and	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	L+L 3.0 3.0 3.0
IRW296WA	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 1.0 5.0 0.0
IRW296WB	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 2.0 10.0 0.0

IRW296WC	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 3.0 15.0 0.0
IRW296WD	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 4.0 20.0 0.0
IRW298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
IRW298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0

IRW298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
ITA101	Elementary Italian I	Introduction to basic grammar, pronunciation, and vocabulary of Italian. Development of speaking, listening, reading, and writing skills. Study of the Italian	Prerequisites: None.	LEC 4.0 4.0 4.0
ITA102	Elementary Italian II	Continued development of speaking, listening, reading, and writing skills in Italian. Study of Italian culture.	Prerequisites: A grade of C or better in ITA101 or permission of Department or Division. Completion of prerequisites within the last three	LEC 4.0 4.0 4.0
ITA201	Intermediate Italian I	Review of essential grammar of the Italian language and study of the Italian Culture. Continued practice and development of reading, writing, and speaking skills.	Prerequisites: A grade of C or better in ITA102 or permission of Department or Division. Completion of prerequisites within the last three	LEC 4.0 4.0 4.0
ITA202	Intermediate Italian II	Continued development of Italian language skills and continued study of the Italian culture.	Prerequisites: A grade of C or better in ITA201 or permission of Department or Division. Completion of prerequisites within the last three	LEC 4.0 4.0 4.0
ITD200	The Physical Child: Birth to Age Three	Examines the physical aspects of child growth and development in the first three years of life in the context of contemporary communities. Includes nutrition and feeding, health and safety, motor skills and exercise, neurological development, and identification of	Prerequisites: None.	LEC 3.0 3.0 3.0
ITD210	Early Attachments, Relationships, and Families: Birth to Age Three	Explores the attachment process and relationships within families. Considers contemporary social contexts where children develop a concept of self, self-regulation, and interaction skills with children and adults. Examines social-emotional development,	Prerequisites: None.	LEC 3.0 3.0 3.0
ITD220	Cognition and Communication: Birth to Age Three	Examines the cognitive development and language acquisition of infants and toddlers. Considers the role of people and daily environments on development. Also covers disabilities and developmental delays as well as major theories and research in the field.	Prerequisites: None.	LEC 3.0 3.0 3.0

ITS101	Introduction to the Digital Divide	Introduction to concepts of the digital divide and access to technology across communities. Exploration of disparities in technology access and adoption, focusing on the barriers faced by urban and rural communities. Includes but not limited to digital literacy, economic and education factors, and the role of public and private	Prerequisites: None.	LEC 1.0 1.0 1.0
ITS102	Advancing Digital Access and Literacy	Digital literacy skills focusing on development of prompting equity, recognition to digital literacy barriers, and access. Emphasis on understanding societal and institutional factors of digital equity and practical	Prerequisites: None.	LEC 1.0 2.0 1.7
ITS103	Wireless Surveys and Community Network Planning	Exploration of methodologies of conducting wireless site surveys to gather and interpret information on wireless coverage, signal strength, and interference to create optimized network plans. Demonstrate an understanding of the importance of data collection,	Prerequisites: None.	LEC 1.0 1.0 1.0
ITS104	Network Planning and Geographical Mapping	Introduction to essential skills in network planning and geographical mapping using mapping tools such as Geographic Information Systems (GIS), Global Positioning Systems (GPS), and heat maps to interpret data signal strength, bandwidths availability, and infrastructure limitations. Emphasizes practical application of tools, performance, and propose	Prerequisites: None.	LEC 1.0 1.0 1.0
ITS105	Introduction to Digital Infrastructure	Introduction to core components of digital infrastructure to explore key topics such as bandwidth, network speeds, data transmission, and the various types of network topologies used to design and maintain efficient networks. Emphasizes how these components work together to support connectivity, ensuring the reliable flow of data across different environments, from	Prerequisites: None.	L+L 1.0 2.0 2.0
ITS106	Wireless Security Fundamentals	Fundamentals of wireless security for security protocols to safeguard data, prevent unauthorized access, and maintain the integrity of wireless communication systems. Effectiveness of different security measures in mitigating these risks, identify potential security threats	Prerequisites: None.	L+L 1.0 2.0 2.0

ITS110	Information Security Fundamentals	Fundamental concepts of information technology security. Topics include authentication methods, access control, cryptography, Public Key Infrastructure (PKI), network attack and defense methods, hardening of operating systems and network devices, securing remote access and wireless technologies and securing infrastructures and topologies. Emphasis on hands-on labs in both the Windows and Linux environments. Builds on thorough understanding of Transmission	Prerequisites: A grade of C or better in CIS126DL, or CIS126RH, or permission of Program Director. Corequisites: BPC270 or MST150++.	L+L 3.0 4.0 4.0
ITS111	Wireless Technologies: Wi-Fi 6, 5G, and LTE	Exploration of wireless networking technologies to develop understanding of wireless protocols, network architectures, technical advancements to meet growing demands for faster, reliable, and efficient connectivity with focus on WiFi6, 5G, and Long-Term Evolution	Prerequisites: A grade of C or better in ITS105 or permission of Instructor.	LEC 1.0 1.0 1.0 LAB 0.0 2.0 2.0
ITS112	Smart Cities and Technology Integration	Exploration of smart cities, focusing on how emerging technologies are integrated into urban infrastructures to enhance city services, improve operational efficiency, and foster sustainable urban development. Students will explore the key components of smart city ecosystems, including Internet of Things (IoT), Artificial Intelligence (AI)-driven analytics, smart grids, intelligent transportation systems, and environmental monitoring technologies. In addition, the implications of these	Prerequisites: None.	L+L 1.0 2.0 2.0
ITS113	Introduction to Citizens Broadband Radio Service (CBRS)	Introduction to Citizens Broadband Radio Service (CBRS) and its applications. Including but not limited to regulations, licensing structures and technical aspects and use in real-world for industries like healthcare,	Prerequisites: A grade of C or better in ITS111 or permission of Instructor.	LEC 1.0 1.0 1.0 LAB 0.0 2.0 2.0
ITS114	CBRS Installation and Management	Technical aspects of Citizens Broadband Radio Service (CBRS) networks installation and management in compliance with Certified Professional Installer (CPI), spectrum access system (SAS) integration, and environmental sensing capacity (ESC). Considerations to meet real-world settings, address common challenges	Prerequisites: A grade of C or better in ITS113 or permission of Instructor.	LEC 1.0 1.0 1.0 LAB 0.0 2.0 2.0

ITS115	Introduction to Digital Transformation	Introduction to digital transformation on organizations and integration of technologies such as cloud computing, artificial intelligence, machine learning, and data analytics in industries such as but not limited to healthcare, finance, and government. In addition, the importance of organizational change management in	Prerequisites: None.	L+L 1.0 2.0 2.0
ITS116	Wireless Network Optimization	Exploration of wireless network optimization through advanced strategic techniques. Focus on improving network performance applying radio frequency (RF) management strategies, mitigate interferences,	Prerequisites: None.	LEC 1.0 1.0 1.0
ITS120	Legal, Ethical and Regulatory Issues	Exploration of legal and ethical issues unique to information security. Analysis of professional ethical codes and their application to information security practitioners. Federal and state laws as they relate to	Prerequisites: None.	LEC 3.0 3.0 3.0
ITS130	Operating System Security	In-depth examination of operating system security including Transmission Control Protocol/ Data Encryption Standard (DES), Triple Data Encryption Standard (3DES), Advanced Encryption Standard (AES), Pretty Good Privacy (PGP), and other encryption technologies (TCP/IP), Internet Protocol Security (IPSec) and Cisco Internetwork Operating System (IOS), Microsoft Windows, Linux and Mac OSX Security. Procedures to defend networks against attacks and recovery from network disasters. Web server security. Emphasis on hands-on labs in both the Windows and Linux environments. Builds on thorough understanding	Prerequisites: A grade of C or better in ITS110 or permission of Instructor.	L+L 3.0 4.0 4.0
ITS240	Ethical Hacking and Network Defense	Preparation for the EC-Council Certified Ethical Hacking examination. In-depth exploration of how to effectively protect computer networks from risks ranging from malicious infiltration to cyber-warfare. Includes examination of ethical hacking, relevant tools and methodologies, and its importance to network security. Resources to identify new computer network	Prerequisites: A grade of C or better in ITS110, or CNT205, or CIS270, or permission of Instructor.	L+L 3.0 4.0 4.0

ITS250	Certified Security Operations Center Analyst: CSA Exam Prep	The Certified Security Operations Center Analyst (CSA) course explores an understanding of Security Operations Center (SOC) fundamentals including incident response, threat detection, vulnerabilities, security monitoring techniques, and use of industry-leading tools and techniques used to safeguard critical systems and infrastructures, networks, and protection	Prerequisites: A grade of C or better in ITS110, ITS120 and ITS240 or permission of Instructor.	L+L 3.0 4.0 4.0
ITS291	Computer Forensics Foundations	Development of foundational computer forensic skills. Introduction to preserving, identifying, extracting, interpreting, and documenting computer data as part of a forensically sound analysis. Examination of the physical and logical structure of hard drives. Study of the logical structure of Windows-based file systems and common applications. Introduction to the logical	Prerequisites: A grade of C or better in BPC170 and ITS110 or permission of Instructor.	L+L 4.0 5.0 5.0
ITS292	Advanced Computer Forensics	Advanced computer forensics analysis techniques with commercial tools. Introduction to open-source forensic tools. Emphasis on data recovery from complex applications and media types. Study of the logical structure of Unix/Linux-based file systems. Advanced search techniques. Analysis of unallocated space,	Prerequisites: A grade of C or better in ITS291 or permission of Instructor.	L+L 4.0 5.0 5.0
ITS298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
JPH245	Traditional and Modern Japanese Culture	Survey of traditional and modern Japanese culture in context. Intellectual, spiritual, and artistic traditions of Japan will be examined with an eye on their popular-culture manifestations. The course, conducted in English, will consist of lectures, discussions, as well as	Prerequisites: None.	LEC 3.0 3.0 3.0
JPN101	Elementary Japanese I	Basic grammar, pronunciation, and vocabulary of Japanese. Study of Japanese culture. Development of speaking, listening, reading and writing skills	Prerequisites: None.	L+L 5.0 6.0 6.0

JPN102	Elementary Japanese II	Continued study of basic grammar, pronunciation and vocabulary of Japanese. Study of the Japanese culture. Intensive practice in oral communication and development of reading and writing skills.	Prerequisites: A grade of C or better in JPN101 or permission of Department or Division. Completion of prerequisites within the last three	L+L 5.0 6.0 6.0
JPN115	Beginning Japanese Conversation I	Conversational Japanese. Basic sentence structure, pronunciation, and vocabulary necessary to develop speaking ability in Japanese. Designed for students seeking speaking and listening abilities, with little	Prerequisites: None.	LEC 3.0 3.0 3.0
JPN116	Beginning Japanese Conversation II	Continuation of conversational Japanese for survival in everyday business and social situations. Expansion of vocabulary and sentence structure through aural/oral practice. Practice in reading and writing Kana.	Prerequisites: A grade of C or better in JPN115. Completion of prerequisites within the last three years is required.	LEC 3.0 3.0 3.0
JPN201	Intermediate Japanese I	Expansion of sentence structures through oral/aural practice. Increased emphasis on reading and writing in Japanese and study of Japanese culture.	Prerequisites: A grade of C or better in JPN102 or permission of Department or Division. Completion of prerequisites within the last three	L+L 5.0 6.0 6.0
JPN202	Intermediate Japanese II	Extensive review of Japanese grammar; development of vocabulary and idiomatic expressions through reading and writing. Continued practice of oral communication skills and study of Japanese culture.	Prerequisites: A grade of C or better in JPN201 or permission of Department or Division. Completion of prerequisites within the last three	L+L 5.0 6.0 6.0
JPN296WA	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify) or permission of instructor. Corequisites: Must be concurrent in at least one class which is related to student's major or career interest or with	LAB 1.0 5.0 0.0
JRN101	Grammar and Style for Journalists	Focus on the fundamentals and application of grammar, punctuation, spelling, style and structure necessary in professional writing fields, including media writing.	Prerequisites: A grade of C or better in WAC101, or a grade of B or better in ALT100, or eligibility for ENG101 as indicated by appropriate English placement.	L+L 1.0 2.0 2.0

JRN105	Introduction to Journalism	Survey of the field of journalism including what journalists do, their role in society, ethical practices, history, current trends, and the future of the profession. Overview of mass communication media, including	Prerequisites: None.	LEC 3.0 3.0 3.0
JRN125	Photo Editing	Basic techniques of photo composition and editing for media reproduction. Teach how to crop and size photographs. Use of photo editing and design software in paginating a newspaper page on the computer. The effect and impact of color vs. black and white photographs. Basic techniques of photo essay, photo page and photo story and/or multimedia news products	Prerequisites: None.	L+L 3.0 3.0 3.0
JRN133	Development of Small Publications	Design, plan and write newsletters, brochures, and advertisements. Desktop computer production and	Prerequisites: None. Computer experience suggested but not	LEC 3.0 3.0 3.0
JRN201	News Writing	Writing and producing news for the media. Associated Press (AP) editing style, writing skills, and organizational	Prerequisites: A grade of C or better in ENG101 or ENG107.	LEC 3.0 3.0 3.0
JRN205	Copyediting	Focus on copy editing skills and techniques needed in professional communication industries. Specifically, the basics of grammar of style, interaction of word and image, the process of aggregation and curation, and an introduction to ethics and industry standards are covered. Writing for clarity, completeness, and	Prerequisites: A grade of C or better in ENG101 or permission of Instructor. JRN201 recommended for Journalism students.	L+L 3.0 3.0 3.0
JRN208	Media Law and Ethics	Basic legal concepts for print, broadcast, online, and photojournalism including constitutional legal protections and the Freedom of Information Act (FOIA). Focus on access to courts, public records, public meetings, subpoenas, shield laws, prior restraint, libel, defamation, privacy, source confidentiality, intellectual property, obscenity, and Federal Communications	Prerequisites: None.	LEC 3.0 3.0 3.0
JRN210	News and Media Production	Hands-on experience working in a college newsroom developing content as reporters, photographers, editors, and other roles on the student news team. Roles and responsibilities vary depending on student	Prerequisites: A grade of C or better in JRN201 or [(ENG101 or ENG107) and permission of Program Director or Instructor].	L+L 3.0 5.0 5.0
JRN212	Writing for Broadcasts	Broadcast writing techniques emphasizing grammar, style and structure for various communication platforms. Focus on media reporting including writing scripts, interviewing skills, live broadcasting techniques,	Prerequisites: A grade of C or better in ENG101 and (JRN201 or permission of Instructor).	L+L 3.0 5.0 5.0
JRN213	Writing for Online	Focus on writing content applying fundamentals of style, grammar, and structure for media online.	Prerequisites: None. JRN201 recommended for Journalism	LEC 3.0 3.0 3.0

JRN216	Current Topics in Media Practice	Theory, training and experience in a specific area of journalism, with a focus on specialized types of journalism and cutting-edge and innovative practices.	Prerequisites: A grade of C or better in JRN201. JRN215 recommended but not required.	LAB 1.0 1.0 0.0
JRN225	Photojournalism	Reporting the news as a photojournalist, with emphasis on the development and creation of news photographs. Experience in shooting, editing and transmitting digital photos using professional photo editing and design	Prerequisites: None.	L+L 3.0 3.0 3.0
JRN226	Introduction to Multimedia Journalism	Overview to multimedia journalism including video and audio for news websites and TV news, as well as other multimedia platforms. Focus on conceptualizing story ideas, identifying and interviewing sources, and producing stories using multimedia. Introduction to current technologies for recording audio and video.	Prerequisites: A grade of C or better in JRN201.	L+L 3.0 3.0 3.0
JRN231	Sports Writing	Writing sports stories for the print media. Composing at the computer keyboard. Associated press editing style, writing skills, and organizational structure for sports	Prerequisites: A grade of C or better in JRN201 or permission of Instructor.	L+L 3.0 3.0 3.0
JRN232	Community Reporting	Focus on the knowledge and skills needed to conduct reporting that is industry ready. Cover a community beat and write and use multimedia skills to publish the	Prerequisites: A grade of C or better in JRN201.	LAB 3.0 3.0 0.0
JRN234	Feature Writing	Emphasis on crafting stylized human interest stories for publications. Includes research, interviewing, writing techniques, editing and professional concerns. Includes best practices for writing features for traditional and	Prerequisites: A grade of C or better in ENG101 or ENG107, or permission of Instructor.	L+L 3.0 3.0 3.0
JRN236AA	Public Relations Internship	Public relations work experience.	Prerequisites: Permission of Program Director.	LAB 1.0 1.0 0.0
JRN236AB	Public Relations Internship	Public relations work experience.	Prerequisites: Permission of Program Director.	LAB 2.0 2.0 0.0
JRN236AC	Public Relations Internship	Public relations work experience.	Prerequisites: Permission of Program Director.	LAB 3.0 3.0 0.0
JRN238	Business Journalism	Focus on reporting for and about business. Explores the nature and functions of business and the roles of business journalists. Examines the various media and situations within which business journalism operates.	Prerequisites: A grade of C or better in JRN201 and GBS151.	L+L 3.0 3.0 3.0
JRN240AA	Journalism Internship	Journalism work experience with a newspaper or other news organization. 80 hours of designated work per credit. Maximum of 6 credits allowed	Prerequisites: A grade of C or better in JRN210.	L+L 1.0 1.0 0.0

JRN240AB	Journalism Internship	Journalism work experience with a newspaper or other news organization. 80 hours of designated work per credit. Maximum of 6 credits allowed.	Prerequisites: A grade of C or better in JRN210.	L+L 2.0 2.0 0.0
JRN240AC	Journalism Internship	Journalism work experience with a newspaper or other news organization. 80 hours of designated work per credit. Maximum of 6 credits allowed	Prerequisites: A grade of C or better in JRN210.	L+L 3.0 3.0 0.0
JRN290	Publications Portfolio	This course is organized around the development of a portfolio of published stories for submission to a jury of professional journalists, active and retired, that supports the district's occupational journalism certificate. Passing	Prerequisites: None.	LAB 1.0 1.0 1.0
JRN296WA	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 1.0 5.0 0.0
JRN296WB	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 2.0 10.0 0.0

JRN296WC	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 3.0 15.0 0.0
JRN296WD	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 4.0 20.0 0.0
JRN298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
JRN298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0

JRN298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
LAS101	Introduction to Law	Legal terminology and basic legal principles in the areas of tort, contract, and criminal law. Interrelationships among lawyers, the court system, and law enforcement and administrative agencies. Development of a case for trial, adjudication, and post-verdict procedures in the civil and criminal systems. Suggested but not required: ENG101 and CRE101, or exemption by score on the	Prerequisites: None.	LEC 3.0 3.0 3.0
LAS107	The Paralegal Profession	Focus on the role, responsibilities, and ethical standards of a paralegal. Provides an overview of the legal system and the role of the paralegal in the legal system. Emphasis on professional development and job-	Prerequisites: None.	LEC 3.0 3.0 3.0
LAS109	Civil Procedures I	Pretrial procedural issues in both Arizona and the federal system. Emphasis on Arizona Rules of Civil Procedure 1-37, 41, 55, 56, and 72-76. Coverage of applicable time limits, filing requirements, and proficiency in locating appropriate provisions in the Arizona Rules of Civil Procedure. Drafting of pleadings	Prerequisites: Acceptance into the Paralegal Studies program. A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: LAS101 and LAS107 and (BPC110 or CIS105 or	LEC 3.0 3.0 3.0
LAS110	Civil Procedures II	Application of the procedural aspects of discovery, trial preparation, and post-trial work as part of a litigation team. Emphasis on practical concerns, such as interviewing of witnesses; preparation of discovery documents, exhibits, and transmittal memoranda; summarizing and indexing depositions; organization of	Prerequisites: A grade of C or better in LAS109 and (BPC110 or CIS105 or permission of Program Director).	LEC 3.0 3.0 3.0
LAS115	Criminal Trial Procedure	Procedural aspects of the criminal trial process in Arizona state courts from preliminary proceedings through trial. Emphasis on application of the rules of criminal procedure and preparation of common trial documents by paralegals. Documents include the	Prerequisites: A grade of C or better in LAS109 and (BPC110 or CIS105 or permission of Program Director).	LEC 3.0 3.0 3.0

LAS131	Legal Writing	The use of proper grammar, punctuation, and spelling in the construction of sentences and the development of paragraphs. Use of case briefs to study effective writing and analytical techniques. Analysis and application of the writing process to produce well-written	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: LAS109 and (BPC110 or CIS105 or permission of Program Director).	LEC 3.0 3.0 3.0
LAS203	Ethics and Professional Practice	Rules of professional responsibility and ethical requirements with an emphasis on their application to legal assistants. Sources of power to regulate the practice of law. Issues related to unauthorized practice	Prerequisites: A grade of C or better in LAS131 and (BPC110 or CIS105 or permission of Program Director).	LEC 3.0 3.0 3.0
LAS204	Contract Law	Examination of contracts and their regulation by the Uniform Commercial Code. Review and drafting of basic agreements.	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: LAS109 and (BPC110 or CIS105 or permission of Program	LEC 3.0 3.0 3.0
LAS208	Probate	Emphasis on various ways in which property can be held and passed on. Requirements for valid wills and trusts. Steps involved in estate administration and appropriate forms to be used. Includes drafting basic	Prerequisites: A grade of C or better in LAS109 and (BPC110 or CIS105 or permission of Program Director).	LEC 3.0 3.0 3.0
LAS211	Legal Research	Use of print and electronic media to locate public documents, statutes, administrative regulations, and cases from county, state, and federal jurisdictions. Reading and interpreting research results.	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: LAS109 and (BPC110 or CIS105 or permission of Program	LEC 3.0 3.0 3.0
LAS212	Tort Law	Basic elements of negligence, strict liability, intentional torts; defenses; damages; insurance coverage. Evaluation of records and personal injury claims; review of insurance policies; settlement brochure; preparation	Prerequisites: A grade of C or better in LAS109 and (BPC110 or CIS105 or permission of Program Director).	LEC 3.0 3.0 3.0
LAS214	Business Organizations	Analysis and evaluation of business organizations with practical application of the law to analyze the utility, form, and function of Sole Proprietorships, General Partnerships, Limited Partnerships, Limited Liability Companies, and Corporations. Preparation of documents to create the most effective and feasible	Prerequisites: A grade of C or better in LAS109 and (BPC110 or CIS105 or permission of Program Director).	LEC 3.0 3.0 3.0
LAS217	Family Law	Legal analysis of marriage, dissolution of marriage, parental rights and duties; pleading and practice.	Prerequisites: A grade of C or better in LAS109 and (BPC110 or CIS105 or permission of Program Director).	LEC 3.0 3.0 3.0

LAS218	Administrative Law	Introduction to fundamental administrative law concepts including the delegation of powers, due process, citizen access and participation, rulemaking, adjudication, and judicial review. Emphasis on Arizona administrative procedures and the role of the paralegal in informal and	Prerequisites: A grade of C or better in LAS109 and (BPC110 or permission of Department Chair or Program Director).	LEC 3.0 3.0 3.0
LAS220	Paralegal Internship Seminar	Coordinates on-the-job experiences with interpersonal relations, communications, time-management, and case-management skills. Provides opportunity to discuss problems encountered during internship.	Prerequisites: A grade of C or better in LAS203, LAS211, (LAS204 or LAS212), and (BPC110 or CIS105 or permission of Program Director). Corequisites: LAS221AB.	LEC 1.0 1.0 1.0
LAS221AB	Paralegal Internship	Field work through placement at a law firm or other law-related organization where student will gain experience working in a legal setting. Supervision and evaluation by on-the-job supervisor as well as college program	Prerequisites: Permission of Program Director. Corequisites: LAS220.	LAB 2.0 10.0 0.0
LAS225	Legal Research, Analysis, and Writing	Integration and further development of legal research and writing skills with an emphasis on critical thinking, issue analysis, and motion practice. Focus on integrating research, writing, and legal argument	Prerequisites: A grade of C or better in LAS131 and LAS211 and (BPC110 or CIS105 or permission of Program Director).	LEC 3.0 3.0 3.0
LAS229	Litigation Technologies	Use of presentation software; use of timekeeping, calendaring, and docketing software; use of litigation support software to organize case files; use of electronic trial presentation software in an electronic	Prerequisites: A grade of C or better in LAS110 and (BPC110 or CIS105 or permission of Program Director).	LEC 3.0 3.0 3.0
LAS261	Bankruptcy	Examination of bankruptcy laws and procedures and the role of paralegals in bankruptcy practice, including the commencement of a case, preparation of common forms, review of bankruptcy litigation including contested matters and adversary proceedings, and	Prerequisites: A grade of C or better in LAS109 and (BPC110 or CIS105 or permission of Program Director).	LEC 3.0 3.0 3.0
LAS265	Regulatory Compliance	Examination of, and requirements for, organizations maintaining compliance with regulatory schemes. Emphasis on federal regulations and the role of non-lawyer personnel, such as paralegals, in obtaining, organizing, analyzing, and presenting recommendations for acting on factual information and legal research	Prerequisites: A grade of C or better in LAS109 and (BPC110 or CIS105 or permission of Program Director).	LEC 3.0 3.0 3.0

LAS280	Paralegal Studies Portfolio Capstone	Demonstration of acquired skills and knowledge through review, revision, and supplementation of electronic portfolio containing evidence of program competencies; preparation, revision, and review of work product samples to facilitate the transition from student to entry-level paralegal.	A grade of C or better required in all Prerequisites. Prerequisites: LAS110, LAS203, LAS204, LAS214 and (BPC110 or CIS105 or permission of Program Director). Prerequisites or Corequisites: (LAS225 and LAS229) or permission	LEC 1.0 1.0 1.0
LAS294AA	Special Topics in Civil Law	Explores special topics related to the practice of civil law. Focuses on substantive and procedural aspects.	Prerequisites: Completion of Legal Assisting degree or certificate, or permission of Department or Division.	LEC 1.0 1.0 1.0
LAS294BA	Special Topics in Criminal Law	Explores special topics related to the practice of criminal law. Focuses on substantive and procedural aspects.	Prerequisites: Completion of Legal Assisting degree or certificate, or permission of Department or Division.	LEC 1.0 1.0 1.0
LAS294CA	Special Topics in Administrative Law	Explores special topics related to the practice of administrative law. Focuses on substantive and procedural aspects.	Prerequisites: Completion of Legal Assisting degree or certificate, or permission of Department or Division.	LEC 1.0 1.0 1.0
LAS294DA	Special Topics in Current Legal Issues	Explores special topics related to the practice of law. Focuses on substantive and procedural aspects.	Prerequisites: Completion of Legal Assisting degree or certificate or permission of Department or Division	LEC 1.0 1.0 1.0
LAS296WA	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 1.0 5.0 0.0

LAS296WB	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 2.0 10.0 0.0
LAS296WC	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 3.0 15.0 0.0
LAS296WD	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 4.0 20.0 0.0
LAS298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0

LAS298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
LAS298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
LAT101	Elementary Latin I	Introduction to the basic grammar and vocabulary of the Latin language. Practice reading and translating Latin	Prerequisites: None.	LEC 4.0 4.0 4.0
LAT102	Elementary Latin II	Comparative study of English and Latin grammar. Emphasis on analytical thinking, memorization, and familiarization with new terminology. Translation from English and from original works in Latin.	Prerequisites: A grade of C or better in LAT101 or permission of Department or Division. Completion of prerequisites within the last three	LEC 4.0 4.0 4.0
LAT201	Intermediate Latin I	Introduction to translation technics using selections from various authors; emphasis on use of primary texts.	Prerequisites: A grade of C or better in LAT102. Completion of prerequisites within the last three	LEC 4.0 4.0 4.0
LAT202	Intermediate Latin II	Refinement of translation technics using selections from Virgil's Aeneid; emphasis on use of language and meter.	Prerequisites: A grade of C or better in LAT201. Completion of prerequisites within the last three	LEC 4.0 4.0 4.0
LBA155	Laboratory Assisting: Principles and Procedures	Overview of laboratory services, laboratory professionals, and the role of a laboratory assistant. Principles and procedures for pre-analytical processing of laboratory specimens. Performance of specimen processing, pre-analytical processes, and point-of-care testing. Application of quality assurance, quality control, quality management principles, infection control, and laboratory safety. Use of laboratory supplies, instrumentation, and information systems. Performing	Prerequisites: (Acceptance into the Laboratory Assisting program), (a grade of C or better in PLB109 and PLB111), and permission of Program Director.	L+L 5.0 5.0 5.0

LBA158	Laboratory Assisting Practicum	Practicum in laboratory assisting based in healthcare facilities or reference laboratories. Performance of clinical skills for pre-analytical processing of laboratory specimens, initial testing phases, and point-of-care testing using laboratory instrumentation, information systems, and supplies. Application of quality assurance, quality control, infection control, and laboratory safety. Performance of clerical and computer functions using	Prerequisites: A grade of C or better in LBA155 and permission of Program Director.	LAB 2.0 9.0 0.0
LDR100	The Leader in You	Introductory exploration and application of leadership theories, concepts and practices for college students that want to make a difference in a changing world. Provides the concept of the relational leadership model and how it differs from traditional leadership theories. Focus on self-development of leadership potential through completion of personal and leadership	Prerequisites: None.	LEC 3.0 3.0 3.0
LDR101	Emerging Leaders I	Concepts and application of leadership skills and service learning to promote social change and value clarification. Development of organizational leadership	Prerequisites: None.	LEC 2.0 2.0 2.0
LDR102	Emerging Leaders II	Focus on implementing collaborative practices and organizational leadership skills to promote positive social change. Apply value-based leadership behavior	Prerequisites: A grade of C or better in LDR101 or permission of Instructor.	LEC 2.0 2.0 2.0
LDR201	Leadership Facilitation I	Designed to provide skills and practice for group facilitation of leadership activities in diverse settings Focus on development of organizational skills to	Prerequisites: A grade of C or better in LDR102 or permission of Instructor.	LEC 2.0 2.0 2.0
LET112	Introduction to Juvenile Corrections	Introduction to the Arizona Department of Juvenile Corrections. Includes the philosophy, mission, vision, and goals of the department in addition to juvenile corrections statistics and jurisdiction issues. Also covers programs available to youth in the department as well as agency information policy and access. Standards of	Prerequisites: None.	LEC 2.0 2.0 2.0
LET113	Juvenile Corrections Procedures	Practical application of juvenile corrections procedures. Includes workplace safety, first aid, and cardiopulmonary resuscitation (CPR) procedures in addition to principles of staff safety in the facility. Also covers physical intervention techniques, preparation and transportation of youth, and radio and telephone	Prerequisites: None.	LAB 2.0 6.0 6.0

LET114	Juvenile Corrections Officer Skills	Officer skills for the juvenile corrections system. Includes cultural awareness, data security policy and procedures, and defensive driving skills. Also covers tools for and goals of behavior management and effective communication styles and skills. Contraband legalities	Prerequisites: None.	L+L 3.0 4.0 4.0
LET115	Crisis Intervention in Juvenile Corrections	Overview of juvenile corrections officer skills for crisis intervention. Includes phases of the stress model and situation assessment in addition to verbal and non-verbal crisis communication. Also covers behavioral support and conflict resolution goals and limitations. Life	Prerequisites: None.	LEC 2.0 2.0 2.0
LET116	Adolescent Treatment Issues	Adolescent treatment issues in the juvenile corrections system. Includes stages of adolescent development and development theories. Covers mental health issues and illness, disorders, and interventions in addition to types of treatments, medications, and behavioral	Prerequisites: None.	LEC 3.0 3.0 3.0
LET117	Juvenile Corrections Supervision	Supervisory skills for the juvenile corrections system. Includes classification principles and systems, stages of change, and case management responsibilities. Also covers indicators of and reporting requirements for child abuse, Incident Command System (ICS) responsibilities, and education team roles and responsibilities. Positive	Prerequisites: None.	LEC 3.0 3.0 3.0
LET118	Legal Issues in Juvenile Corrections	Overview of legal issues in the Arizona Department of Juvenile Corrections (ADJC) system. Includes justice system treatment philosophies and theories as well as adjudication, conviction, and victim's rights. Also covers civil and criminal liability, causes of civil litigation, and civil rights concerns. Search and seizure, due process,	Prerequisites: None.	LEC 3.0 3.0 3.0
LET120	Juvenile Corrections Housing Unit Operations	Housing unit operations for juvenile corrections officers. Includes policies for housing unit operations, supervisory procedures, and documentation in addition to behavior management goals and techniques. Also covers levels of support, group management skills, and	Prerequisites: None.	L+L 2.0 3.0 3.0
LET130	Detention Officer Training	Introduction to the detention field. Includes officer responsibilities with regards to discipline, conduct and dealing with inmates in the legal system. Examination of detention services, management principles, philosophy and goals also covered. Constitutional Amendments,	Prerequisites: Permission of Department or Division.	LEC 2.0 2.0 2.0

LET132	Introduction to Correctional Law	Introduction to the legal and constitutional rights of inmates. Pre-trial, sentencing, and probation processes covered. Court cases with regards to enforcement personnel and custodial agencies discussed. Also	Prerequisites: A grade of C or better in LET130.	LEC 3.0 3.0 3.0
LET134	Special Needs Issues and Communication	Management skills for dealing with inmates with special needs. Issues related to female inmates, drug addictions, and mental disorders covered. Techniques for dealing with suicidal inmates and gang members	Prerequisites: A grade of C or better in LET132.	LEC 2.0 2.0 2.0
LET135	Problem Solving and Crisis Management	Further examination of management techniques and tools within the detention facilities. Crisis intervention and de-escalation techniques covered. Also includes medical screening, inmate grievances, inmate	Prerequisites: A grade of C or better in LET134.	LEC 2.0 2.0 2.0
LET136	Detention Security Procedures	Security procedures within the detention facilities. Officer responsibilities with regards to contraband, facility security, and key/tool control. Procedures for conducting searches, security walks, headcounts, and the proper use of restraints. Dealing with hostage and	Prerequisites: A grade of C or better in LET135 or permission of Department or Division.	LEC 2.0 2.0 2.0
LET138	Detention Officer Emergency Procedures	Techniques for managing emergency situations in the detention facility including fires and medical emergencies. Skills for administering first aid and cardiopulmonary resuscitation (CPR). Procedures for using control devices. Includes Occupational Safety and Health Administration (OSHA) safety equipment	Prerequisites: A grade of C or better in LET136.	LAB 1.0 3.0 3.0
LET139	Detention Facility Training	Daily procedures for managing the detention facility. Includes procedures for processing inmate needs and requests, completing departmental reports and crime scene management. Operational procedures and	Prerequisites: A grade of C or better in LET138.	L+L 2.0 4.0 4.0
LET141	Detention Defensive Tactics	Defensive tactics training for Detention Officers. Covers defensive body mechanics, various defensive techniques, handcuffing, and search techniques as well as pressure points and the carotid control technique. Ground defense and survival skills, survival psychology,	Prerequisites: Permission of Department or Division.	L+L 4.0 5.0 5.0
LET144	Detention Officer Field Training	Field training procedures for the detention facility officer. Includes officer communication, safety, and security as well as procedures for handling emergency situations in the detention facility. Also covers Order of Protection, Injunction Against Harassment, and visitation	Prerequisites: Permission of Department or Division.	L+L 2.0 3.0 3.0

LET146	Officer Survival	Overview of skills and techniques for officer survival. Tactical thinking, critical incident stress, entry techniques and emergency plans as well as basic high risk traffic stops and search warrants covered.	Prerequisites: None.	LEC 1.0 1.0 1.0
LET148	Detention Officer Field Training Lab	Application of field training procedures for the detention facility officer. Includes communication and documentation requirements as well as officer safety in the tower and on the floor. Also covers procedures for handling emergency situations and management of	Prerequisites: Permission of Department or Division.	LAB 3.0 9.0 9.0
LET150	Firearms I	Overview of firearms usage. Covers firearms safety and nomenclature, basic firearms usage techniques, and	Prerequisites: Permission of Department or Division.	L+L 3.0 3.0 3.0
LET151	Firearms II	Practical application of firearms usage. Covers loading and unloading ammunition, firearm safety, daytime and nighttime firing techniques and shooting positions.	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: LET150.	L+L 2.0 2.0 2.0
LET152	Tactical Weapons	Practical application of tactical weapons procedures. Emphasis on handgun and rifle techniques in addition to impact weapon targets, use of force, and taser operation. Includes techniques for engaging suspects,	Prerequisites: Permission of Department or Division.	L+L 4.0 6.0 6.0
LET154	Leadership in Law Enforcement	Skills for effective leaders in the law enforcement industry. Covers behavioral and personality types, leadership styles, organizational accountability, and skills for providing effective mentoring. Emphasis on	Prerequisites: None.	LEC 2.0 2.0 2.0
LET155	General Instructor Certification	Designed to aid persons responsible for training in the workplace. Emphasis on motivating the adult learner, systematic training, planning, and evaluating	Prerequisites: None.	LEC 3.0 3.0 3.0
LET160	Correctional System Ethics and Professionalism	Overview of policies and guidelines with respect to professionalism and ethics in the correctional system. Includes workforce diversity, staff-inmate relations, and harassment issues. Also covers the definition of ethics	Prerequisites: Permission of Department or Division.	LEC 1.0 1.0 1.0
LET162	Introduction to Inmate Management	Effective inmate management techniques. Includes components of effective management and use of officer discretion. Criminal justice system also covered. Procedures for dealing with inmate discipline and	Prerequisites: Permission of Department or Division.	LEC 3.0 3.0 3.0
LET164	Correctional Information Systems	Overview of policies and guidelines for professional and effective distribution of information within the correctional system, including regulations governing two-way radio operation and use of a field notebook	Prerequisites: Permission of Department or Division.	LEC 1.0 1.0 1.0

LET166	Correction Officers Safety and Weapons Training	Basic shooting principles of the weapons used by correctional officers. Includes nomenclature, handling, loading and firing of the service handgun, shotgun, and 37mm gas gun. Lawful use of chemical agents including identification, coding, delivery and decontamination	Prerequisites: Permission of Department or Division.	L+L 2.0 4.0 4.0
LET167	Correctional Sergeant Leadership	Examination of leadership skills, duties and responsibilities, and procedures for sergeants in correctional facilities. Includes leading and creating an environment that motivates employees, effective communication, professionalism, and staffing/roster management procedures. Also covers procedures for the Incident Command System (ICS), Designated Area	Prerequisites: Permission of Department or Division.	LEC 2.0 2.0 2.0
LET168	Inmate Security Procedures I	Procedures for dealing with inmate security. Includes progressive behavior control and protective custody. Inmate count, personal property inventory, mail handling procedures, and cell extraction procedures	Prerequisites: Permission of Department or Division.	LEC 2.0 2.0 2.0
LET169	Inmate Security Procedures II	Security procedures for handling inmates. Covers searches, contraband, monitoring of inmates and perimeter checks. Transportation of inmates, use of restraints and driving skills including preventable	Prerequisites: A grade of C or better in LET168 or Corequisites: LET168.	L+L 3.0 4.0 4.0
LET170	Security, Custody and Control Procedures	Procedures for maintaining security and control within a correctional institution. Includes custody levels, roles of staff, and essential components with regards to span-of-control. Also covers procedures for dealing with crime scene management, fires, and emergency situations.	Prerequisites: Permission of Department or Division.	LEC 2.0 2.0 2.0
LET171	Essentials of Team Dynamics and Leadership in Public Safety	Overview of leadership essentials including characteristics and skills for achieving positive team dynamics, organizational goals, and greatness in the public safety sector. Covers techniques for influencing the mindsets and skill sets of teams and tools required to unlock the talent and strengths of their teams. Also covers levels of trust and engagement, facilitating team	Prerequisites: None.	LEC 2.0 2.0 2.0
LET172	Conflict and Crisis Management	Conflict and crisis management techniques for correctional institutions. Effecting positive, non-forceful resolutions to potentially violent situations. Emphasis on	Prerequisites: Permission of Department or Division.	LEC 2.0 2.0 2.0

LET173	Introduction to Leadership in Public Safety	Introduction to leadership in the field of public safety. Covers stages of adult human development, generational differences, and characteristics of effective leaders. Also includes characteristics of leaders, including values, ethics, attitudes, behavior, and response techniques in addition to identification of	Prerequisites: None.	LEC 2.0 2.0 2.0
LET174	Organizational Culture and Leadership	Examination of organizational structure and its application to the field of public safety. Covers characteristics and principles of effective organizations, systems and process management, and phases of process building in addition to characteristics of a process enterprise. Also includes levels of leadership	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: LET173.	LEC 3.0 3.0 3.0
LET175	Public Safety Leadership Capstone	Completion and professional presentation of a capstone project such as a formal staff study or leadership portfolio in the field of public safety, including steps for problem identification, research, and analyzing	Prerequisites: A grade of C or better in LET174.	LAB 1.0 3.0 2.40
LET176	Medical and Mental Health	Responsibilities of the correctional system staff with regards to medical and mental health of inmates. Includes basic first aid, basic life support, and supervision and care for mentally ill and impaired inmates. Also includes drug and substance abuse and	Prerequisites: Permission of Department or Division.	LEC 2.0 2.0 2.0
LET178	Physical Fitness and Self Defense Training	Physical and self defense training for correctional officers. Emphasis on aerobic power, muscular strength, endurance, and flexibility. Includes necessary and legal self defense along with techniques for protection of self and others in physical confrontations. Also includes training guidelines, safety issues and the benefits of	Prerequisites: Permission of Department or Division.	L+L 3.0 5.0 5.0
LET179	Highway Patrol Procedures	Overview of operational and response procedures for highway patrol operations. Covers pursuits, roadblocks, emergency response, and high risk stops in addition to incident command systems. Also includes overview of racially biased policing, sex trafficking indicators, and	Prerequisites: Permission of Department or Division.	LEC 3.0 3.0 3.0
LET180	Introduction to Computer Aided Dispatch	Introduction to computer aided dispatch. Covers techniques and procedures for emergency broadcast, including dispatch protocol, types of requests, and use of the dispatch panel. Also includes an overview of banking and vehicle security systems, the Incident Command System (ICS), and procedures for officer	Prerequisites: None.	LEC 2.0 2.0 2.0

LET181	Emergency Communications Personnel	Duties and responsibilities of personnel within the emergency communications industry. Includes information operator and tactical dispatcher responsibilities for handling various types of calls including priority one, hot calls and pursuits. Also covers	Prerequisites: None.	LEC 2.0 2.0 2.0
LET182	Emergency Communications Procedures	Practical application of emergency communications procedures. Includes dispatch functions, protocol and techniques, Incident Command system (ICS) implementation, and information officer and dispatcher responsibilities. In addition to basic dispatch procedures, covers queries, pursuits, priority one calls, hot calls, all calls, and high-risk situations and	Prerequisites: None.	L+L 3.0 9.0 9.0
LET183	Transportation Law	Transportation law provisions. Covers Arizona Revised Statute (ARS) Title 28, drug transportation, and contraband as well as civil and criminal traffic laws. Traffic offenses, violation name, and classification	Prerequisites: Permission of Department or Division.	LEC 1.0 1.0 1.0
LET184	Introduction to 911 Call Basics	Overview of basics for processing 911 calls. Covers communications terminology, abbreviations and codes as well as various police systems. Also includes location systems including numbering, point of origin, freeway	Prerequisites: None.	LEC 3.0 3.0 3.0
LET185	911 Policies and Procedures	Policies and procedures for completing 911 calls. Includes the National Incident Management System (NIMS), Incident Command System (ICS) and the use of an incident action plan. Also covers the purpose and use of radio codes, the online crime reporting website, and call signs. Alarm call types, prioritization, reporting,	Prerequisites: None.	L+L 3.0 5.0 5.0
LET186	Specialized 911 Call Procedures	Procedures for managing specific emergency situations. Includes goals and procedures for handling barricaded suspect calls, active shooter situations and officer involved emergencies. Also covers Critical Incident Stress Management (CISM) resources and the impact of	Prerequisites: None.	L+L 3.0 5.0 5.0
LET195	Proficiency Skills for Fire Investigators	Proficiency skills required of the fire investigator. Includes physical conditioning and wellness as well as defensive tactics and vehicle operations.	Prerequisites: Permission of Department or Division.	L+L 2.0 4.0 4.0
LET196	Patrol Procedures for Fire Investigators	Patrol and off-duty responsibilities procedures for fire investigators. Includes domestic violence authority as well as priorities for handling crimes in progress. Also covers communication procedures and restrictions.	Prerequisites: Permission of Department or Division.	LEC 1.0 1.0 1.0

LET197	Firearms for Fire Investigators	Firearms training for the fire investigator. Includes firearm safety and procedures, including daytime and nighttime firing techniques and shooting positions.	Prerequisites: Permission of Department or Division.	L+L 2.0 4.0 4.0
LET198	Criminal Investigations for Fire Investigators	Overview of procedures for conducting special criminal investigations. Responsibilities of the fire investigator with regard to death investigations, and assault and burglary cases. Also covers gangs and gang activity in addition to narcotics and dangerous drug	Prerequisites: Permission of Department or Division.	LEC 1.0 1.0 1.0
LET201	Physical Fitness Instructor Certification	Covers skills necessary to instruct and conduct physical fitness tests using the Cooper Institute for Aerobics Research standards and the Peace Officer Physical Aptitude Test (POPAT) standards. Also covers basics of human anatomy, strength training and aerobic	Prerequisites: Permission of Department or Division.	LEC 3.0 3.0 3.0
LET225	Criminal Investigations Certification	Police Detective Training. Emphasis on investigations, search and seizure, legal aspects of interview and interrogation, report writing, case management, and	Prerequisites: Must be a certified police officer or have permission of Department or Division.	LEC 6.0 6.0 6.0
LET225AA	Criminal Investigations Certification I	Overview of information, strategies, techniques, and resources available to detectives investigating property crimes, sex crimes, forged documents, and death	Prerequisites: Must be a certified police officer or have permission of Department or Division.	LEC 1.0 1.0 1.0
LET225AB	Criminal Investigations Certification II	Review of laws regarding search and seizure. Updated information regarding new laws as they apply to search and seizure.	Prerequisites: Must be a certified police officer or have permission of Department or Division.	LEC 1.0 1.0 1.0
LET225AC	Criminal Investigations Certification III	The legal framework for admissible confessions and other information gathered through interviews and interrogations. Prepares law enforcement personnel for obtaining confessions and other incriminating	Prerequisites: Must be a certified police officer or have permission of Department or Division.	LEC 1.0 1.0 1.0
LET225AD	Criminal Investigations Certification IV	Emphases on necessity for good reports in criminal investigations. Characteristics of pre-report preparation, preparing the body of the report, and assembling the case report. Process of handling submission of a case	Prerequisites: Must be a certified police officer or have permission of Department or Division.	LEC 1.0 1.0 1.0
LET225AE	Criminal Investigations Certification V	Overview of the criminal investigators role in preparing case documents for submittal to the attorney and to prepare for trial.	Prerequisites: Must be a certified police officer or have permission of Department or Division.	LEC 0.5 0.5 0.5
LET225AF	Criminal Investigations Certification VI	Various types of electronic evidence and the procedures required to be submitted to the court for prosecution.	Prerequisites: Must be a certified police officer or have permission of Department or Division.	LEC 0.5 0.5 0.5

LET225AG	Criminal Investigations Certification VII	This course is a summative culmination of the investigator courses. Students will assume the investigator's role in a crime scene scenario, securing a crime scene, processing evidence, preparing	Prerequisites: A grade of C or better in LET225AA, LET225AB, LET225AC, LET225AD, LET225AE, and LET225AF.	LEC 1.0 1.0 1.0
LET226	Arrest and Defense Tactics Instructor Training	Techniques for instructing students in arrest and defense tactics. Includes approaching suspects, use of equipment, and officer responsibilities as well as handcuffing and transporting prisoners. Use of force and liability issues, pressure points and impact weapons also covered. Close Quarter Crisis Management and	Prerequisites: Permission of Department or Division.	LEC 6.0 6.0 6.0
LET229	High Risk Situations/Instructor Training	Techniques for instructing students in high risk/known risk situations. Includes pre-stop procedures, primary and back-up officer responsibilities, suspect removal,	Prerequisites: None.	LEC 2.0 2.0 2.0
LET243	Search Warrant Preparation	Overview of statutes, constitutional requirements, and case law covering searches, seizures, and detentions relative to the search warrant process. Includes procedures and tactical considerations for obtaining and serving search warrants. Also covers review and documentation of probable cause related to property, persons, and drug-related crimes within a search	Prerequisites: Must be Law Enforcement personnel or have permission of Instructor.	L+L 6.0 6.0 6.0
LET250	DUI Detection	Overview of alcohol-related DUI enforcement and general deterrence, DUI detection and description techniques, legal statutes, Standardized Field Sobriety Test (SFST's) procedures, DUI arrest process, report writing, courtroom testimony techniques and drug	Prerequisites: Permission of Department or Division.	LEC 2.0 2.0 2.0
LET254	Criminal Investigations Detective I	Advanced training designed to prepare law enforcement officers for transition into investigator positions. Includes Criminal Investigations Division (CID) goals and expectations, the scouting mission techniques and resources, operational plan components and development, and a review of professional writing skills for report writing, in addition to procedures for surveillance. Also covers procedures for	Prerequisites: Permission of Department or Division.	LEC 3.0 3.0 3.0

LET255	Criminal Investigations Detective II	Further advanced training designed to prepare law enforcement officers for transition into investigator positions. Includes Department of Public Safety (DPS) Criminal Investigations Division (CID) policies and procedures, the intelligence mission and cycle, crime scene management and processing, in addition to open source intelligence applications and resources. Also	Prerequisites: A grade of C or better in LET254.	LEC 3.0 3.0 3.0
LET256	Law Enforcement Firearm Instructor	A train the trainer course for police firearm instructors. Covers instructional techniques for the pistol, revolver, and shotgun.	Prerequisites: AzPost (Peace Officer Standard and Training) Certified Police General Instructor or permission of Department or Division.	LEC 5.0 5.0 5.0
LET256AA	Law Enforcement Patrol Rifle Instructor	Techniques on proper manipulation and marksmanship skills needed by a patrol officer/deputy in the use of the patrol rifle, and techniques of teaching those skills to other officers/deputies.	Prerequisites: AzPOST (Peace Officer Standard and Training) certified law enforcement firearms instructor or permission of Instructor.	LEC 3.0 3.0 3.0
LET260	Traffic Accident Investigation	Overview of accident investigation techniques and reports. Physical evidence on the roadway and from the vehicle, human factors and reaction times, measurement and calculations emphasized. Also	Prerequisites: Permission of Department or Division.	LEC 3.0 3.0 3.0
LET262	Active Shooter Procedures	Procedures for response and mitigation of active shooter/active homicide events. Includes policies for decision making, use of appropriate force, tactics for responding to active shooter events, basic structure clearing techniques, and Tactical Combat Casualty Care	Prerequisites: Permission of Department or Division.	L+L 2.0 3.0 3.0
LET279AA	Field Training: Phase I	Introduction to the Field Training Program. Overview of standards for officers in training. Also includes vehicle inspection, traffic stops, writing citations, and field interview cards. Use of the radio and Mobil Data Terminal (MDT) covered. Integration of radio and MDT	Prerequisites: Permission of Department or Division.	L+L 4.0 4.0 4.0
LET279AB	Field Training: Phase II	Field training communication skills. Procedures for interview and interrogation skills, as well as strategies for conflict resolution. Covers standards for effective report writing in addition to requirements for callback, arrest and field reports. Also includes procedures for	Prerequisites: Permission of Department or Division.	L+L 4.0 6.0 6.0
LET279AC	Field Training: Phase III	Continuation of field training. Procedures in arrest of suspects driving under the influence (DUI) and for investigating accidents emphasized. Standards for	Prerequisites: Permission of Department or Division.	L+L 5.0 5.0 5.0

LET279AD	Field Training: Phase IV	Culmination of field training. Self initiated field activity, 'On-view' cases emphasized. Integration of recognizing activity that is suspicious in nature or illegal and appropriate action. Standards for officers in training also	Prerequisites: Permission of Department or Division.	L+L 4.0 6.0 6.0
MAS101	Introduction to Medical Assisting	Introduction to professional skills required in the field of medical assisting. Development of professional behaviors and expectations; in addition to but not limited to communication and mathematical calculations	Prerequisites: None.	LEC 3.0 3.0 3.0
MAS102	Fundamentals of Administrative Medical Assisting	Explores fundamental administrative procedures in ambulatory healthcare settings, such as appointment scheduling, telephone etiquette, and patient rights. Emphasis on a basic understanding of medical law and ethics and Health Insurance Portability and Accountability Act (HIPAA) regulations. Provides a basic overview of insurance, coding, billing, and electronic	Prerequisites: A grade of C or better in MAS101.	LEC 6.0 6.0 6.0
MAS103	Basic Anatomy, Physiology, and Medical Terminology	Provides an overview of medical terminology and the word parts used in building and analyzing terms used in healthcare, including abbreviations and symbols. A body-systems approach is used for terms relating to	Prerequisites: None.	LEC 3.0 3.0 3.0
MAS104	Medical Administrative Assisting Practicum	Students will apply the medical administrative concepts learned in previous program courses.	Prerequisites: A grade of C or better in HCC145 or MAS103.	LAB 4.0 4.0 4.0
MAS201	Fundamentals of Clinical Medical Assisting	Provides a foundation for clinical lab skills related to medical assisting. This hands-on course will explore surgical procedures, vital signs, sterilization, electrocardiogram (EKG), and emergency situations in the ambulatory setting. Includes a review of the steps	Prerequisites: Acceptance into the Clinical Medical Assisting or Medical Assisting program.	L+L 6.0 7.5 7.5
MAS202	Laboratory Testing in Ambulatory Healthcare Settings	Introduction to basic Point of Care Testing (POCT), specimen collection, and handling. Theory and practice of basic phlebotomy and application of fundamental phlebotomy procedures and techniques in a clinical	Prerequisites: A grade of C or better in MAS201, or permission of Program Director.	L+L 6.0 7.5 7.5
MAS203	Medical Assisting Pharmacology	Explores principles of basic pharmacology and medication administration. Focus on responsibility and appropriate medication protocols as they relate to	Prerequisites: A grade of C or better in MAS201 and MAS202.	L+L 6.0 7.5 7.5
MAS204	Clinical Medical Assisting Practicum	Application of clinical medical assisting concepts while interacting with patients at a clinical practicum site.	Prerequisites: A grade of C or better in MAS203.	LAB 4.0 9.0 0.0
MAS205	Medical Assisting Program Review	Prepares students to apply for the clinical credentialing examination and for entry into the medical assisting	Prerequisites: A grade of C or better in MAS203.	LEC 2.0 2.0 2.0

MAT051	Number Sense I	Primary emphasis on conceptual understanding of whole numbers, integers and mathematical operations. Use systems of measure and Pythagorean Theorem. Focus on mathematical language, connections,	Prerequisites: None.	LEC 1.0 1.0 1.0
MAT052	Number Sense II	Primary emphasis on conceptual understanding of decimals and fractions, and decimal and fraction addition and subtraction. Solving problems involving decimals and fractions. Focus on mathematical	Prerequisites: A grade of C or better in MAT051, OR an appropriate district placement.	LEC 1.0 1.0 1.0
MAT053	Multiplicative and Proportional Reasoning	Primary emphasis on conceptual understanding of decimals and fractions, and decimal and fraction multiplication and division. Solving problems involving decimals, fractions, and percentages. Focus on additive and multiplicative reasoning including proportionality	Prerequisites: A grade of C or better in each of the following courses: (MAT051 and MAT052), OR an appropriate district placement.	LEC 1.0 1.0 1.0
MAT055	Algebraic Structures	Emphasis on meanings related to variable, equality, inequality, equivalence. The use of additive and multiplicative reasoning in solving linear equations and inequalities in one variable. Validation of solution(s) through a reasonable mathematical defense. Transfer and apply knowledge through a process of sense making and reasonableness in mathematical problems	Prerequisites: None.	LEC 1.0 1.0 1.0
MAT056	Functions I	Recognize patterns and organize data to represent situations where output is related to input. Understand the concept of function and be able to represent functions in multiple ways, including tables, algebraic rules, graphs and contextual situations, and make	Prerequisites: A grade of C or better in MAT055, or an appropriate district placement.	LEC 1.0 1.0 1.0
MAT057	Functions II	Read, represent, and interpret linear function relationships numerically, analytically, graphically and verbally and connect the different representations. Model and solve real world problems involving constant	Prerequisites: A grade of C or better in MAT055 and MAT056, or an appropriate district placement.	LEC 1.0 1.0 1.0
MAT081	Basic Arithmetic	Primary emphasis on conceptual understanding of and solving problems involving whole numbers, integers, mathematical operations, decimals, decimal operations, fractions, percentages, angles and geometric figures. Use of systems of measure, similarity, proportionality and the Pythagorean theorem. Focus on mathematical language, connections, patterns and reasoning, and	Prerequisites: None.	LEC 4.0 4.0 4.0

MAT082	Basic Arithmetic	Primary emphasis on conceptual understanding of and solving problems involving whole numbers, integers, mathematical operations, decimals, decimal operations, fractions, percentages, angles and geometric figures. Use of systems of measure, similarity, proportionality and the Pythagorean theorem. Focus on mathematical language, connections, patterns and reasoning, and	Prerequisites: None.	LEC 3.0 3.0 3.0
MAT090	Introductory Algebra	Emphasis on meanings related to variable, equality, inequality, equivalence. The use of additive and multiplicative reasoning in solving linear equations and inequalities in one variable. Validation of solution(s) through a reasonable mathematical defense. Transfer and apply knowledge through a process of sense making and reasonableness in mathematical problems and practical application situations. Recognize patterns and organize data to represent situations where output is related to input. Understand the concept of function and be able to represent functions in multiple ways, including tables, algebraic rules, graphs and contextual situations, and make connections among these representations. Read, represent, and interpret linear	Prerequisites: None.	LEC 5.0 5.0 5.0
MAT091	Introductory Algebra	Emphasis on meanings related to variable, equality, inequality, equivalence. The use of additive and multiplicative reasoning in solving linear equations and inequalities in one variable. Validation of solution(s) through a reasonable mathematical defense. Transfer and apply knowledge through a process of sense making and reasonableness in mathematical problems and practical application situations. Recognize patterns and organize data to represent situations where output is related to input. Understand the concept of function and be able to represent functions in multiple ways, including tables, algebraic rules, graphs and contextual situations, and make connections among these representations. Read, represent, and interpret linear	Prerequisites: None.	LEC 4.0 4.0 4.0

MAT092	Introductory Algebra	Emphasis on meanings related to variable, equality, inequality, equivalence. The use of additive and multiplicative reasoning in solving linear equations and inequalities in one variable. Validation of solution(s) through a reasonable mathematical defense. Transfer and apply knowledge through a process of sense making and reasonableness in mathematical problems and practical application situations. Recognize patterns and organize data to represent situations where output is related to input. Understand the concept of function and be able to represent functions in multiple ways, including tables, algebraic rules, graphs and contextual situations, and make connections among these representations. Read, represent, and interpret linear	Prerequisites: None.	LEC 3.0 3.0 3.0
MAT103	College Mathematics Prep	Foundational knowledge of topics necessary for success in College Mathematics. Emphasis on understanding mathematical concepts and their applications. Topics include number sense, proportional reasoning, numerical and algebraic expressions, linear	Prerequisites: None.	LEC 3.0 3.0 3.0
MAT108	Tutored Mathematics	Structured tutorial assistance and math study skills to help students achieve success in a mathematics course in which they are concurrently enrolled. Mathematics study skills emphasized.	Prerequisites: None. Corequisites: (MAT150 or MAT151 or MAT151AA or MAT151AB or MAT151AC or MAT151AD or MAT152 or MAT155 or MAT156), OR any lower numbered MAT class, OR permission of	LEC 2.0 2.0 2.0
MAT108AA	Tutored Mathematics	Structured tutorial assistance and math study skills to help students achieve success in a mathematics course in which they are concurrently enrolled. Mathematics study skills emphasized.	Prerequisites: None. Corequisites: (MAT150 or MAT151 or MAT151AA or MAT151AB or MAT151AC or MAT151AD or MAT152 or MAT155 or MAT156), OR any lower numbered MAT class, OR permission of	LEC 1.0 1.0 1.0
MAT112	Mathematical Concepts and Applications	A problem solving approach to mathematics as it applies to real-life situations. Development, use and communication of mathematical concepts and applications that relate to measurement, percentage,	Prerequisites: None.	LEC 3.0 3.0 3.0

MAT114	College Algebra Prep	Proper use of function notation, average rate of change of functions, and evaluating arithmetic and algebraic expressions. Analysis of linear and quadratic equations, and their applications; graphs of linear and quadratic	Prerequisites: None.	LEC 4.0 4.0 4.0
MAT115	College Algebra Prep	Proper use of function notation, average rate of change of functions, and evaluating arithmetic and algebraic expressions. Analysis of linear and quadratic equations, and their applications; graphs of linear and quadratic	Prerequisites: None.	LEC 5.0 5.0 5.0
MAT120	Intermediate Algebra	Analysis of rational, radical, quadratic and exponential equations, functions and applications; graphs of radical, quadratic and exponential functions; operations on polynomial, rational, and radical expressions.	Prerequisites: A grade of C or better in each of the following courses: (MAT055 and MAT056 and MAT057), OR a grade of C or better in (MAT090 or MAT091 or MAT092 or MAT095 or MAT096), OR an	LEC 5.0 5.0 5.0
MAT121	Intermediate Algebra	Analysis of rational, radical, quadratic and exponential equations, functions and applications; graphs of radical, quadratic and exponential functions; operations on polynomial, rational, and radical expressions.	Prerequisites: A grade of C or better in each of the following courses: (MAT055 and MAT056 and MAT057), OR a grade of C or better in (MAT090 or MAT091 or MAT092 or MAT095 or MAT096), OR an	LEC 4.0 4.0 4.0
MAT122	Intermediate Algebra	Analysis of rational, radical, quadratic and exponential equations, functions and applications; graphs of radical, quadratic and exponential functions; operations on polynomial, rational, and radical expressions.	Prerequisites: A grade of B or better in each of the following courses: (MAT055 and MAT056 and MAT057), OR a grade of B or better in (MAT090 or MAT091 or MAT092 or MAT095 or MAT096), OR an	LEC 3.0 3.0 3.0
MAT126	Intermediate Algebra with Review	Analysis of rational, radical, quadratic and exponential equations, functions and applications; graphs of radical, quadratic and exponential functions; operations on polynomial, rational, and radical expressions.	Prerequisites: None.	LEC 6.0 6.0 6.0
MAT140	College Mathematics	Working knowledge of college-level mathematics and its applications to real-life problems. Emphasis on understanding mathematical concepts and their applications. Topics include proportional reasoning, modeling, finance, probability, and statistics.	Prerequisites: An appropriate District placement, or a grade of C or better in (MAT052, MAT053 and MAT055) or (MAT055, MAT056 and MAT057) or MAT09+ or MAT103 or MAT114 or MAT115 or MAT12+.	LEC 5.0 5.0 5.0

MAT141	College Mathematics	Working knowledge of college-level mathematics and its applications to real-life problems. Emphasis on understanding mathematical concepts and their applications. Topics include proportional reasoning, modeling, finance, probability, and statistics.	Prerequisites: An appropriate District placement or a grade of C or better in (MAT052, MAT053 and MAT055) or (MAT055, MAT056 and MAT057) or MAT09+ or MAT103 or MAT114 or MAT115 or MAT12+.	LEC 4.0 4.0 4.0
MAT142	College Mathematics	Working knowledge of college-level mathematics and its applications to real-life problems. Emphasis on understanding mathematical concepts and their applications. Topics include proportional reasoning, modeling, finance, probability, and statistics.	Prerequisites: An appropriate District placement or a grade of C or better in (MAT052, MAT053 and MAT055) or (MAT055, MAT056 and MAT057) or MAT09+ or MAT103 or MAT114 or MAT115 or MAT12+.	LEC 3.0 3.0 3.0
MAT145	College Mathematics with Review	Working knowledge of college-level mathematics and its applications to real-life problems. Emphasis on understanding mathematical concepts and their applications. Topics include proportional reasoning, modeling, finance, probability, and statistics, along with	Prerequisites: None.	LEC 5.0 5.0 5.0
MAT146	College Mathematics with Review	Working knowledge of college-level mathematics and its applications to real-life problems. Emphasis on understanding mathematical concepts and their applications. Topics include proportional reasoning, modeling, finance, probability, and statistics, along with	Prerequisites: None.	LEC 6.0 6.0 6.0
MAT150	College Algebra/Functions	Analysis and interpretation of the behavior and nature of functions including linear, quadratic, higher-order polynomials, rational, exponential, logarithmic, power, absolute value, and piecewise-defined functions; systems of equations, using multiple methods including	Prerequisites: A grade of C or better in MAT095, or MAT096, or MAT114, or MAT115, or MAT12+, OR an appropriate district placement for MAT15+, OR permission of	LEC 5.0 5.0 5.0
MAT150	College Algebra/Functions	Analysis and interpretation of the behavior and nature of functions including linear, quadratic, higher-order polynomials, rational, exponential, logarithmic, power, absolute value, and piecewise-defined functions; systems of equations, using multiple methods including	Prerequisites: A grade of C or better in MAT114 or MAT115 or MAT12+ OR an appropriate district placement for MAT15+, or permission of Department or Division Chair.	LEC 5.0 5.0 5.0
MAT151	College Algebra/Functions	Analysis and interpretation of the behavior and nature of functions including linear, quadratic, higher-order polynomials, rational, exponential, logarithmic, power, absolute value, and piecewise-defined functions; systems of equations, using multiple methods including	Prerequisites: A grade of C or better in MAT114 or MAT115 or MAT12+ or an appropriate district placement for MAT15+ or permission of Department or Division Chair.	LEC 4.0 4.0 4.0

MAT152	College Algebra/Functions	Analysis and interpretation of the behavior and nature of functions including linear, quadratic, higher-order polynomials, rational, exponential, logarithmic, power, absolute value, and piecewise-defined functions; systems of equations, using multiple methods including	Prerequisites: A grade of C or better in MAT114 or MAT115 or MAT12+ OR an appropriate district placement for MAT15+ OR permission of Department or Division Chair.	LEC 3.0 3.0 3.0
MAT155	College Algebra/Functions with Review	Analysis and interpretation of the behavior and nature of functions including linear, quadratic, higher-order polynomials, rational, exponential, logarithmic, power, absolute value, and piecewise-defined functions; systems of equations, using multiple methods including matrices, and modeling and solving real world problems.	Prerequisites: A grade of C or better in (MAT055, MAT056, and MAT057), or MAT09+, or MAT114, or MAT115, or an appropriate district placement for MAT120 or MAT121 or MAT122, or permission of Department/Division	LEC 5.0 5.0 5.0
MAT156	College Algebra/Functions with Review	Analysis and interpretation of the behavior and nature of functions including linear, quadratic, higher-order polynomials, rational, exponential, logarithmic, power, absolute value, and piecewise-defined functions; systems of equations, using multiple methods including matrices, and modeling and solving real world problems, along with review of intermediate algebra, as needed.	Prerequisites: A grade of C or better in each of the following: (MAT055, MAT056, and MAT057), OR MAT09+ or MAT114 or MAT115, OR an appropriate district placement for MAT120 or MAT121 or MAT122, OR permission of Department or Division	LEC 6.0 6.0 6.0
MAT172	Finite Mathematics	An introduction to the mathematics required for the study of social and behavioral sciences. Includes combinatorics, probability, descriptive statistics, matrix algebra, linear programming and the mathematics of finance. Includes applications of technology in problem-solving.	Prerequisites: A grade of C or better in (MAT150 or MAT151 or MAT151AA or MAT151AB or MAT151AC or MAT151AD or MAT152 or MAT155 or MAT156) or MAT187 or MAT188 or an	LEC 3.0 3.0 3.0
MAT182	Plane Trigonometry	A study of measures of angles, properties of graphs of trigonometric functions, fundamental identities, addition and half-angle formulas, inverse trigonometric functions, solutions of trigonometric equations, complex numbers and properties of triangle solution. May receive credit for only one of the following: MAT182 or MAT187.	Prerequisites: A grade of C or better in (MAT150 or MAT151 or MAT151AA or MAT151AB or MAT151AC or MAT151AD or MAT152 or MAT155 or MAT156), OR an appropriate district placement. Corequisites: (MAT150 or MAT151 or MAT151AA or MAT151AB or	LEC 3.0 3.0 3.0
MAT187	Precalculus	Topics in algebra and trigonometry in preparation for calculus.	Prerequisites: A grade of C or better in MAT15+, or an appropriate district placement.	LEC 5.0 5.0 5.0
MAT188	Precalculus	Topics in algebra and trigonometry in preparation for calculus.	Prerequisites: A grade of C or better in MAT 15+, OR an appropriate	LEC 4.0 4.0 4.0

MAT206	Elements of Statistics	Basic concepts and applications of statistics, including data description, estimation and hypothesis tests.	Prerequisites: A grade of C or better in MAT14+ or MAT15+ or MAT187 or MAT188 or equivalent or an appropriate District placement or permission of Department/Division	LEC 3.0 3.0 3.0
MAT212	Brief Calculus	Introduction to the theory, techniques and applications of the differential and integral calculus of functions with problems related to business, life, and the social	Prerequisites: A grade of C or better in MAT15+ or MAT187 or MAT188 or an appropriate District placement.	LEC 3.0 3.0 3.0
MAT213	Brief Calculus	Introduction to the theory, techniques, and applications of the differential and integral calculus of functions with problems related to business, life, and the social	Prerequisites: A grade of C or better in MAT15+ or MAT187 or MAT188 or an appropriate District placement.	LEC 4.0 4.0 4.0
MAT217	Mathematical Analysis for Business	An introduction to the mathematics required for the study of business. Includes multivariable optimization, Lagrange multipliers, linear programming, linear algebra, probability, random variables, discrete and continuous	Prerequisites: A grade of C or better in MAT212, or MAT213, or MAT220, or MAT221.	LEC 3.0 3.0 3.0
MAT218	Mathematical Analysis for Business	An introduction to the mathematics required for the study of business. Includes multivariable optimization, Lagrange multipliers, linear programming, linear algebra, probability, random variables, discrete and continuous	Prerequisites: A grade of C or better in MAT212, or MAT213, or MAT220, or MAT221.	LEC 4.0 4.0 4.0
MAT220	Calculus with Analytic Geometry I	Limits, continuity, differential and integral calculus of functions of one variable.	Prerequisites: A grade of C or better in MAT187 or MAT188 or an appropriate District placement.	LEC 5.0 5.0 5.0
MAT221	Calculus with Analytic Geometry I	Limits, continuity, differential and integral calculus of functions of one variable.	Prerequisites: A grade of C or better in MAT187 or MAT188 or an appropriate District placement.	LEC 4.0 4.0 4.0
MAT225	Elementary Linear Algebra	Introduction to matrices, systems of linear equations, determinants, vector spaces, linear transformations and eigenvalues. Emphasizes the development of	Prerequisites: A grade of C or better in MAT212 or MAT213 or MAT220 or MAT221, or equivalent.	LEC 3.0 3.0 3.0
MAT227	Discrete Mathematical Structures	Course emphasizes discrete mathematics connections to computer science by exposing students to foundational concepts of set theory, logic, counting, induction, proof techniques, graph theory, and	Prerequisites: A grade of C or better in MAT212, or MAT213, or MAT220, or MAT221, or permission of Department/Division Chair.	LEC 3.0 3.0 3.0
MAT230	Calculus with Analytic Geometry II	Techniques of integration for both proper and improper integrals with applications to the physical and social sciences, elements of analytic geometry, and the	Prerequisites: A grade of C or better in MAT220 or MAT221 or equivalent.	LEC 5.0 5.0 5.0
MAT231	Calculus with Analytic Geometry II	Techniques of integration for both proper and improper integrals with applications to the physical and social sciences, elements of analytic geometry, and the	Prerequisites: A grade of C or better in MAT220 or MAT221 or equivalent.	LEC 4.0 4.0 4.0

MAT240	Calculus with Analytic Geometry III	Multivariate calculus including vectors, vector- valued functions, partial differentiation, multiple integration, and an introduction to vector fields.	Prerequisites: A grade of C or better in Grade of C or better in MAT230 or MAT231.	LEC 5.0 5.0 5.0
MAT241	Calculus with Analytic Geometry III	Multivariate calculus including vectors, vector- valued functions, partial differentiation, multiple integration and	Prerequisites: A grade of C or better in MAT230 or MAT231.	LEC 4.0 4.0 4.0
MAT256	Investigating Quantity: Number, Operations and Numeration Systems	Explore number, numeration systems and operations on numbers. Techniques of problem solving with an emphasis on exploring a variety of strategies. Use a variety of visualization techniques to develop a conceptual understanding of these topics.	Prerequisites: A grade of C or better in (MAT15+ or higher), or (MAT12+ and MAT14+), or [MAT14+ and (MAT114 or MAT115)], or (MAT14+ and an appropriate District placement into MAT150, MAT151, or MAT152), or permission of	LEC 4.0 4.0 4.0
MAT257	Investigating Geometry, Probability and Statistics	Explores geometry, measurement, probability and statistics. Uses visualization, technologies, problem solving, reasoning and proof to develop a conceptual	Prerequisites: A grade of C or better in MAT256 or permission of Department/Division Chair.	LEC 4.0 4.0 4.0
MAT276	Modern Differential Equations	Introduces differential equations, theoretical and practical solution techniques with applications. Problem solving using MATLAB.	Prerequisites: A grade of C or better in MAT230 or MAT231 or permission of Department/Division Chair.	LEC 4.0 4.0 4.0
MAT277	Modern Differential Equations	Introduces differential equations, theoretical and practical solution techniques with applications. Problem solving using MATLAB.	Prerequisites: A grade of C or better in MAT230 or MAT231 or permission of Department/Division Chair.	LEC 3.0 3.0 3.0
MAT280	Foundational Statistics for Engineers	Fundamentals of probability, descriptive statistics, sampling distributions, parameter estimation, tests of hypotheses, regression analysis, analysis of variance,	Prerequisites: A grade of C or better in MAT220, or MAT221, or equivalent.	L+L 3.0 5.0 5.0
MAT282AA	Service-Learning Experience in Mathematics	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 1.0 1.0 0.0
MAT282AB	Service-Learning Experience in Mathematics	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 2.0 2.0 0.0
MAT282AC	Service-Learning Experience in Mathematics	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 3.0 3.0 0.0
MAT295	Special Topics in Mathematics	Conceptual and computational aspects of a special topic in modern mathematics.	Prerequisites: Permission of Department/Division Chair.	LEC 1.0 1.0 1.0

MAT298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Department/Division Chair.	LAB 1.0 1.0 0.0
MAT298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Department/Division Chair.	LAB 2.0 2.0 0.0
MAT298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Department/Division Chair.	LAB 3.0 3.0 0.0
MAT305	Mathematics for Machine Learning	Advanced mathematical concepts essential for understanding and applying techniques in machine learning using Python programming language. Focus on vector-based calculus, probability distributions,	Prerequisites: A grade of C or better in (AIM250 and MAT227) or permission of Program Director.	L+L 3.0 4.0 4.0
MCO120	Media and Society	Study of historical and contemporary roles of media and its pervasiveness in society as it relates to culture,	Prerequisites: Eligibility for ENG101 or ENG107 or permission of	LEC 3.0 3.0 3.0
MCO220	Cultural Diversity and the Media	Images of the diverse cultures and gender issues within the U.S. media. Exploration of racial and gender roles which shape the media as well as media roles which influence U.S. race relations and racial change. Roles, contributions, and challenges of the minority press in	Prerequisites: A grade of C or better in ENG101 or ENG107.	LEC 3.0 3.0 3.0

MCO296WA	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 1.0 5.0 0.0
MCO296WB	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 2.0 10.0 0.0
MCO296WC	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 3.0 15.0 0.0

MCO296WD	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 4.0 20.0 0.0
MCO298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
MCO298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
MCO298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0

MDC103	Introduction to Medical Assisting	This course develops the foundation of healthcare through an understanding of anatomy and physiology, medical terminology, application of basic pathophysiology as it relates to entry-level medical assisting, emergency preparedness, and demonstration of CPR completion. Medical terminology as it relates to structures, functions, diseases, procedures, and diagnostic testing. Building and analyzing terms using word parts. Medical abbreviations, symbols and correct spelling and pronunciation, Professionalism in healthcare to ensure students are ready to enter the professional workplace including etiquette, image, manners, communication, professional relationships, responsibility and accountability, respectfulness, patient privacy. Empathy, compassion and emotional maturity specific to the healthcare setting. Focus on	Prerequisites: Program admission, and successful completion of RDG100 or higher or appropriate reading placement into CRE101. Health and Safety Documentation uploaded to American DataBank and verified prior to being enrolled in the class.	156
MDC104	Fundamentals of Administrative Medical Assisting	This course explores fundamental administrative procedures in various healthcare settings. Overview of the daily operations, principles and procedures for administrative skills including: medical record management, introduction to the electronic health record (EHR), and application of insurance, coding and billing. Basic administrative office policies, procedures, appointment scheduling, telephone etiquette, patient reception, financial practices, third party payers, health insurance, and basic understanding of medical billing and coding. Health organization structure, patient rights	Prerequisites: MDC103.	159

MDC105	Fundamentals of Clinical Medical Assisting I	Overview of the daily operations, principles and procedures for clinical medical assisting, including: compliance with Occupational Safety and Health Administration (OSHA), the Centers for Disease Control and Prevention (CDC), and Clinical Laboratory Improvement Amendments (CLIA). Infection control practices including, proper disposal of biohazardous materials and sharps, aseptic handwashing, appropriate application of personal protective equipment (PPE), blood borne pathogens, fomites, chain of infection, setting up and maintaining a sterile field, surgical instrument identification and sterilization, sterile techniques, and application of sterile gloves. Definition, application and importance of performing vital signs	Prerequisites: A grade of C or better in MDC104.	141
MDC106	Fundamentals of Clinical Medical Assisting II	This course explores all aspects of clinical medical assisting skills, concepts, and procedures in a simulated healthcare setting. Topics include medical specialty practices and basic point-of-care testing (POCT), specimen collection and handling while complying with state and federal government agencies. The course also explores principles and procedures for basic dosage calculation and medication administration specific to medical assisting. Theory and practice of basic phlebotomy procedures and equipment. This	Prerequisites: MDC105.	205
MDC106DC	Fundamentals of Clinical Medical Assisting II	This course explores all aspects of clinical medical assisting skills, concepts, and procedures in a simulated healthcare setting. Topics include medical specialty practices and basic point-of-care testing (POCT), specimen collection and handling while complying with state and federal government agencies. The course also explores principles and procedures for basic dosage calculation and medication administration specific to medical assisting. Theory and practice of basic phlebotomy procedures and equipment. This	Prerequisites: MDC105.	174

MDC130	Medical Assisting Practicum	This course prepares and engages students in a practicum experience with an opportunity to apply both clinical and administrative skills and concepts which include the application of duties, procedures, and knowledge derived from program coursework.	Prerequisites: A grade of C or better in MDC106 or MDC120 with a P grade. Students are responsible to maintain the requirements of the background check, fingerprint clearance card, and health and safety documentation throughout the	200
MDL190	Clinical Laboratory Operations	Overview of laboratory services, laboratory professionals, and the role of a medical laboratory technician (clinical laboratory technician). Understanding of health care reform, reimbursement, cost analysis, coding, credentialing, accreditation, and regulatory agencies. Emphasis on process improvement, laboratory mathematics, statistics, documentation, medico-legal implications, education, management and personnel, and specimen integrity. Application of pre-analytical, analytical, and post-analytical principles, infection control, and laboratory safety. Recognition of acceptable quality control and quality management principles, phlebotomy principles, and lab equipment, glassware, labware, and water purification. Includes	Prerequisites: Acceptance into the Medical Laboratory Science program and permission of Program Director.	LEC 2.0 2.0 2.0
MDL240	Clinical Urinalysis and Body Fluid Analysis	Examines anatomy and physiology of the renal system, renal diseases, and renal function tests. Emphasis on interpretation, evaluation, and reporting of urinalysis and body fluid results, urine and body fluid collection techniques, types, specimen handling and preservation, and instrument calibration, maintenance, and quality	Prerequisites: A grade of C or better in MDL190, acceptance into the Medical Laboratory Science program, and permission of the Program Director.	L+L 3.0 5.0 5.0
MDL241	Practicum: Clinical Urinalysis and Body Fluid Analysis	Practicum experience in clinical urinalysis and body fluid analysis based in healthcare facilities or reference laboratories. Assessment of anatomy and physiology of the renal system, renal diseases, and renal function tests. Performance of interpretation, evaluation, and reporting of urinalysis and body fluid results, urine and body fluid collection techniques, types, specimen handling and preservation, and instrument calibration,	Prerequisites: A grade of C or better in MDL240, acceptance into the Medical Laboratory Science program, and permission of the Program Director.	LAB 1.0 6.0 0.0

MDL242	Clinical Hematology and Hemostasis	Examines the anatomy and physiology of the hematopoietic and hemostasis systems, hematology and hemostasis case studies, anemia categories, and thrombocyte, hemostatic, and malignant and nonmalignant leukocyte disorders. Emphasis on interpreting, evaluating, and reporting hematology and hemostasis results, anticoagulant therapy, morphology, peripheral smear correlation with analyzer results and patient condition, erythrocyte indices, collection techniques, specimen handling, calibration, and quality	Prerequisites: A grade of C or better in MDL240, acceptance into the Medical Laboratory Science program, and permission of the Program Director.	L+L 6.0 9.0 9.0
MDL243	Practicum: Clinical Hematology and Hemostasis	Practicum experience in clinical hematology and hemostasis based in healthcare facilities or reference laboratories. Assessment of the anatomy and physiology of the hematopoietic and hemostasis systems, hematology case studies, anemia categories, and thrombocyte, malignant and nonmalignant leukocyte disorders. Application of interpreting, evaluating, and reporting hematology results, morphology, peripheral smear correlation with analyzer results, erythrocyte indices, collection techniques, specimen handling, calibration, and quality control.	Prerequisites: A grade of C or better in MDL242, acceptance into the Medical Laboratory Science program, and permission of the Program Director.	LAB 1.0 6.0 0.0
MDL244	Clinical Immunohematology and Immunology	Principles of immunity and immunologic testing. Causes of disorders of the immune system. Study of blood group antigens, antibodies, and genetics. Understanding of donor blood collection, component preparation, and transfusion therapies. Performance of	Prerequisites: A grade of C or better in MDL242, acceptance into the Medical Laboratory Science program, and permission of the Program Director.	L+L 6.0 9.0 9.0
MDL245	Practicum: Clinical Immunohematology and Immunology	Practicum in immunohematology and immunology in healthcare facilities or reference laboratories. Performance of clinical skills in immunity and immunologic testing, testing for disorders of the immune system, blood group antigens, antibodies, and genetics. Observation of donor blood collection,	Prerequisites: A grade of C or better in MDL244, acceptance into the Medical Laboratory Science program, and permission of the Program Director.	LAB 1.0 6.0 0.0

MDL246	Clinical Microbiology	Emphasis on microbial infectious and bioterrorism agents, classification, morphology, phenotyping, diseases, biotechnology and molecular technology, quality assurance and quality control, epidemiological significance, and regulatory standards. Application of antimicrobial, biochemical, and differential testing, drug resistance, selection, inoculation and incubation of culture media, isolation techniques, cell culture and viral detection tests, and macroscopic and microscopic evaluation. Emphasis on staining, rapid and commercial testing methods, safety precautions, specimen collection, handling, storage, and disposal of biological material, pretreatment, decontamination, and	Prerequisites: A grade of C or better in MDL244, acceptance into the Medical Laboratory Science program, and permission of the Program Director.	L+L 6.0 9.0 9.0
MDL247	Practicum: Clinical Microbiology	Practicum experience in clinical microbiology based in healthcare facilities or reference laboratories. Emphasis on microbial infectious and bioterrorism agents, classification, morphology, phenotyping, diseases, biotechnology and molecular technology, quality assurance and quality control, epidemiological significance, and regulatory standards. Application of antimicrobial, biochemical, and differential testing, drug resistance, selection, inoculation and incubation of culture media, isolation techniques, cell culture and viral detection tests, and macroscopic and microscopic evaluation. Procedures for staining, rapid and commercial testing methods, safety precautions, specimen collection, handling, storage, and disposal of	Prerequisites: A grade of C or better in MDL246, acceptance into the Medical Laboratory Science program, and permission of the Program Director.	LAB 1.0 9.0 0.0
MDL248	Clinical Chemistry	Principles and procedures of clinical chemistry and testing for diseases of protein, nonprotein nitrogen compounds, lipid, glucose, bilirubin, liver disease, cardiac and endocrine function, toxicology, therapeutic drug monitoring, acid base balance, electrolytes, and trace elements. Emphasis on quality assurance, quality control, mathematics and statistical analysis, specimen collection, and preanalytical processes. Study of immunoassays, nucleic acid probes, viral and tumor markers, automation of analytical techniques,	Prerequisites: A grade of C or better in MDL246, acceptance into the Medical Laboratory Science program, and permission of the Program Director.	L+L 6.0 9.0 9.0

MDL249	Practicum: Clinical Chemistry	Practicum in clinical chemistry based in healthcare facilities or reference laboratories. Performance of clinical skills in clinical chemistry and testing for diseases of protein, nonprotein nitrogen compounds, lipid, glucose, bilirubin, liver disease, cardiac and endocrine function, toxicology, therapeutic drug monitoring, acid base balance, electrolytes, genetic diseases and inborn errors of metabolism, and trace elements. Application of quality assurance, quality control, mathematics and statistical analysis, specimen collection, and preanalytical processes. Performance of immunoassays, nucleic acid probes, viral and tumor markers,	Prerequisites: A grade of C or better in MDL248, acceptance into the Medical Laboratory Science program, and permission of Program Director.	LAB 1.0 9.0 0.0
MDL252	Clinical Preparation I	Examines clinical laboratory testing in a simulated laboratory environment. Emphasis on interpretation, evaluation, and reporting of a variety of laboratory results, and includes instrument calibration,	Prerequisites: A grade of C or better in MDL244, acceptance into the Medical Laboratory Science program, and permission of Program Director.	L+L 0.5 2.5 2.5
MDL263	Clinical Preparation II	Continuation of examination of clinical laboratory testing in a simulated laboratory environment. Emphasis on interpretation, evaluation, and reporting of a variety of laboratory results, and includes instrument calibration,	Prerequisites: A grade of C or better in MDL248, acceptance into the Medical Laboratory Science program, and permission of Program Director.	L+L 0.5 2.5 2.5
MDL290	Medical Laboratory Science Program Review	Preparation for the professional practice national examinations. Topics include methodologies, techniques, and problem solving relative to urinalysis; body fluids, hematology, hemostasis, immunohematology, immunology, microbiology, and chemistry. Development of a professional practice resume, personalized test taking strategies and	Prerequisites: A grade of C or better in (MDL247 and MDL249), acceptance into the Medical Laboratory Science program and permission of Program Director.	LEC 2.0 2.0 2.0
MDL291	Medical Laboratory Science Program Capstone	Preparation for the professional practice national examinations. Topics include methodologies, techniques, and problem solving relative to urinalysis; body fluids, hematology, hemostasis, immunohematology, immunology, microbiology, and	Prerequisites: A grade of C or better in (MDL247 and MDL249), acceptance into the Medical Laboratory Science program and permission of Program Director.	LEC 1.0 1.0 1.0
MDL295AA	Special Topics: Medical Laboratory Science	Explores a special topic related to medical laboratory science. Topics vary and include concepts relevant to those advancing or pursuing careers in medical	Prerequisites: Permission of Program Director.	L+L 1.0 2.0 1.7
MDL295AB	Special Topics: Medical Laboratory Science	Explores a special topic related to medical laboratory science. Topics vary and include concepts relevant to those advancing or pursuing careers in medical	Prerequisites: Permission of Program Director.	L+L 2.0 3.0 2.7

MDL295AC	Special Topics: Medical Laboratory Science	Explores a special topic related to medical laboratory science. Topics vary and include concepts relevant to those advancing or pursuing careers in medical	Prerequisites: Permission of Program Director.	L+L 3.0 4.0 4.0
MEC101	HVAC I: Principles and Trade Calculations	Basic principles of heating, ventilating and air conditioning (HVAC). Trade calculations, algebraic and geometric equations, and scientific notation. Use and	Prerequisites: Registered apprentice status or permission of Apprenticeship Coordinator.	LEC 5.0 5.0 5.0
MEC103	HVAC II: Piping, Soldering, Brazing and Electrical	Application, preparation and joining of copper and plastic pipe. Soldering and brazing tools, materials, and procedures. Refrigeration cycle, furnace operation and maintenance. Use of multimeter and manometer. Electricity, electrical circuits, and electrical components. Measurement of voltage, current, resistance and circuit	Prerequisites: Registered apprentice status or permission of Apprenticeship Coordinator.	LEC 5.0 5.0 5.0
MEC105	Residential and Industrial Plumbing I	Plumbing practices, history, laws, codes, regulations and responsibility to the public. Usage and maintenance of hand and power tools. Workplace safety and Occupational Safety and Health Administration (OSHA) requirements. Application of basic plumbing calculations and principles of science as they relate to plumbing system installation and maintenance. Characteristics, advantages,	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	LEC 5.0 5.0 5.0
MEC106	HVAC III: Systems	Air distribution systems, measurement instruments and venting and sizing. Gas-fired equipment, furnaces, heating, ventilating, and air conditioning (HVAC) systems, and electric heating systems. Alternating current (AC) motors, circuit components and testing instruments. Maintenance, safety, troubleshooting, and	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	LEC 5.0 5.0 5.0
MEC107	Residential and Industrial Plumbing II	Application of advanced plumbing calculations to include percentages, conversions, fractions, decimals, square roots, circles, angles, measurement. First aid, personal safety, and Occupational Safety and Health Act (OSHA) guidelines. Materials handling, usage, advantages, and disadvantages. Fixtures I, II, III,	Prerequisites: A grade of C or better in MEC105.	LEC 5.0 5.0 5.0
MEC108	Residential and Industrial Plumbing III	Water piping materials. Sources and treatment of public, private, and individual water systems. Water distribution and supply systems. Cross-connection protection and pipe identification. Hot water heaters. Sanitary drainage systems. Plumbing calculations and blueprint reading.	Prerequisites: Registered apprentice status or permission of Apprenticeship Coordinator.	LEC 5.0 5.0 5.0

MEC118	Residential and Industrial Plumbing IV	Properties of water and plumbing traps. Air, air chamber, and sizing. High and low level pressure measurement. Manometer, gauge selection and use. Vibration, turbulence, and water hammer. Roof, floor	Prerequisites: Registered apprentice status or permission of Apprenticeship Coordinator.	LEC 5.0 5.0 5.0
MEC119	Basic Safety	Overview of safety rules and procedures for working on construction job sites	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	LEC 1.0 1.0 1.0
MEC120	Basic Calculations for Construction	Addition, subtraction, multiplication and division of whole, decimal, fraction and metric numbers. Percentage and fraction conversions. Metric units of length, weight, volume and temperature. Metric system as it relates to the construction trade. Basic algebra and	Prerequisites: None.	L+L 1.5 1.5 1.5
MEC121	Introduction to Hand and Power Tools	Overview of the use, maintenance and safety procedures for common hand and power tools.	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	LEC 1.0 1.0 1.0
MEC122	Rigging Safety and Equipment	Rigging safety, equipment and inspection. Includes crane hand signals, common rope knots, types of derricks and cranes and safety procedures for rigging	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	LEC 1.0 1.0 1.0
MEC124	HVAC IV: Equipment, Devices, Compressors and Pumps	Heat transfer and human comfort. Humidifiers and humidity. Air filters and air filter friction loss. Metering devices and expansion valves. Thermal expansion valves. Compressors and heat pumps. Installation, adjustment, replacement, service, troubleshooting. Reverse-cycling. Leak detection, evacuation, recovery, and charging heating, ventilating, and air conditioning	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	LEC 5.0 5.0 5.0
MEC201	HVAC V: Maintenance and Troubleshooting	Tools, instruments, equipment, components, procedures, materials, and tasks for preventative maintenance and troubleshooting of heating, ventilating and air conditioning (HVAC) systems. Microprocessor, gas, electric, and oil heating systems. Furnaces, electric	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	LEC 5.0 5.0 5.0
MEC203	HVAC VI: Troubleshooting Heating and Cooling Systems	Cooling and heating systems; heat pumps, Heating, Ventilation and Air Conditioning (HVAC) systems and accessories. Commercial heating and cooling systems. Air and water balancing systems. Steam systems.	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	LEC 5.0 5.0 5.0

MEC205	Residential and Industrial Plumbing V	Gas and plumbing code requirements. Residential, commercial, industrial, institutional plumbing practices. Fixtures, appliances, fixture fittings, valves, and trim. Gas piping installation, pipe sizing, pipe fittings and connections, appliances, regulators, meters, controls, and corrosion. Advanced plumbing calculations.	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	LEC 5.0 5.0 5.0
MEC206	HVAC VII: Air Quality and Energy Conservation	Advanced blueprint reading. Architectural, plumbing, mechanical, and electrical drawings. Submittal, transfer and design. Indoor air quality. Heating, Ventilating and Air Conditioning (HVAC) equipment, components, accessories and systems. Introduction to computers	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	LEC 5.0 5.0 5.0
MEC207	Residential and Industrial Plumbing VI	Advanced plumbing calculations. Offsets, tank capacities, volume and weight, ratios and proportions, sizing, and piping expansion. Energy, temperature, heat transfer, stratification, multiple heaters, and recirculation. Basic electricity and troubleshooting. Safety, current, motors, circuits, humidity and condensation. Plumbing, electrical,	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	LEC 5.0 5.0 5.0
MEC208	Residential and Industrial Plumbing VII	General considerations, leaks and drainage. Installation, repair, and service of residential, commercial, industrial, and institutional heating systems. In-ground and above-ground water piping, drainage, waste and vent. Fuel gas piping, lead products, water heaters, waste stoppages, and water hammer. Blueprint reading. Installation of waste systems. Interceptors and	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	LEC 5.0 5.0 5.0
MEC218	Residential and Industrial Plumbing VIII	Hydraulic and plumbing theory. Pumps, uses, and design. Pump performance curves, pump installation, and maintenance. Advanced blueprint reading, sketching, and material estimating. Plumbing code.	Prerequisites: A grade of C or better in MEC208.	LEC 5.0 5.0 5.0
MEC224	HVAC VIII: Water Treatment and HVAC Design	Water problems, remedies, maintenance, and treatment. Commercial water and steam systems. Inspection and evaluation. System start up and shutdown. Cooling towers; evaporative condensers, boilers, chillers, air handlers and forced air systems. Components, accessories and design factors.	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	LEC 5.0 5.0 5.0

MFC101	Technical Documentation	Analysis and interpretation of technical drawings (prints) common to manufacturing. Mathematical calculations for determining dimensions. Introduction and application of geometric dimensioning and tolerancing (GD&T).	Prerequisites: None.	84
MFC110	Inspection Techniques	Set-up and use of inspection tools and equipment per current industry standards. Selection, completion and interpretation of information from inspection forms.	Prerequisites: None.	72
MFC111	Geometric Dimensioning and Tolerance (GDT)	Controls of geometric dimensioning and tolerance (GDT) including the form, orientation, profile and location. Includes qualifying controls per engineering documentation for the American Society of Mechanical	Prerequisites: None.	102
MFC113	Coordinate Measuring Machines I	Fundamentals and general aspects of coordinate measuring machines (CMM). Basic measuring techniques and operation, including conformance to geometric dimensioning and tolerancing requirements using both manual and programmable (automatic)	Prerequisites: None.	84
MFC120	Introduction to Manual Machining	Introduces manual machining operations related to drilling, grinding, sawing, milling, and lathe processes. Development of fundamental skills, practices and safety applications in working with manual machine tools, hand tools, and related equipment common to manufacturing. Provides theoretical and practical experiences related to	Prerequisites: None.	168
MFC130	CNC Machine Operator	Designed to provide a fast-track to fundamental knowledge and skills necessary for entry-level, machine operator positions. Introduction to print reading, inspection, and safe startup and operation of multi-axis computer numerical control (CNC) machines. Topics include two and three-axis program interpretation and	Prerequisites: None.	150
MFC131	CNC Machining Level I	Introduction to safe startup and operation of multi-axis computer numerical control (CNC) machines. Topics include two and three-axis program interpretation and application, qualifying tooling, and tool offsets to	Prerequisites: None.	216
MFC131DC	CNC Machining Level I	Introduction to safe startup and operation of multi-axis computer numerical control (CNC) machines. Topics include two and three-axis program interpretation and application, qualifying tooling, and tool offsets to	Prerequisites: None.	216

MFC140	Manual CNC Programming	Introduction to manual computer numerical control (CNC) programming of word address language (G&M code) for CNC machine tools. Multi-axis CNC programming for CNC controlled machines. Computer based tool path verification, CNC controller tool path	Prerequisites: None.	67
MFC140DC	Manual CNC Programming	Introduction to manual computer numerical control (CNC) programming of word address language (G&M code) for CNC machine tools. Multi-axis CNC programming for CNC controlled machines. Computer based tool path verification, CNC controller tool path	Prerequisites: None.	67
MGT101	Techniques of Supervision	Overview of the foundations of supervision and how to get things done within an organization through other people. The functions of planning, organizing, staffing,	Prerequisites: None.	LEC 3.0 3.0 3.0
MGT105	Leadership for Citizenship	Characteristics and types of leaders, responsibilities of leadership, and ethics of leadership as related to	Prerequisites: None.	LEC 1.0 1.0 1.0
MGT109	Development of Professional Skills and Standards	Explores the skills and qualities necessary to develop and maintain a successful professional life. Topics include management/leadership skill development, effective job search, image development, career advancement, gender issues, professional conduct,	Prerequisites: None.	L+L 3.0 3.0 3.0
MGT126	Customer Service Skills and Strategies	Explores strategies to help improve job performance and develop a service-oriented philosophy. Uses practical training concepts and techniques to demonstrate how superior customer service can lead to competitive advantage and profitability in business. Focuses on both internal and external customers, interactions among people, processes, and systems	Prerequisites: None.	L+L 3.0 3.0 3.0
MGT147	Supply Chain Management	Supply chain management, including basic concepts and underlying principles of logistics and inventory	Prerequisites: None.	LEC 3.0 3.0 3.0
MGT148	Office Ethics and Culture	Ethical issues and standards in the office; making ethical choices. Relationships and attitudes in the	Prerequisites: None.	LEC 2.0 2.0 2.0
MGT157	Introduction to Statistical Analysis of Clinical and Bioscience Data for Managers	Introduction to basic concepts and applications of statistics, including data description, estimation probability as techniques for managing, collecting, summarizing and interpreting data. Includes the use of statistical computer software (e.g., SAS) used for the	Prerequisites: None.	L+L 3.0 5.0 5.0

MGT160	Project Management	Examination of concepts and methodologies for effective project management. Project planning and management from contract negotiations through project completion, including communications, human resources, management, and project scheduling as well	Prerequisites: Permission of Department or Division.	L+L 3.0 3.0 3.0
MGT175	Business Organization and Management	Covers basic principles of managing quality and performance in organizations. Covers management functions: planning, organizing, leading, and controlling. Emphasizes continual improvement, ethics, and social	Prerequisites: None.	LEC 3.0 3.0 3.0
MGT180	Retail Management	The role of management in retailing and retail performance. Challenges and processes of retail management across various institutions.	Prerequisites: None.	LEC 3.0 3.0 3.0
MGT227	Training and Instructional Design for Health Information Technology	Overview of learning management systems, instructional design software tools, teaching techniques and strategies, evaluation of learner competencies, maintenance of training records, and measurement of	Prerequisites: Permission of Program Director or Instructor.	LEC 3.0 3.0 3.0
MGT228	Management, Planning, and Leadership for Health Information Technology	Principles of leadership and effective management of teams for Health Information Technology. Emphasis on the leadership modes and styles best suited to IT deployment. Survey of health care and public health organization and delivery in the United States, with an emphasis on professional roles, legal, ethical, and regulatory issues, and payment systems. Analysis of	Prerequisites: A grade of C or better in GBS110 or MGT251 or Corequisites: GBS110 or MGT251.	LEC 3.0 3.0 3.0
MGT229	Management and Leadership I	Covers management concepts and applications for business, industry, and government organizations.	Prerequisites: None.	LEC 3.0 3.0 3.0
MGT230	Management and Leadership II	Includes practical applications of activities, issues, and problems related to current managerial and supervisory skills and talents.	Prerequisites: A grade of C or better in MGT229 or permission of Department or Division.	LEC 3.0 3.0 3.0
MGT242	Project Scope and Procurement Management	Scope management and procurement management in a project environment, including how a project's scope is planned, defined, and verified. Concepts of scope change management. Concepts of procurement management, including procurement planning, supplier solicitation, supplier selection, contract administration,	Prerequisites: A grade of C or better in TQM240 or permission of Instructor.	LEC 2.0 2.0 2.0

MGT243	Project Time and Cost Management	Time management and cost management in a project environment, including activity definition, sequencing and duration estimating. Schedule development and specific tools to support schedule creation and control. Project cost management including resource planning,	Prerequisites: A grade of C or better in TQM240 or permission of Instructor.	LEC 2.0 2.0 2.0
MGT244	Project Risk and Quality Management	Risk management and quality management in a project environment, including risk identification, risk aversion, and risk response planning. Presents techniques to perform risk analysis and risk response planning on projects. Concepts of quality management including quality planning, quality assurance and quality control.	Prerequisites: None.	LEC 2.0 2.0 2.0
MGT245	Project, Human Resources and Communications Management	Concepts of human resource management and communications management in a project environment, including project organizational planning, staff acquisition and team development. Concepts of project communications planning, information distribution,	Prerequisites: None.	LEC 2.0 2.0 2.0
MGT246	Principles of Project Management	Project Management principles expected of a Project Management Professional (PMP). Includes an overview of exam format, topics, and study techniques. Focus is on project scope, procurement, time, risk, cost, quality, human resource, communication, and integration	Prerequisites: A grade of C or better in TQM240 or permission of Instructor.	LEC 3.0 3.0 3.0
MGT247	Compensation and Benefits	Techniques and methodology for planning, coordinating and monitoring effective compensation and benefits programs within human resources.	Prerequisites: None.	LEC 3.0 3.0 3.0
MGT251	Human Relations in Business	Analysis of motivation, leadership, communications, and other human factors. Cultural differences that may create conflict and affect morale individually and within	Prerequisites: None. MGT101 or MGT175 or MGT229 suggested but not required.	LEC 3.0 3.0 3.0
MGT253	Owning and Operating a Small Business	Starting, organizing, and operating a small business, including location, finance management processes, advertisement and promotion, credit, inventory control	Prerequisites: None.	LEC 3.0 3.0 3.0
MGT270AA	Management Internship	Management work experience in a business or industry. 80 hours of designated work per credit.	Prerequisites: Permission of Department or Division.	L+L 1.0 1.0 0.0
MGT270AB	Management Internship	Management work experience in a business or industry. 80 hours of designated work per credit.	Prerequisites: Permission of Department or Division.	L+L 2.0 2.0 0.0
MGT270AC	Management Internship	Management work experience in a business or industry. 80 hours of designated work per credit.	Prerequisites: Permission of Department or Division.	L+L 3.0 3.0 0.0
MGT276	Human Resources Management	Human resource planning, staffing, training, compensating, and appraising employees in	Prerequisites: None. MGT101 or MGT175 or MGT229 suggested, but	LEC 3.0 3.0 3.0

MGT277	Labor Relations	Covers the historical, legal, and environmental parameters surrounding current labor/management relations, including contract negotiations and grievance	Prerequisites: None. MGT101 or MGT175 or MGT229 suggested but not required.	LEC 3.0 3.0 3.0
MGT286	Human Resource Employment Management	Techniques and methodology for coordinating and monitoring effective employment selection practices. Includes description of employment functions, staffing analysis, employment recruitment and advertising, applicant screening, interviewing and reference	Prerequisites: A grade of C or better in MGT276 or permission of Department or Division.	LEC 3.0 3.0 3.0
MGT289	Professional in Human Resources Test Preparation	Preparation for testing for Professional in Human Resources (PHR) certification. Includes responsibilities of the PHR in the development, implementation and management of budgets, workforce planning and employee training. Also covers compensation and	Prerequisites: None.	LEC 3.0 3.0 3.0
MGT290	Leadership Through Continuous Improvement: Leading Self	This course focuses on creating a culture of continuous improvement, problem solving and Kaizen thinking. Upon completion of this course the student will be able to create and facilitate a Huddle Board Meeting, conduct Gemba Walks, implement principles of total systems thinking, conduct 5S organizing principles, and	Prerequisites: None.	L+L 3.0 3.0 3.0
MGT291	Supervisor Essentials: Aspire to Lead	This course will introduce students to the essential tools and resources needed to be an effective supervisor. Emphasis on the important role leaders play in the success of an organization through compliance training, knowledge of work culture, and demonstrating traits of	Prerequisites: None.	L+L 3.0 3.0 3.0
MGT292	Employee Coaching and Development: Leading Others	Upon completion of this course, students will be able to utilize leadership and coaching skills along with ADOT's development tools and resources to cultivate and improve employee skills and team development and	Prerequisites: None.	L+L 3.0 3.0 3.0
MGT293	Collaborative Leadership: Leading Teams	This course focuses on the framework for how to effectively hire the right people and create a positive, engaging, growth environment that promotes employee retention. Upon completion of this course the student will be able to utilize emotional intelligence and humble inquiry to improve accountability, performance,	Prerequisites: None.	L+L 3.0 3.0 3.0

MGT296WA	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 1.0 5.0 0.0
MGT296WB	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 2.0 10.0 0.0
MGT296WC	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 3.0 15.0 0.0
MGT298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0

MGT298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
MGT298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
MHL130	Herstory: Women in Popular Music	Overview of the contributions made by women in the evolution of popular music and its industry	Prerequisites: None.	LEC 3.0 3.0 3.0
MHL140	Survey of Music	Study of composers, compositions, styles, and periods	Prerequisites: None.	LEC 3.0 3.0 3.0
MHL143	Music in World Cultures	Non-European musical traditions including the study of music in rituals, musical instruments and the impact of	Prerequisites: None.	LEC 3.0 3.0 3.0
MHL145	American Jazz and Popular Music	The study of cultural and social contributions to the evolution of American jazz and popular music from the	Prerequisites: None.	LEC 3.0 3.0 3.0
MHL146	Survey of Broadway Musicals	Survey of Broadway musicals traced from their origins to the present viewed in their cultural, political, and socioeconomic contexts. Emphasis on stylistic periods, composers, lyricists, directors, and choreographers.	Prerequisites: None.	LEC 3.0 3.0 3.0
MHL153	Rock Music and Culture	History of Rock music and how cultural, social, political, and economic conditions have shaped its evolution.	Prerequisites: None.	LEC 3.0 3.0 3.0
MHL155	Survey of American Music	History of the music of North America from the earliest American Indian music to the present. Introduction to the musical trends, composers, socioeconomic developments and trends, musical forms and styles that	Prerequisites: None.	LEC 3.0 3.0 3.0
MHL156	Music in Latin America and the Caribbean	To discuss the role of music in Latin and Caribbean cultures and the impact of these cultures on music. To present a historical survey to the evolution and development of musical styles from rumba to reggae. Among the topics, and to include: origins, gender, race, ethnicity, politics, elements of music, instruments, both sacred and secular music, and significant individuals	Prerequisites: None.	LEC 3.0 3.0 3.0

MHL159	Mexican Music History	History of the music of Mexico from early indigenous music to the present. Introduction to the musical origins, genres, and cultural influences in the context of social	Prerequisites: None.	LEC 3.0 3.0 3.0
MHL194	Music and Culture	Introduction to the study of multicultural music in its social, cultural, historical and economic contexts. Performance of music using percussion, rhythm, and the human body. Historical and social aspects of global	Prerequisites: A grade of C or better in MTC101 or a higher level MTC course; or Corequisites: MTC105 and MTC106 or permission of Instructor.	LEC 3.0 3.0 3.0
MHL204	Hip-Hop Music and Culture	A history of Hip-Hop's musical and artistic elements and how cultural, social, political, and economic conditions have shaped its evolution.	Prerequisites: A grade of C or better in ENG101, or ENG107, or permission of Instructor.	LEC 3.0 3.0 3.0
MHL241	Music History and Literature to 1750	In-depth study of music history from the primitive era through the Baroque period.	Prerequisites: A grade of C or better in MTC155 and MTC156 or Corequisites: MTC155 and MTC156 or permission of Instructor.	LEC 3.0 3.0 3.0
MHL242	Music History and Literature 1750 to Present	In-depth study of music history from the Classical period through the Contemporary period	Prerequisites: A grade of C or better in MHL241 or permission of Instructor.	LEC 3.0 3.0 3.0
MHL295	Topics in Music	Exploration of selected topics in music. Focuses on a theme, era, genre, concept, or critical approach. Analysis and interpretation of topic's representation, development, and significance in a variety subjects related to music humanities. Includes reading, listening	Prerequisites: A grade of C or better in ENG101, or ENG107, or permission of Instructor.	LEC 3.0 3.0 3.0
MHL298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0

MIC101	Fundamentals of Healthcare Interpreting	This course introduces the field of interpreting, interpretation models, cognitive processes associated with interpretation, professional ethical standards, employment opportunities, bilingual customer service, and working conditions. Topics include pronunciation, medical vocabulary, resources, legal issues, code of ethics, standards of practice, certification, interpreter assessments/qualifications, and protocol associated with various settings. Upon completion, students should be able to interpret English/Spanish and Spanish/English simulated health care encounters,	Prerequisites: 1. A grade of C or better in RDG100 or higher or appropriate reading placement into CRE101. 2. Receive a Pass on the bilingual oral exam.	80
MIC103	Medical and Clinical Development	Basic anatomy, physiology, and medical terminology in Spanish and English for health care settings. Emphasis on pronunciation of commonly used medical abbreviations for medical specialists and branches of medicine. Students will analyze, define, and correctly spell medical terms and abbreviations. Systems to be covered are: cardiovascular, respiratory, digestive, musculoskeletal, genitourinary, endocrine, immune, and nervous. Common test procedures for each system. Cancer and first response interpretation roles will also be covered. Students also participate in activities to prepare for clinical externships, taken by in-person	Prerequisites: MIC101 or SPA205 with a C or better, or with Program Manager approval.	80

MIC104	Medical Spanish/English Interpreting	This course covers Spanish/English interpreting in a medical context and setting. The course introduces the field of interpreting, interpretation models, cognitive processes associated with interpretation, professional ethical standards, bilingual customer service and working conditions. Students will focus on pronunciations, medical terminology, resources, legal issues, code of ethics, standards of practice, certification requirements, interpreter assessments/qualifications and protocol associated with various settings. Students will also focus on review of professional conduct and first response interpretation. Upon completion, students should be able to interpret English/Spanish and Spanish/English simulated health care encounters, explain how to prepare for and manage an interpreted encounter, and apply ethical	Prerequisites: Program admission. Successful completion of RDG100 or higher or appropriate reading placement into CRE101. Receive a 'Pass' on the bilingual oral exam.	80
MIC105	Medical Interpreter Clinical Practicum	Practical training and application of healthcare interpreting under direct supervision of clinical or hospital preceptor. Students will train with staff interpreters or dual-role interpreters. Documentation of daily interpreter attendance logs and a satisfactory performance evaluation are required to successfully complete the clinical. Students must meet the clinical facilities requirements prior to beginning. Clinical hours will vary and students are expected to travel and have reliable transportation.	Prerequisites: 1. A grade of C or better in (MIC101 and MIC103), or (SPA205 and SPA206), or MIC104, or permission of Program Manager. 2. Background check requirements in compliance with the Maricopa County Community College District Supplemental Background Check Policy. 3. Students also must provide a copy of an Arizona Department of Public Safety Level One Fingerprint Clearance Card. Students must maintain current fingerprint clearance throughout the clinical(s). 4. Complete and submit the Allied Health Student Health and Safety Documentation Checklist, with included documentation 5. Students are responsible to meet the requirements of the background	40

MIC106	Medical Interpreter Clinical and Simulated Hybrid Practicum	Practical training and application of healthcare interpreting through simulated clinical experiences. Students will conduct a total of 40 hours of simulated clinicals where they will interpret on behalf of the patient and healthcare staff. Students will receive daily performance evaluations and must successfully complete all competencies and attendance requirements to successfully complete this course. Students who are enrolled in the Medical Interpreter-Spanish program or the Spanish Interpreting for Healthcare Professionals program are required to either complete a practicum at a clinical site or a simulated	Prerequisites: A grade of C or better in (MIC101 and MIC103), or (SPA205 and SPA206), or MIC104, or permission of Program Manager.	40
MIS101	Introduction to the United States Army	Introduces the personal challenges and competencies that are critical for effective leadership and communication. Students learn how the personal development of life skills such as cultural understanding, goal setting, time management, stress management and comprehensive fitness relate to leadership, officership and the Army profession. Focuses on developing basic knowledge and comprehension of Army leadership dimensions, attributes and core leader competencies while gaining an understanding of the Army ROTC program, its	Prerequisites: None.	LEC 4.0 3.0 0.0 LAB 0.0 2.0 0.0
MIS102	Foundation of Agile and Adaptive Leadership	Introduces the professional challenges and competencies that are needed for effective execution of the profession of arms and Army communication. Through this course, students learn how ethics and values shape the Army and the specific ways that these ethics are inculcated into Army culture. Explores the seven Army values and the warrior ethos, investigate the profession of arms and Army leadership as well as an overview of the Army, and gains practical experience	Prerequisites: A grade of C or better in MIS101.	LEC 4.0 3.0 0.0 LAB 0.0 2.0 0.0

MIS201	Army Leadership and Decision Making	Academically challenging course where students study, practice and apply the fundamentals of Army leadership, officership, Army values and ethics, personal development and small-unit tactics at the platoon level. Requires the student to demonstrate writing skills and present information briefings as preparation for development in becoming a successful future officer. Includes reading assignments, homework assignments, small group assignments, briefings, case studies, practical exercises, a mid-term exam and final	Prerequisites: A grade of C or better in MIS101 and MIS102.	LEC 4.0 3.0 0.0 LAB 0.0 2.0 0.0
MIS202	Army Doctrine and Team Development	Academically challenging course where students study, practice and apply the fundamentals of the leadership, officer skills, Army values and ethics, personal development and tactics at the small-unit level. Focuses on cross-cultural competencies as they relate to Army doctrine and how they apply in a combatant commander's engagement strategies. Stresses Army values, teamwork and warrior ethos and their relationship to the law of land warfare and philosophy of military service. Covers the ability to lead and follow through team building exercises in small units up to squad level. Requires the student to demonstrate writing skills and present information briefings as	Prerequisites: A grade of C or better in MIS101, MIS102 and MIS201.	LEC 4.0 3.0 0.0 LAB 0.0 2.0 0.0
MIT106	Industrial Safety	Safety, health management, and accident prevention in industrial work environment. Role of Occupational Safety and Health Administration (OSHA) act, materials handling, electrical safety, machine safety, first response to fire and medical emergencies, safety signs and color codes, recognition of safety and health	Prerequisites: None.	LEC 2.0 2.0 2.0

MIT120	Industrial Technology Fundamentals	Theories and concepts in industrial technology basics and OSHA 10 certification. Introductory concepts in industrial math, hand and power tools, technical drawings, rigging, and materials handling. Emphasis on communication and employability skills. Included labs emphasize and anchor the course material. Safety and management expectations. Defense in depth strategy and conduct of verifications. Maintenance procedures. Work control process. Performance of work standards and documentation including pre-job preparation, pre-	Prerequisites: None.	L+L 3.0 5.0 5.0
MIT121	Industrial Technology I-A	Principles of Industrial Maintenance Technology. Modules include theory and applications in tools of the trade, fasteners and anchors, oxyfuel cutting, gaskets and packing, technical mathematics, and technical drawings. Included labs emphasize and anchor the	Prerequisites: A grade of C or better in MIT120 or Corequisites: MIT120 or permission of Instructor.	L+L 3.0 5.0 5.0
MIT122	Industrial Technology I-B	Principles of Industrial Maintenance Technology. Modules include theory and applications in pumps and valves, test instruments, rigging, mobile and support equipment, and lubrication. Included labs emphasize	Prerequisites: A grade of C or better in MIT120 or Corequisites: MIT120 or permission of Instructor.	L+L 3.0 5.0 5.0
MIT123	Industrial Mechanical Technology II-A	Basic layout, introduction to piping components, copper and plastic piping practices, introduction to ferrous metal piping practices, identifying, installing and maintaining valves, hydrostatic and pneumatic testing, introduction to bearings, and low-pressure steam	Prerequisites: A grade of C or better in MIT122 or permission of Instructor.	L+L 3.0 5.0 5.0
MIT124	Industrial Mechanical Technology II-B	High pressure steam systems and auxiliaries, distillation towers and vessels, heaters, furnaces, heat exchangers, cooling towers, fin fans, and introduction to tube work. Included labs emphasize and anchor the	Prerequisites: A grade of C or better in MIT122 or permission of Instructor.	L+L 3.0 5.0 5.0
MIT133	Industrial Electrical and Instrumentation Technology II-A	Industrial safety for E and I technicians, introduction to the National Electrical Code, electrical theory, alternating current, electrical and instrumentation test equipment, flow, pressure, level, and temperature.	Prerequisites: A grade of C or better in MIT122 or permission of Instructor.	L+L 3.0 5.0 5.0
MIT134	Industrial Electrical and Instrumentation Technology II-B	Process mathematics, hand bending, tubing, clean, purge, and test tubing and piping systems, instrument drawings and documents, conductors and cables, and conductor terminations and splices. Included labs	Prerequisites: A grade of C or better in MIT122 or permission of Instructor.	L+L 3.0 5.0 5.0

MIT209	Automated Manufacturing	Evolution of automation in manufacturing from fixed (hard) automation to Computer Integrated Manufacturing (CIM) is presented with numerical control (NC); computer-aided design/computer-aided manufacturing (CAD/CAM); automated material handling; automation communication protocol. Manufacturing management strategies include statistical process control (SPC); material requirements planning (MRP); manufacturing resource planning (MRPII); and	Prerequisites: A grade of C or better in ELT131 or ELE131 or equivalent.	L+L 3.0 6.0 6.0
MKT101	Introduction to Public Relations	Emphasizes public relations techniques used both within and outside the business organization, including	Prerequisites: None.	LEC 3.0 3.0 3.0
MKT109	Introduction to Fashion Merchandising	Explores the various levels and specialized segment of the fashion industry, the principles of fashion, the fundamentals of merchandising apparel, consumers'	Prerequisites: None.	LEC 3.0 3.0 3.0
MKT110	Marketing and Social Networking	Theory and practice in the use of social media in marketing. Topics may include a history of social media, preparation for social marketing, the power of collective influence, and how to engage with social media. Reviews social mediums, social networks, platforms and	Prerequisites: None.	LEC 3.0 3.0 3.0
MKT111	Applied Marketing and Social Networking	Examination of the strategic use of digital and social media marketing platforms and tools for global communication and networking, including analysis of various digital and social media platforms and tools for developing brands, creating professional networks and creating engaging content. Hands-on use of social media platforms and tools to conduct research, develop strategies for creating, integrating, and evaluating social	Prerequisites: A grade of C or better in MKT110.	L+L 3.0 4.0 4.0
MKT112	Retail Customer Service	Introduction to the field of retail sales. Emphasis on customer service and sales techniques	Prerequisites: None.	LEC 1.0 1.0 1.0
MKT114	Retail Inventory Control	Retail inventory control procedures. Emphasis on the role of the professional sales associate within a retail company and in the handling of merchandise	Prerequisites: A grade of C or better in MKT112.	LEC 1.0 1.0 1.0
MKT151	Display and Visual Merchandising	An examination of the principles of design including line, color, balance, and texture as they relate to the display of merchandise. Participation in displays, field	Prerequisites: None.	L+L 3.0 4.0 4.0
MKT200	Retail Buying	Examines management/buyer role in investment, pricing, planning, controlling sales and inventories Any BPC/CIS spreadsheet course recommended.	Prerequisites: None. A grade of C or better in any BPC/CIS spreadsheet course recommended.	LEC 3.0 3.0 3.0

MKT263	Advertising Principles	Introduces the advertising function within business, including media study, creative strategies, and advertising campaigns MKT271 suggested, but not	Prerequisites: None. MKT271 suggested but not required.	LEC 3.0 3.0 3.0
MKT267	Principles of Sales	Analyzes and applies the steps and techniques used in personal selling. Highlights the role of the professional sales representative and his/her functions as they relate to the company's mission and customer expectations.	Prerequisites: None.	LEC 3.0 3.0 3.0
MKT268	Merchandising	Surveys structure and operation of retail organizations. Emphasizes merchandising to include price, location,	Prerequisites: None. MKT271 suggested but not required.	LEC 3.0 3.0 3.0
MKT271	Principles of Marketing	An analysis of the marketing process and environment with regard to the product, pricing, distribution, and communication in order to satisfy buyer needs	Prerequisites: None.	LEC 3.0 3.0 3.0
MKT273	Marketing Research	Planning and preparing for a marketing research effort and presentation of research findings in a professional manner. Includes the study of problem definition, sampling methods, statistical analysis, presentation	Prerequisites: A grade of C or better in MKT271 or permission of Instructor.	LEC 3.0 3.0 3.0
MKT274AC	Fashion Merchandising Study Tour	A tour of the fashion merchandising industry outside the metropolitan Phoenix area. Includes a variety of experiences and activities to enhance awareness of this	Prerequisites: Permission of Department or Division.	LAB 3.0 15.0 3.0
MKT277	Advanced Sales	Advanced selling and communication techniques.	Prerequisites: A grade of C or better in MKT267 or permission of Department or Division.	LEC 3.0 3.0 3.0
MKT280AA	Marketing Internship	Marketing work experience in a business or industry. 80 hours of designated work per credit.	Prerequisites: Permission of Department or Division.	L+L 1.0 1.0 0.0
MKT280AB	Marketing Internship	Marketing work experience in a business or industry. 80 hours of designated work per credit.	Prerequisites: Permission of Department or Division.	L+L 2.0 2.0 0.0
MKT280AC	Marketing Internship	Marketing work experience in a business or industry. 80 hours of designated work per credit.	Prerequisites: Permission of Department or Division.	L+L 3.0 3.0 0.0
MKT296WA	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 1.0 5.0 0.0

MKT296WB	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 2.0 10.0 0.0
MKT296WC	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 3.0 15.0 0.0
MKT296WD	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 4.0 20.0 0.0
MKT298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0

MKT298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
MKT298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
MMT184	Digital Animation I	The art of animation (animated sequences, special effects, titles, etc.) using the computer. Construction characters, background graphics, color, scaling, storyboard, cells, timing, editing, and surface rendering.	Prerequisites: A grade of C or better in (ART111 or ART116) or permission of Instructor. Corequisites: AVC100 or permission of Instructor.	L+L 3.0 6.0 6.0
MMT185	3D Modeling and Animation I	Basic concepts of 3D modeling. Anatomy of computer geometry; basic elements that make computer models- curves, surfaces, non-uniform rational basis spline (NURBS), and polygons. 3D translation, shading,	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: AVC100 or permission of Instructor.	L+L 3.0 6.0 6.0
MMT186	Modeling for Digital Media	Development of 3-D models for multimedia productions. 3-D logos, objects, and advanced animation projects using special effects.	Prerequisites: A grade of C or better in AVC/MMT184 or permission of Instructor. Xref: AVC184	L+L 3.0 6.0 6.0
MMT190	Art of Web Site Design	Introduction to design production for websites. Layout, typography and presentation style for HTML (Hyper Text Markup Language). Design of mock-ups using digital design software to produce artistic form and content for the Web using Hyper Text Markup Language (HTML), digital text, and graphics. Discussion of color, proportion, typography and Web-specific design principles. Emphasizes design of cross-browser	Prerequisites: A grade of C or better in AVC100, or permission of Instructor.	L+L 3.0 6.0 6.0

MMT216	Multimedia Project Management	Interactive video and multimedia project management including defining, analyzing, designing, and validating interactive/multimedia applications; building and managing development and production teams; planning, budgeting, and scheduling; interactive/multimedia authoring; project implementation;	Prerequisites: None.	L+L 3.0 6.0 6.0
MMT285	3D Modeling and Animation II	Advanced techniques for 3D modeling and computer animation. Creating and applying 2D background and 3D model textures, creating and applying special effects to models and animation, designing, modeling, and	Prerequisites: A grade of C or better in AVC/MMT185. Xref: AVC185	L+L 3.0 6.0 6.0
MMT298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
MMT298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
MMT298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
MNG300	Management Principles	Overview of the opportunities and challenges involved in the management process. Exploration of the functions of management, business ethics and social responsibility, entrepreneurial mindsets, operations management, decision making, and human resources. Emphasis placed on managing for excellence in both	Prerequisites: A grade of C or better in (ACC212, GBS205, GBS221, and GBS233), or permission of Instructor.	LEC 3.0 3.0 3.0

MNG305	Organizational Management and Behavior	Overview of management skills and concepts as they relate to organizational culture and behavior. Focus on organizational structure and dynamics. Emphasis on leadership skills, communication, motivating employees,	Prerequisites: A grade of C or better in (ACC212, GBS205, GBS221, and GBS233), or permission of Instructor.	LEC 3.0 3.0 3.0
MNG310	Accounting for Managers	Examination of financial and managerial accounting concepts relevant to making business decisions based on financial information and for evaluation of company performance. Topics include accounting's conceptual framework, financial statement analysis, and managerial	Prerequisites: A grade of C or better in ACC212, or permission of Instructor.	LEC 3.0 3.0 3.0
MNG405	Applied Human Resource Management	Overview of human resources management, focusing on skills and knowledge necessary to effectively lead employees. Detailed coverage of jobs and labor, talent development, compensation, and employee relations. Emphasis on how human resource management	Prerequisites: A grade of C or better in MNG300, or permission of Instructor.	LEC 3.0 3.0 3.0
MNG410	Project Management Principles	Integrated introduction to Project Management. Examination of fundamental managerial and technical aspects of Project Management activities. Focus on initiating, planning, executing, and assessing projects.	Prerequisites: A grade of C or better in MNG300, or permission of Instructor.	LEC 3.0 3.0 3.0
MNG415	Change Management	Overview of managing change within organizations. Emphasis on theories, processes, and applications. Explore strategies for leading and implementing change initiatives and managing employees through change.	Prerequisites: A grade of C or better in MNG300, or permission of Instructor.	LEC 3.0 3.0 3.0
MNG425	Strategic Management	Overview of theory and application of strategic management principles. Exploration of an organization's position, capabilities, and resources used to gain a competitive advantage. Emphasis on the alignment of	Prerequisites: A grade of C or better in (BUS305, MNG300, MNG305, and MNG310), or permission of Instructor.	LEC 3.0 3.0 3.0
MNG490	Management Capstone	Demonstration of acquired knowledge and skills through analysis of complex business cases. Includes the development of a career plan, with a focus on career research, application materials, and the development of a career strategy. Students will present a portfolio	Prerequisites: A grade of C or better in (BUS305, BUS310, MNG300, MNG305, and MNG310), or permission of Instructor.	L+L 3.0 4.0 4.0

MNT110	Nanotechnology: What It Is and Why It Matters	Designed to provide students with a strong fundamental understanding of the scientific principles, processing, and applications of nanotechnology. Includes the concepts of chemical bonding, quantum mechanics, and microstructure applied to various nanomaterials and their use in electronic devices, composites, computing, and various other biological, medical, energy-related, and current consumer applications. Introduces	Prerequisites: None.	LEC 3.0 3.0 3.0
MNT112	Semiconductor Industry Overview	Provides an overview of the semiconductor industry and the manufacturing process, including raw materials to finished products. Covers key events, various career paths, and types of skills and qualifications. Emphasis on quality control standards, environmental and ethical considerations, economic and political impacts, and	Prerequisites: None.	LEC 3.0 3.0 3.0
MNT115	Semiconductor Manufacturing Processes	Covers semiconductor manufacturing principles and processes, including MEMS, materials, safety, equipment, and strategies for maintaining contaminant-	Prerequisites: None.	LEC 3.0 3.0 3.0
MNT119	Introduction to Vacuum Technology	Equips technicians with essential knowledge and skills in vacuum technology critical to semiconductor	Prerequisites: None.	LEC 1.0 1.0 1.0
MNT120	Introduction to Microelectromechanical Systems (MEMS)	Overview of fundamentals of the scientific principles, processing, and applications of microelectromechanical systems (MEMS). Covers topics in applications, fabrication methods, characterization, and commercialization concepts as well includes surface micromachining, patterning, etching and deposition processes in addition to cleanroom protocol and safety.	Prerequisites: None.	L+L 3.0 4.0 4.0
MNT130	Introduction to Light and Lasers	Introduces the fundamentals of light, optics, and lasers. Covers the nature and properties of light (such as energy, amplitude, wavelength, frequency, period, phase, propagation). Addresses geometrical optics (reflection, diffraction, imaging, thin lens formula, lens maker's equation), wave optics (interference, diffraction, polarization), and the basic principles and practical applications of lasers. Covers optical handling and positioning, light sources, laser classifications and	Prerequisites: A grade of C or better in MAT114, or MAT115, or MAT12+, or MAT15+ or higher, OR an appropriate district placement for MAT15+ or higher, OR permission of Instructor or Department/Division Chair.	L+L 4.0 6.0 6.0

MNT140	Careers and Professional Skills in Nanotechnology	Introduction to professional skills unique to the field of nanotechnology fabrication. Emphasis on teamwork, problem solving, cultural diversity in the workplace, communication, and continuous professional	Prerequisites: None.	LEC 1.0 1.0 1.0
MNT201	Materials, Safety, and Equipment for Nanotechnology	Safety procedures and equipment used in the micro and nanotechnology industries. Covers chemical, biological, and energy safety protocol as well as infrastructure facilities and systems. Also includes an overview of the structural, chemical, and physical	Prerequisites: None.	L+L 3.0 4.0 4.0
MNT210	Basic Nanotechnology Processes	Introduction to basic nanotechnology processes and a comparison of top-down and bottom-up manufacturing processes. Covers characteristics of plasma and its application to additive and subtractive processes. Also includes basic pattern transfer processes, laser	Prerequisites: None.	L+L 3.0 4.0 4.0
MNT215	Micro and Nano Fabrication Tools and Techniques	Introduction to basic micro and nanotechnology tools and processes and a comparison of top-down and bottom-up manufacturing processes. Covers characteristics of plasma and its application to additive and subtractive processes. Also includes basic pattern transfer processes, laser ablation, and chemical and physical vapor deposition. Aligned with materials,	Prerequisites: None.	L+L 3.0 4.0 4.0
MNT220	Materials in Nanotechnology	Examination of material used in the field of nanotechnology. Covers colloids, nanoparticles, oxides, and quantum dots in addition to self-assembly applications. Also includes biocompatibility and the dry	Prerequisites: None.	L+L 3.0 4.0 4.0
MNT225	Material Properties and Effects of Size	Examination of materials used in the field of nanotechnology. Covers nanoparticles, oxides, and dielectric materials selection and modification. Also includes biocompatibility and applications for	Prerequisites: A grade of C or better in MNT201 or permission of Instructor.	L+L 3.0 4.0 4.0
MNT230	Patterning for Nanotechnology	Overview of patterning processes in nanotechnology. Includes photolithography techniques, technology, and tools. Covers photoresist applications and unique lithography techniques, including block polymer	Prerequisites: None.	L+L 3.0 4.0 4.0

MNT235	Nanotechnology Characterization Tools and Techniques	Overview of characterization tools and techniques for nanotechnology structures and materials. Includes procedures for light, physical, and electron beam characterization. Also includes tools and processes for advanced Scanning Probe Microscopy (SPM) and surface analysis. Aligns with ASTM Nano-Characterization standards and its exam. Additional	Prerequisites: A grade of C or better in MNT201 or permission of Instructor.	L+L 3.0 4.0 4.0
MNT240	Nanotechnology Applications	An introduction to the practical application of emerging technologies in nanoscience. Includes applications for health sciences, energy, manufacturing, electronics, the	Prerequisites: None.	L+L 3.0 4.0 4.0
MNT245	Advanced Topics in Light and Lasers	Advanced principles and applications of light and lasers. Addresses Photonic Integrated Circuits (PIC) concepts, materials, fabrication technologies, and applications. Describes silicon PIC and III-V semiconductor devices in addition to completion of applicable calculations. Addresses lasers and PICs in diverse applications in telecommunications, data	Prerequisites: A grade of C or better in MNT130, or OPT105, or permission of Instructor. MAT182 is recommended but not required.	L+L 3.0 4.0 4.0
MNT250	Characterization of Nanotechnology Structures and Materials	Overview of characterization tools and techniques for nanotechnology structures and materials. Includes in-situ and ex-situ characterization as well as procedures for light, physical and electron beam characterization. Also includes tools and processes for advanced	Prerequisites: None.	L+L 3.0 4.0 4.0
MPT101	Technical Documentation	Analysis and interpretation of technical drawings (prints) common to manufacturing. Mathematical calculations for determining dimensions. Introduction and application of Geometric Dimensioning and Tolerancing (GD&T).	Prerequisites: None.	L+L 3.0 5.0 5.0
MPT101MP	Technical Documentation	Analysis and interpretation of technical drawings (prints) common to manufacturing. Mathematical calculations for determining dimensions. Introduction and application of Geometric Dimensioning and Tolerancing (GD&T).	Prerequisites: None.	LEC 3.0 1.0 1.0 LAB 0.0 4.0 4.0
MPT110	Inspection Techniques	Setup and use of inspection tools and equipment per current industry standards. Selection, completion and interpretation of information from inspection forms.	Prerequisites: None.	L+L 3.0 5.0 5.0
MPT110MP	Inspection Techniques	Setup and use of inspection tools and equipment per current industry standards. Selection, completion and interpretation of information from inspection forms.	Prerequisites: None.	LEC 3.0 1.0 1.0 LAB 0.0 4.0 4.0

MPT111	Geometric Dimensioning and Tolerance (GDT)	Controls of geometric dimensioning and tolerance (GDT) including the form, orientation, profile and location. Includes qualifying controls per engineering documentation for the American Society of Mechanical	Prerequisites: None.	L+L 3.0 5.0 5.0
MPT111MP	Geometric Dimensioning and Tolerance (GDT)	Controls of geometric dimensioning and tolerance (GDT) including the form, orientation, profile and location. Includes qualifying controls per engineering documentation for the American Society of Mechanical	Prerequisites: None.	LEC 3.0 1.0 1.0 LAB 0.0 4.0 4.0
MPT113	Coordinate Measuring Machines I	Fundamentals and general aspects of Coordinate Measuring Machines (CMM). Basic measuring techniques and operation, including conformance to geometric dimensioning and tolerancing requirements using both manual and programmable (automatic)	Prerequisites: A grade of C or better in (MPT101 or MPT101MP) and (MPT110 or MPT110MP), or permission of Program Director.	L+L 3.0 4.0 4.0
MPT120	Introduction to Manual Machining	Introduces manual machining operations related to drilling, grinding, sawing, milling, and lathe processes. Development of fundamental skills, practices and safety applications in working with manual machine tools, hand tools, and related equipment common to manufacturing. Provides theoretical and practical experiences related to	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: (MPT101 or MPT101MP) and (MPT111 or MPT111MP), or permission of Program Director.	L+L 4.0 6.0 6.0
MPT120MP	Introduction to Manual Machining	Introduces manual machining operations related to drilling, grinding, sawing, milling, and lathe processes. Development of fundamental skills, practices and safety applications in working with manual machine tools, hand tools, and related equipment common to manufacturing. Provides theoretical and practical experiences related to	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: (MPT101 or MPT101MP) and (MPT111 or MPT111MP), or permission of Program Director.	LEC 4.0 2.0 2.0 LAB 0.0 4.0 4.0
MPT130	CNC Machine Operator	Designed to provide a fast track to fundamental knowledge and skills necessary for entry-level machine operator positions. Introduction to print reading, inspection, and safe start-up and operation of multi-axis Computer Numerical Control (CNC) machines. Topics include two- and three-axis program interpretation and	Prerequisites: None.	L+L 6.0 10.0 10.0
MPT130MP	CNC Machine Operator	Designed to provide a fast track to fundamental knowledge and skills necessary for entry-level machine operator positions. Introduction to print reading, inspection, and safe start-up and operation of multi-axis Computer Numerical Control (CNC) machines. Topics include two- and three-axis program interpretation and	Prerequisites: None.	LEC 6.0 3.0 3.0 LAB 0.0 7.0 7.0

MPT131	CNC Machining Level I	Introduction to safe start-up and operation of multi-axis Computer Numerical Control (CNC) machines. Topics include two- and three-axis program interpretation and application, qualifying tooling, and tool offsets to	Prerequisites: A grade of C or better in MPT120 or MPT120MP or permission of Program Director.	L+L 6.0 10.0 10.0
MPT131MP	CNC Machining Level I	Introduction to safe start-up and operation of multi-axis Computer Numerical Control (CNC) machines. Topics include two- and three-axis program interpretation and application, qualifying tooling, and tool offsets to	Prerequisites: A grade of C or better in MPT120 or MPT120MP or permission of Program Director.	LEC 6.0 3.0 3.0 LAB 0.0 7.0 7.0
MPT132	CNC Machining Level II	Safe setup and operation of multi-axis Computer Numerical Control (CNC) machines. Topics include multi-axis programming, qualifying tooling, and tool offsets to produce a product to industry standards.	Prerequisites: A grade of C or better in MPT130 or MPT130MP or MPT131 or MPT131MP or permission of Program Director.	L+L 3.0 5.0 5.0
MPT132MP	CNC Machining Level II	Safe setup and operation of multi-axis Computer Numerical Control (CNC) machines. Topics include multi-axis programming, qualifying tooling, and tool offsets to produce a product to industry standards.	Prerequisites: A grade of C or better in MPT130 or MPT130MP or MPT131 or MPT131MP or permission of Program Director.	LEC 3.0 2.0 2.0 LAB 0.0 3.0 3.0
MPT140	Manual CNC Programming	Introduction to Manual Computer Numerical Control (CNC) programming of Word Address Language (G&M Code) for CNC machine tools. Multi-axis CNC programming for CNC controlled machines. Computer based tool path verification, CNC controller tool path	Prerequisites: A grade of C or better in (MPT130 or MPT130MP) or (MPT131 or MPT131MP) or machine shop experience or permission of Program Director.	LEC 3.0 2.0 2.0 LAB 0.0 3.0 3.0
MPT150	Introduction to SolidWorks	Introduction to CAD modeling, solid part generation, assembly of parts, and working drawing creation. Applications of CAD/CAM in Computer Integrated	Prerequisites: None.	LEC 3.0 2.0 2.0 LAB 0.0 3.0 3.0
MPT151	Solid Design I: SolidWorks	Introduction to solid modeling and parametric design of mechanical components. Use of SolidWorks commands. Creation of single part in two-dimensional (2D) sketch, three-dimensional (3D) solid. Feature based components and feature associativity. Initial preparation	Prerequisites: A grade of C or better in (MPT101 or MPT101MP) and (MPT111 or MPT111MP), or permission of Program Director.	L+L 3.0 5.0 5.0
MPT152	Solid Design: Certified SolidWorks Associate/Certified SolidWorks Professional Test	Preparation for latest Certified SolidWorks Associate (CSWA) or Certified SolidWorks Professional (CSWP) exam. Includes exam objectives, solid design, assemblies, COSMOSXpress, and technical documentation in current version.	Prerequisites: Permission of Program Director.	L+L 1.0 2.0 2.0

MPT213	Coordinate Measuring Machines II	Advanced techniques and operation of Coordinate Measuring Machine (CMM). Includes alignments, Computer-Aided Design (CAD) use, program control, scanning, and dimensioning. Offline programming for operation of CMM. Conformance to geometric dimensioning and tolerancing and manufacturing documentation. Implementation of measurement	Prerequisites: A grade of C or better in MPT113 or permission of Program Director.	L+L 3.0 4.0 4.0
MPT214	3D Scanning and Reverse Engineering: Geomagic	Principles of digital 3D Scanning and reverse engineering. Data acquisition of organic and mechanical components. Transformation of data into solid model geometry to create parts of equal or superior quality for machining or 3D printing.	A grade of C or better required in all Prerequisites. Prerequisites: MPT113 or permission of Program Director. Prerequisites or Corequisites: MPT151 or permission of Program	L+L 3.0 5.0 5.0
MPT215	Workplace Quality Systems	History of quality systems and procedures. Benefits of ISO 9000 procedures. The twenty elements of ISO 9000. Components and requirements of the International Organization for Standardization (ISO)	Prerequisites: None.	L+L 3.0 3.0 3.0
MPT216	Applied Statistical Process Control Methods	Identification of quality characteristics derived from variable and attribute data. Usage of statistical rules for interpretation of control charts. Analysis and recommendation of appropriate actions on factors	Prerequisites: A grade of C or better in MPT215 or permission of Program Director.	L+L 3.0 4.0 4.0
MPT217	Lean and Six Sigma Applied Concepts	Lean manufacturing and Six Sigma methodologies and application to an organization. Identification of waste and application of cost to poor quality process within an organization. Quality System tools and implementation.	Prerequisites: A grade of C or better in MPT215 or permission of Program Director.	L+L 3.0 3.0 3.0
MPT218	Advanced Quality Process Methods	High-level quality improvement process applied to manufacturing. Specific emphasis on experimental methods focused on waste reduction and general quality and process improvement. Understanding key process variables and decision-making methods based on established procedures. Applying statistical methods	Prerequisites: A grade of C or better in (MPT101, MPT110, MPT111, and MPT113), or permission of Program Director.	L+L 3.0 4.0 4.0
MPT220	Manual Machining: NIMS Level I Certification	Preparation for latest National Institute for Metalworking Skills (NIMS) Machining Level I certification in Drill Press, Manual Milling, Turning, and Grinding.	Prerequisites: A grade of C or better in MPT120, or MPT120MP, or permission of Program Director.	L+L 6.0 6.0 6.0
MPT221	Manual Machining: NIMS Level II Certification	Preparation for current National Institute for Metalworking Skills (NIMS) Machining Level II certification in Manual Milling, Turning, and Grinding.	Prerequisites: A grade of C or better in MPT220, or (Level I NIMS Certifications in: Drill Press, Lathe Between centers, Lathe Chucking, Mill, and Surface Grinding), or	L+L 3.0 5.0 5.0

MPT250	Solid Design II: Advanced Part Modeling: SolidWorks	Creating mechanical assemblies using SolidWorks design tools. Advanced feature tools including constraints and motion. Skill enhancement in the creation of advanced assemblies and part design, standard and advanced mates, and performing mass	Prerequisites: A grade of C or better in MPT151 or permission of Program Director.	L+L 3.0 5.0 5.0
MPT251	Solid Design: Documentation/GD&T: SolidWorks	Creation of engineering drawings. Parts and assemblies using associative mechanical design software. Principles and applications presented in accordance with the American Society of Mechanical Engineers (ASME) Y14 series of standards. Drawing sheets and templates, views, projections, dimensions and annotations, Geometric Dimensioning and Tolerancing	Prerequisites: A grade of C or better in MPT151 or permission of Program Director.	L+L 3.0 5.0 5.0
MPT252	Solid Design: Simulation: SolidWorks	Principles of Finite Element Analysis (FEA), stress and gap analysis, and the Finite Element Method (FEM). Application of fixtures, loads, and connections to assemblies and models. Conducting static and dynamic simulation studies. Evaluation of simulation results and	Prerequisites: A grade of C or better in MPT250 or permission of Program Director.	L+L 3.0 5.0 5.0
MPT253	Solid Design: Surface Modeling: SolidWorks	Creation and manipulation of freeform shapes and surfaces using SolidWorks mechanical design software. Surface body design using 3D sketch geometry and solid features. Verification of surface integrity and	Prerequisites: A grade of C or better in MPT250 or permission of Program Director.	L+L 3.0 4.0 4.0
MPT254	Solid Design: Sheet Metal: SolidWorks	Design of sheet metal parts and assemblies. Creation of sheet metal production drawings. Conversion of solid models to sheet metal. Creation of welded structures with standard structural members using SolidWorks	Prerequisites: A grade of C or better in MPT250 or permission of Program Director.	L+L 3.0 4.0 4.0
MPT255	Solid Design 3D Printing	3D printing/additive manufacturing with various additive manufacturing materials. Model orientation for optimal printing and 3D layer slicing, infill control, and orientation. Foundation and support structure design. Fused Deposition Modeling (FDM), Stereolithography	Prerequisites: A grade of C or better in [(MPT111 or MPT111MP) and MPT250], or permission of Program Director.	L+L 4.0 5.0 5.0
MPT260	Computer Aided Manufacturing (CAM) I	Introduction to Computer-Aided Manufacturing (CAM) system programming for Computer Numerical Control (CNC) machines using computer graphics for programming and tool path geometry. Computer programming for simultaneous 3-axis CNC machines,	Prerequisites: A grade of C or better in MPT130, or MPT130MP, or MPT131, or MPT131MP, or permission of Program Director.	L+L 3.0 5.0 5.0

MPT260MP	Computer Aided Manufacturing (CAM) I	Introduction to Computer-Aided Manufacturing (CAM) system programming for Computer Numerical Control (CNC) machines using computer graphics for programming and tool path geometry. Computer programming for simultaneous 3-axis CNC machines,	Prerequisites: A grade of C or better in MPT130, or MPT130MP, or MPT131, or MPT131MP, or permission of Program Director.	LEC 3.0 1.0 1.0 LAB 0.0 4.0 4.0
MPT261	MasterCam Certified Programmer Mill Level I: Test Preparation: CPgM1	Review of the latest Certified Programmer Mill Level I (CPgM1) exam in preparation for exam. Competency of geometry construction, tool plane and work plane construction, Computer Numerical Control (CNC), milling tool path generation, and tool path verification with core	Prerequisites: Permission of Program Director.	L+L 1.0 2.0 2.0
MPT262	Computer Aided Manufacturing (CAM) II	Advanced Computer-Aided Manufacturing (CAM) system programming for Computer Numerical Control (CNC) machines using computer graphics for programming and tool path geometry. Computer programming for mill turns and five axis simultaneous	Prerequisites: A grade of C or better in MPT260, or MPT260MP, or permission of Program Director.	L+L 3.0 5.0 5.0
MPT262MP	Computer Aided Manufacturing (CAM) II	Advanced Computer-Aided Manufacturing (CAM) system programming for Computer Numerical Control (CNC) machines using computer graphics for programming and tool path geometry. Computer programming for mill turns and five-axis simultaneous	Prerequisites: A grade of C or better in MPT260, or MPT260MP, or permission of Program Director.	LEC 3.0 1.0 1.0 LAB 0.0 4.0 4.0
MPT270	Tooling, Fixtures, and Gauges	Various types of tools, fixtures, and gauges and their function as related to manufacturing processes. Clamping and workholding principles as well as use of appropriate hardware.	Prerequisites: A grade of C or better in [(MPT120, or MPT120MP, or four National Institute of Metalworking Skills (NIMS) in CNC Machining or Manual Machining) and (MPT150 or MPT151)], or CAD101, or CAD201, or Certified SolidWorks Associate	LEC 3.0 3.0 3.0
MPT282AA	Volunteerism for Manufacturing: A Service Learning	Service-learning field experience within private/public agencies and citizen volunteer groups.	Prerequisites: Permission of Program Director.	LAB 1.0 1.0 0.0
MPT282AB	Volunteerism for Manufacturing: A Service Learning	Service-learning field experience within private/public agencies and citizen volunteer groups.	Prerequisites: Permission of Program Director.	LAB 2.0 2.0 0.0
MPT282AC	Volunteerism for Manufacturing: A Service Learning	Service-learning field experience within private/public agencies and citizen volunteer groups.	Prerequisites: Permission of Program Director.	LAB 3.0 3.0 0.0

MPT290AA	Manufacturing Production Internship	Construction internship office/field experience with private/public agencies or citizen volunteer groups. Eighty (80) hours of designated work experience.	Prerequisites: Permission of Program Director.	LAB 1.0 6.0 0.0
MPT290AB	Manufacturing Production Internship	Construction internship office/field experience with private/public agencies or citizen volunteer groups. One hundred and sixty (160) hours of designated work	Prerequisites: Permission of Program Director.	LAB 2.0 12.0 0.0
MPT290AC	Manufacturing Production Internship	Construction internship office/field experience with private/public agencies or citizen volunteer groups. Two hundred and forty (240) hours of designated work.	Prerequisites: Permission of Program Director.	LAB 3.0 18.0 0.0
MPT296WA	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits, minimum 2.6 grade point average and be able to obtain a position related to student's academic or career goals (student's present job may qualify) or permission of Program Director. Corequisites: Must be concurrent in at least one class which is related to student's major or career interest or	LAB 1.0 5.0 0.0
MPT296WB	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits, minimum 2.6 grade point average and be able to obtain a position related to student's academic or career goals (student's present job may qualify) or permission of Program Director. Corequisites: Must be concurrent in at least one class which is related to student's major or career interest or	LAB 2.0 10.0 0.0

MPT296WC	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits, minimum 2.6 grade point average and be able to obtain a position related to student's academic or career goals (student's present job may qualify) or permission of Program Director. Corequisites: Must be concurrent in at least one class which is related to student's major or career interest or	LAB 3.0 15.0 0.0
MPT296WD	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits, minimum 2.6 grade point average and be able to obtain a position related to student's academic or career goals (student's present job may qualify) or permission of Program Director. Corequisites: Must be concurrent in at least one class which is related to student's major or career interest or	LAB 4.0 20.0 0.0
MPT298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director.	LAB 1.0 1.0 0.0
MPT298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director.	LAB 2.0 2.0 0.0

MPT298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director.	LAB 3.0 3.0 0.0
MSP101	Mortuary Science: Orientation and History	Designed to orient prospective students to the roles, functions, and responsibilities of funeral service professionals. Overview of the requirements, governing agencies, and employment outlook in the field. Includes a historical overview of funeral service with emphasis on individuals, events, and forces that have influenced	Prerequisites: None.	LEC 3.0 3.0 3.0
MSP105	Cremation for Mortuary Science	Overview of cremation topics, including proper procedures, legal considerations, services, merchandise, trends, and the history of cremation.	Prerequisites: Permission of Instructor.	LEC 1.0 1.0 1.0
MSP201	Mortuary Science, Sociology, and Religion	Survey of basic principles of sociology as they relate to funeral service. Emphasis on family structures, social structures, and social factors. Exploration of cultural and	Prerequisites: Admission to the Mortuary Science program.	LEC 3.0 3.0 3.0
MSP202	Embalming	Study of the disinfection, temporary preservation and restoration of the deceased human body by physical and chemical means for the specific purpose to delay organic decomposition and apply practices for reverent	Prerequisites: Admission to the Mortuary Science program.	LEC 3.0 3.0 3.0
MSP202LL	Embalming Lab	Field experience involving observation and practice of embalming processes in a laboratory setting. Includes writing case study reports. Study of anatomical considerations for mortuary science students.	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: MSP202 and admission to the Mortuary Science	LAB 1.0 2.0 2.0
MSP203	Microbiology for Mortuary Science	Survey of basic principles of microbiology. Emphasis on sanitation, disinfection, public health, and embalming	Prerequisites: Admission to the Mortuary Science program.	LEC 3.0 3.0 3.0
MSP204	Chemistry for Mortuary Science	Survey of the basic principles of chemistry as they relate to funeral service. Emphasis on the chemical principles and precautions involved in the preservation and	Prerequisites: Admission to the Mortuary Science program.	LEC 3.0 3.0 3.0
MSP205	Funeral Directing I	Funeral directing, documentation procedures, and regulatory compliance from time of death to disposition. Includes establishing professional relationships with family members and funeral profession and allied	Prerequisites: Admission to the Mortuary Science program.	LEC 3.0 3.0 3.0

MSP206	Funeral Directing II	Operation of the established funeral home, including principles and product knowledge in the area of funeral service management and merchandising.	Prerequisites: A grade of C or better in MSP205.	LEC 3.0 3.0 3.0
MSP207	Mortuary Science Restorative Art	Care and restoration of the deceased human body to create natural form and appearance. Includes	Prerequisites: Admission to the Mortuary Science program.	LEC 3.0 3.0 3.0
MSP207LL	Mortuary Science Restorative Art Lab	Care and restoration of the deceased human body to create natural form and appearance. Includes anatomical aspects and color theory.	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: MSP207 and admission to the Mortuary Science	LAB 1.0 2.0 2.0
MSP208	Funeral Service Law: Legal, Ethical, and Regulatory Considerations	Exploration of funeral service regulation by state and federal government agencies. Includes cemetery code, dispositions, Federal Trade Commission (FTC), licensing, and crematory law. Examination of torts, wills, estates, contract law, liability, and probate considerations for the funeral service practitioner.	Prerequisites: Admission to the Mortuary Science program.	LEC 3.0 3.0 3.0
MSP209	Pathology for Mortuary Science	Study of disease processes and their impact on the human body, with emphasis on those conditions which relate to or affect the handling of human remains.	Prerequisites: Admission to the Mortuary Science program.	LEC 3.0 3.0 3.0
MSP210	Psychology and Counseling for Mortuary Science	Survey of the basic principles of psychology and counseling, as they relate to funeral service. Includes psychological concepts in the areas of grief, bereavement, mourning, aftercare and crisis	Prerequisites: Admission to the Mortuary Science program.	LEC 2.0 2.0 2.0
MSP211	Compendium for Mortuary Science	Comprehensive review of exam skills and coursework prior to taking the National Board Exam for Mortuary Science. Analysis of skills and tasks an entry-level funeral practitioner would possess. This course develops skills for recall, application, and analysis of	Prerequisites: Admission to the Mortuary Science program.	LEC 3.0 3.0 3.0
MSP282AA	Service-Learning Experience in Mortuary Science	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 1.0 1.0 0.0
MSP282AB	Service-Learning Experience in Mortuary Science	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 2.0 2.0 0.0
MSP282AC	Service-Learning Experience in Mortuary Science	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 3.0 3.0 0.0

MSP296WA	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 1.0 5.0 0.0
MSP296WB	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 2.0 10.0 0.0
MSP296WC	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 3.0 15.0 0.0

MSP296WD	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 4.0 20.0 0.0
MST140	Microsoft Networking Essentials	Emphasis on local area network with overview of wide area networks. Includes terminology, hardware and software components, connectivity, network architecture, packet structure, topologies, communication standards and protocols, and security	Prerequisites: None. (BPC110 or CIS105 and CIS121AB) suggested but not required.	L+L 3.0 4.0 4.0
MST150	Installing and Configuring Microsoft Windows	In-depth exploration of how to effectively install and configure the current version of, Windows. Includes features of Windows, virtualization improvements, network connectivity, access to resources, monitor and	Prerequisites: None. CIS190 or CNT140AB suggested but not required.	L+L 3.0 4.0 4.0
MST155DC	Installation, Storage, and Compute with Windows Server	This course focuses primarily on the installation, storage, and compute features and their functionality that is available within Windows Server. As Information Technology pushes towards more cloud based solutions and makes our classic approach obsolete, this course will help students prepare for a career within an Information Technology enterprise and help distinguish themselves in today's competitive job market. This course covers various topics like Windows Server	Prerequisites: A grade of C or better in MST150++ or permission of Instructor.	L+L 4.0 5.0 5.0
MST157DC	Networking with Windows Server	This course focuses on the networking features and their functionality available within Windows Server. It builds upon the skills from the Installation, Storage, and Compute with Windows Server course (MST155DC) and will develop skills related to Software-Defined Networking (SDN) solutions within Hyper-V, remote connectivity with VPN and Direct Access, and providing Internet connectivity with Domain Name System (DNS), Dynamic Host Configuration Protocol (DHCP), and	Prerequisites: A grade of C or better in MST155DC or permission of Instructor.	L+L 4.0 5.0 5.0

MST158DB	Installing and Configuring Windows Server	In-depth exploration of how to effectively install and configure Windows Server. Includes roles and features of Server, virtualization with Hyper-V, core network services, Active Directory, and Group Policy. Designed to prepare students for the corresponding Microsoft	Prerequisites: A grade of C or better in (MST140 or CNT140 or CNT140AA) and (MST150 or MST150SV or MST150VI or MST150XP) or permission of	L+L 4.0 5.0 5.0
MST158DC	Identity Management with Windows Server 2016	Prepares students to manage Windows Server 2016 tasks. Configure and manage multiple services, such as Identity Management and Active Directory. Learn how to install and configure domain controllers and create and manage users, groups, and computers within Organizational Units. Prepares students for the	Prerequisites: A grade of C or better in MST157DC.	L+L 4.0 5.0 5.0
MST160	Azure Administrator	Teaches IT professionals how to manage Azure subscriptions, secure identities, administer the infrastructure, configure virtual networking, connect Azure and on-premises sites, manage network traffic, implement storage solutions, create and scale virtual machines, implement web apps and containers, backup	Prerequisites: A grade of C or better in MST150WT, or permission of Instructor.	L+L 4.0 5.0 5.0
MST260	Microsoft Azure Cloud Development and Operations	Designed to provide technical information and skills required to develop and operate Microsoft Azure cloud infrastructure environments. Describes the design processes and implementation strategies for application and infrastructure that enable continuous integration, testing, and delivery, as well as infrastructure as code and process monitoring. Emphasizes processes, and technologies required to increase software delivery velocity and improve service reliability. Helps to prepare	Prerequisites: A grade of C or better in (CIS156 and MST160) or permission of Instructor.	L+L 3.0 4.0 4.0
MTC098	Music Theory Boot Camp	Intensive review of music theory fundamentals to develop and/or refresh skills necessary for advanced	Prerequisites: None.	LEC 1.0 1.0 1.0
MTC101	Introduction to Music Theory	Designed to develop written and aural skills necessary for advanced study of music theory and skills.	Prerequisites: None.	LEC 3.0 3.0 3.0
MTC103	Introduction to Aural Perception	An introduction to the aural skills necessary to hear relationships of intervals, rhythms, melody, and harmony	Prerequisites: None.	L+L 1.0 2.0 2.0
MTC105	Music Theory I	The chronological study of music theory including: harmony, melody, texture, structure and timbre through analysis, original compositions and basic exercises to	Prerequisites: A grade of C or better in MTC101 or permission of Instructor. Corequisites: MTC106.	LEC 3.0 3.0 3.0
MTC106	Aural Perception I	The development of listening and performing skills through dictation, sight singing and keyboard harmony	Prerequisites: None. Corequisites: MTC105.	L+L 1.0 2.0 2.0

MTC110	Music Notation for Songwriting	Basic musical notational system with emphasis on note reading, staff placement, meter, rhythmic patterns, basic harmonic patterns, chords and chord symbols, lead	Prerequisites: None.	LEC 2.0 2.0 2.0
MTC122	Fretboard Harmony	An in-depth study of functional and theoretical practice as applied to the fretboard of the guitar through understanding of chord symbols, intervals and rhythm	Prerequisites: A grade of C or better in MTC101.	LEC 3.0 3.0 3.0
MTC130	Jazz Theory	Develop written and aural theory skills necessary in the jazz idiom.	Prerequisites: A grade of C or better in (MTC101 and MTC103), or permission of Instructor.	LEC 2.0 2.0 2.0
MTC155	Music Theory II	A continuation of Music Theory I with emphasis on harmony and part-writing procedures	Prerequisites: A grade of C or better in MTC105. Corequisites: MTC156.	LEC 3.0 3.0 3.0
MTC156	Aural Perception II	A continuation of Aural Perception I, including harmonic practices.	Prerequisites: A grade of C or better in MTC106. Corequisites: MTC155.	L+L 1.0 2.0 2.0
MTC180	Computer Literacy for Musicians	Instruction in basic computer literacy, including generic applications and music-specific programs with hands-on experience. Ability to read music notation required.	Prerequisites: A grade of C or better in MTC101, or MTC105, or Corequisites: MTC105, or permission	L+L 3.0 4.0 4.0
MTC203	Jazz Composition	Composition and analysis of standard song forms as well as other standard compositional practices and forms idiomatic to jazz	Prerequisites: A grade of C or better in MTC155 or MUP165 or permission of Instructor.	L+L 3.0 3.0 3.0
MTC205	Music Theory III	The study of chromatic harmony and melody, modulation techniques and expanded chords. The	Prerequisites: A grade of C or better in MTC155. Corequisites: MTC206.	LEC 3.0 3.0 3.0
MTC206	Aural Perception III	A development of listening and performing skills, including an introduction of chromatic harmonic	Prerequisites: A grade of C or better in MTC156. Corequisites: MTC205.	L+L 1.0 2.0 2.0
MTC240	Composition	Introduction to the basics of music composition, stressing techniques and procedures for developing original ideas.	Prerequisites: A grade of C or better in (MTC105 and MTC106 or equivalent) and permission of	L+L 3.0 0.6 4.68
MTC255	Music Theory IV	A continuation of Music Theory III, including 20th century theories and techniques	Prerequisites: A grade of C or better in MTC205. Corequisites: MTC256.	LEC 3.0 3.0 3.0
MTC256	Aural Perception IV	A continuation of Aural Perception III, including extended chords.	Prerequisites: A grade of C or better in MTC206. Corequisites: MTC255.	L+L 1.0 2.0 2.0
MTC298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0

MTC298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
MTC298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
MUC109	Music Business: Content Creation and Copyright	Designed to provide an overview of content creation and copyright considerations within the Music Industry. Topics include songwriting and music creation, copyright, publishing and licensing, studio production, media applications of music, business ownership and	Prerequisites: None.	LEC 3.0 3.0 3.0
MUC110	Music Business: Marketing and Monetization	Designed to provide an overview of the marketing and monetization of music. Topics include music label operations; contracts; marketing, promotion, and merchandising; agents, managers, and attorneys;	Prerequisites: None.	LEC 3.0 3.0 3.0
MUC111	Digital Audio Workstation I (DAW I)	Use of digital mixing and automation software in conjunction with editing and recording. Includes computer operation, troubleshooting, and file management.	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: MUC195, or MUC195AA, or FMP105, or	L+L 3.0 5.0 5.0
MUC112	Digital Audio Workstation II (DAW II)	Use of digital mixing and automation software in conjunction with editing and recording. Includes computer operation, troubleshooting, and file	Prerequisites: A grade of C or better in MUC111, and (MUC195 or MUC195AA).	L+L 3.0 5.0 5.0
MUC114	Song Publishing and Marketing	Publishing and marketing of songs including services that publishers provide and what to consider when choosing one, a summary of various aspects and types of contracts, working as a staff writer, publisher	Prerequisites: None.	LEC 1.0 1.0 1.0
MUC115	Song Copyrighting and Demos	Terms involved with copyright laws. Clarification of when copyright begins, ownership of copyright and registration, limitations of copyright, and when works become public domain. Phases of making a	Prerequisites: None.	LEC 1.0 1.0 1.0

MUC120	Introduction to Sound Design for Film and Video	Basic principles of recording and mixing sound for film and video. Includes voice-over, automatic dialog replacement (ADR), foley, ambience, special effects and music. Emphasis on analog and digital recording	Prerequisites: A grade of C or better in (FMT100 and FMT136) or permission of Instructor.	LEC 3.0 3.0 3.0
MUC122	Sound Design I	Introduction to Sound Design and Audio Post-Production for Multimedia. Includes creating and editing Sound Effects, ADR, Foley, Music, and Ambience, such as Film, TV, Video Gaming, Theatre, and Dance. Emphasis on computer assisted production using Digital Audio Workstations and sound design techniques using	Prerequisites: None.	L+L 3.0 5.0 5.0
MUC135	Introduction to Disc Jockey Techniques	Development of beginning level live-performance disc jockey techniques. Emphasis on understanding the construction of industry-formatted dance songs, cueing, segueing/mixing methods, the relationship of beats per minute to segueing, and programming songs to entertain a live audience. Covers the history of the live	Prerequisites: None.	L+L 3.0 3.0 3.0
MUC136	Turntablism: The Art of the Scratch DJ	Covers the skills required in vinyl manipulation; examines the development of turntable techniques and the contributions made by individual turntable artists.	Prerequisites: None.	L+L 3.0 4.0 4.0
MUC137	Digital DJ Performance Techniques	Covers the skills required for live performance employing digital media with an emphasis on programs such as Serato Scratch Live and Ableton Live.	Prerequisites: None.	L+L 3.0 4.0 4.0
MUC138	Disc Jockey Laboratory	Operation, scope, roles and responsibilities in the commercial music production process.	Prerequisites: None.	LAB 1.0 1.0 1.0
MUC139	Introduction to Emcee-Rapping Techniques	Development of beginning level live-performance and recording emcee-rap techniques. Emphasis on understanding rhyme, structure, breath control, stage presence, and performance. Covers the history of the DJ/emcee and origins of the rapper, song structure,	Prerequisites: None.	L+L 3.0 4.0 4.0
MUC140	Songwriting	An introduction to the art and craft of songwriting through the study and analysis of diverse songwriters and musical styles, and creation of original songs.	Prerequisites: A grade of C or better in MTC101, or MTC105, or permission of Instructor.	LEC 3.0 3.0 3.0
MUC145	Recording Studio Business Operations	Operation, scope, roles and responsibilities in the commercial music production process. Focuses on the business aspects and daily management of the professional recording studio. Includes strategies for project management, client service, marketing,	Prerequisites: None.	LEC 3.0 3.0 3.0

MUC180	Computer Literacy for the Music Business	Basic computer literacy, including business applications used in the Music Industry, with hands-on experience.	Prerequisites: A grade of C or better in MUC109 or permission of Instructor or Department or Division	L+L 3.0 3.0 3.0
MUC181	Popular Music Orchestration and Arranging	Basic orchestration and arranging techniques as used in popular music genres including jazz, pop, and rock music for vocal and instrumental music performance ensembles. Idiomatic uses of harmony, melodic rhythm,	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: (MTC155 or higher level of MTC music theory) and	LEC 3.0 3.0 3.0
MUC191	Electronic Music I	An introduction to creating music with computers, utilizing the Musical Instrument Digital Interface (MIDI) protocol, synthesizers, digital audio software/hardware,	Prerequisites: None.	L+L 3.0 4.0 4.0
MUC192	Electronic Music II	Continued study of creating music with computers, utilizing the Musical Instrument Digital Interface (MIDI) configurations, audio editing, and music software/hardware at the intermediate level. Emphasis	Prerequisites: A grade of C or better in MUC191.	L+L 3.0 4.0 4.0
MUC193	Computer-Based Sound Synthesis	Principles of sound synthesis using computer-based methods. Synthesis methods include subtractive, additive, frequency modulation, sample and synthesis, and hybrid. Emphasis on synthesis techniques for use	Prerequisites: A grade of C or better in MUC191 or permission of Instructor.	L+L 3.0 4.0 4.0
MUC195	Studio Music Recording I	Basic principles of studio sound recording. Emphasis on musical acoustics, operation of recording equipment, studio setups, and multitrack recording. Includes studio session process and musical production decisions.	Prerequisites: None.	L+L 3.0 5.0 5.0
MUC195AA	Studio Music Recording I	Basic principles of studio sound recording. Emphasis on musical acoustics, operation of recording equipment, studio setups, and multitrack recording. Includes studio session process and musical production decisions.	Prerequisites: None.	LEC 3.0 3.0 3.0 LAB 0.0 2.0 2.0
MUC196	Studio Music Recording II	Emphasis on signal-processing equipment, mixing consoles, and advanced musical recording session procedures, production, and engineering. Includes mix-down and resultant master tape of a musical recording	Prerequisites: A grade of C or better in MUC195 or MUC195AA.	L+L 3.0 5.0 5.0
MUC196AA	Studio Music Recording II	Emphasis on signal-processing equipment, mixing consoles, and advanced musical recording session procedures, production, and engineering. Includes mix-down and resultant master tape of a musical recording	Prerequisites: A grade of C or better in MUC195 or MUC195AA.	LEC 3.0 3.0 3.0 LAB 0.0 2.0 2.0
MUC197	Live Sound Reinforcement I	Basic principles of live sound engineering. Emphasis on signal flow, acoustic, sound reinforcement set-ups and installation, signal processing, microphone selections and placement. Includes setting up sound systems and	Prerequisites: None.	L+L 3.0 4.0 4.0

MUC198	Live Sound Reinforcement II	Emphasis on musical production decisions. Front-of-house and monitor console placement, loudspeaker arrangements, power considerations, program material and sound pressure levels. Includes setting up of sound system and mixing live performances with various	Prerequisites: A grade of C or better in MUC197.	L+L 3.0 4.0 4.0
MUC209	Music Industry Entrepreneurship	Operation, scope, and career opportunities in the music business. Focuses on music in the areas of entrepreneurship, visionary development and the	Prerequisites: A grade of C or better in MUC109 and MUC110 or permission of Instructor.	LEC 3.0 3.0 3.0
MUC210	Advanced Industry Topics: Concert Promotion and Touring	Operation, scope, and career opportunities in the music business. Focuses on advanced aspects of concert promotion, touring and festival production. Areas of focus include marketing, planning, operations, talent buying, and budgeting for profitable and successful	Prerequisites: A grade of C or better in MUC109 or permission of Instructor or Department or Division Chair.	LEC 3.0 3.0 3.0
MUC211	Advanced Industry Topics: Artist Management and Development	Operation, scope, and career opportunities in the music business. Focus on advanced aspects of artist management and development. Include roles and responsibilities of an Artist Manager, the nature and structure of the relationship between an Artist and Artist Manager, and the development of business, and career	Prerequisites: A grade of C or better in MUC109 or permission of Instructor or Department or Division Chair.	LEC 3.0 3.0 3.0
MUC215	Music Industry Seminar: Innovation in Music Technology	Seminar in Music Industry technology with an emphasis on current product and service innovations. Emphasis on marketing and promotional uses of new technology.	Prerequisites: None.	LEC 1.0 1.0 1.0
MUC216	Music	Workshop seminar in commercial music disciplines.	Prerequisites: None.	LEC 1.0 1.0 1.0
MUC218	Audio Mixing Techniques	Approaches in final mixing for different musical genres. Develop critical listening skills, and applying these techniques to students' projects. Professional-type	Prerequisites: A grade of C or better in (MUC111 and MUC196), or permission of Instructor.	L+L 3.0 4.0 4.0
MUC220	Advanced Sound Design for Film and Video	Explores techniques and advanced applications used in designing sound using original student footage on a non-linear editing system.	Prerequisites: A grade of C or better in FMT/MUC120 or permission of Instructor. Xref: FMT120	LEC 3.0 3.0 3.0 LAB 0.0 2.0 2.0
MUC222	Sound Design II	Intermediate level Sound Design and Audio Post-Production for Multimedia.	A grade of C or better required in all Prerequisites. Prerequisites: MUC122. Prerequisites or Corequisites: MUC191 or MUC111 or	L+L 3.0 5.0 5.0
MUC237	Electronic Dance Music Production	Process and skills required for music production employing digital media, with an emphasis on producing music on digital audio workstations.	Prerequisites: A grade of C or better in MUC191 or permission of Instructor.	L+L 3.0 4.0 4.0

MUC240	Creative Music Production	Operation, scope, roles and responsibilities in the commercial music production process. Focuses on creative aspects of commercial music production, including song selection, realization of artistic vision, studio selection, musician and vocal staff selection, coaching for optimal performance, analyzing song structure and sound quality and trouble-shooting problems in the overall artistic impression of the finished	Prerequisites: A grade of C or better in [(MTC101 and MTC103) or (MTC105 and MTC106)], and (MUC112, MUC192, and MUC295), or permission of Instructor.	L+L 4.0 5.0 5.0
MUC241	Business Principles of Music Production	Operation, scope, roles and responsibilities in the commercial music production process. Focuses on business aspects of commercial music production, including project management, budgeting, production personnel, deal structures, revenue sources, copyright,	Prerequisites: A grade of C or better in (MUC109 and MUC110) or permission of Instructor.	LEC 3.0 3.0 3.0
MUC242	Music Genres and Styles	Operation and development of creative skills in the commercial music production process. Geared towards music producers and emphasizing analysis and comprehension of commercial music styles and genres, including: pop, country, rock, soul, rhythm and blues,	Prerequisites: None.	LEC 2.0 2.0 2.0
MUC261	Modern Arranging I	Basic arranging techniques as used in jazz and rock idioms for combo and special ensembles. Idiomatic uses of harmony, melodic rhythm, voicing, tonal color and	Prerequisites: A grade of C or better in MUP164 and MUP165 or permission of Instructor.	LEC 3.0 3.0 3.0
MUC262	Modern Arranging II	Arranging for larger ensembles, including strings, jazz ensemble, woodwinds and synthesizers. Detailed study of harmony, form and orchestration.	Prerequisites: A grade of C or better in MUC261 or permission of Instructor.	LEC 3.0 3.0 3.0
MUC274	Music Industry Study Tour	A tour of the music industry outside the metropolitan Phoenix area. Includes a variety of experiences and activities to enhance awareness of professional	Prerequisites: None.	LAB 2.0 2.0 0.0
MUC280	Recording Studio Maintenance	Introduction to the techniques, electronics, and tools used to perform basic recording studio, live sound, and electronic musical instrument equipment maintenance	Prerequisites: A grade of C or better in MUC195AA or MUC111 or permission of instructor.	L+L 3.0 3.0 3.0
MUC281	Electronic Music III	Continued study of the production of music using electronic processes. Emphasis on more complex configurations and their applications in live performance	Prerequisites: A grade of C or better in MUC192.	L+L 3.0 4.0 4.0
MUC289	Live Sound Reinforcement III	Focus on audio engineering and media production for performances and events. The course will cover advanced audio concepts and techniques, basic lighting, rigging, and media. Students will apply their knowledge assisting as part of productions, events,	Prerequisites: A grade of C or better in MUC198.	L+L 3.0 6.0 6.0

MUC290AA	Music Business Internship	Music Business Internship work experience. Perform a variety of activities, to fulfill the routines and responsibilities of the department or business where the internship is served. Eighty (80) hours of designated	Prerequisites: Permission of Department or Division.	L+L 1.0 1.0 0.0
MUC291AA	Disc Jockey Internship	Disc Jockey (DJ) internship work experience, which may include emcee-rapping and/or electronic dance music production, under the supervision of an experienced industry professional. Perform a variety of activities to fulfill the routines and responsibilities of the department	Prerequisites: Permission of Department or Division.	L+L 1.0 1.0 0.0
MUC292	Sound Design III	Advanced Sound Design Production for Multimedia: Designed to provide an atmosphere of team research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment	Prerequisites: A grade of C or better in MUC222, or permission of Instructor.	L+L 3.0 5.0 5.0
MUC293	Self-Promotion for Music	Designed to provide the skills and knowledge required for effective self-promotion. Focus on career goal development, market analysis, communication and networking skills, and the development of a self-	Prerequisites: A grade of C or better in MUC109, or permission of Instructor.	LEC 1.0 1.0 1.0
MUC294	Portfolio for Music	Includes developing a portfolio that demonstrates music related skills and marketing of songs, recordings, and	Prerequisites: A grade of C or better in MUC293.	LEC 1.0 1.0 1.0
MUC295	Studio Music Recording III	Producing and engineering a recording project. Covers how recording studios work and how recording projects are organized from pre-production through delivery of	Prerequisites: A grade of C or better in MUC196 and (MUC111 or permission of Instructor).	L+L 3.0 6.0 6.0
MUC296WA	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 1.0 5.0 0.0

MUC296WB	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 2.0 10.0 0.0
MUC296WC	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 3.0 15.0 0.0
MUC296WD	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 4.0 20.0 0.0
MUC297AA	Audio Production Internship	Music Internship work experience in a business or industry. Eighty (80) hours of designated work per	Prerequisites: Permission of Department or Division.	L+L 1.0 1.0 0.0
MUC297AB	Audio Production Internship	Music Internship work experience in a business or industry eighty (80) hours of designated work per credit.	Prerequisites: A grade of C or better in MUC110.	L+L 2.0 2.0 0.0
MUC297AC	Audio Production Internship	Music Internship work experience in a business or industry eighty (80) hours of designated work per credit.	Prerequisites: Permission of Department or Division.	L+L 3.0 3.0 0.0

MUC298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
MUC298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
MUC298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
MUE107	Woodwinds Methods I	Practical class with emphasis on techniques of playing and teaching woodwind instruments including embouchure, breath control, tone, mouthpiece	Prerequisites: None.	L+L 1.0 3.0 3.0
MUE108	Percussion Methods I	Practical class with emphasis on techniques of playing and teaching percussion instruments including hand position, rudiments, stick control, and elements of	Prerequisites: None.	L+L 1.0 3.0 3.0
MUE109	Brass Methods I	Practical class with emphasis on techniques of playing and teaching brass instruments including embouchure, breath control, tone, and literature.	Prerequisites: None.	L+L 1.0 3.0 3.0
MUE110	Strings Methods I	Practical class with emphasis on techniques of playing and teaching string instruments including tone control	Prerequisites: None.	L+L 1.0 3.0 3.0
MUE111	Guitar Methods	Practical class with emphasis on both classical and popular techniques, methods, materials, solo/ensemble literature and repertoire used in all levels of guitar. Instructional approaches to the guitar as both a	Prerequisites: None.	L+L 1.0 3.0 3.0

MUE207	Woodwinds Methods II	Continuation of Woodwinds Methods I with additional emphasis on skills including ensemble performance, transposition, increasing range and literature.	Prerequisites: A grade of C or better in MUE107 or permission of Instructor.	L+L 1.0 3.0 3.0
MUE208	Percussion Methods II	Continuation of Percussion Methods I with additional emphasis on ensemble techniques and representative	Prerequisites: A grade of C or better in MUE108 or permission of	L+L 1.0 3.0 3.0
MUE209	Brass Methods II	Continuation of Brass Methods I with additional focus on skills including ensemble performance, transposition, increasing range and solo literature.	Prerequisites: A grade of C or better in MUE109 or permission of Instructor.	L+L 1.0 3.0 3.0
MUE210	Strings Methods II	Continuation of String Methods I with additional focus on skills including fingering and bowing techniques, and solo/ensemble literature.	Prerequisites: A grade of C or better in MUE110 or permission of Instructor.	L+L 1.0 3.0 3.0
MUE240	Introduction to Choral Methods	Overview of techniques, methods, materials, style characteristics, and repertoire used in directing choral music at the secondary level including simulated teaching, conducting, and the demonstration of vocal	Prerequisites: None.	L+L 1.0 3.0 3.0
MUE250	Vocal Pedagogy/Voice Methods	Study of the anatomy, physiology, and acoustics of singing as applied to healthy vocal function and the teaching of singing. Topics include: overview of techniques, materials, and literature used in teaching	Prerequisites: None.	L+L 1.0 3.0 3.0
MUE296WA	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits, minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify) or permission of instructor. Corequisites: Must be concurrent in at least one class which is related to student's major or career interest or with	LAB 1.0 5.0 0.0

MUE296WB	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits, minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify) or permission of instructor. Corequisites: Must be concurrent in at least one class which is related to student's major or career interest or with	LAB 2.0 10.0 0.0
MUE296WC	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits, minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify) or permission of instructor. Corequisites: Must be concurrent in at least one class which is related to student's major or career interest or with	LAB 3.0 15.0 0.0
MUE296WD	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits, minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify) or permission of instructor. Corequisites: Must be concurrent in at least one class which is related to student's major or career interest or with	LAB 4.0 20.0 0.0
MUE298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0

MUE298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
MUE298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
MUP100	Introduction to Digital Musicianship	A music performance class that provides foundational skills in the use of digital concepts, tools, software applications, and technology to improve performance ability and music making concepts that align with current	Prerequisites: None.	LEC 2.0 2.0 2.0
MUP101AA	Private Instruction: Voice	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four-course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: None.	L+L 1.0 0.6 0.0
MUP101AD	Private Instruction: Piano	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: None.	L+L 1.0 0.6 0.0

MUP101AG	Private Instruction: Harpsichord	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: None.	L+L 1.0 0.6 0.0
MUP101AJ	Private Instruction: Organ	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: None.	L+L 1.0 0.6 0.0
MUP101AM	Private Instruction: Guitar	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: None.	L+L 1.0 0.6 0.0
MUP101AP	Private Instruction: Trumpet	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: None.	L+L 1.0 0.6 0.0
MUP101AS	Private Instruction: French Horn	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: None.	L+L 1.0 0.6 0.0

MUP101AV	Private Instruction: Trombone	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: None.	L+L 1.0 0.6 0.0
MUP101AY	Private Instruction: Euphonium	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, euphonium, tuba, flute, oboe, clarinet, bassoon,	Prerequisites: None.	L+L 1.0 0.6 0.0
MUP101BB	Private Instruction: Tuba	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: None.	L+L 1.0 0.6 0.0
MUP101BE	Private Instruction: Flute	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: None.	L+L 1.0 0.6 0.0
MUP101BH	Private Instruction: Oboe	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: None.	L+L 1.0 0.6 0.0

MUP101BK	Private Instruction: Clarinet	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: None.	L+L 1.0 0.6 0.0
MUP101BN	Private Instruction: Bassoon	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: None.	L+L 1.0 0.6 0.0
MUP101BQ	Private Instruction: Saxophone	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: None.	L+L 1.0 0.6 0.0
MUP101BT	Private Instruction: Violin	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: None.	L+L 1.0 0.6 0.0
MUP101BW	Private Instruction: Viola	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: None.	L+L 1.0 0.6 0.0

MUP101BZ	Private Instruction: Violoncello	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: None.	L+L 1.0 0.6 0.0
MUP101CC	Private Instruction: Contrabass	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: None.	L+L 1.0 0.6 0.0
MUP101CF	Private Instruction: Popular Music Bass Guitar	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four-course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar,	Prerequisites: None.	L+L 1.0 0.6 0.0
MUP101CI	Private Instruction: Percussion	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: None.	L+L 1.0 0.6 0.0
MUP101CJ	Private Instruction: Harp	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meetint departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: None.	L+L 1.0 0.6 0.0

MUP101CK	Private Instruction: Popular Music Voice	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four-course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar,	Prerequisites: None.	L+L 1.0 0.6 0.0
MUP101CL	Private Instruction: Popular Music Piano	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four-course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar,	Prerequisites: None.	L+L 1.0 0.6 0.0
MUP101CM	Private Instruction: Popular Music Guitar	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four-course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar,	Prerequisites: None.	L+L 1.0 0.6 0.0
MUP101CN	Private Instruction: Popular Music Drum	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four-course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar,	Prerequisites: None.	L+L 1.0 0.6 0.0

MUP101CO	Private Instruction: Popular Music Production	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four-course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar,	Prerequisites: None.	L+L 1.0 0.6 0.0
MUP101CP	Private Instruction: Popular Electronic Music Performance	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four-course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar,	Prerequisites: None.	L+L 1.0 0.6 0.0
MUP101CQ	Private Instruction: Popular Music Turntablism	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four-course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar,	Prerequisites: None.	L+L 1.0 0.6 0.0
MUP102AA	Private Instruction: Voice	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: None.	L+L 2.0 1.2 0.0
MUP102AD	Private Instruction: Piano	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: None.	L+L 2.0 1.2 0.0

MUP102AG	Private Instruction: Harpsichord	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: None.	L+L 2.0 1.2 0.0
MUP102AJ	Private Instruction: Organ	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: None.	L+L 2.0 1.2 0.0
MUP102AM	Private Instruction: Guitar	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: None.	L+L 2.0 1.2 0.0
MUP102AP	Private Instruction: Trumpet	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: None.	L+L 2.0 1.2 0.0
MUP102AS	Private Instruction: French Horn	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: None.	L+L 2.0 1.2 0.0
MUP102AV	Private Instruction: Trombone	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: None.	L+L 2.0 1.2 0.0

MUP102AY	Private Instruction: Euphonium	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, euphonium, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: None.	L+L 2.0 1.2 0.0
MUP102BB	Private Instruction: Tuba	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: None.	L+L 2.0 1.2 0.0
MUP102BE	Private Instruction: Flute	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: None.	L+L 2.0 1.2 0.0
MUP102BH	Private Instruction: Oboe	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: None.	L+L 2.0 1.2 0.0
MUP102BK	Private Instruction: Clarinet	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: None.	L+L 2.0 1.2 0.0
MUP102BN	Private Instruction: Bassoon	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: None.	L+L 2.0 1.2 0.0

MUP102BQ	Private Instruction: Saxophone	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: None.	L+L 2.0 1.2 0.0
MUP102BT	Private Instruction: Violin	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: None.	L+L 2.0 1.2 0.0
MUP102BW	Private Instruction: Viola	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: None.	L+L 2.0 1.2 0.0
MUP102BZ	Private Instruction: Violoncello	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: None.	L+L 2.0 1.2 0.0
MUP102CC	Private Instruction: Contrabass	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: None.	L+L 2.0 1.2 0.0
MUP102CF	Private Instruction: Popular Music Bass Guitar	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four-course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar,	Prerequisites: None.	L+L 2.0 1.2 0.0

MUP102CI	Private Instruction: Percussion	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: None.	L+L 2.0 1.2 0.0
MUP102CJ	Private Instruction: Harp	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: None.	L+L 2.0 1.2 0.0
MUP102CK	Private Instruction: Popular Music Voice	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four-course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar,	Prerequisites: None.	L+L 2.0 1.2 0.0
MUP102CL	Private Instruction: Popular Music Piano	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four-course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar,	Prerequisites: None.	L+L 2.0 1.2 0.0
MUP102CM	Private Instruction: Popular Music Guitar	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four-course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar,	Prerequisites: None.	L+L 2.0 1.2 0.0

MUP102CN	Private Instruction: Popular Music Drum	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four-course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar,	Prerequisites: None.	L+L 2.0 1.2 0.0
MUP102CO	Private Instruction: Popular Music Production	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four-course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar,	Prerequisites: None.	L+L 2.0 1.2 0.0
MUP102CP	Private Instruction: Popular Electronic Music Performance	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four-course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar,	Prerequisites: None.	L+L 2.0 1.2 0.0
MUP102CQ	Private Instruction: Popular Music Turntablism	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four-course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar,	Prerequisites: None.	L+L 2.0 1.2 0.0
MUP127	Class Guitar I	Emphasis on note-reading and folk-style harmonic accompaniment. Includes finger-style playing. Stresses development of efficient practice techniques and proper	Prerequisites: None.	L+L 1.0 3.0 3.0

MUP128	Class Guitar II	Note-reading range including second position and parts of higher positions. Classical, popular, Latin, and other styles of music. Theory including scales, keys, and chord construction. Technical exercises of both hands.	Prerequisites: A grade of C or better in MUP127 or permission of Instructor.	L+L 1.0 3.0 3.0
MUP130	Introduction to Class Piano	Basic introduction to piano techniques and fundamentals of music including hand position, sight-reading of both melodic and harmonic materials, and the introduction of scale patterns. Designed for those	Prerequisites: None.	L+L 1.0 3.0 3.0
MUP131	Class Piano I	Development of beginning piano techniques and the fundamentals of music including basic hand position, music-reading skills of melodic and harmonic material, major scales, transposition, and harmonizations	Prerequisites: None.	L+L 1.0 3.0 3.0
MUP132	Class Piano II	Continuation of Piano I with emphasis on elementary piano techniques including major and minor scales, transposition, improvisation, and sight reading.	Prerequisites: A grade of C or better in MUP131 or permission of Instructor.	L+L 1.0 3.0 3.0
MUP133	Class Voice I	Introduction to the fundamentals of vocal production. Emphasis on breathing techniques, tone production and performances in class of solo vocal literature.	Prerequisites: None.	L+L 1.0 3.0 3.0
MUP134	Class Voice II	Continuation of Class Voice I including the elements of stage presence and diction.	Prerequisites: A grade of C or better in MUP133 or permission of	L+L 1.0 3.0 3.0
MUP140	Elementary Piano Pedagogy	An overview of instructional methods, techniques, materials, and repertoire, intended for teaching piano students at the elementary level. Includes creating studio documents, teaching functional skills, peer piano	Prerequisites: Permission of Instructor.	LEC 2.0 2.0 2.0
MUP141	Intermediate Piano Pedagogy	Overview of techniques, methods, materials, stylistic characteristics, and repertoire used in teaching piano students at the intermediate and early advanced levels including peer piano teaching, performance and	Prerequisites: Permission of Instructor.	LEC 2.0 2.0 2.0
MUP149	Gospel Chorus	A mixed chorus with emphasis on college/community participation and preparation of a variety of Gospel Music for public performance. Auditions may be	Prerequisites: None.	L+L 1.0 3.0 3.0
MUP150	Community Chorus	A mixed chorus with emphasis on college/community participation and preparation of a variety of choral literature for public performance. Auditions may be	Prerequisites: None.	L+L 1.0 3.0 3.0

MUP151AA	Private Instruction: Voice	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four-course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: A grade of C or better in MUP101AA.	L+L 1.0 0.6 0.0
MUP151AD	Private Instruction: Piano	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: A grade of C or better in MUP101AD.	L+L 1.0 0.6 0.0
MUP151AG	Private Instruction: Harpsichord	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: A grade of C or better in MUP101AG.	L+L 1.0 0.6 0.0
MUP151AJ	Private Instruction: Organ	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: A grade of C or better in MUP101AJ.	L+L 1.0 0.6 0.0
MUP151AM	Private Instruction: Guitar	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: A grade of C or better in MUP101AM.	L+L 1.0 0.6 0.0

MUP151AP	Private Instruction: Trumpet	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: A grade of C or better in MUP101AP.	L+L 1.0 0.6 0.0
MUP151AS	Private Instruction: French Horn	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: A grade of C or better in MUP101AS.	L+L 1.0 0.6 0.0
MUP151AV	Private Instruction: Trombone	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: A grade of C or better in MUP101AV.	L+L 1.0 0.6 0.0
MUP151AY	Private Instruction: Euphonium	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, euphonium, tuba, flute, oboe, clarinet, bassoon,	Prerequisites: A grade of C or better in MUP101AY.	L+L 1.0 0.6 0.0
MUP151BB	Private Instruction: Tuba	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: A grade of C or better in MUP101BB.	L+L 1.0 0.6 0.0

MUP151BE	Private Instruction: Flute	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: A grade of C or better in MUP101BE.	L+L 1.0 0.6 0.0
MUP151BH	Private Instruction: Oboe	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: A grade of C or better in MUP101BH.	L+L 1.0 0.6 0.0
MUP151BK	Private Instruction: Clarinet	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: A grade of C or better in MUP101BK.	L+L 1.0 0.6 0.0
MUP151BN	Private Instruction: Bassoon	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: A grade of C or better in MUP101BN.	L+L 1.0 0.6 0.0
MUP151BQ	Private Instruction: Saxophone	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: A grade of C or better in MUP101BQ.	L+L 1.0 0.6 0.0

MUP151BT	Private Instruction: Violin	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: A grade of C or better in MUP101BT.	L+L 1.0 0.6 0.0
MUP151BW	Private Instruction: Viola	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: A grade of C or better in MUP101BW.	L+L 1.0 0.6 0.0
MUP151BZ	Private Instruction: Violoncello	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: A grade of C or better in MUP101BZ.	L+L 1.0 0.6 0.0
MUP151CC	Private Instruction: Contrabass	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: A grade of C or better in MUP101CC.	L+L 1.0 0.6 0.0
MUP151CF	Private Instruction: Popular Music Bass Guitar	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four-course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar,	Prerequisites: A grade of C or better in MUP101CF.	L+L 1.0 0.6 0.0

MUP151CI	Private Instruction: Percussion	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: A grade of C or better in MUP101CI.	L+L 1.0 0.6 0.0
MUP151CJ	Private Instruction: Harp	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: A grade of C or better in MUP101CJ.	L+L 1.0 0.6 0.0
MUP151CK	Private Instruction: Popular Music Voice	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four-course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar,	Prerequisites: A grade of C or better in MUP101CK.	L+L 1.0 0.6 0.0
MUP151CL	Private Instruction: Popular Music Piano	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four-course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar,	Prerequisites: A grade of C or better in MUP101CL.	L+L 1.0 0.6 0.0
MUP151CM	Private Instruction: Popular Music Guitar	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four-course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar,	Prerequisites: A grade of C or better in MUP101CM.	L+L 1.0 0.6 0.0

MUP151CN	Private Instruction: Popular Music Drum	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four-course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar,	Prerequisites: A grade of C or better in MUP101CN.	L+L 1.0 0.6 0.0
MUP151CO	Private Instruction: Popular Music Production	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four-course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar,	Prerequisites: A grade of C or better in MUP101CO.	L+L 1.0 0.6 0.0
MUP151CP	Private Instruction: Popular Electronic Music Performance	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four-course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar,	Prerequisites: A grade of C or better in MUP101CP.	L+L 1.0 0.6 0.0
MUP151CQ	Private Instruction: Popular Music Turntablism	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four-course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar,	Prerequisites: A grade of C or better in MUP101CQ.	L+L 1.0 0.6 0.0
MUP152AA	Private Instruction: Voice	Private Instruction emphasizing musicianship, literature, technique and performance. Four-course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: A grade of C or better in MUP102AA.	L+L 2.0 1.2 0.0

MUP152AD	Private Instruction: Piano	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: A grade of C or better in MUP102AD.	L+L 2.0 1.2 0.0
MUP152AG	Private Instruction: Harpsichord	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: A grade of C or better in MUP102AG.	L+L 2.0 1.2 0.0
MUP152AJ	Private Instruction: Organ	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: A grade of C or better in MUP102AJ.	L+L 2.0 1.2 0.0
MUP152AM	Private Instruction: Guitar	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: A grade of C or better in MUP102AM.	L+L 2.0 1.2 0.0
MUP152AP	Private Instruction: Trumpet	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: A grade of C or better in MUP102AP.	L+L 2.0 1.2 0.0
MUP152AS	Private Instruction: French Horn	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: A grade of C or better in MUP102AS.	L+L 2.0 1.2 0.0

MUP152AV	Private Instruction: Trombone	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: A grade of C or better in MUP102AV.	L+L 2.0 1.2 0.0
MUP152AY	Private Instruction: Euphonium	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, euphonium, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: A grade of C or better in MUP102AY.	L+L 2.0 1.2 0.0
MUP152BB	Private Instruction: Tuba	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: A grade of C or better in MUP102BB.	L+L 2.0 1.2 0.0
MUP152BE	Private Instruction: Flute	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: A grade of C or better in MUP102BE.	L+L 2.0 1.2 0.0
MUP152BH	Private Instruction: Oboe	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: A grade of C or better in MUP102BH.	L+L 2.0 1.2 0.0
MUP152BK	Private Instruction: Clarinet	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: A grade of C or better in MUP102BK.	L+L 2.0 1.2 0.0

MUP152BN	Private Instruction: Bassoon	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: A grade of C or better in MUP102BN.	L+L 2.0 1.2 0.0
MUP152BQ	Private Instruction: Saxophone	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: A grade of C or better in MUP102BQ.	L+L 2.0 1.2 0.0
MUP152BT	Private Instruction: Violin	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: A grade of C or better in MUP102BT.	L+L 2.0 1.2 0.0
MUP152BW	Private Instruction: Viola	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: A grade of C or better in MUP102BW.	L+L 2.0 1.2 0.0
MUP152BZ	Private Instruction: Violoncello	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: A grade of C or better in MUP102BZ.	L+L 2.0 1.2 0.0
MUP152CC	Private Instruction: Contrabass	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: A grade of C or better in MUP102CC.	L+L 2.0 1.2 0.0

MUP152CF	Private Instruction: Popular Music Bass Guitar	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four-course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar,	Prerequisites: A grade of C or better in MUP102CF.	L+L 2.0 1.2 0.0
MUP152CI	Private Instruction: Percussion	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: A grade of C or better in MUP102CI.	L+L 2.0 1.2 0.0
MUP152CJ	Private Instruction: Harp	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: A grade of C or better in MUP102CJ.	L+L 2.0 1.2 0.0
MUP152CK	Private Instruction: Popular Music Voice	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four-course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar,	Prerequisites: A grade of C or better in MUP102CK.	L+L 2.0 1.2 0.0
MUP152CL	Private Instruction: Popular Music Piano	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four-course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar,	Prerequisites: A grade of C or better in MUP102CL.	L+L 2.0 1.2 0.0

MUP152CM	Private Instruction: Popular Music Guitar	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four-course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar,	Prerequisites: A grade of C or better in MUP102CM.	L+L 2.0 1.2 0.0
MUP152CN	Private Instruction: Popular Music Drum	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four-course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar,	Prerequisites: A grade of C or better in MUP102CN.	L+L 2.0 1.2 0.0
MUP152CO	Private Instruction: Popular Music Production	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four-course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar,	Prerequisites: A grade of C or better in MUP102CO.	L+L 2.0 1.2 0.0
MUP152CP	Private Instruction: Popular Electronic Music Performance	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four-course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar,	Prerequisites: A grade of C or better in MUP102CP.	L+L 2.0 1.2 0.0

MUP152CQ	Private Instruction: Popular Music Turntablism	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four-course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar,	Prerequisites: A grade of C or better in MUP102CQ.	L+L 2.0 1.2 0.0
MUP153	Concert Choir	A mixed choir designed to emphasize choral techniques and performance of all styles of choral literature. Public performances are scheduled each semester.	Prerequisites: None.	L+L 1.0 5.0 5.0
MUP154AA	Jazz Vocal Ensemble	Practical and performing experience in vocal jazz. Includes music from the 1920's through the present.	Prerequisites: Auditions required or permission of Instructor.	L+L 1.0 3.0 3.0
MUP154AB	Jazz Vocal Ensemble	Practical and performing experience in vocal jazz. Includes music from the 1920's through the present. Requires participation in various public performances on campus and in the community throughout the semester.	Prerequisites: Auditions required and two semesters in A Cappella Choir or permission of Instructor.	L+L 2.0 5.0 5.0
MUP155	Handbell Choir (Bell Canto)	Emphasis on practical and performing skills in bell ringing. Preparation of all styles of bell literature. Scheduled public performances during the year.	Prerequisites: None.	L+L 1.0 3.0 3.0
MUP157	Treble Choir	A high voice chorus designed to emphasize choral technique and performance of all styles of appropriate choral literature. Public performances are scheduled during the year. Auditions may be required.	Prerequisites: None.	L+L 1.0 3.0 3.0
MUP158	Popular Music Ensemble	Emphasizes instrumental and vocal techniques and the preparation of all styles of rock band literature. Introduces music business. Requires participation in public and private performances throughout the	Prerequisites: Prerequisites: None. Auditions may be required.	L+L 1.0 2.0 2.0
MUP159	Community Orchestra	Emphasis on college/community participation and the preparation of orchestral literature for public	Prerequisites: None.	L+L 1.0 3.0 3.0
MUP160	Orchestra	A class designed to emphasize orchestral ensemble techniques and the preparation of all styles of orchestral literature. Public performances are scheduled	Prerequisites: None.	L+L 1.0 5.0 5.0
MUP161	Community Band	Emphasis on college/community participation and the preparation of band literature for public performance.	Prerequisites: None.	L+L 1.0 3.0 3.0
MUP162	Band	Designed to emphasize instrumental techniques and the preparation of all styles of band literature for ensemble performance. Includes public performances.	Prerequisites: None.	L+L 1.0 5.0 5.0

MUP163	Jazz Ensemble	Practical and performance experience in various jazz styles. Open to all students on the basis of auditions.	Prerequisites: None.	L+L 1.0 3.0 3.0
MUP164	Jazz Improvisation I	Theoretical and performance skills in many styles of jazz	Prerequisites: None.	L+L 2.0 3.0 3.0
MUP165	Jazz Improvisation II	Intermediate theoretical and performance skills in many styles of jazz improvisation.	Prerequisites: A grade of C or better in MUP164 or permission of	L+L 2.0 3.0 3.0
MUP166	Jazz Piano I	Introduction to basic jazz piano skills, including chord construction, chord voicings, accompanying and solo	Prerequisites: A grade of C or better in MUP131 or permission of	L+L 1.0 2.0 2.0
MUP167	Jazz Piano II	Continued development of jazz piano techniques with emphasis on voicing formulas for ninth, eleventh, thirteenth, and altered dominant chords	Prerequisites: A grade of C or better in MUP166 or permission of Instructor.	L+L 1.0 2.0 2.0
MUP168	Mariachi Band	Emphasis on college and community participation and the preparation of mariachi band literature for public performance. Auditions may be required.	Prerequisites: None.	L+L 1.0 3.0 3.0
MUP169	Guitar Ensemble	Ensemble of the entire guitar family that may include standard, requinto, alto, bass, and contrabass guitars that emphasizes guitar techniques and the preparation of all styles of guitar ensemble literature. Literature will include modern and historical guitar ensemble repertoire, new works, arrangements, and transcriptions from various musical periods and traditions as well as guitar literature from a diverse number of world musical traditions. Guitar techniques are studied and refined as they relate to the literature performed. Emphasis placed on reading and listening skills, rehearsal and	Prerequisites: None.	L+L 1.0 3.0 3.0
MUP171	Opera Workshop	A workshop in the study and performance of operatic	Prerequisites: None.	L+L 2.0 5.0 5.0
MUP181	Chamber Music Ensembles	Practical and performance experience in instrumental, vocal, and mixed ensembles.	Prerequisites: None.	L+L 1.0 2.0 2.0
MUP182	Chamber Singers	Practical and performance experience in various styles	Prerequisites: None.	L+L 1.0 3.0 3.0
MUP183	Jazz Combo	Jazz Combo participation provides an opportunity for students to develop improvisational skills in a variety of styles from historical and contemporary jazz practice, while offering a creative outlet for composers and	Prerequisites: None.	L+L 1.0 2.0 2.0
MUP185	Flute Choir	Ensemble of the entire flute family that may include piccolo, E flat flute, C flutes, alto flutes, and bass flute. Literature will include commissioned works, original works for standard flute choir, and transcriptions from	Prerequisites: None.	L+L 1.0 3.0 3.0

MUP190	Percussion Ensemble	Practical and performance experience in various percussion styles. Percussion literature from a diverse number of world musical traditions. Western European art music, various African traditions, Indian music, Japanese music, Indonesian music, Mexican, Central, and South American music, and percussion compositions from the American Experimental Tradition rehearsed and performed. Concerts presented throughout the semester. Percussion techniques are studied and refined as they relate to the literature performed. Emphasis placed on reading and listening	Prerequisites: None.	L+L 1.0 3.0 3.0
MUP201AA	Private Instruction: Voice	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: A grade of C or better in MUP151AA.	L+L 1.0 0.6 0.0
MUP201AD	Private Instruction: Piano	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: A grade of C or better in MUP151AD.	L+L 1.0 0.6 0.0
MUP201AG	Private Instruction: Harpsichord	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: A grade of C or better in MUP151AG.	L+L 1.0 0.6 0.0

MUP201AJ	Private Instruction: Organ	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: A grade of C or better in MUP151AJ.	L+L 1.0 0.6 0.0
MUP201AM	Private Instruction: Guitar	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: A grade of C or better in MUP151AM.	L+L 1.0 0.6 0.0
MUP201AP	Private Instruction: Trumpet	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: A grade of C or better in MUP151AP.	L+L 1.0 0.6 0.0
MUP201AS	Private Instruction: French Horn	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: A grade of C or better in MUP151AS.	L+L 1.0 0.6 0.0
MUP201AV	Private Instruction: Trombone	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: A grade of C or better in MUP151AV.	L+L 1.0 0.6 0.0

MUP201AY	Private Instruction: Euphonium	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, euphonium, tuba, flute, oboe, clarinet, bassoon,	Prerequisites: A grade of C or better in MUP151AY.	L+L 1.0 0.6 0.0
MUP201BB	Private Instruction: Tuba	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: A grade of C or better in MUP151BB.	L+L 1.0 0.6 0.0
MUP201BE	Private Instruction: Flute	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: A grade of C or better in MUP151BE.	L+L 1.0 0.6 0.0
MUP201BH	Private Instruction: Oboe	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: A grade of C or better in MUP151BH.	L+L 1.0 0.6 0.0
MUP201BK	Private Instruction: Clarinet	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: A grade of C or better in MUP151BK.	L+L 1.0 0.6 0.0

MUP201BN	Private Instruction: Bassoon	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: A grade of C or better in MUP151BN.	L+L 1.0 0.6 0.0
MUP201BQ	Private Instruction: Saxophone	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: A grade of C or better in MUP151BQ.	L+L 1.0 0.6 0.0
MUP201BT	Private Instruction: Violin	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: A grade of C or better in MUP151BT.	L+L 1.0 0.6 0.0
MUP201BW	Private Instruction: Viola	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: A grade of C or better in MUP151BW.	L+L 1.0 0.6 0.0
MUP201BZ	Private Instruction: Violoncello	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: A grade of C or better in MUP151BZ.	L+L 1.0 0.6 0.0

MUP201CC	Private Instruction: Contrabass	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: A grade of C or better in MUP151CC.	L+L 1.0 0.6 0.0
MUP201CF	Private Instruction: Popular Music Bass Guitar	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four-course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar,	Prerequisites: A grade of C or better in MUP151CF.	L+L 1.0 0.6 0.0
MUP201CI	Private Instruction: Percussion	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: A grade of C or better in MUP151CI.	L+L 1.0 0.6 0.0
MUP201CJ	Private Instruction: Harp	Private Instruction emphasizing developmental improvement of musicianship, and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: A grade of C or better in MUP151CJ.	L+L 1.0 0.6 0.0
MUP201CK	Private Instruction: Popular Music Voice	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four-course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar,	Prerequisites: A grade of C or better in MUP151CK.	L+L 1.0 0.6 0.0

MUP201CL	Private Instruction: Popular Music Piano	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four-course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar,	Prerequisites: A grade of C or better in MUP151CL.	L+L 1.0 0.6 0.0
MUP201CM	Private Instruction: Popular Music Guitar	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four-course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar,	Prerequisites: A grade of C or better in MUP151CM.	L+L 1.0 0.6 0.0
MUP201CN	Private Instruction: Popular Music Drum	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four-course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar,	Prerequisites: A grade of C or better in MUP151CN.	L+L 1.0 0.6 0.0
MUP201CO	Private Instruction: Popular Music Production	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four-course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar,	Prerequisites: A grade of C or better in MUP151CO.	L+L 1.0 0.6 0.0

MUP201CP	Private Instruction: Popular Electronic Music Performance	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four-course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar,	Prerequisites: A grade of C or better in MUP151CP.	L+L 1.0 0.6 0.0
MUP201CQ	Private Instruction: Popular Music Turntablism	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four-course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar,	Prerequisites: A grade of C or better in MUP151CQ.	L+L 1.0 0.6 0.0
MUP202AA	Private Instruction: Voice	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: A grade of C or better in MUP152AA.	L+L 2.0 1.2 0.0
MUP202AD	Private Instruction: Piano	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: A grade of C or better in MUP152AD.	L+L 2.0 1.2 0.0
MUP202AG	Private Instruction: Harpsichord	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: A grade of C or better in MUP152AG.	L+L 2.0 1.2 0.0

MUP202AJ	Private Instruction: Organ	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: A grade of C or better in MUP152AJ.	L+L 2.0 1.2 0.0
MUP202AM	Private Instruction: Guitar	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: A grade of C or better in MUP152AM.	L+L 2.0 1.2 0.0
MUP202AP	Private Instruction: Trumpet	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: A grade of C or better in MUP152AP.	L+L 2.0 1.2 0.0
MUP202AS	Private Instruction: French Horn	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: A grade of C or better in MUP152AS.	L+L 2.0 1.2 0.0
MUP202AV	Private Instruction: Trombone	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: A grade of C or better in MUP152AV.	L+L 2.0 1.2 0.0
MUP202AY	Private Instruction: Euphonium	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, euphonium, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: A grade of C or better in MUP152AY.	L+L 2.0 1.2 0.0

MUP202BB	Private Instruction: Tuba	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: A grade of C or better in MUP152BB.	L+L 2.0 1.2 0.0
MUP202BE	Private Instruction: Flute	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: A grade of C or better in MUP152BE.	L+L 2.0 1.2 0.0
MUP202BH	Private Instruction: Oboe	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: A grade of C or better in MUP152BH.	L+L 2.0 1.2 0.0
MUP202BK	Private Instruction: Clarinet	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: A grade of C or better in MUP152BK.	L+L 2.0 1.2 0.0
MUP202BN	Private Instruction: Bassoon	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: A grade of C or better in MUP152BN.	L+L 2.0 1.2 0.0
MUP202BQ	Private Instruction: Saxophone	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: A grade of C or better in MUP152BQ.	L+L 2.0 1.2 0.0

MUP202BT	Private Instruction: Violin	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: A grade of C or better in MUP152BT.	L+L 2.0 1.2 0.0
MUP202BW	Private Instruction: Viola	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: A grade of C or better in MUP152BW.	L+L 2.0 1.2 0.0
MUP202BZ	Private Instruction: Violoncello	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: A grade of C or better in MUP152BZ.	L+L 2.0 1.2 0.0
MUP202CC	Private Instruction: Contrabass	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: A grade of C or better in MUP152CC.	L+L 2.0 1.2 0.0
MUP202CF	Private Instruction: Popular Music Bass Guitar	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four-course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar,	Prerequisites: A grade of C or better in MUP152CF.	L+L 2.0 1.2 0.0
MUP202CI	Private Instruction: Percussion	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: A grade of C or better in MUP152CI.	L+L 2.0 1.2 0.0

MUP202CJ	Private Instruction: Harp	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: A grade of C or better in MUP152CJ.	L+L 2.0 1.2 0.0
MUP202CK	Private Instruction: Popular Music Voice	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four-course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar,	Prerequisites: A grade of C or better in MUP152CK.	L+L 2.0 1.2 0.0
MUP202CL	Private Instruction: Popular Music Piano	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four-course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar,	Prerequisites: A grade of C or better in MUP152CL.	L+L 2.0 1.2 0.0
MUP202CM	Private Instruction: Popular Music Guitar	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four-course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar,	Prerequisites: A grade of C or better in MUP152CM.	L+L 2.0 1.2 0.0
MUP202CN	Private Instruction: Popular Music Drum	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four-course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar,	Prerequisites: A grade of C or better in MUP152CN.	L+L 2.0 1.2 0.0

MUP202CO	Private Instruction: Popular Music Production	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four-course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar,	Prerequisites: A grade of C or better in MUP152CO.	L+L 2.0 1.2 0.0
MUP202CP	Private Instruction: Popular Electronic Music Performance	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four-course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar,	Prerequisites: A grade of C or better in MUP152CP.	L+L 2.0 1.2 0.0
MUP202CQ	Private Instruction: Popular Music Turntablism	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four-course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar,	Prerequisites: A grade of C or better in MUP152CQ.	L+L 2.0 1.2 0.0
MUP209	Elements of Conducting	Essentials of conducting techniques used in choral and instrumental ensembles including terminology,	Prerequisites: None.	LEC 2.0 2.0 2.0
MUP217	Music Theatre: Broadway Solos	Study and in-class performance of scenes and solos from Broadway musical literature.	Prerequisites: None.	L+L 1.0 3.0 3.0
MUP218	Audition Techniques: Music Theater	Practice in the techniques of auditioning for musical theater. Identification and illustration techniques of the vocal and acting music theater audition.	Prerequisites: None.	L+L 1.0 3.0 3.0
MUP227	Class Guitar III	Additional fingerboard positions. Ensemble techniques and performance.	Prerequisites: A grade of C or better in MUP226 or permission of	L+L 1.0 3.0 3.0
MUP228	Class Guitar IV	Advanced fingerboard positions. Duet and trio performances. Advanced ensemble techniques.	Prerequisites: A grade of C or better in MUP227 or permission of	L+L 1.0 3.0 3.0
MUP231	Class Piano III	Development of intermediate piano techniques including selected solo literature, transposition of harmonic patterns, and secondary dominants.	Prerequisites: A grade of C or better in MUP132 or permission of Instructor.	L+L 1.0 3.0 3.0

MUP232	Class Piano IV	Continuation of Piano III including modulation techniques, improvisation of piano accompaniments, advanced chromatic harmony, and sight reading of	Prerequisites: A grade of C or better in MUP231 or permission of Instructor.	L+L 1.0 3.0 3.0
MUP233	Class Voice III	Interpretive singing through a closer examination of coloring, tone production, dynamics, and tempo	Prerequisites: A grade of C or better in MUP134.	L+L 1.0 3.0 3.0
MUP234	Class Voice IV	Emphasis on the preparation of solo vocal literature for the purpose of evaluation and the integration of the music with the drama of the music.	Prerequisites: A grade of C or better in MUP233 or permission of Instructor.	L+L 1.0 3.0 3.0
MUP240	Piano Literature	A chronological study and analysis of the repertoire for piano and other keyboard instruments from the late sixteenth century to the twenty-first century. Emphasis on the evolution of the piano, musical periods, and characteristics of the musical forms found in keyboard repertoire. Includes historical and biographical context	Prerequisites: A grade of C or better in MUP140 or permission of Instructor.	LEC 2.0 2.0 2.0
MUP241	Piano Artistry	Overview of topics and issues including practice skills, rhythm, technique, musicianship such as dynamics, ornamentation, pedaling, touch, phrasing, articulation, voicing, balance, and the manipulation of time, necessary for pianists and piano teachers in working for	Prerequisites: A grade of C or better in MUP240 or permission of Instructor.	LEC 2.0 2.0 2.0
MUP250AA	Survey of Diction for Singers (English)	Introduction to the use of phonetics in the study of English song literature.	Prerequisites: None.	L+L 1.0 2.0 2.0
MUP250AB	Survey of Diction for Singers (Italian/Latin)	Introduction to the use of phonetics in the study of Italian/Latin song literature	Prerequisites: None.	L+L 1.0 2.0 2.0
MUP250AC	Survey of Diction for Singers (German)	Introduction to the use of phonetics in the study of German song literature.	Prerequisites: None.	L+L 1.0 2.0 2.0
MUP250AD	Survey of Diction for Singers (French)	Introduction to the use of phonetics in the study of French song literature.	Prerequisites: None.	L+L 1.0 2.0 2.0
MUP251AA	Private Instruction: Voice	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: A grade of C or better in MUP201AA.	L+L 1.0 0.6 0.0

MUP251AD	Private Instruction: Piano	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: A grade of C or better in MUP201AD.	L+L 1.0 0.6 0.0
MUP251AG	Private Instruction: Harpsichord	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: A grade of C or better in MUP201AG.	L+L 1.0 0.6 0.0
MUP251AJ	Private Instruction: Organ	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: A grade of C or better in MUP201AJ.	L+L 1.0 0.6 0.0
MUP251AM	Private Instruction: Guitar	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: A grade of C or better in MUP201AM.	L+L 1.0 0.6 0.0
MUP251AP	Private Instruction: Trumpet	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: A grade of C or better in MUP201AP.	L+L 1.0 0.6 0.0

MUP251AS	Private Instruction: French Horn	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: A grade of C or better in MUP201AS.	L+L 1.0 0.6 0.0
MUP251AV	Private Instruction: Trombone	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: A grade of C or better in MUP201AV.	L+L 1.0 0.6 0.0
MUP251AY	Private Instruction: Euphonium	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, euphonium, tuba, flute, oboe, clarinet, bassoon,	Prerequisites: A grade of C or better in MUP201AY.	L+L 1.0 0.6 0.0
MUP251BB	Private Instruction: Tuba	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: A grade of C or better in MUP201BB.	L+L 1.0 0.6 0.0
MUP251BE	Private Instruction: Flute	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: A grade of C or better in MUP201BE.	L+L 1.0 0.6 0.0

MUP251BH	Private Instruction: Oboe	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: A grade of C or better in MUP201BH.	L+L 1.0 0.6 0.0
MUP251BK	Private Instruction: Clarinet	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: A grade of C or better in MUP201BK.	L+L 1.0 0.6 0.0
MUP251BN	Private Instruction: Bassoon	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: A grade of C or better in MUP201BN.	L+L 1.0 0.6 0.0
MUP251BQ	Private Instruction: Saxophone	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: A grade of C or better in MUP201BQ.	L+L 1.0 0.6 0.0
MUP251BT	Private Instruction: Violin	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: A grade of C or better in MUP201BT.	L+L 1.0 0.6 0.0

MUP251BW	Private Instruction: Viola	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: A grade of C or better in MUP201BW.	L+L 1.0 0.6 0.0
MUP251BZ	Private Instruction: Violoncello	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: A grade of C or better in MUP201BZ.	L+L 1.0 0.6 0.0
MUP251CC	Private Instruction: Contrabass	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: A grade of C or better in MUP201CC.	L+L 1.0 0.6 0.0
MUP251CF	Private Instruction: Popular Music Bass Guitar	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four-course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar,	Prerequisites: A grade of C or better in MUP201CF.	L+L 1.0 0.6 0.0
MUP251CI	Private Instruction: Percussion	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: A grade of C or better in MUP201CI.	L+L 1.0 0.6 0.0

MUP251CJ	Private Instruction: Harp	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone,	Prerequisites: A grade of C or better in MUP202CJ.	L+L 1.0 0.6 0.0
MUP251CK	Private Instruction: Popular Music Voice	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four-course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar,	Prerequisites: A grade of C or better in MUP201CK.	L+L 1.0 0.6 0.0
MUP251CL	Private Instruction: Popular Music Piano	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four-course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar,	Prerequisites: A grade of C or better in MUP201CL.	L+L 1.0 0.6 0.0
MUP251CM	Private Instruction: Popular Music Guitar	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four-course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar,	Prerequisites: A grade of C or better in MUP201CM.	L+L 1.0 0.6 0.0

MUP251CN	Private Instruction: Popular Music Drum	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four-course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar,	Prerequisites: A grade of C or better in MUP201CN.	L+L 1.0 0.6 0.0
MUP251CO	Private Instruction: Popular Music Production	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four-course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar,	Prerequisites: A grade of C or better in MUP201CO.	L+L 1.0 0.6 0.0
MUP251CP	Private Instruction: Popular Electronic Music Performance	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four-course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar,	Prerequisites: A grade of C or better in MUP201CP.	L+L 1.0 0.6 0.0
MUP251CQ	Private Instruction: Popular Music Turntablism	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four-course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar,	Prerequisites: A grade of C or better in MUP201CQ.	L+L 1.0 0.6 0.0
MUP252AA	Private Instruction: Voice	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: A grade of C or better in MUP202AA.	L+L 2.0 1.2 0.0

MUP252AD	Private Instruction: Piano	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: A grade of C or better in MUP202AD.	L+L 2.0 1.2 0.0
MUP252AG	Private Instruction: Harpsichord	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: A grade of C or better in MUP202AG.	L+L 2.0 1.2 0.0
MUP252AJ	Private Instruction: Organ	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: A grade of C or better in MUP202AJ.	L+L 2.0 1.2 0.0
MUP252AM	Private Instruction: Guitar	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: A grade of C or better in MUP202AM.	L+L 2.0 1.2 0.0
MUP252AP	Private Instruction: Trumpet	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: A grade of C or better in MUP202AP.	L+L 2.0 1.2 0.0
MUP252AS	Private Instruction: French Horn	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: A grade of C or better in MUP202AS.	L+L 2.0 1.2 0.0

MUP252AV	Private Instruction: Trombone	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: A grade of C or better in MUP202AV.	L+L 2.0 1.2 0.0
MUP252AY	Private Instruction: Euphonium	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, euphonium, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: A grade of C or better in MUP202AY.	L+L 2.0 1.2 0.0
MUP252BB	Private Instruction: Tuba	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: A grade of C or better in MUP202BB.	L+L 2.0 1.2 0.0
MUP252BE	Private Instruction: Flute	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: A grade of C or better in MUP202BE.	L+L 2.0 1.2 0.0
MUP252BH	Private Instruction: Oboe	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: A grade of C or better in MUP202BH.	L+L 2.0 1.2 0.0
MUP252BK	Private Instruction: Clarinet	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: A grade of C or better in MUP202BK.	L+L 2.0 1.2 0.0

MUP252BN	Private Instruction: Bassoon	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: A grade of C or better in MUP202BN.	L+L 2.0 1.2 0.0
MUP252BQ	Private Instruction: Saxophone	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: A grade of C or better in MUP202BQ.	L+L 2.0 1.2 0.0
MUP252BT	Private Instruction: Violin	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: A grade of C or better in MUP202BT.	L+L 2.0 1.2 0.0
MUP252BW	Private Instruction: Viola	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: A grade of C or better in MUP202BW.	L+L 2.0 1.2 0.0
MUP252BZ	Private Instruction: Violoncello	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: A grade of C or better in MUP202BZ.	L+L 2.0 1.2 0.0
MUP252CC	Private Instruction: Contrabass	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: A grade of C or better in MUP202CC.	L+L 2.0 1.2 0.0

MUP252CF	Private Instruction: Popular Music Bass Guitar	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four-course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar,	Prerequisites: A grade of C or better in MUP202CF.	L+L 2.0 1.2 0.0
MUP252CI	Private Instruction: Percussion	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: A grade of C or better in MUP202CI.	L+L 2.0 1.2 0.0
MUP252CJ	Private Instruction: Harp	Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola,	Prerequisites: A grade of C or better in MUP202CJ.	L+L 2.0 1.2 0.0
MUP252CK	Private Instruction: Popular Music Voice	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four-course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar,	Prerequisites: A grade of C or better in MUP202CK.	L+L 2.0 1.2 0.0
MUP252CL	Private Instruction: Popular Music Piano	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four-course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar,	Prerequisites: A grade of C or better in MUP202CL.	L+L 2.0 1.2 0.0

MUP252CM	Private Instruction: Popular Music Guitar	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four-course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar,	Prerequisites: A grade of C or better in MUP202CM.	L+L 2.0 1.2 0.0
MUP252CN	Private Instruction: Popular Music Drum	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four-course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar,	Prerequisites: A grade of C or better in MUP202CN.	L+L 2.0 1.2 0.0
MUP252CO	Private Instruction: Popular Music Production	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four-course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar,	Prerequisites: A grade of C or better in MUP202CO.	L+L 2.0 1.2 0.0
MUP252CP	Private Instruction: Popular Electronic Music Performance	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four-course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar,	Prerequisites: A grade of C or better in MUP202CP.	L+L 2.0 1.2 0.0

MUP252CQ	Private Instruction: Popular Music Turntablism	Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four-course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar,	Prerequisites: A grade of C or better in MUP202CQ.	L+L 2.0 1.2 0.0
MUP270	Musical Theatre Workshop	Workshop in the study and performance of Musical Theatre repertoire. Includes audition techniques, stage directions, character role development, rehearsal techniques, vocal acting styles and vocal technique,	Prerequisites: None.	L+L 2.0 5.0 5.0
MUP270AA	Musical Theatre Workshop	Workshop in the study and performance of musical theatre repertoire. Includes audition techniques, stage directions, character role development, rehearsal techniques, vocal acting styles and vocal technique,	Prerequisites: None.	LAB 1.0 3.0 3.0
MUP273	Musical Theatre Production	Principles and techniques for musical theatre production performance. Includes audition techniques, stage directions, character role development, rehearsal techniques, vocal acting styles and vocal technique,	Prerequisites: By audition.	LAB 1.0 5.0 5.0
MUP282AA	Volunteerism for Music: A Service Learning Experience	Service-learning field experience within private/public agencies, citizen volunteer groups, and on-campus sites. 50 hours of designated work per credit. Standard grading available according to procedures outlined in	Prerequisites: None.	LAB 1.0 1.0 0.0
MUP282AB	Volunteerism for Music: A Service Learning Experience	Service-learning field experience within private/public agencies, citizen volunteer groups, and on-campus sites. 50 hours of designated work per credit. Standard grading available according to procedures outlined in	Prerequisites: None.	LAB 2.0 2.0 0.0
MUP282AC	Volunteerism for Music: A Service Learning Experience	Service-learning field experience within private/public agencies, citizen volunteer groups, and on-campus sites. 50 hours of designated work per credit. Standard grading available according to procedures outlined in	Prerequisites: None.	LAB 3.0 3.0 0.0
MUP288	Basics of Piano Accompanying Vocal	Introduction to piano accompanying with emphasis on basic skills needed to accompany solo voice, choral singing, and congregational singing.	Prerequisites: A grade of C or better in MUP151AD or MUP231 or permission of Instructor.	LEC 2.0 2.0 2.0
MUP289	Basics of Piano Accompanying Instrument	Introduction to piano accompanying with emphasis on basic skills needed to accompany solo instruments, chamber music and musicals.	Prerequisites: A grade of C or better in MUP151AD or MUP231 or permission of Instructor.	LEC 2.0 2.0 2.0

MUP296WA	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 1.0 5.0 0.0
MUP296WB	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 2.0 10.0 0.0
MUP296WC	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 3.0 15.0 0.0

MUP296WD	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 4.0 20.0 0.0
MUP298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
MUP298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
MUP298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0

MWR101	Introduction to Millwrighting	Fundamental millwright trade skills, employee/employer roles and responsibilities, and safe work practices needed for entry-level performance in the construction industry. Emphasis on attaining standard industry safety credentials, practical experience using terminology and basic measuring techniques. Response to environmental and energy efficient building concepts through green construction methods. Training for job	Prerequisites: Apprentice status or permission of the Apprenticeship Coordinator.	L+L 2.0 2.0 2.0
MWR102	Millwrighting Safety and Health Certifications	Construction hazard awareness and individual responsibility for workplace safety and health, including assessing danger, employing prevention measures, and responding to emergencies. Safe and proper use of hand and power tools, first aid, and cardiopulmonary resuscitation (CPR), and Occupational Safety and	Prerequisites: Apprentice status or permission of the Apprenticeship Coordinator.	L+L 2.0 2.0 2.0
MWR103	Machinery Installation and Erection I	Fundamental machinery installation skills including industry standard practices such as general and assembly drawing interpretation, site inspection criteria, communication skills, pre-installation inspection, storage, and staging. Includes tools and techniques for moving, lifting, elevating machines, and equipment placement. Emphasis on measuring and layout	Prerequisites: Apprentice status or permission of the Apprenticeship Coordinator.	L+L 2.0 2.0 2.0
MWR104	Machinery Installation and Erection II	Machinery installation skills used in manufacturing applications. Disassembling machinery for inspection and maintenance. Review equipment manufacturers' operating and maintenance guides and assembly instructions. Identification of component locations; measurements and tolerances; installation requirements; and alignment of parts using machine	Prerequisites: Apprentice status or permission of the Apprenticeship Coordinator.	L+L 2.0 2.0 2.0
MWR105	Millwrighting General Skills	Overview of hand and power tools, and stationary machinery general skills used in millwright trade. In-depth review of standard tools including identification, safe operating, inspection, and manufacturer guidelines. Routine cutting, shaping and smoothing of materials with emphasis on measuring and layout accuracy in precision bench skills and field operations. Review of project drawings to promote development of	Prerequisites: Apprentice status or permission of the Apprenticeship Coordinator.	L+L 2.0 2.0 2.0

MWR106	Math for Millwrighting, Hand, Power and Precision Tools	Fundamental operations with whole numbers, common fractions, decimals, percentages, and ratio and proportion. Measurement tools. Fundamentals of Algebra, linear equations, includes applied math problems. Use, maintenance and safety procedures for	Prerequisites: A grade of C or better in (MWR103 and registered apprentice status) or permission of the Apprenticeship Coordinator.	L+L 2.0 2.0 2.0
MWR107	Drives, Pulleys and Belts	Identification, application, and installation skills for typical power drive systems. Demonstrations and practice exercises on the belt, chain and gear drives. Review of safety, rigging tasks, machinery fastening	Prerequisites: Apprentice status or permission of the Apprenticeship Coordinator.	L+L 2.0 2.0 2.0
MWR108	Reading Mechanical Prints	Types of blueprints, sketching, and basic print reading. Symbols for materials, construction details, standards, and specifications. Interpretation of two-dimensional views to convey shape, characteristics, construction, and scope of project. Standard drawing methods and how to read visual and verbal cues. Recognizing shop drawings, locating machinery, calculating dimensions,	Prerequisites: Apprentice status or permission of the Apprenticeship Coordinator.	L+L 2.0 2.0 2.0
MWR109	Turbine Familiarization	Function and performance of a General Electric Frame 5 Gas Turbine. Component descriptions and machine drawings, assembly/disassembly tasks and key bolting	Prerequisites: Apprentice status or permission of the Apprenticeship Coordinator.	L+L 2.0 2.0 2.0
MWR110	Cutting and Burning	Overview of cutting and burning skills using oxygen/acetylene torch equipment. In-depth review of torch cutting principles will cover parts identification, gas characteristics, torch accessories and tips, safe operating and inspection criteria, and manufacturers'	Prerequisites: Apprentice status or permission of the Apprenticeship Coordinator.	L+L 2.0 2.0 2.0
MWR111	Tools and Equipment Applications	Discuss the safe and appropriate use of fall protection and emergency response procedures. Tool applications to provide opportunities for tool skill mastery and	Prerequisites: Apprentice status or permission of the Apprenticeship Coordinator.	L+L 2.0 2.0 2.0
MWR115	Millwright General Skills B - Millwright Apprenticeship	Hand and power tools, shop equipment, and precision instruments to complete various machining operations. Provides millwright skills and experience using stationary	Prerequisites: Apprentice status or permission of the Apprenticeship Coordinator.	L+L 2.0 2.0 2.0
MWR121	Structural Welding A - Millwright Apprenticeship	Careful examination of applicable codes. Includes terminology, shielded metal arc welding (SMAW) processes, equipment and safety requirements, electrode identification and applications, welding positions and deposits. Practical experience to include symbol identification, print interpretation, code citation, safe equipment setup and operation, and recognition/remediation of welding flaws. Course will	Prerequisites: Apprentice status or permission of the Apprenticeship Coordinator.	L+L 2.0 2.0 2.0

MWR131	Structural Welding B - Millwright Apprenticeship	Provides practical experience for structural welding skills used in commercial and industrial construction. Review of welding terminology, welding processes, welding equipment, and safety requirements. Discusses electrode characteristics and metal inert gas/tungsten inert gas (MIG/TIG) welding applications. Course focuses on the written examination and production of	Prerequisites: Apprentice status or permission of the Apprenticeship Coordinator.	L+L 2.0 2.0 2.0
MWR201	Shaft Alignment I	Terms, characteristics, and operating principles for the transit and laser levels. Procedures for establishing machinery and equipment elevation and alignment using precision optical instruments and installation procedures. Topics include transit and jig transit characteristics, instrument increments of measurement and accuracy, site inspection, setting up levels,	Prerequisites: Apprentice status or permission of the Apprenticeship Coordinator.	L+L 2.0 2.0 2.0
MWR202	Conveyor Systems	Proper layout and component alignment of machinery, equipment, and conveyor systems. Identification of proper alignment procedures. Belt splicing. Analysis of effects of improper installation on maintenance and	Prerequisites: Apprentice status or permission of the Apprenticeship Coordinator.	L+L 2.0 2.0 2.0
MWR203	Speciality Machinery I	Fundamentals and theory of hydraulics and pneumatics. Types, components, construction, and assembly of pumps and compressors. Inner workings of industrial pumps and compressors. Auxiliary equipment	Prerequisites: (Registered apprentice status and a grade of C or better in MWR202) or permission of the Apprenticeship Coordinator.	LEC 5.0 5.0 5.0
MWR204	Speciality Machinery II	Design, terminology, installation and operation of centrifugal and axial draft fans, monorail systems, steam turbines and generators. Layout and fabrication of	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	LEC 5.0 5.0 5.0
MWR205	Shaft Alignment II	Terms, characteristics, and methods for aligning machine shafts. Comprehensive review of alignment principles including conventional dial indicator and computer-aided. Setting up indicators, taking and	Prerequisites: Apprentice status or permission of the Apprenticeship Coordinator.	L+L 2.0 2.0 2.0
MWR206	Rigging Hardware and Procedures	Lifting theory and practical rigging methods and procedures. Rigging attachment procedures, lifting equipment, limits of operation, and communication practices. United Brotherhood of Carpenters (UBC)	Prerequisites: Apprentice status or permission of the Apprenticeship Coordinator.	L+L 2.0 2.0 2.0
MWR207	Advanced Precision Alignment Instruments	Computer aided transit and laser levels. Procedures for using Computer-aided Design (CAD), Global Positioning System (GPS) and Satellite instruments and computer programs using metric circle, GPS coordinates, degrees, minutes, and seconds on veneer scales. Utilization of	Prerequisites: A grade of C or better in (MWR201 and registered apprentice status) or permission of the Apprenticeship Coordinator.	L+L 2.0 2.0 2.0

MWR208	Compressor Theory and Maintenance	Fundamentals and theory of hydraulics and pneumatics. Types, components, construction, and assembly of pumps and compressors. Inner workings of industrial pumps and compressors. Design and	Prerequisites: Apprentice status or permission of the Apprenticeship Coordinator.	L+L 2.0 2.0 2.0
MWR209	Introduction to Wind Turbines	Design, function and installation of wind turbine equipment. Methods, sequences and procedures for housings, bolting, power, drive assembly and other components. Jobsite safety, print interpretation, material identification, and use of system devices and	Prerequisites: A grade of C or better in (MWR109 and registered apprentice status) or permission of the Apprenticeship Coordinator.	L+L 2.0 2.0 2.0
MWR210	Solar Installer	Characteristics, design, and installation of concentrated photovoltaic (CPV) components. Methods, sequences, and procedures for layout, assembly, mounting, and elevating/positioning for solar array construction. Includes industry overview and outlook for renewable	Prerequisites: Apprentice status or permission of the Apprenticeship Coordinator.	L+L 2.0 2.0 2.0
MWR218	Compressor Theory and Maintenance - Millwright	Operating theory and components of types of positive displacement compressors. Compressor configuration, operating parameters, safety, and maintenance	Prerequisites: Apprentice status or permission of the Apprenticeship Coordinator.	L+L 2.0 2.0 2.0
MWR219	Turbine Maintenance - Millwright Apprenticeship	Explores the machines and auxiliary equipment used in the power production industry. Highlights the function and performance of a typical gas turbine, and includes	Prerequisites: Apprentice status or permission of the Apprenticeship Coordinator.	L+L 2.0 2.0 2.0
MWR298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
MWR298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0

MWR298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
NAV101	Elementary Navajo I	Basic grammar, pronunciation, and vocabulary of the Navajo language. Practice of listening, speaking, reading, and writing skills. Includes the study of the Navajo culture with participation in an off-campus	Prerequisites: None.	LEC 4.0 4.0 4.0
NAV102	Elementary Navajo II	Continued study of grammar, pronunciation, and vocabulary of the Navajo language. Emphasis on listening, speaking, reading, and writing skills.	Prerequisites: A grade of C or better in NAV101 or permission of Department or Division. Completion of prerequisites within the last three	LEC 4.0 4.0 4.0
NAV115	Beginning Navajo Conversation I	Beginning conversational Navajo with emphasis on basic listening and speaking skills, including basic pronunciation, vocabulary, sentence structure, and	Prerequisites: None.	LEC 3.0 3.0 3.0
NAV201	Intermediate Navajo I	Continued study of the Navajo language. Continued practice and development of listening, speaking, reading, and writing skills. Emphasis on fluency and accuracy of the Navajo language. Includes continued	Prerequisites: A grade of C or better in NAV102 or permission of Department or Division. Completion of prerequisites within the last three	LEC 4.0 4.0 4.0
NAV202	Intermediate Navajo II	Continued study of the Navajo language. Continued practice and development of listening, speaking, reading, and writing skills. Emphasis on fluency and accuracy of the Navajo language. Includes continued	Prerequisites: A grade of C or better in NAV201 or permission of Department or Division. Completion of prerequisites within the last three	LEC 4.0 4.0 4.0
NCE101	Introduction and Overview of Cancer Disease	Introduction and overview of the disease and treatment of cancer including cancer origin, development, pathology, staging, hematopoiesis, epidemiology, diagnosis modalities, treatment options, cancer research and differentiation of solid tumors versus nonsolid tumors. Effective analysis, synthesis, and	Prerequisites: Health care professional or permission of Department or Division.	LEC 2.0 2.0 2.0

NCE102	Exploring the World of Nursing for the High School Student (Summer Camp)	Overview of the philosophy, core values, policies, competencies and curricular components of the Maricopa Community College District Nursing Program (MCCDNP). Introduce the use of the nursing process, utilization of critical thinking skills, and sound decision-making principles in the clinical setting. Examine the communication process, time management, stress reduction, and the transition in role expectations between High school and College Students. Explore the roles of Licensed Practical Nurse (LPN), Registered	Prerequisites: None. Corequisites: HCC/RES109. Xref: HCC109	LAB 1.5 4.5 4.5
NCE103	Behavioral Health Technician	Students learn to care for patients with a wide variety of mental illnesses to include anxiety, mood, personality and psychotic disorders, as well as post-traumatic stress syndrome and behavioral issues. Behavioral health technicians follow physician/nurse instructions and hospital procedures. Identification of modalities to monitor patient's mental and emotional status, physical symptoms related to mental disorders, and recognition of medication side effects. A variety of therapies will be	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: NUR158, or NCE150, or permission of Division or Department Chair.	LEC 4.0 4.0 4.0
NCE105	Job Preparation for the Health Care Professional	Designing and creating resumes/curriculum vitae, job interview skills, electronic portfolio, and job searching in the health care market. Appearance, dress, and questioning skills emphasized. Role-playing exercises of	Prerequisites: None.	LEC 0.5 0.5 0.5
NCE106	Decision Making in Nursing	Principles and application of a clinical judgment decision-making model in nursing. Description and application of critical thinking and clinical reasoning skills and their relationship to the clinical judgment decision-making	Prerequisites: None. Corequisites: NUR152 or NUR172 or NUR252 or NUR283.	LEC 0.5 0.5 0.5
NCE110	Basic First Aid	Basic first aid principles and interventions for the lay person. Topics include lacerations and bleeding control, seizures, chest pain, heat related problems, orthopedic injuries, and treatment of bites, stings, and burns	Prerequisites: None.	LEC 0.5 0.5 0.5
NCE112	Wilderness First Aid	Knowledge and skills to care for an injured or suddenly ill person in remote locations. Treatment of wounds, bone, joint and soft-tissue injuries. Treatment and immobilization for head and neck injuries. Signs, symptoms and treatment for a seizure and animal bites and stings. Assessment and treatment of patients with	Prerequisites: None.	LEC 1.0 1.0 1.0

NCE115	Nursing Healthcare Transition and Safe Passage	Overview of American nursing practice, including historical and current perspectives. Key components of transitioning to Registered Nurse role in the United States. Contrasting Registered Nurse roles in US and in other countries. Career development and successful	Prerequisites: Permission of Instructor.	LEC 2.0 2.0 2.0
NCE118	Ventilator Management for Nurses	Nursing care and management of the mechanically ventilated patient. Adjuncts to airway management including types and indications for use. Initiation,	Prerequisites: Registered nurse or licensed practical nurse or respiratory therapist.	LEC 0.5 0.5 0.5
NCE131	Recognizing Skin Rashes in the School Aged Child	Recognition of common childhood rashes, identify allergic rash manifestations, communicable rashes and infectious rashes.	Prerequisites: Current Arizona Registered Nurse (RN) license or Licensed Practical Nurse (LPN) license or permission of Instructor.	LEC 0.5 0.5 0.5
NCE150	Advanced Placement: Nurse Assisting	Prepares the advanced placement nursing assistant student for the Certified Nursing Assistant (CNA) certification or Licensed Nursing Assistant (LNA) examination. The student will care for clients across the wellness/illness continuum within the scope of practice of the CNA/LNA. Includes basic problem solving processes specific to meeting the basic and holistic needs of clients, therapeutic communication skills, as well as interventions to ensure the needs and safety of the client. Provides opportunity for the student to show proficiency in the performance of basic nursing assistant skills and procedures through laboratory activities and	Prerequisites: One year full-time employment OR two years part-time employment of direct patient care within the past five years OR students who have successfully completed course work that included direct patient care experiences in allied health, medicine or nursing in the past five years, OR permission of the Division Chairperson.	L+L 2.0 4.4 4.0
NCE153	Restorative Nursing Assistant	Additional skills for nurse assisting in restorative care settings, such as reinforcing client performance of Activities of Daily Life and assistive efforts for optimizing client independence.	Prerequisites: Permission of Department or Program Director, or a grade of C or better in NCE150 or NUR158 or current CNA certificate. CNA certificate must remain in active status throughout the term of the	L+L 1.75 1.75 1.75
NCE161	Foundation in Patient Advocacy	Foundational knowledge and skills needed for the emerging profession of patient Advocacy. Role of the patient advocate, health care delivery methods, best practices, consumer and provider perspectives,	Prerequisites: None.	LEC 2.0 2.0 2.0
NCE165	Legal Aspects of Nursing	Principles of legal aspects in nursing, rules of liability, negligent conduct and principles of malpractice. Review of the scope of nursing practices, and other legal	Prerequisites: None.	LEC 1.0 1.0 1.0

NCE168	End of Life Care Training	Nursing care at the end of life, pain management, symptom management, ethical issues, communication, cultural considerations, loss, grief and bereavement. Achievement of quality palliative care and preparation	Prerequisites: None.	LEC 1.0 1.0 1.0
NCE170	Pharmacology for Nurses	Review and update of selected pharmacological classifications. Includes dosages, administration methods and reactions.	Prerequisites: (Current license as Practical Nurse or Registered Nurse) or registered as student nurse or	LEC 3.0 3.0 3.0
NCE173	Venipuncture	Development of clinical skills for venipuncture. Emphasis on review of anatomy and physiology of vasculature of the arm, medical asepsis, and procedure.	Prerequisites: Permission of Instructor.	LEC 1.0 0.5 0.5 LAB 0.0 24.0 1.5
NCE175	Licensed Practical Nurse Update	Role and responsibilities of the Licensed Practical Nurse. Application of nursing care for medical-surgical patients, use of the nursing process and administration of medications. Includes expanded role of the Licensed Practical Nurse, principles of safe nursing practice, legal/ethical issues, human growth and development, therapeutic communication and physical assessment	Prerequisites: Current license as a Practical Nurse.	LEC 10.0 6.0 6.0 LAB 0.0 12.0 12.0
NCE200	Contemporary Leadership Concepts for Health Care	Introduction to leadership and management concepts for work-readiness in health care fields. Professional role development of the beginning registered nurse. Includes organizational design and governance as well as leadership and management theories and qualities	Prerequisites: Current Arizona Registered Nurse (RN) license or Licensed Practical Nurse (LPN) license or permission of Instructor.	LEC 1.0 1.0 1.0
NCE201	Physical Assessment	Basic health assessment by collecting health histories and performing physical examinations. Relationship of sciences and humanities to holistic aspects of health. Assessment for normal, variations of normal, and	Prerequisites: Current Practical Nurse (PN) or Registered Nurse (RN) license or permission of Instructor.	LEC 3.0 3.0 3.0
NCE202	Overview of Physical Assessment of the Adult Client	Overview of interviewing techniques and approaches to documenting a comprehensive health history and physical examination assessment techniques. Emphasis on the nursing process and health assessment skills. Performance of beginning level physical assessment.	Prerequisites: (Current Nursing or Allied Health student, or current Arizona Registered Nurse (RN) license, or Licensed Practical Nurse (LPN) license, or recent graduate of an accredited nursing program) and	LEC 1.0 1.0 1.0
NCE203	Interpretation of Laboratory Diagnostic Examinations	Utilization of laboratory diagnostic examination results for evaluation of patient conditions. Normal results for selected body fluids. Abnormal results related to pathophysiological conditions of adults. Incorporation of results of examinations to assess, modify, and evaluate	Prerequisites: Registered Nurse or Licensed Practical Nurse Nursing students or permission of Instructor.	LEC 0.5 0.5 0.5

NCE204	Hemodynamics	Events of the cardiac cycle related to normal hemodynamic waveforms and pressures. Purpose, procedure and potential complications related to hemodynamic invasive lines. Trouble shooting and preventative procedures for hemodynamic invasive lines. Normal and abnormal pressure forms related to various forms of pathophysiology. Treatments and interventions for specific cardiac diseases. Impact of	Prerequisites: Registered nurse (RN) respiratory therapist or cardiovascular technician with knowledge of dysrhythmia recognition.	LEC 1.0 1.0 1.0
NCE205	Emergency Room Nursing	Roles of emergency health team. Medical/legal issues specific to emergency room care. Triage classifications for specific emergency room/department situations, nursing care for selected conditions, trauma, and disease processes. Organ donation issues, discharge	Prerequisites: Registered Nurse (RN) or Licensed Practical Nurse (LPN) or currently enrolled in a nursing program or permission of Instructor.	LEC 4.0 4.0 4.0
NCE207	Recognition and Nursing Management of the Deteriorating Patient	This course will provide a scenario/simulation-based problem solving approach to recognize and manage the patient who has the potential for a deteriorating status in a wide variety of concept-oriented conditions. The ultimate goal is to prevent or reverse the clinical	Prerequisites: Current Arizona Registered Nurse (RN) license or Licensed Practical Nurse (LPN) license or registered as student nurse or permission of Instructor.	LEC 0.5 0.5 0.5
NCE208	Neonatal Pathophysiology	Pathophysiology and physiologic adaptations of the neonate to include assessment and management of respiratory, cardiac, hematological, immunological, neurological and fluid and electrolyte disorders. Acid-	Prerequisites: Registered therapist registered nurse (RN) or pharmacist with neonatal experience.	LEC 3.0 3.0 3.0
NCE209	SCHOOL HEALTH ASSISTING	The role of the school health assistant. Legal issues related to the school health setting. Performance of vision, hearing, and scoliosis screenings. Documentation, vital signs, triage guidelines in the school health setting. Common diseases that affect school-age children. Child abuse issues and protocol.	Prerequisites: None.	LEC 3.0 3.0 3.0
NCE210	School Nurse Emergency Assessment Skills	Update of emergency assessment in the school setting. Includes emergency assessment of seizures, asthma, head and neck injuries, heat-related problems, bites, stings, and burns, and orthopedic injuries.	Prerequisites: School nurse, school health aide or other health professional or permission of Instructor.	LEC 1.0 1.0 1.0
NCE211	Advanced Mental Health Assessment Skills for Healthcare	Comprehensive study of mental health first aid, trauma-informed care, and motivational interviewing. Preparation for certifications in motivational interviewing	Prerequisites: Healthcare professional license or certification, or permission of Instructor.	LEC 1.0 1.0 1.0

NCE212	Patient Education	Current concepts relevant to planning and implementing a teaching plan, and the role the nurse has in patient education. Patient education instructional methods, educational theories, nursing process and case management in patient education. Focus on patient	Prerequisites: Current Arizona Registered Nurse (RN) license or Licensed Practical Nurse (LPN) license or permission of Instructor.	LEC 0.5 0.5 0.5
NCE213ND	Long-Term Care Nursing Update	Medicare and insurance documentation procedures for the long-term care patient. Medical-legal issues that pertain to the long-term care patient. Specific nursing procedures performed for the long-term care patient.	Prerequisites: Registered nurse (RN) licensed practical nurse (LPN) or health worker currently employed in a long-term care setting.	LEC 0.5 0.5 0.5
NCE214CA	Basic Electrocardiogram Interpretation	Focuses on recognition of common cardiac rhythms. Includes major and minor reportable occurrences which affect a patient's status and priority interventions.	Prerequisites: Permission of Instructor.	LEC 1.0 1.0 1.0
NCE214ME	Advanced Metrology and IV Drug Therapy	Advanced course in intravenous and pediatric calculations. Preparation for NCLEX-RN exam and Registered Nurse review of complex medication calculations. Emphasis on safe clinical practice using the nursing process to analyze and calculate pediatric	Prerequisites: Registered nurse or current student in Associate Degree Nursing program.	LEC 1.0 1.0 1.0
NCE214MF	Advanced IV Drug Therapy	Advanced course in drug calculation and administration using the ratio/proportion and dimensional analysis methods. Focus on intravenous medications and titrations for critical care, pediatric and high risk obstetric	Prerequisites: Current student in Associate Degree Nursing program or permission of Instructor.	LEC 0.5 0.5 0.5
NCE214MI	Math and Medications for Intermediate Nursing Students	Focus on basic mathematical concepts to calculate metric- apothecary conversion, dosage problems, intravenous flow rates using the ratio/proportion and dimensional analysis methods. These calculations will focus application to acute care, long-term care, and	Prerequisites: Current student in Nursing program or permission of Department or Division.	LEC 0.5 0.5 0.5
NCE214MM	Math/Methods of Drug Calculation	Focuses on basic mathematical concepts using decimals and fractions to calculate fractional and metric-apothecary conversion dosage problems and intravenous flow rates. Emphasis on the dimensional	Prerequisites: None.	LEC 1.0 1.0 1.0
NCE214MO	Math/Methods for Beginning Nursing Students	Focus on basic mathematical concepts to calculate metric- apothecary conversion, dosage problems and intravenous flow rates. Includes calculation problems with oral, parenteral, and reconstitution medications. Emphasis on the ratio/proportion and dimensional	Prerequisites: Current student in Associate Degree Nursing program or permission of Instructor.	LEC 0.5 0.5 0.5
NCE214ND	Nursing Developmental Skills for Health Providers	Updating specific nursing areas in order to enhance success in nursing courses and/or employment.	Prerequisites: Previous coursework or experience in nursing related skills or permission of Instructor.	LEC 1.0 1.0 1.0

NCE214OP	Orientation to Nursing Program	Overview of the philosophy, mission, vision, Nurse of the Future Competencies, student learning outcomes, and the constructivist framework of the Maricopa Nursing program. Student expected to be prepared with basic concepts of therapeutic communication, the nursing process, pharmacology, introductory concepts of intravenous therapy and knowledge of fundamental concepts. Primary content areas: nursing process, with emphasis on the use of the nursing process to develop a plan of care; utilization of critical thinking skills; problem-solving strategies, the communication process;	Prerequisites: Designee/advanced placement into the Nursing Program or permission of the Nursing Director.	LEC 3.0 2.0 2.0 LAB 0.0 3.0 3.0
NCE214PO	Tutored NCLEX Review For Nursing Students	Brief review of nursing care by systems using an NCLEX review book. Focus on nursing process, prioritizing, and critical thinking related to application of nursing care in case study situations. Also practice multiple-choice	Prerequisites: Currently enrolled nursing student, or permission of Instructor.	LEC 2.0 2.0 2.0
NCE215AA	Nursing Update: Pain Management	Comprehensive pain assessment and pain management. Pharmacological agents, treatment modalities, and delivery systems. Regulatory agency policies, standards of care, and documentation	Prerequisites: Registered Nurse or Licensed Practical Nurse or currently enrolled in a nursing program or permission of Instructor.	LEC 0.5 0.5 0.5
NCE215AB	Nursing Update: Wound and Skin Care	Wound and skin assessment and documentation guidelines. Skin care protocols and interventions to prevent pressure ulcers and promote optimal healing. Wound care products and treatment options.	Prerequisites: Registered Nurse or Licensed Practical Nurse or currently enrolled in a nursing program or permission of Instructor.	LEC 0.5 0.5 0.5
NCE215AC	Nursing Update: Stoma Care	Care of the patient with fecal and urinary diversions. Appliance selection, stoma care, and management of potential complications. Includes nutritional, psychological, and educational aspects of care.	Prerequisites: Registered Nurse or Licensed Practical Nurse or currently enrolled in a nursing program or permission of Instructor.	LEC 0.5 0.5 0.5
NCE215AD	Nursing Update: Advances in Diabetes Management	Diabetes management and implications. Risk factors of diabetes and lifestyle modifications. Medication updates and new technological advances for the treatment of	Prerequisites: None.	LEC 0.5 0.5 0.5
NCE215AE	Nursing Update: Cardiac Care	Provides nurses with up-to-date information on prevention, diagnosis, and treatment of cardiovascular and related diseases.	Prerequisites: Registered Nurse (RN) or Licensed Practical Nurse (LPN) or other licensed personnel working with cardiac patients.	LEC 0.5 0.5 0.5
NCE215ND	Nursing Skills Update	Enhancement and reinforcement of specific nursing skills. Special needs patients, patient assessment techniques, medicolegal responsibilities, and diagnostic	Prerequisites: None.	LEC 0.5 0.5 0.5

NCE216AA	School Health Update: Assessment Skills	Assessment skills for the school health setting. Assessment and management of selected school health problems including abdominal pain, head and spinal cord injuries, and environmental hazards.	Prerequisites: Registered Nurse or Licensed Practical Nurse or currently enrolled in a nursing program or permission of Instructor.	LEC 0.5 0.5 0.5
NCE216ND	School Nurse Skills Update	Enhancement and reinforcement of specific skills encountered in the school health setting. Special needs of physically and emotional disabled children. Review of special procedures and medications used with special	Prerequisites: Current school nurse or school health aide.	LEC 0.5 0.5 0.5
NCE218	Ventilator Management for Critical Care and Emergency Room	Patient care including indications, management and complications in mechanically ventilated patients. Types of mechanical ventilation, pharmacological management, care of the mechanically ventilated	Prerequisites: Health care professional, or permission of Department or Division.	LEC 0.5 0.5 0.5
NCE219	Advanced First Aid for School Health Staff	Advanced first aid principles and interventions for staff working in a school health setting. Topics include assessment and management of medical emergencies such as asthma, anaphylaxis, environmental	Prerequisites: (Basic first aid training or experience) or permission of Instructor.	LEC 0.5 0.5 0.5
NCE220	Advanced IV Therapy Skills for RNs	Intravenous (IV) therapy skills utilized by the Registered Nurse in home health, long term care, and the acute care setting. Includes principles of care for specific central venous catheters, and infusion pumps. Also,	Prerequisites: Current license as Registered Nurse or enrolled in an accredited RN program or permission of Instructor.	LEC 0.5 0.5 0.5
NCE221	Patient Care Technician Skills	Patient care technician skills and techniques which include: drawing blood, performing a variety of specimen collections, observing and reporting patient status, assisting in patient preparation and electrode placement for electrocardiograms, suctioning patients, performing urinary catheterizations, documentation and reporting of skill completion, maintaining patient	Prerequisites: Certified Nurse Assistant (CNA), Nurse Assistant course or equivalent within the past year, and permission of Continuing Education Program Director and/or Instructor.	LEC 3.0 2.5 2.5 LAB 0.0 24.0 1.5
NCE223	LPN-IV Therapy and Medication Skills	Terminology and anatomy related to intravenous therapy. Drug response factors, dosage, calculations, intravenous site dressing change, intravenous administration equipment, and initiating intravenous therapy. Documentation and procedures for laboratory check lists. Meets state nursing board requirements for	Prerequisites: Current license as Practical Nurse or permission of Instructor.	LEC 2.5 2.0 2.0 LAB 0.0 24.0 1.5
NCE224	Nursing Case Management	Case management and managed care responsibilities, insurance strategies, utilization management, legal and ethical issues, quality improvement and discharge	Prerequisites: Registered Nurse (RN) Licensed Practical Nurse (LPN) social worker or permission of Instructor.	LEC 3.0 3.0 3.0

NCE225	Introduction to School Nursing	Registered nursing skills necessary to prepare for employment in a School Health Setting. Triaging, school health office management skills, and legal issues and scope of practice of the school nurse. Health screening basics and immunization protocols, emergency	Prerequisites: Current Arizona Registered Nurse (RN) license or Licensed Practical Nurse (LPN) license or recent graduate of an accredited nursing program or	LEC 2.0 2.0 2.0
NCE226	Pediatric Nursing Clinical Skills	Clinical application of nursing theory to the pediatric patient. Focuses on effective physical assessment techniques, and changes in nursing skills for the pediatric patient.	Prerequisites: Registered Nurse (RN), or Licensed Practical Nurse (LPN), or permission of Instructor. Corequisites: NCE227.	LAB 1.0 45.0 3.0
NCE227	Science of Pediatric Nursing	Preparation for relocation to the pediatric unit the hospital nurse. Application of pediatric nursing theory based upon the nursing process.	Prerequisites: Registered Nurse (RN), or Licensed Practical Nurse (LPN), or permission of Instructor. Corequisites: NCE226.	LEC 1.0 1.0 1.0
NCE228	Holistic Nursing Fundamentals-Certification Exam Preparation	Preparation for the holistic nursing certification examination. Includes holistic nursing philosophy, foundations, core values, standards, and principles. Covers self-care and self-reflection, theories, Integrative Health and Wellness Assessments (IHWA), in addition to development of, goals, and strategies for implementation of individualized care plans. Also	Prerequisites: None.	LEC 3.0 3.0 3.0
NCE230	PICC Line Insertion	Overview of the care, maintenance and insertion of Peripherally Inserted Central Catheter (PICC) lines. Advantages of PICC lines, legal implications, types, as well as anatomy and physiology for proper insertion.	Prerequisites: Current license as a Registered Nurse.	L+L 0.5 24.0 1.5
NCE231	Pharmacology for Critical Care and Emergency Room Nurses	Pharmacology update for emergency department and critical care personnel on new drug therapies and related patient care protocols. Pharmacological management of cardiac and respiratory system disorders, complications, and emergency interventions. Patient management protocols for conscious sedation. New pharmacological agents for the treatment and	Prerequisites: Registered Nurse or permission of Instructor.	LEC 1.0 1.0 1.0
NCE232	Health Assessment of the School Age Child	Comprehensive health assessment foundation. Development of interviewing skills, obtaining health histories, and conducting physical examinations on the school age child. Identification and management of	Prerequisites: School nurse or current Registered Nurse (RN) licensure.	LEC 3.0 3.0 3.0

NCE233	Nursing Care of the Special Needs Child	Overview of congenital and acquired pediatric conditions, chronic illnesses and physical challenges that may lead to developmental delay or educational dysfunction. Application of the nursing process to provide care for the special needs child. Developmental assessment tools, skilled nursing interventions and environmental factors. Resources for disabled and	Prerequisites: School nurse or current Registered Nurse (RN) licensure.	LEC 3.0 3.0 3.0
NCE234	Fundamentals of School Nursing Practice	Assessment, development, implementation and evaluation of school health programming. Focus on nursing theory as it relates to school health programming. Program management, professional development, dealing with change, health education,	Prerequisites: School nurse or current Registered Nurse (RN) licensure.	LEC 3.0 3.0 3.0
NCE235	Conscious Sedation	Conscious sedation criteria and protocols. Nursing responsibilities and interventions pre-, intra- and post-procedure. Medications commonly used for conscious sedation, monitoring equipment, potential complications	Prerequisites: Registered nurse (RN) or permission of Instructor.	LEC 0.5 0.5 0.5
NCE237	Care and Management of Vascular Access Devices	Types of vascular catheters, types of clients who use them and clinical indications for each. Care for the different devices, differences in tip locations and the types of infusion therapies infused through each	Prerequisites: Current Arizona Registered Nurse (RN) license or Licensed Practical Nurse (LPN) license or registered as student	LEC 0.5 0.5 0.5
NCE242	Twelve Lead Electrocardiogram (EKG) Interpretation	Normal and abnormal wave forms of the cardiac cycle. Normal and abnormal heart axis. Differences between ventricular and supraventricular tachycardia. Various types of blocks. Identification of heart chamber enlargement. Injury, ischemic and necrotic heart patterns. Effect of specific drugs and electrolyte	Prerequisites: Basic electrocardiogram (EKG) experience or previous course work in dysrhythmia interpretation or permission of Instructor.	LEC 0.5 0.5 0.5
NCE243	Nursing Skill and Competency Review	Resume writing, interpersonal and therapeutic communication, teamwork concepts, IV Skills and pharmacological review. Central line catheter care, nutritional management, urinary catheterization, NG insertion and suctioning, respiratory management, basic	Prerequisites: Permission of Instructor.	LEC 3.5 2.5 2.5 LAB 0.0 90.0 6.0
NCE245	Introduction to Holistic Nursing	Philosophy and theories of holism applied to nursing practice. Focus on the physical, emotional, psychological, social, and spiritual needs of the client. Emphasis on application of the nursing process from a holistic perspective. Healing relationship model, self-care concept, nurse-patient communication, health care	Prerequisites: Current Arizona Registered Nurse (RN) license or Licensed Practical Nurse (LPN) license or permission of Instructor.	LEC 1.0 1.0 1.0

NCE246AA	Basic Fetal Heart Monitoring	Application of basic concepts and knowledge of fetal monitoring to assist the antepartum and intrapartum nurse in providing effective nursing care to ensure fetal well-being.	Prerequisites: Current Arizona Registered Nurse (RN) license or Licensed Practical Nurse (LPN) license or permission of Instructor.	LEC 1.0 1.0 1.0
NCE249	Basic Critical Care Nursing	Foundation in basic critical care for nurses who are new or interested in entering the critical care environment. Including anatomy, physiology, and pharmacology. Disease management for the following systems: cardiac, respiratory, neuroscience, gastrointestinal, renal,	Prerequisites: Current license as Registered Nurse or Practical Nurse or recent graduate of an accredited nursing program or permission of Instructor.	LEC 4.0 4.0 4.0
NCE249AA	Critical Care: Cardiac	Foundation in basic critical care for nurses who are new or interested in entering the critical care environment. Including anatomy, physiology, and pharmacology. Disease management for the cardiac system.	Prerequisites: Current license as Registered Nurse or Practical Nurse or recent graduate of an accredited nursing program or permission of	LEC 1.0 1.0 1.0
NCE249AB	Critical Care: Respiratory	Foundation in basic critical care for nurses who are new or interested in entering the critical care environment. Including anatomy, physiology, and pharmacology. Disease management for the respiratory system.	Prerequisites: Current license as Registered Nurse or Practical Nurse or recent graduate of an accredited nursing program or permission of	LEC 1.0 1.0 1.0
NCE249AC	Critical Care: Neurologic	Foundation in basic critical care for nurses who are new or interested in entering the critical care environment. Including anatomy, physiology, and pharmacology. Disease management for the neurologic system.	Prerequisites: Current license as Registered Nurse or Practical Nurse or recent graduate of an accredited nursing program or permission of	LEC 1.0 1.0 1.0
NCE249AD	Critical Care: Endocrine and Renal	Foundation in basic critical care for nurses who are new or interested in entering the critical care environment. Including anatomy, physiology, and pharmacology. Disease management for the endocrine and renal	Prerequisites: Current license as Registered Nurse or Practical Nurse or recent graduate of an accredited nursing program or permission of	LEC 0.5 0.5 0.5
NCE249AE	Critical Care: Gastrointestinal	Foundation in basic critical care for nurses who are new or interested in entering the critical care environment. Including anatomy, physiology, and pharmacology. Disease management for the gastrointestinal system.	Prerequisites: Current license as Registered Nurse or Practical Nurse or recent graduate of an accredited nursing program or permission of	LEC 0.5 0.5 0.5
NCE251	Telemetry Nursing	Cardiac anatomy and physiology and the conduction system. Elements of a cardiac assessment. Recognition of arrhythmia and cardiac abnormalities seen on electrocardiogram (EKG). Indications for temporary and permanent pacing. Drug groups and their interactions specific to the cardiac patient. Normal and abnormal lab values for the cardiac patient. Pre- and post-procedure	Prerequisites: Registered Nurse (RN) and a grade of C or better in NCE214CA or equivalent.	LEC 3.0 3.0 3.0

NCE255	Death, Grief, and Bereavement	Grief and bereavement care for the client and family. Ethical and cultural issues in terminal care, children and death, AIDS related death issues, suicide, homicide	Prerequisites: None.	LEC 2.0 2.0 2.0
NCE257	Science of Maternity Nursing	Preparation for relocation to the maternal/child health unit the hospital nurse. Application of maternal/child nursing theory based upon the nursing process.	Prerequisites: Current Arizona Registered Nurse (RN) license or Licensed Practical Nurse (LPN) license or permission of Instructor.	LEC 1.0 1.0 1.0
NCE258	Maternity Nursing Clinical Skills	Clinical application of nursing theory to the maternal/child patient. Focuses on effective physical assessment techniques, determining neonatal status, and maternal physiological and psychological well-	Prerequisites: Current Arizona Registered Nurse (RN) license or Licensed Practical Nurse (LPN) license or permission of Instructor.	LAB 1.0 1.0 1.0
NCE259	Advanced Critical Care Nursing	Provides the experienced Critical Care Nurse with an opportunity to build on basic critical care knowledge. Advanced concepts in assessment, hemodynamic monitoring, pathophysiology of disease processes, and use of the Nursing Process for critically ill patients with complex, multisystem disorders. Designed to help prepare experienced Critical Care Nurses for the	Prerequisites: A grade of C or better in NCE249 or Registered Nurse working in Critical Care or permission of Instructor.	LEC 4.0 4.0 4.0
NCE260	Intra-Aortic Balloon Pump	Mechanics of the cardiac cycle. Physiologic effects of the intra-aortic balloon pump. Indications and contraindications. Components, operation, care and maintenance of the intra- aortic balloon pump. Complications and nursing implications with the use of	Prerequisites: Registered Nurse (RN) or cardiovascular technician who has completed a Basic EKG course and has Critical Care Training.	LEC 0.5 0.5 0.5
NCE261	Ultrasound-Guided Peripheral Intravenous Access	Technique of ultrasound-guided peripheral venous access. Client selection for procedure, selection of vasculature, and troubleshooting using ultrasound guidance equipment. Use of equipment and hands-on,	Prerequisites: Current Arizona Registered Nurse (RN) license or Licensed Practical Nurse (LPN) license or registered as student	L+L 0.5 24.0 1.5
NCE262	Legal Medical Consulting	Role of the legal medical consultant in specific litigation. Importance of the law library. Definition of ethics, professionalism, standards of practice, discovery and disclosure. Steps and procedures involved with legal research. Role of the legal medical expert as a witness. Alternative conflict resolution. Role of independent medical examination. Role of the insurance industry and	Prerequisites: Licensed medical personnel or permission of Instructor.	LEC 3.0 3.0 3.0

NCE264	Advanced Legal Medical Consulting/Civil Procedure	Reinforcement and broadening of knowledge and skills required for a career in legal medical consulting. Civil litigation process from initial client contact, discovery, and trial to post trial period. Intensive case analysis and thorough exploration of legal theory, procedure, and strategy. Discussion of the Federal and Arizona Rules of Civil Procedure and hands on experience in the	Prerequisites: A grade of C or better in NCE262 or equivalent.	LEC 3.0 3.0 3.0
NCE265	Triage Skills for Urgent Care Staff	Identification of high risk aspects of frequent medical complaints. Instruction in avoiding errors when triaging patients in the urgent care setting.	Prerequisites: Current Arizona Registered Nurse (RN) license or Licensed Practical Nurse (LPN) license or permission of Instructor.	LEC 0.5 0.5 0.5
NCE266	Recognition and Management of the Patient with Allergies	Allergy process, types of allergies and their presentations, levels and types of reactions, as well as treatment, diagnostic testing and prevention strategies.	Prerequisites: Health care professional or permission of Department or Division.	LEC 0.5 0.5 0.5
NCE267	IV Medication Administration and Advanced Metrology	Knowledge and skills to safely prepare and administer intravenous medications and solutions. Includes advanced metrology to accurately calculate IV drug dosages and infusion rates.	Prerequisites: Current Arizona Registered Nurse (RN) license or Licensed Practical Nurse (LPN) license or permission of Instructor.	L+L 1.0 2.0 2.0
NCE268	Non Rash Infectious Diseases in the Pediatric Patient	Epidemiology and symptomology of non rash producing infectious diseases often seen in children and identify ways to prevent, reduce, and control their spread. Meningococcal disease, Tuberculosis, influenza, Methicillin Resistant Staph Aureus (MRSA), pertussis, conjunctivitis, mononucleosis, streptococcal infections,	Prerequisites: Current Arizona Registered Nurse (RN) license or Licensed Practical Nurse (LPN) license or permission of Instructor.	LEC 0.5 0.5 0.5
NCE271	Pediatric Diabetes	Provides an overview of diabetes in the pediatric population. Epidemiology and etiology, types of diabetes in children and symptom recognition, medication and diet management, complications, new	Prerequisites: Current Arizona Registered Nurse (RN) license or Licensed Practical Nurse (LPN) license or permission of Instructor.	LEC 0.5 0.5 0.5

NCE272	Certified Medication Assistant	Completion of this course will qualify the student to sit for the certification examination to administer prescribed medications within defined state laws (Legislation A.R.S.32-1650.01).	Prerequisites: Students will need to have been a Certified Nursing Assistant (CNA) or a Licensed Nursing Assistant (LNA) for a minimum of six months, or completed the CNA or LNA course within the past year, or completed semester I of the Practical Nurse (PN) program, or completed the first block of the Registered Nurse (RN) program, or permission of the Director or Program Director as students who have	L+L 4.0 6.0 8.0
NCE273	Rehabilitation Technician	The rehabilitation technician (RT) performs patient related care tasks, assists patients with activities of daily living and provides direct patient care under supervision of the licensed nurse and or licensed therapist. Obtains and records patient vital signs. Monitors and records daily intake and output. Obtains specimens, including non-invasive body fluids and blood specimens. Performs electrocardiogram (ECG) electrode placement, running ECG strips, and blood glucose monitoring. Assists physician, licensed nurse, or licensed therapist with diagnostic tests, clinical procedures, and other tasks as requested. Communicates patient needs and observed/reported changes in patient condition to supervising licensed nurse, physician or licensed therapist. Documents all interactions as directed by licensed nurse, physician, or licensed therapist. Assists	Prerequisites: Valid certification or license as a nurse assistant (CNA or LNA) OR completion of a nurse assistant program within the past twelve (12) months OR permission of the Nursing Director.	L+L 2.0 2.5 3.0
NCE274	Industry Telemetry Nursing	Overview of cardiac anatomy, physiology, and the conduction system. Demonstration of a cardiac assessment, review of normal and abnormal lab values, arrhythmias, and cardiac abnormalities seen on an electrocardiogram (ECG). Introduction to medications specific to the cardiac patient. Overview of cardiac	Prerequisites: Current Arizona Registered Nurse (RN) license or Licensed Practical Nurse (LPN) license or permission of Instructor.	L+L 4.0 4.5 5.0
NCE275	Registered Nurse Update	Update of current general principles of nursing care, procedures and medication.	Prerequisites: Current Registered Nurse License.	LEC 10.0 6.0 6.0 LAB 0.0 12.0 12.0

NCE276	Clinical Teaching in Nursing: An Overview	Applies Nurse of the Future Competencies and educational Constructivism learning theory to develop a foundation for nursing faculty. Designed to assist instructor to consistently plan, guide, and evaluate learning activities for nursing students in clinical	Prerequisites: Current Registered Nurse License.	LEC 1.0 1.0 1.0
NCE277	Clinical Teaching in Nursing: A Practicum Experience	Overview of the process, concepts and skills related to supervising nursing students in the clinical area with application of concepts learned. A mentored clinical experience to guide and facilitate the student in the development of skills of clinical instruction.	Prerequisites: Current Arizona Registered Nurse License, BSN required, but MSN preferred as per our accrediting and approval bodies. All health and safety requirements per the current Maricopa Nursing Clinical Instructor Handbook must be	LEC 1.5 0.5 0.5 LAB 0.0 45.0 3.0
NCE278	Critical Care Nursing	Foundations in critical care for nurses who are interested in entering the critical care environment or nurses who seek to increase their expertise in critical care. Includes basic anatomy, physiology, and pharmacology. Disease management for the following systems: cardiac, respiratory, neuroscience, gastrointestinal, renal, endocrine and hematology,	Prerequisites: Current license as a Registered Nurse or recent graduate of an accredited nursing program or permission of Instructor or employer. Licensed Practical Nurses will be allowed to take the course by request of their employer or with	L+L 4.0 4.5 5.0
NCE282AA	Volunteerism for Nursing: A Service Learning Experience	Service-learning field experience within human service organization/agency.	Prerequisites: Permission of Instructor.	LAB 1.0 1.0 0.0
NCE290	Concepts of Aging	Examine several concepts of aging: physiological, cognitive, spirituality, health promotion, and pharmacology of the older adult. Focus will be placed on caring for the aging patient and their family.	Prerequisites: Current Arizona Registered Nurse (RN) license or Licensed Practical Nurse (LPN) license or registered as student	LEC 1.0 1.0 1.0
NCE291	Nursing Skills and Patient Care in Simulation	Review of basic skills. Remediation, guided learning, and simulation performance.	Prerequisites: Current Arizona Registered Nurse (RN) license or Licensed Practical Nurse (LPN) license or registered as student	LAB 1.0 45.0 3.0
NCE292	Simulation for Patient Care Experiences	Review and practice of nursing skills. Remediation, guided learning, and simulation performance.	Prerequisites: Current Arizona Registered Nurse (RN) license or Licensed Practical Nurse (LPN) license or registered as student	LAB 2.0 90.0 6.0
NCE292AA	Simulated Patient Care	Review of practical nursing skills. Includes simulated patient experience in various focus areas.	Prerequisites or Corequisites: Permission of Program Director.	LAB 2.0 90.0 6.0

NCE292AB	Patient Care Experiences	Practical nursing skills. Includes patient care experiences.	Prerequisites: A grade of C or better in NCE292AA. Prerequisites or Corequisites: Current Nursing Health and Safety Clearance.	LAB 2.0 90.0 6.0
NCE293	Team Management of Deteriorating Patients in Simulation	Development of skills needed to effectively identify, assess, monitor, and respond to patients who are either deteriorating or at risk of deteriorating related to injury or disease process.	Prerequisites: Current licensure as a health professional or registered as a student in a health professional program of study, or permission of	LAB 2.0 90.0 6.0
NCE298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
NCE298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
NCE298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
NDT101	Introduction to Neurodiagnostics	Introduction to neurodiagnostic testing principles and procedures, including basic electronic concepts, the operation of electroneurodiagnostic and polysomnographic equipment, common diagnoses, activations, montages, safety, infection control, and	Prerequisites: Admission into the Clinical Neurodiagnostic Technology program. Corequisites: NDT101LL.	LEC 3.0 3.0 3.0
NDT101LL	Introduction to Neurodiagnostics Laboratory	Application of introductory neurodiagnostic testing, including measurement, electrode application, equipment operation, and procedures.	Prerequisites: Admission into the Clinical Neurodiagnostic Technology program. Corequisites: NDT101.	LAB 1.0 3.0 3.0

NDT102	Applied Neuroanatomy and Physiology	Introduction to neuroanatomy and physiology as it relates to the field of neurodiagnostics.	Prerequisites: A grade of C or better in BIO160 or BIO202 and admission into the Clinical Neurodiagnostic Technology program.	LEC 3.0 3.0 3.0
NDT103LL	Intermediate Neurodiagnostic Laboratory	Introduction to the application of Electroencephalography (EEG) with practical application skills for Polysomnography (PSG) and Electroneurodiagnostic (END) clinical procedures.	Prerequisites: A grade of C or better in NDT101LL and admission into the Clinical Neurodiagnostic Technology program. Corequisites: PSG201.	LAB 1.0 3.0 3.0
NDT200LL	Clinical Preparation Laboratory	Application of Electroencephalography (EEG) and Polysomnography (PSG) to meet clinical standards with measurement, electrode application, equipment operation, and procedures.	Prerequisites: A grade of C or better in EEG202LL and PSG202LL and admission into the Clinical Neurodiagnostic Technology	LAB 1.0 3.0 3.0
NDT202	Introduction to Nerve Conductions and Evoked Potentials	Introduction to theoretical aspects of Nerve Conduction Studies (NCS) and Evoked Potential (EP) testing.	Prerequisites: A grade of C or better in EEG202 and PSG202 and admission into the Clinical Neurodiagnostic Technology	LEC 3.0 3.0 3.0
NDT202LL	Introduction to Nerve Conductions and Evoked Potentials Laboratory	Introduction to the practical application of Nerve Conduction Studies (NCS) and Evoked Potentials (EP) testing.	Prerequisites: A grade of C or better in EEG202 and PSG202 and admission into the Clinical Neurodiagnostic Technology	LAB 1.0 3.0 3.0
NDT282	Volunteerism for Neurodiagnostic Technology	Service learning field experience within private/public agencies, educational institutions, or citizen volunteer groups.	Prerequisites: Acceptance into the Clinical Neurodiagnostic Technology program and permission of Instructor.	LEC 0.5 0.5 0.5
NLT100	Nail Technology I	Introduction to basic nail services, general sciences, safety, and infection control practices in the nail care	Prerequisites: None.	200
NLT105	Nail Technology II	Apply advanced techniques and continue to build on previous concepts learned in nail services, general sciences, safety, and infection control in the nail	Prerequisites: None.	200
NLT110	Nail Technology III	This course is designed to prepare Nail Technology students for the written and practical examinations for Arizona State Board of Cosmetology licensure. Students will master and apply previous concepts learned in nail services, general sciences, and business	Prerequisites: None.	200
NMS120	Media in Cyberspace	Using on-line material, investigates how the new information technologies affect the more traditional media. The effect on consumers and society.	Prerequisites: None.	LEC 3.0 3.0 3.0

NMS160	Sports Media Careers	Introduction to the professions, organizations, and media occupations within sports management. Examines professional and not-for-profit organizations, career opportunities in collegiate and community sports organizations, and career opportunities in the traditional and non-traditional media arenas. Includes resume writing, cover letters, career choices, interviews, and job	Prerequisites: None.	LEC 3.0 3.0 3.0
NMS215	Electronic Newsroom	Creating, writing, designing, managing, promoting, and publishing the online student publication through team effort. Emphasis on style, consistency, and news/information judgment combined with community	Prerequisites: A grade of C or better in JRN210 or NMS120 or JRN213 or permission of Instructor.	L+L 3.0 5.0 5.0
NUC100	Introduction to Nuclear Medicine Technology	Role of the nuclear medicine technologist job duties, responsibilities, working conditions and work environments. Certification and licensing requirements for the nuclear medicine technologist, shadowing	Prerequisites: None.	LEC 1.0 1.0 1.0
NUC101	Essentials of Nuclear Medicine Technology	Introduction to the essential information for the Nuclear Medicine Technology program.	Prerequisites: Admission to Nuclear Medicine Technology program.	LEC 1.0 1.0 1.0
NUC103	Nuclear Medicine Image Evaluation I	Faculty-led case presentation with reinforcement of processing parameters.	Prerequisites: Admission to Nuclear Medicine Technology program.	L+L 1.0 3.0 3.0
NUC110	Introduction to Radiation Physics and Biology for Nuclear	Atomic structure, types of radiation, radiation biology, and radiation protection.	Prerequisites: Admission to Nuclear Medicine Technology program.	LEC 3.0 3.0 3.0
NUC112	Nuclear Medicine Quality Control	Introduction to the nuclear medicine laboratory rules, equipment operation, and quality control (QC).	Prerequisites: Admission to Nuclear Medicine Technology program.	LAB 1.0 3.0 3.0
NUC113	Nuclear Medicine Clinical Applications	Establishing competencies by demonstration of nuclear medicine imaging and non-imaging procedures.	Prerequisites: Admission to Nuclear Medicine Technology program.	LAB 1.0 3.0 3.0
NUC114	Nuclear Medicine Instrumentation	Principles of safe operation for nuclear medicine imaging and non-imaging equipment, including quality	Prerequisites: Admission to Nuclear Medicine Technology program.	LEC 3.0 3.0 3.0
NUC116	Nuclear Medicine Procedures I	Skeletal, respiratory, gastrointestinal (GI) anatomy, physiology, pathology, and related clinical procedures	Prerequisites: Admission to Nuclear Medicine Technology program.	LEC 3.0 3.0 3.0
NUC120	Radiopharmaceutical/ Pharmaceutical Administration for the Nuclear Medicine Technologist	Techniques for the administration of radiopharmaceuticals and pharmaceuticals used by the nuclear medicine technologist.	Prerequisites: Admission to Nuclear Medicine Technology program.	L+L 1.5 1.5 1.5
NUC122	Nuclear Medicine Imaging I Lab	Protocols for opening/operating in a nuclear medicine department. Quality control, radiation safety, performance of bone scans, lung scans, and	Prerequisites: Admission to Nuclear Medicine Technology program.	LAB 1.0 3.0 3.0

NUC124AA	Nuclear Medicine Theory I: Part A	Non-imaging instrumentation to include gas-filled detector systems, scintillation detection systems, statistics, nuclear counting statistics, and laboratory equipment. Imaging instrumentation to include planar scintillation cameras, multicrystal scintillation cameras, solid-state detector systems, single photon emission	Prerequisites: Admission to Nuclear Medicine Technology program.	LEC 1.5 1.5 1.5
NUC124AB	Nuclear Medicine Theory I: Part B	Imaging instrumentation to include quality control of imaging systems and maintenance of image archiving systems. Computers in instrumentation, types of computers, number systems, general structure of computer hardware, software, communications, data management, internet, nuclear medicine computer	Prerequisites: Admission to Nuclear Medicine Technology program.	LEC 1.5 1.5 1.5
NUC126	Nuclear Medicine Procedures II	Endocrine and genitourinary anatomy, physiology, pathology, and clinical procedures and techniques.	Prerequisites: Admission to Nuclear Medicine Technology program.	LEC 3.0 3.0 3.0
NUC130	Professionalism and Patient Care	Communication and interaction skills, patient assessment, procedures involving transport, medical records, infection control, emergency, safety and	Prerequisites: Admission to Nuclear Medicine Technology program.	LAB 1.0 3.0 3.0
NUC170AA	Nuclear Medicine Cardiac Imaging I	Cardiovascular anatomy, physiology and pathology as it relates to cardiac system imaging. Cardiac stress and rest testing, myocardial perfusion and viability, equilibrium radionuclide angiograph (ERNA or MUGA or RVG). First pass angiography, infarct imaging, major	Prerequisites: Admission to Nuclear Medicine Technology program.	LEC 1.5 1.5 1.5
NUC170AB	Nuclear Medicine Cardiac Imaging II	Cardiovascular imaging instrumentation, procedures, and processing. Radiopharmaceuticals and interventional drugs used in cardiovascular imaging. Non-pharmacologic stress testing. Patient care for the	Prerequisites: Admission to Nuclear Medicine Technology program.	LEC 1.5 1.5 1.5
NUC180	Nuclear Medicine Physics and Instrumentation	Principles of safe operation for nuclear medicine imaging and non-imaging equipment, including positron emission tomography (PET) systems and quality control.	Prerequisites: Admission to Nuclear Medicine Technology program or certified by the American Registry of Radiologic Technologists (ARRT) [R.T. (N)] or the Nuclear Medicine Technology Certification Board	LEC 4.0 4.0 4.0
NUC202	Nuclear Medicine Clinical Practicum I	Supervised clinical application of current nuclear medicine practice reinforcing didactic and laboratory concepts. Focus on developing competency in	Prerequisites: Admission to Nuclear Medicine Technology program.	LAB 3.0 15.0 0.0
NUC203	Nuclear Medicine Image Evaluation II	Student led/instructor coached evaluation of images related to clinical situations and procedures.	Prerequisites: Admission to Nuclear Medicine Technology program.	L+L 1.0 3.0 3.0

NUC212	Clinical Practicum I	Orientation to facility policies and departmental organization. Under direct supervision, clinical application of current nuclear medicine practice of patient care and clinical experiences with an emphasis	Prerequisites: Admission to Nuclear Medicine Technology program.	LAB 1.5 9.0 0.0
NUC214	Fundamentals of Nuclear Medicine II	Principles and applications of statistics as they relate to Nuclear Medicine. Configuration, function, and application of computers and networks in nuclear	Prerequisites: Admission to Nuclear Medicine Technology program.	LEC 1.5 1.5 1.5
NUC216	Nuclear Medicine Procedures II	Endocrine and genitourinary anatomy, physiology, pathology, and clinical procedures and techniques.	Prerequisites: Admission to Nuclear Medicine Technology program.	LEC 3.0 3.0 3.0
NUC220	Sectional Anatomy for Nuclear Medicine	Sectional human anatomy in the transverse, sagittal and coronal planes. Emphasis on the brain, neck, thorax, abdomen/pelvic cavity and extremities.	Prerequisites: Admission to the Nuclear Medicine Technology Program or permission of Program	LEC 3.0 3.0 3.0
NUC222	Clinical Practicum II	Supervised clinical application of current nuclear medicine practice reinforcing didactic and laboratory concepts. Demonstrate developing competency in	Prerequisites: Admission to Nuclear Medicine Technology program.	LAB 3.0 15.0 0.0
NUC223	Nuclear Medicine Image Evaluation II	Student led/instructor coached evaluation of images related to clinical situations and procedures.	Prerequisites: Admission to Nuclear Medicine Technology program.	L+L 1.0 3.0 3.0
NUC224	Fundamentals of Nuclear Medicine III	Policy and regulations of delivery systems health policy and ethics regarding the access of health care. Medical informatics implementation of clinical system data entry, patient data, administration, and medical quality assurance mandatory patient centered documentation for federal, state, regulatory, and credentialing agencies professional medical ethics, legal issues and patient	Prerequisites: Admission to Nuclear Medicine Technology program.	LEC 1.5 1.5 1.5
NUC232	Clinical Practicum III	Under the supervision of licensed technologists, enhance skills and knowledge of current nuclear medicine practice with a focus on broadening procedure	Prerequisites: Admission to Nuclear Medicine Technology program.	LAB 3.0 15.0 0.0
NUC233	Nuclear Medicine Image Evaluation III	Advanced student-led serial evaluation of images related to clinical situations and procedures.	Prerequisites: Admission to Nuclear Medicine Technology program.	L+L 1.0 3.0 3.0
NUC234	Nuclear Medicine Department Administration	Practical methods of leadership, ethics, advocacy, department management, continuous quality improvement, coding and reimbursement, and	Prerequisites: Admission to Nuclear Medicine Technology program.	LEC 3.0 3.0 3.0
NUC236	Nuclear Medicine Procedures III	Central nervous system (CNS), tumor, hematopoietic and infection clinical procedures and techniques to demonstrate anatomy, physiology, and pathology.	Prerequisites: Admission to Nuclear Medicine Technology program.	LEC 3.0 3.0 3.0

NUC240	Clinical Pathology for Diagnostic Imaging	Causes of disease etiology and impact on the human body. Common physiologic effects of disease on body systems. Correlations of disease, physical findings, clinical laboratory values and diagnostic imaging. Role of Diagnostic Medical Imaging (DMI) modalities in the diagnosis and treatment of selected disease processes as part of the health care team. Cultural implications in	Prerequisites: Admission to Nuclear Medicine Technology program.	LEC 3.0 3.0 3.0
NUC242	Clinical Practicum IV	Independently function under limited supervision of licensed technologists. Advancement of skills to include all required competencies. Practice diverse and appropriate methods of performing procedures.	Prerequisites: Admission to Nuclear Medicine Technology program.	LAB 3.0 15.0 0.0
NUC243	Nuclear Medicine Image Evaluation IV	Evaluation of images related to clinical situations and procedures. Demonstration of technical skills. Peer-	Prerequisites: Admission to Nuclear Medicine Technology program.	L+L 1.0 3.0 3.0
NUC244	Nuclear Medicine Radiopharmacy	Radiopharmacy and adjunctive pharmaceutical preparation, calculation, administration, and quality	Prerequisites: Admission to Nuclear Medicine Technology program.	L+L 3.0 4.0 4.0
NUC246	Nuclear Medicine Procedures IV	Radiopharmaceutical therapy and theranostics clinical procedures and techniques.	Prerequisites: Admission to Nuclear Medicine Technology program or permission of Program Director.	LEC 3.0 3.0 3.0
NUC250	Fundamentals of Computed Tomography and Elements of Magnetic Resonance Imaging	Introduction to principles and operation of computed tomography (CT) scanner and magnetic resonance imaging (MRI).	Prerequisites: Admission to Nuclear Medicine Technology program or permission of the Program Director.	LEC 3.0 3.0 3.0
NUC251	Computed Tomography and Hybrid Imaging Case	Anatomy, physiology, pathology, and techniques related to the performance of clinical computed tomography (CT) and hybrid imaging.	Prerequisites: Admission to Nuclear Medicine Technology program or permission of Program Director.	LEC 3.0 3.0 3.0
NUC252	Clinical Practicum V	Orientation to facility policies and procedures and departmental organization. Reinforcement and broadening of knowledge base related to patient care and the roles and responsibilities of the nuclear medicine technologist at the advanced level. Focus on progression to independent level of function in the areas of patient care, radiation protection, instrumentation imaging, non-imaging and computers, radiopharmacy, diagnostic and therapeutic procedures.	Prerequisites: Admission to Nuclear Medicine Technology program.	LAB 3.0 15.0 0.0

NUC253	Nuclear Medicine Image Evaluation V	Emphasis on positron emission tomography (PET) therapy imaging and other studies new to the nuclear medicine imaging field. Evaluation of images related to clinical situations and procedures including patient history, patient preparation, name and energy of radiopharmaceutical, method of localization, dosimetry, and method of clearance. Normal and abnormal distribution. Need for additional views and/or	Prerequisites: Admission to Nuclear Medicine Technology program.	LAB 1.0 3.0 3.0
NUC259	Fundamentals of Research in Nuclear Medicine	Fundamental components to nuclear medicine research.	Prerequisites: Admission to Nuclear Medicine Technology program.	LEC 3.0 3.0 3.0
NUC260	Research Methods and Design	Exploration of knowledge and effective analysis of resources to promote best practice in imaging professions. Introduction to research design, statistical reasoning, and interpretation of the medical literature. Provide a basis for understanding and interpreting the	Prerequisites: Admission to Nuclear Medicine Technology program.	LEC 3.0 3.0 3.0
NUC261	Emerging Technologies	Exploration of new and emerging technologies that will become tomorrow's standard of practice. Introduction to these new ideologies. Development and presentation of	Prerequisites: Admission to Nuclear Medicine Technology program.	LEC 2.0 2.0 2.0
NUC262	Capstone Practicum	Culminating course to integrate the educational process to facilitate role transition from student to graduate nuclear medicine technologist.	Prerequisites: Admission to Nuclear Medicine Technology program or permission of the Program Director.	LAB 1.5 9.0 0.0
NUC263	Nuclear Medicine Research Presentation and Publication	Presentation of research project at local, regional, or national meeting or submission of research project to scientific journal for publication. Critical evaluation of	Prerequisites: A grade of C or better in NUC259 and NUC260.	LEC 3.0 3.0 3.0
NUC270	Nuclear Medicine Scientific Method	Scientific research in the field of nuclear medicine. Abstract writing to include research study results, objectives, methods, observational and analytical	Prerequisites: Admission to Nuclear Medicine Technology program.	LEC 1.0 1.0 1.0
NUC272	Cardiac Practicum	Comprehensive, advanced-level practical experience at a designated cardiac clinical site.	Prerequisites: Admission to Nuclear Medicine Technology program or certified by the American Registry of Radiologic Technologists (ARRT) in Nuclear Medicine [R.T. (N)] or the Nuclear Medicine Technology Certification Board (NMTCB) in	LAB 1.5 9.0 0.0

NUC276	Nuclear Cardiology	Cardiovascular anatomy, physiology, and pathophysiology as it relates to cardiac imaging including cardiac blood flow, electrophysiology, and function. Pharmacologic and exertional stress testing methods used in conjunction with imaging. Cardiac	Prerequisites: Admission to Nuclear Medicine Technology program or certified by ARRT [R.T. (N)] or the Nuclear Medicine Technology Certification Board (NMTCB) in	L+L 3.0 4.0 4.0
NUC280	Nuclear Medicine PET Physics and Instrumentation	Principles of safe operation for positron emission tomography (PET) systems and required quality control.	Prerequisites: Admission to Nuclear Medicine Technology program or certified by the American Registry of Radiologic Technologists (ARRT) [R.T. (N)] or the Nuclear Medicine Technology Certification Board	LEC 3.0 3.0 3.0
NUC283	PET/CT Practicum	Comprehensive, advanced-level practical experience at a Positron Emission Tomography/Computed Tomography (PET/CT) clinical site.	Prerequisites: Admission to Nuclear Medicine Technology program or permission of the Program Director.	LAB 1.5 9.0 0.0
NUC290	Nuclear Medicine Seminar	Review of content areas addressed on the American Registry of Radiologic Technologists (ARRT), Nuclear Medicine Technology Certification Board (NMTCB), and Arizona state licensure examinations. Study and test-	Prerequisites: Admission to Nuclear Medicine Technology program.	LEC 3.0 3.0 3.0
NUC291	Computed Tomography Registry and Board Exam	Discussion of concepts outlined in the American Registry of Radiologic Technologists (ARRT) published content specifications for their post-primary certification	Prerequisites: Permission of the Program Director or Instructor.	LEC 1.0 1.0 1.0
NUC292	Radiopharmacy Practicum	Comprehensive, high level practical experience at a Radiopharmacy clinical site. Cooperative work with direct and indirect supervisory personnel in a Radiopharmacy setting. Emphasis on technical components of	Prerequisites: Admission to Nuclear Medicine Technology program.	LAB 1.0 3.0 0.0
NUC303	Nuclear Medicine Image Evaluation III	Advanced student-led serial evaluation of images related to clinical situations and procedures.	Prerequisites: Admission to Nuclear Medicine Technology program.	L+L 1.0 3.0 3.0
NUC316	Nuclear Medicine Procedures III	Central nervous system (CNS), tumor, hematopoietic and infection clinical procedures and techniques to demonstrate anatomy, physiology, and pathology.	Prerequisites: Admission to Nuclear Medicine Technology program.	LEC 3.0 3.0 3.0
NUC322	Nuclear Medicine Clinical Practicum II	Under the supervision of licensed technologists, enhance skills and knowledge of current nuclear medicine practice with a focus on broadening procedure	Prerequisites: Admission to Nuclear Medicine Technology program.	LAB 3.0 15.0 0.0
NUC350	Fundamentals of Computed Tomography and Elements of Magnetic Resonance Imaging	Introduction to principles and operation of computed tomography (CT) scanner and magnetic resonance imaging (MRI).	Prerequisites: Admission to Nuclear Medicine Technology program or permission of the Program Director.	LEC 3.0 3.0 3.0

NUC359	Research Methods and Design	Exploration of knowledge and effective analysis of resources to promote best practice in imaging professions. Introduction to research design, statistical reasoning, and interpretation of the medical literature. Provide a basis for understanding and interpreting the	Prerequisites: Admission to Nuclear Medicine Technology program.	LEC 3.0 3.0 3.0
NUC372	Cardiac Practicum	Comprehensive, advanced-level practical experience at a designated cardiac clinical site.	Prerequisites: Admission to Nuclear Medicine Technology program or certified by the American Registry of Radiologic Technologists (ARRT) in Nuclear Medicine [R.T. (N)] or the Nuclear Medicine Technology Certification Board (NMTCB) in	LAB 1.5 9.0 0.0
NUC382	PET/CT Practicum	Comprehensive, advanced-level practical experience at a positron emission tomography/computed tomography (PET/CT) clinical site.	Prerequisites: Admission to Nuclear Medicine Technology program or permission of the Program Director.	LAB 1.5 9.0 0.0
NUC392	Computed Tomography Clinical Practicum I	Use of correct computed tomography instrumentation, protocol implementation and positioning techniques. Application of patient safety measures and follow As Low As Reasonably Achievable (ALARA) practices to reduce radiation dose as established by the institution. Practice within established ethical and legal guidelines.	Prerequisites: Admission to Nuclear Medicine Technology program.	LAB 3.0 15.0 0.0
NUC402	Computed Tomography Clinical Practicum II	Reinforcement of clinical skills in a practical setting within established ethical and legal guidelines. Focus on use of correct tomography instrumentation, protocol implementation, and positioning techniques and application of patient safety measures and As Low As Reasonably Achievable (ALARA) practices to reduce	Prerequisites: Admission to Nuclear Medicine Technology program.	LAB 3.0 15.0 0.0
NUC403	Nuclear Medicine Image Evaluation IV	Evaluation of images related to clinical situations and procedures. Demonstration of technical skills. Peer-	Prerequisites: Admission to Nuclear Medicine Technology program.	L+L 1.0 3.0 3.0
NUC416	Nuclear Medicine Procedures IV	Radiopharmaceutical therapy and theranostics clinical procedures and techniques.	Prerequisites: Admission to Nuclear Medicine Technology program or permission of Program Director.	LEC 3.0 3.0 3.0
NUC422	Nuclear Medicine Clinical Practicum III	Independently function under limited supervision of licensed technologists. Advancement of skills to include all required competencies. Practice diverse and appropriate methods of performing procedures.	Prerequisites: Admission to Nuclear Medicine Technology program.	LAB 3.0 15.0 0.0

NUC432	Capstone Practicum	Culminating course to integrate the educational process to facilitate role transition from student to graduate nuclear medicine technologist.	Prerequisites: Admission to Nuclear Medicine Technology program or permission of the Program Director.	LAB 3.0 9.0 0.0
NUC434	Nuclear Medicine Department Administration	Practical methods of leadership, ethics, advocacy, department management, continuous quality improvement, coding and reimbursement, and	Prerequisites: Admission to Nuclear Medicine Technology program.	LEC 3.0 3.0 3.0
NUC444	Nuclear Medicine Radiopharmacy	Radiopharmacy and adjunctive pharmaceutical preparation, calculation, administration, and quality	Prerequisites: Admission to Nuclear Medicine Technology program.	L+L 3.0 4.0 4.0
NUC450	Computed Tomography and Hybrid Imaging Case	Anatomy, physiology, pathology, and techniques related to the performance of clinical computed tomography (CT) and hybrid imaging.	Prerequisites: Admission to Nuclear Medicine Technology program or permission of Program Director.	LEC 3.0 3.0 3.0
NUC459	Nuclear Medicine Research Presentation and Publication	Presentation of research project at local, regional, or national meeting or submission of research project to scientific journal for publication. Critical evaluation of	Prerequisites: A grade of C or better in NUC259 and NUC359.	LEC 3.0 3.0 3.0
NUC490	Nuclear Medicine Seminar	Review of content areas addressed on the American Registry of Radiologic Technologists (ARRT), Nuclear Medicine Technology Certification Board (NMTCB), and Arizona state licensure examinations. Study and test-	Prerequisites: Admission to Nuclear Medicine Technology program.	LEC 3.0 3.0 3.0
NUR101	Student Success in Nursing	Individual self-awareness and self management strategies for success with nursing study, clinical reasoning and testing success. Emphasis on the development of prioritizing and delegation skills for the	Prerequisites: Permission of Instructor.	LEC 1.0 1.0 1.0
NUR102	Nursing Process Transition	Transitions paramedics to scope and practice of nursing. Focuses on nursing concepts and theories to meet basic human needs across the lifespan throughout the wellness/illness continuum. Theoretical concepts focus on clients of all ages with selected physiological and psychological alterations. Emphasis on expanding the paramedic's skills and experience to transition to the role of the nurse utilizing nursing	Prerequisites: Arizona or National Paramedic Registry Certificate, and application and admission to Maricopa Nursing advanced placement. One year current healthcare work experience required or permission of Nursing Department Chairperson. Corequisites: NUR103.	LEC 4.0 4.0 4.0
NUR103	Nursing Science Transition	Application of nursing concepts and theories of health promotion to nursing care to meet basic human needs. Provides opportunity for the paramedic to develop clinical competency in selected nursing skills and care of clients across the lifespan experiencing altered physiologic functioning. Includes clinical experience with individuals, families, and small groups of clients in acute, long-term, and community settings to develop	Prerequisites: Arizona or National Paramedic Registry Certificate, and application and admission to Maricopa Nursing with advanced placement. Minimum of one year current healthcare work experience required or permission of Nursing Department Chairperson.	LAB 4.0 12.0 12.0

NUR104AA	Structured Nursing Review	Structured nursing tutorial assistance and nursing study skills to help students achieve success in their respective block of nursing courses. Nursing process	Prerequisites: None. Corequisites: Enrollment in the Nursing program or permission of Department Chair.	LEC 0.5 0.5 0.5
NUR104AB	Structured Nursing Review	Structured nursing tutorial assistance and nursing study skills to help students achieve success in their respective block of nursing courses. Nursing process	Prerequisites: None. Corequisites: Concurrent enrollment in the Nursing program or permission of Department	LEC 1.0 1.0 1.0
NUR106	Nursing Theory and Science Transition (Paramedic Bridge)	Introduction and utilization of Nurse of the Future competencies to develop knowledge, skills, and attitudes to provide safe, quality patient care across the wellness-illness continuum in selected medical-surgical and mental health patients. Basic care concepts and nursing process are utilized to meet the needs of adult and older adult patients.	Prerequisites: (Arizona or National Paramedic Registry Certificate), acceptance into the Maricopa Nursing advanced placement, a grade of C or better in NUR187, and (one year current work experience utilizing Paramedic scope of practice or permission of Nursing Department	LEC 9.0 5.5 5.5 LAB 0.0 157.5 10.5
NUR150	Practical Nurse Bridge Course	Designed to bridge previously gained healthcare knowledge, skills, and abilities of the military Veteran student and/or Licensed Practical Nurse (LPN) seeking to refresh knowledge in the role of the practical nurse. Course includes didactic, laboratory, and clinical experiences for practical nursing including concepts and theories related to care of geriatric, adult, pediatric, and childbearing clients. Areas of didactic and clinical focus include: role of the practical nurse collaborating with other members of the healthcare team; concepts of health promotion and disease/illness prevention; therapeutic communication techniques; nutritional concepts; medication administration to include pharmacokinetics and pharmacodynamics of medications, nursing considerations in medication administration, and dosage calculation; documentation and concepts related to information technology.	Prerequisites: A military Veteran with a health care designation (medic/corpsman) or a licensed practical nurse (LPN) who requires a refresher program. Approval of the Nursing Chair or designee and application packet completion is required.	LEC 12.0 9.0 9.0 LAB 0.0 180.0 12.0

NUR151	Nursing Theory and Science I	Introduction to fundamentals of nursing theory and practice utilizing critical thinking based on the nursing process and principles of evidence based practice. Focus on meeting basic human needs within the wellness/illness continuum. Theoretical concepts related to holistic care of well, geriatric, and adult clients. Provides safe nursing care to clients with selected alterations in health. Introduction to professional nursing practice. Applies concepts of health promotion, disease/illness prevention. Provides care based upon integration of pathophysiology, nutrition, communication	Prerequisites: Admission into the Nursing Program.	LEC 10.0 5.0 5.0 LAB 0.0 15.0 15.0
NUR152	Nursing Theory and Science I	Introduction of Nurse of the Future competencies as a foundational framework for development of the professional nurse. Basic care concepts, the nursing process, and clinical reasoning are utilized to meet the	Prerequisites: Admission into the Nursing program.	LEC 9.0 4.0 4.0 LAB 0.0 16.88 15.0
NUR158	Nurse Assisting	Introduction to the role of the nursing assistant for clients across the wellness/illness continuum within the nurse assisting scope of practice. Includes basic problem solving processes specific to meeting the basic and holistic needs of clients, therapeutic communication skills, interventions to ensure the needs and safety of the client, specific types of diseases, conditions and alterations in behavior of the client. Focus is on the special needs of the older adult client in the acute and long-term care settings, and basic care skills and procedures. Provides opportunity for the development	Prerequisites: Reading and math assessment as well as completion of all required Health and Safety documents.	LEC 4.5 2.5 2.5 LAB 0.0 6.0 6.0
NUR160PN	Practical Nursing Theory and Science I	Core values of the practical nursing program, nursing history, standards, and scope of practice of the practical nurse. Safe nursing care of clients with selected alterations in health; fundamental concepts of health promotion, disease/illness prevention. Nursing care based upon integration of pathophysiology, nutrition, communication and physical, biological, and psycho-	Prerequisites: Admission into the Fast Track Practical Nursing Program.	LEC 11.0 6.0 6.0 LAB 0.0 225.0 15.0

NUR171	Nursing Theory and Science II	Application of nursing theory and practice utilizing critical thinking based on the nursing process and evidence based practice. Holistic nursing concepts of health promotion, disease/illness prevention, and health restoration for adult and geriatric clients. Role development as the professional nurse member of the health care team. Participation in client teaching and discharge planning. Application of previous knowledge of physical, biologic, psycho-social sciences, and the cultural and spiritual aspects of nursing care. Application of nursing concepts in the development of plan of care to include pathophysiology, nutrition,	Prerequisites: A grade of C or better in NUR151 or permission of Nursing Department Chairperson.	LEC 8.0 4.0 4.0 LAB 0.0 12.0 12.0
NUR172	Nursing Theory and Science II	Utilization of Nurse of the Future competencies and clinical judgment measures to develop knowledge, skills, and attitudes to provide safe, quality patient care across the wellness-illness continuum in selected	Prerequisites: A grade of C or better in (BIO202 and NUR152) or permission of Nursing Department Chair.	LEC 9.0 5.5 5.5 LAB 0.0 11.81 10.5
NUR180PN	Practical Nursing Theory and Science II	Holistic practical nursing concepts and theories related to care of childbearing, pediatric, adult, and geriatric clients. Role of the practical nurse collaborating with other members of the healthcare team. Concepts of health promotion and disease/illness prevention. Nursing care based upon integration of pathophysiology, nutrition, communication and physical, biological and psycho-social sciences. Information technology in performing and documenting client care. Emphasis on nursing care related to pediatric, child-bearing families, and adult clients with selected	Prerequisites: A grade of C or better in NUR160PN.	LEC 11.0 6.0 6.0 LAB 0.0 225.0 15.0
NUR187	Pharmacology and Medication Administration	Overview of selected drug classifications and categories. Emphasis on principles of drug metabolism and effects, interactions and adverse reactions, medication administration, and nursing implications for safe practice with a focus on adult and older adult patients. Requires application of previous knowledge of	Prerequisites: Permission of Nursing Department/Division Chair.	LEC 1.5 1.5 1.5

NUR191	Practical Nursing Transition	Overview of the role of the practical nurse in the care of patients. Includes nursing standards and scope of practice of the practical nurse. Emphasis on nursing care related to pediatric and care of the well childbearing patient and childbearing family. Focus on the role of practical nurse in providing care through	Prerequisites: A grade of C or better in NUR171, or NUR172, or permission of Nursing Department Chair.	LEC 3.0 2.0 2.0 LAB 0.0 3.0 3.0
NUR251	Nursing Theory and Science III	Application of critical thinking strategies related to holistic care of the newborn, pediatric, and childbearing clients. Integration of concepts related to holistic care of adults and geriatric clients with selected acute and chronic alterations in health. Integration of professional nursing standards in role development. Utilization of previous knowledge of physical, biologic, psycho-social sciences, and the cultural, spiritual aspects of nursing care. Integration of concepts of nutrition, pharmacology,	Prerequisites: A grade of C or better in (BIO202, BIO205 and NUR171) or permission of Nursing Department Chairperson.	LEC 8.0 4.0 4.0 LAB 0.0 12.0 12.0
NUR252	Nursing Theory and Science III	Application of critical thinking strategies and clinical judgment measures related to holistic care of the newborn and childbearing patients. Integration of concepts related to holistic care of adults and older adult patients with selected acute and chronic alterations in health. Integration of professional nursing standards in role development. Utilization of previous knowledge of physical, biologic, psycho-social sciences, and the cultural, spiritual aspects of nursing care. Integration of concepts of nutrition, pharmacology,	Prerequisites: A grade of C or better in [(CRE101 or appropriate district placement) and NUR172 and PSY101] or permission of Nursing Department Chair.	LEC 9.0 5.5 5.5 LAB 0.0 11.81 10.5
NUR271	Nursing Theory and Science IV	Integration of critical thinking strategies for complex holistic needs of high-risk clients with multi- system health alterations. Application of strategies related to holistic care of the client with psychiatric/ mental health disorders. Introduction to community based care. Assimilation of professional role into practice. Evaluation of care based on the knowledge of physical, biologic, psycho-social sciences, and the cultural and spiritual beliefs of clients. Development of nurse leadership and management roles. Integration of concepts of nutrition,	Prerequisites: A grade of C or better in NUR251 or permission of Nursing Department Chairperson.	LEC 7.0 4.0 4.0 LAB 0.0 9.0 9.0

NUR283	Nursing Theory and Science IV	Applies Nurse of the Future competencies and clinical judgment measures to practice and manage care for the child/family unit and adults requiring complex care throughout the wellness/illness continuum, and prepare for transition from student to professional nurse.	Prerequisites: A grade of C or better in (BIO205 and NUR252) or permission of Nursing Department Chair.	LEC 9.0 5.5 5.5 LAB 0.0 11.81 10.5
NUR291	Nursing Clinical Capstone	Synthesis of the nursing process to facilitate role transition from student to graduate nurse within a preceptorship experience. Development of nurse	Prerequisites: A grade of C or better in NUR271 or permission of Nursing Department Chairperson.	LAB 2.0 6.0 6.0
NUR292	Overview of Current Nursing Principles and Practice across the Lifespan	Update of current principles and practice guidelines for returning nurses in pediatric, obstetrical and geriatric clients. Overview of nursing concepts, therapeutic interventions, and evidence-based practice for clients	Prerequisites: Permission of Instructor.	LEC 2.0 2.0 2.0
NUR295	Registered Nurse Refresher	Update of current principles of nursing theory and practice for registered nurses. Didactic instruction meets all Arizona State Board of Nursing requirements: nursing process and patient centered care; pharmacology, medication calculation, and medication administration; communication; critical thinking, clinical decision making and evidence-based practice; delegation, management, and leadership; working with interdisciplinary teams; meeting psychological and physiological needs of adult clients with medical-surgical conditions; ethics; documentation including electronic health records; informatics; and quality improvement. Concentrated preceptorship experience under the	Prerequisites: Permission of Instructor.	LEC 10.0 6.0 6.0 LAB 0.0 180.0 12.0
NUR296WA	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 1.0 5.0 0.0

NUR296WB	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 2.0 10.0 0.0
NUR296WC	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 3.0 15.0 0.0
NUR296WD	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 4.0 20.0 0.0
NUR298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment are made available for student use. Allows the best aspects of independent study and individualized learning to be	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0

NUR298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment are made available for student use. Allows the best aspects of independent study and individualized learning to be	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
NUR298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment are made available for student use. Allows the best aspects of independent study and individualized learning to be	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
NUR301	Role of the Professional Nurse	Introduction to the transition from Registered Nurse to the role and scope of the professional baccalaureate nurse. Review of nursing philosophies, theories, and conceptual models. Focus on concepts and attributes	Prerequisites: Admission into the RN to BSN program; current, unencumbered RN license.	LEC 3.0 3.0 3.0
NUR302	Health Assessment and Promotion	Overview of the health assessment process, including methods of taking health history, physical examination skills, documentation, and health promotion strategies. Emphasis on health promotion across the lifespan among diverse populations, health equity, and	Prerequisites: Admission into the RN to BSN program; current, unencumbered RN license.	LEC 4.0 3.0 3.0 LAB 0.0 3.0 3.0
NUR303	Nursing Research and Evidence-Based Practice	Use of evidence-based research findings for improving clinical practice and person-centered care outcomes. Exploration of quantitative and qualitative research methodologies. Emphasis on the critical review of	Prerequisites: Admission into the RN to BSN program; current, unencumbered RN license.	LEC 3.0 3.0 3.0
NUR304	Public and Community Health Nursing	Exploration of population health as a system of diverse cultures, values, and subgroups with varying socioeconomic circumstances and levels of vulnerability. Emphasis on factors affecting community settings using epidemiological data and functional health pattern assessments to plan, organize, and deliver services in community settings, including health education and promotion, illness prevention, and disaster	Prerequisites: Admission into the RN to BSN program; current, unencumbered RN license.	LEC 4.0 3.0 3.0 LAB 0.0 3.0 3.0

NUR305	Legal and Ethical Topics in Nursing	Overview of health policy, legislative and regulatory guidelines, the Nurse Practice Act, and legal and ethical concepts that influence the practice of professional nursing. Focus on ethical decision-making models.	Prerequisites: Admission into the RN to BSN program; current, unencumbered RN license.	LEC 3.0 3.0 3.0
NUR401	Systems-Based Thinking in Nursing	Overview of systems-based thinking in nursing and its role in improving the quality and safety of patient care. Focus on coordination of healthcare systems components to address complex issues and deliver	Prerequisites: Admission into the RN to BSN program; current, unencumbered RN license.	LEC 3.0 3.0 3.0
NUR402	Healthcare Technology and Informatics	Exploration of various modalities and integration of healthcare technology and informatics to manage and communicate data, advance health information literacy, and improve patient outcomes. Focus on components, applications, problem solving, and data management	Prerequisites: Admission into the RN to BSN program; current, unencumbered RN license.	LEC 3.0 3.0 3.0
NUR403	Nursing Leadership and Management	Overview of leadership qualities, abilities, and personal style including strengths and challenges. Focus on understanding the differences between management and leadership. Emphasis on communication and	Prerequisites: Admission into the RN to BSN program; current, unencumbered RN license.	LEC 3.0 3.0 3.0
NUR404	Advanced Nursing Capstone	Capstone project that provides the baccalaureate nursing student with the opportunity to assess, identify, propose, and present an evidence-based project that addresses an issue significant to nursing practice. The project will synthesize knowledge from coursework and experience. The capstone project will be under the guidance and in collaboration with program faculty and	Prerequisites: Admission into the RN to BSN program; current, unencumbered RN license.	LEC 4.0 2.0 2.0 LAB 0.0 6.0 6.0
NVH245	Navajo Culture and Heritage	Survey of the Navajo people, including their history, culture/aesthetics, education, spirituality, and language	Prerequisites: None.	LEC 3.0 3.0 3.0
OAS101	Computer Typing I: Keyboarding and Formatting	Keyboard mastery; letters, tables, and reports; office production; and manuscripts	Prerequisites: None.	L+L 3.0 5.0 5.0
OAS101AA	Computer Typing I: Keyboard Mastery	Incorporates correct touch typing principles	Prerequisites: None.	L+L 1.0 1.7 1.7
OAS101AB	Computer Typing I: Letters, Tables and Reports	Letter, table, and report formatting	Prerequisites: A grade of C or better in OAS101AA or permission of Department or Division.	L+L 1.0 1.7 1.7
OAS101AC	Computer Typing I: Production and Manuscript	Simple office projects and manuscripts	Prerequisites: A grade of C or better in OAS101AB or permission of Department or Division.	L+L 1.0 1.7 1.7

OAS102	Computer Typing II: Document Production	Arrangement of letters, memos, manuscripts, and tabulation; speed/accuracy improvement	Prerequisites: A grade of C or better in OAS101 or permission of Department or Division.	L+L 3.0 5.0 5.0
OAS103AA	Computer Typing: Skill Building I	Individual progression on speed/accuracy drills.	Prerequisites: Ability to touch type at 25 words per minute or permission of Department or Division.	L+L 1.0 1.7 1.7
OAS107	Professional Telephone	Proper telephone techniques and professional business manners	Prerequisites: None.	LEC 1.0 1.0 1.0
OAS108	Business English	Comprehensive coverage of correct use of English grammar including spelling, punctuation, capitalization, and number style mechanics in a business context	Prerequisites: None.	LEC 3.0 3.0 3.0
OAS111AA	Computer Keyboarding I	Mastery of essential microcomputer keyboarding skills. Emphasis on touch typing of alphabetic and numeric	Prerequisites: None.	L+L 1.0 1.7 1.7
OAS118	10-Key By Touch	Touch system of numeric keys on ten-key pads	Prerequisites: None.	L+L 1.0 1.7 1.7
OAS120	Financial Record Keeping	Computerized application of concepts and procedures of office record keeping; includes finance and personnel records, inventory systems, banking procedures and cash control; decision-making process	Prerequisites: None.	LEC 3.0 3.0 3.0
OAS125	Introduction to the Professional Office	Expectations of the professional in the electronic office of today. Realistic and practical coverage of roles, responsibilities, and environment	Prerequisites: None.	LEC 3.0 3.0 3.0
OAS181	Medical Office: Vocabulary	Basic medical vocabulary with emphasis on pronunciation, spelling, and definition	Prerequisites: None.	LEC 3.0 3.0 3.0
OAS298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
OPT105	Introduction to Precision Optics	A historical overview of precision optics and scientific development. Covers optics application and the manufacturing process including machinery, tools, and systems. Examines fundamental principles, characteristics and design of optical components including geometrical optics, wave optics, metrology, fiber optics, photonics, aberration theory, optical	Prerequisites: None.	LEC 3.0 3.0 3.0

OPT107	Precision Optics and Mathematical Concepts	Precision optics and mathematical concepts. Covers basic algebraic operations, problem solving involving metric measurement, gears, pulleys, simple mechanism problems. Areas and volume calculations of geometric figures. Essentials of trigonometry for solving right and oblique triangles. Addresses geometrical optics (reflection, diffraction, imaging, thin lens formula, lens maker's equation), wave optics (interference, diffraction, polarization), and the basic principles and practical	Prerequisites: None.	LEC 3.0 3.0 3.0
OPT112	Optical Elements and Ray Optics	Overview of terminology and techniques in the use of analytical and laboratory methods for planning, executing, and evaluating arrangements using components such as mirrors, prisms, thin and thick lenses, diffusers, stops, reticles, and various types of light sources. Reflection, refraction, dispersion, image	Prerequisites: None.	L+L 3.0 4.0 4.0
OPT115	Optical Fabrication and Metrology	A study of optical materials, processes, and measurement techniques employed in the manufacture of modern optical components. Covers steps in planning, tooling, fabricating, finishing, testing, coating,	Prerequisites: None.	L+L 3.0 4.0 4.0
OPT215	Advanced Optical Fabrication and Metrology	Study of advanced processes, tools, and Computerized Numerical Control (CNC) technology shaping the methodology in manufacturing precision optical components. Emphasis in CNC grinding and polishing,	Prerequisites: A grade of C or better in OPT115.	L+L 3.0 4.0 4.0
OPT225	Optical Systems	Application of optical fabrication techniques covering assembly of multiple optical elements into cemented and mechanically mounted lens systems, in addition to training in precision cleaning and inspection of optical surfaces. Also covers advanced metrology skills such as interferometry of transmitted beams and measurement	Prerequisites: None.	L+L 3.0 4.0 4.0
OSH101	Introduction to Occupational Safety, Health, and Environmental Technology	Overview of occupational safety, health, and environmental regulations and technology. Overview of the regulatory framework related to safety and environmental program management. Career opportunities and their relationship to business	Prerequisites: None.	LEC 3.0 3.0 3.0
OSH102	Introduction to Industrial Hygiene	Overview of environmental hazardous materials technology. History of pollution leading to current legislation. Environmental effects of pollution. Overview of the regulatory framework. Career opportunities in	Prerequisites: None.	LEC 3.0 3.0 3.0

OSH105	Construction Safety	Occupational Safety and Health Act. Common causes for accidents and fatalities in construction. Abatement techniques for construction specific hazards. Use of personal protection and lifesaving equipment. Specific types of health hazards related to the construction	Prerequisites: None.	LEC 2.0 2.0 2.0
OSH105AA	Construction Safety	Occupational Safety and Health Act. Common causes for accidents and fatalities in construction. Abatement techniques for construction specific hazards. Use of personal protection and lifesaving equipment. Specific types of health hazards related to the construction	Prerequisites: None.	LEC 3.0 3.0 3.0
OSH106	Industrial Safety	Safety, health management, and accident prevention in industrial work environment. Role of Occupational Safety and Health Administration (OSHA) act, materials handling, electrical safety, machine safety, first response to fire and medical emergencies, safety signs and color codes, recognition of safety and health	Prerequisites: None.	LEC 2.0 2.0 2.0
OSH106AC	Industrial Safety	Safety, health management and accident prevention in industrial work environment. Role of Occupational Safety and Health Administration (OSHA) act, materials handling, electrical safety, machine safety, emergency preparedness, safety signs and color codes, recognition of safety and health hazards accident prevention, and	Prerequisites: None.	LEC 3.0 3.0 3.0
OSH107	Occupational Safety Principles and Practice	Application of safety and health regulations and best practices. Hazard identification and accident investigation techniques. Major construction hazards	Prerequisites: A grade of C or better in OSH106AC or permission of Instructor.	LEC 3.0 3.0 3.0
OSH189	Professional Leadership Development for Occupational Safety and Health	Personal and professional leadership development related to Occupational Health and Safety (OSH) through active participation in peer-to-peer and professional mentoring. Exposure to industry technical meetings, technical tours, seminars, college discipline specific campus club, scholarship awareness, career fairs, and other similar events. Supplemented by readings, and pre-and post-activity discussion and	Prerequisites: A grade of C or better in OSH101 and GTC/MIT/OSH106 and a student member of the American Society of Safety Engineers. Xref: GTC106 MIT106	LEC 1.0 1.0 1.0

OSH189AA	Professional Leadership Development for Occupational Safety and Health I	Personal and professional leadership development related to Occupational Safety and Health (OSH) through active participation in professional mentoring. Exposure to industry technical meetings, technical tours, college discipline specific campus club, scholarship awareness, and other similar events. Supplemented by readings, and pre- and post-activity	Prerequisites: A grade of C or better in OSH106AC.	L+L 1.0 2.0 1.70
OSH203	Health and Safety Program Management	Introduction to safety program theory and principles needed to develop, manage, implement and evaluate a safety and health program. Systems safety and applied psychology theories that enhance safety program management. Hazard identification methods and	Prerequisites: A grade of C or better in OSH106AC or permission of Instructor.	LEC 3.0 3.0 3.0
OSH204	Health and Safety Program Management II	Current and emerging topics in safety and health program management. Exploration of current topics through emerging regulatory and/or consensus standards organizations. Case study investigation and analysis with applications to safety and health management. Introduction to new and evolving online	Prerequisites: A grade of C or better in OSH107 and OSH203, or permission of Instructor.	LEC 3.0 3.0 3.0
OSH206	Risk Management and Loss Control	Statistical and cost analysis, report writing, and injury prevention related to loss control. Prevention programs designed to minimize or eliminate property and	Prerequisites: None.	LEC 3.0 3.0 3.0
OSH211	Industrial Safety Management Systems and Performance Indicators	Establishment of a safety management system meeting safety management system standards, concentrating on reactive and proactive approaches for safety department functions. Specific content includes development of safety duties, establishment of	Prerequisites: A grade of C or better in OSH203.	LEC 3.0 3.0 3.0
OSH218	Ergonomics	Analysis and evaluation of ergonomics risk factors for occupational tasks. Application of theories, methods, and techniques used in work design and systems. Methodological problems in human information processing, human control functions, human-machine	Prerequisites: A grade of C or better in OSH107 or permission of Instructor.	LEC 3.0 3.0 3.0
OSH220	Safety and Emergency Management	Assessment of emergency management systems for occupational safety program development. Planning and implementation of the four phases of emergency management: mitigation, preparedness, response, and recovery. Analysis of all hazards preparedness and response in emergency situations resulting from natural and technological hazards. Planning and budgeting for	Prerequisites: A grade of C or better in OSH105AA or OSH106AC.	LEC 3.0 3.0 3.0

OSH240	Fire Protection Systems	Building occupant safety requirements including industry standards, regulations, building codes, fire codes and life safety codes. Fundamentals of fire protection system operation, inspection and maintenance. Principles of life safety systems including	Prerequisites: A grade of C or better in OSH106AC.	LEC 3.0 3.0 3.0
OSH270AA	Occupational Safety and Health Internship	Occupational Safety and Health (OSH) work experience in business, industry or government. Eighty (80) hours of designated work experience.	Prerequisites: A grade of C or better in OSH101 and OSH106AC or permission of Instructor.	LAB 1.0 6.0 0.0
OSH270AB	Occupational Safety and Health Internship	Occupational Safety and Health (OSH) work experience in business, industry or government. One hundred and sixty (160) hours of designated work experience.	Prerequisites: A grade of C or better in OSH101 and OSH106AC.	LAB 2.0 12.0 0.0
OSH270AC	Occupational Safety and Health Internship	Occupational Safety and Health (OSH) work experience in business, industry or government. Two hundred and forty (240) hours of designated work experience.	Prerequisites: A grade of C or better in OSH101 and OSH106AC.	LAB 3.0 18.0 0.0
OSH290AC	Case Study and Research Project	Completion of a selected safety project in policy and procedure development or training program curriculum design in actual or simulated work setting. Combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students	Prerequisites: Permission of Instructor.	LAB 3.0 3.0 3.0
OSH298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
OSH298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0

OSH298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
OTA100	Introduction to Occupational Therapy Assistant Profession	History, theory and philosophy of occupational therapy and occupational therapy assistant (OTA) professions. Topics include practice contexts, ethics, and scope of practice. Emphasis on developing professional behavior skills expected of an entry-level occupational therapy	Prerequisites: None.	LEC 2.0 2.0 2.0
OTA102	Psychosocial Health and Occupation	Analysis of impact of psychosocial health on occupation throughout the lifespan. Focus on occupational therapy (OT) assessments and screening procedures for process skills, social interaction skills, and performance patterns. Theoretical models for group occupational therapy assistant (OTA) interventions and development	Prerequisites: Admission to the Occupational Therapy Assistant program, and a grade of C or better in (OTA100 and PSY101). Corequisites: PSY266.	LEC 3.0 3.0 3.0
OTA105	Fieldwork Level I: Psychosocial	Introductory-level clinical fieldwork experience for the occupational therapy assistant (OTA). Emphasis on observational skills and basic interactional skill in a mental health clinical setting with a culturally diverse client population. Focus on developing professional behavior, professional communication, and clinical reasoning in psychosocial context. Opportunities to	Prerequisites: Admission to Occupational Therapy Assistant program. Corequisites: OTA102.	LAB 0.5 3.0 0.0
OTA107	Fundamentals of Occupational Therapy	Discussion of Occupational Therapy Practice Framework (OTPF), analysis of occupational performance and analysis of activities. Role of occupational therapy assistant (OTA) from referral to discharge. OTA interventions, documentation requirements, and terminology. Emphasis placed on therapeutic use of self	Prerequisites: Admission to the Occupational Therapy Assistant program and a grade of C or better in OTA100.	LEC 3.0 2.0 2.0 LAB 0.0 3.0 3.0
OTA117	Physical Health and Occupations	Impact of physical health on occupation throughout the lifespan. Focus on observing, identifying, measuring, and assessing motor and sensory client factors.	Prerequisites: Admission to the Occupational Therapy Assistant program and a grade of C or better	LEC 3.0 1.0 1.0 LAB 0.0 6.0 6.0

OTA157	Occupational Therapy Assistant in Physical Rehabilitation	Theories and practice models for occupational therapy for clients with physical disabilities. Topics include pathology and therapeutic interventions. Emphasis on clinical reasoning, locating resources, daily treatment planning, task and environmental modifications, activity	Prerequisites: Admission to the Occupational Therapy Assistant program.	LEC 3.0 1.0 1.0 LAB 0.0 6.0 6.0
OTA201	Assistive Technology	Specialized assistive technology items: car modifications, power wheel chair options, adaptive toys and switches, seating systems, orthotics and prosthetics, and apps for therapeutic use. Emphasis on	Prerequisites: A grade of C or better in OTA157.	LEC 2.0 2.0 2.0
OTA205	Fieldwork Level I: Adult	Introductory level clinical fieldwork experience with a geriatric population. Application of learning with focus on exhibiting professional behavior, professional communication, clinical observation skills, and implementation of selected geriatric treatment strategies	Prerequisites: Admission to the Occupational Therapy Assistant program and a grade of C or better in OTA157. Corequisites: OTA207.	LAB 0.5 2.5 0.0
OTA207	Occupational Therapy Assistant in Geriatrics	Impact of aging on occupational performance. Physical, sensory, and cognitive changes associated with aging. Social, psychological, and cultural impact on aging. Common and emerging contexts of service provision. Focus on synthesizing learning and implementing	Prerequisites: A grade of C or better in OTA157.	LEC 3.0 2.0 2.0 LAB 0.0 3.0 3.0
OTA215	Fieldwork Level I: Pediatrics	Introductory-level fieldwork experience in a pediatric context. Emphasis on demonstrating professional behavior, professional communication, clinical observation skills, selecting age-appropriate therapeutic activities, and applying therapeutic use of self with a	Prerequisites: Admission to the Occupational Therapy Assistant program and a grade of C or better in OTA157. Corequisites: OTA217.	LAB 0.5 2.5 0.0
OTA216	Occupational Therapy Assisting Pediatrics I	Distinguishes between typical and atypical pediatric development. Common pediatric health conditions of infants, children, and adolescents. Occupational therapy practice models, theories, and delivery contexts	Prerequisites: Admission to the Occupational Therapy Assistant program and a grade of C or better in OTA102 and OTA117.	LEC 2.0 2.0 2.0
OTA217	Occupational Therapy Assisting Pediatrics II	Distinguishes between typical and atypical pediatric development. Common pediatric health conditions of infants, children, and adolescents. Occupational therapy practice models, theories, and delivery contexts found in pediatrics. Focus on synthesizing prior learning and specific pediatric treatment activities to develop	Prerequisites: Admission to the Occupational Therapy Assistant program and a grade of C or better in OTA102, OTA117, and OTA216.	LEC 3.0 2.0 2.0 LAB 0.0 3.0 3.0

OTA234	Occupational Therapy Assistant Professional Standards	Preparation for transition into level 2 fieldwork. Focus on supervisory structures, professional ethics, legislative issues, licensure requirements, evidence based practice, and reimbursement systems. Topics include program planning, marketing, quality assurance. Assessment of personal and professional competencies	Prerequisites: A grade of C or better in OTA157.	LEC 2.0 2.0 2.0
OTA255	Fieldwork Level II: Adult	Clinical experience under the direct supervision of experienced occupational therapists (OTs) or occupational therapy assistants (OTAs) in a context primarily serving adult clients. Emphasis is placed on clinical preparation for entry-level practice as an OTA.	Prerequisites: Admission to the Occupational Therapy Assistant program and a grade of C or better in (OTA207, OTA217, and OTA234). Corequisites: OTA284.	LAB 4.0 21.0 0.0
OTA256	Clinical Practicum Seminar II: Adult	Advanced therapeutic skills and professional reasoning in adult settings. Emphasis on journaling, discussion board interactions, in-service and case presentations, documentation of patient care interventions, and	Prerequisites: Admission into the Occupational Therapy Assistant program. Corequisites: OTA255.	LEC 1.0 1.0 1.0
OTA265	Fieldwork Level II: Pediatrics	Secondary clinical experience under the direct supervision of experienced occupational therapists (OTs) or occupational therapy assistants (OTAs) in a context primarily serving pediatric clients. Emphasis is placed on clinical preparation for entry-level practice as	Prerequisites: Admission to the Occupational Therapy Assistant program and a grade of C or better in (OTA207, OTA217, and OTA234).	LAB 4.0 21.0 0.0
OTA266	Clinical Practicum Seminar II: Pediatrics	Advanced therapeutic skills and professional reasoning in pediatric settings. Emphasis on journaling, discussion board interactions, in-service and case presentations, documentation of patient care interventions, and	Prerequisites: Admission into the Occupational Therapy Assistant program. Corequisites: OTA265.	LEC 1.0 1.0 1.0
OTA284	Occupational Therapy Assistant Professional Transition	Integration of clinical experiences during level 2 fieldwork with theoretical models and didactic learning. Preparation for licensure and National Board for Certification in Occupational Therapy (NBCOT) examination. Focus on self- assessment, study skills,	Prerequisites: Admission to the Occupational Therapy Assistant program and a grade of C or better in (OTA207, OTA217, and OTA234).	LEC 2.0 2.0 2.0
PAD100	21st Century Public Policy and Service	Introduction to topics pertaining to public policy and public service in the 21st century. Includes formation, implementation, and evaluation procedures for public policy, as well as roles and agendas of policy makers and public administrators. Also covers careers in public service/administration and an evaluation of essential	Prerequisites: None.	LEC 3.0 3.0 3.0

PAD107	Public Finance Administration	Basic overview of public finance system for state and local government. Includes budgeting processes, revenue and funding sources involving taxes and revenue forecasting. Also covers capital planning, debt management, performance measurement, financial	Prerequisites: A grade of C or better in CIS114DE.	LEC 3.0 3.0 3.0
PAD122	Public Sector Human Resources Management	Overview of human resources management in the public sector. Covers planning, staffing, training, compensating, and appraising employees in labor	Prerequisites: A grade of C or better in CIS114DE.	LEC 3.0 3.0 3.0
PAD170	Public Sector Organizational Behavior	Basic principles of public-sector management from an organizational behavior perspective. Levels of organizational behavior: the individual, the group and	Prerequisites: None.	LEC 3.0 3.0 3.0
PAD200	Public Affairs Economics	Introduction to the use of macroeconomic and microeconomic principles concerning public affairs and social issues. Includes the role of economics in societal development and public policies in addition to the effects of unemployment and inflation. Also covers	Prerequisites: A grade of C or better in PAD100 or permission of Instructor.	LEC 3.0 3.0 3.0
PAD210	Fundamentals of Real Property Appraisal	Procedures and techniques for estimating market value of vacant and improved properties. Includes appraisal theory, assessment procedures, and appraisal/assessment techniques in addition to land description and land valuation. Also covers definitions and structure of cost and various types of cost	Prerequisites: Permission of Department or Division.	L+L 2.0 3.0 3.0
PAD212	Valuation Concepts and Cost Appraisal Methods	Functions of the assessor and appraiser. Covers the nature and principles of value, assessment, as well as appraisal processes. Emphasis on property owner rights and limitations including an overview of the Arizona Property Tax System. Also covers use of a construction	Prerequisites: Permission of Department or Division.	L+L 2.0 3.0 3.0
PAD214	Land Valuation	Analysis of land valuation procedures. Covers maps, land value factors, and ownership as well as systems of land identification. Includes site data units of comparison and market influences in addition to Arizona statutes and precedents related to special land	Prerequisites: Permission of Department or Division.	L+L 2.0 3.0 3.0
PAD216	Basic Ad Valorem Appraisal Concepts	Basic assessment and valuation practices for mixed-use properties, partially complete structures, and salvage properties. Also covers the construction cost system, cost components, and market adjustments as well as methods for measuring depreciation. Also includes	Prerequisites: Permission of Department or Division.	L+L 2.0 3.0 3.0

PAD218	Personal Property Valuation	Overview of personal property valuation in the state of Arizona. Includes procedures and forms for the valuation process, as well as mobile home classification and affixture requirement. Also covers year/life tables	Prerequisites: Permission of Department or Division.	LEC 1.0 1.0 1.0
PAD220	Income Approach to Valuation	Principles for the income approach to valuation. Includes an overview of real estate investment and finance as well as development of net operating income estimates. Also covers contemporary and historical capitalization methods and procedures for developing	Prerequisites: Permission of Department or Division.	L+L 2.0 3.0 3.0
PAD222	Intermediate Ad Valorem Appraisal Concepts	Procedures for Ad Valorem Appraisal. Covers sales ratio studies, appraisal level, and uniformity as well as mixed-use assessment ratios. Also includes Centrally Valued Properties, Direct Sales Comparison, and Income Value	Prerequisites: Permission of Department or Division.	L+L 2.0 3.0 3.0
PAD224	Hearing Procedures	Preparation for hearing procedures. Emphasis on presentation techniques, documentation, and organization of Assessor's records as well as property classification and confirmation. Also covers analysis of and response to appellant arguments and completion	Prerequisites: Permission of Department or Division.	L+L 2.0 3.0 3.0
PAR101	Introduction to the Paralegal Profession	Comprehensive introduction into the legal profession with a focus on the paralegal's role. Introduction into legal terminology, basic legal principles, and the parties	Prerequisites: None.	LEC 3.0 3.0 3.0
PAR102	Paralegal Research, Analysis, and Writing I	Introduction into legal research, analysis and writing. Covers legal research binding, persuasive authority, and use of legal citation. Includes components and use of case law and briefs in addition to use of secondary sources and digests. Also covers electronic legal	Prerequisites: A grade of C or better in (ENG101 or ENG107) and (BPC110 or CIS105) and (CRE101 or equivalent as indicated by assessment), or permission of	LEC 3.0 3.0 3.0
PAR103	Paralegal Research, Analysis, and Writing II	Advanced legal writing and research. Analysis and application of the writing process to produce well-written documents commonly used in the practice of law. Covers various types of legal writing, including memorandum of law, persuasive writing, and legal correspondence. The use of proper grammar,	Prerequisites: A grade of C or better in PAR102, or permission of Program Director.	LEC 3.0 3.0 3.0
PAR104	Ethics for the Paralegal	Paralegal rules of professional responsibility and ethical requirements. Includes regulation of the profession as well as unauthorized practice of law and confidentiality. Also covers conflict of interest, competence, and negligence.	Prerequisites: A grade of C or better in (ENG101 or ENG107) and (BPC110 or CIS105) and (CRE101 or equivalent as indicated by assessment) and PAR102, or	LEC 3.0 3.0 3.0

PAR106	Legal Foundations for Paralegals	Legal principles of tort, contract, and criminal law. Includes roles and responsibilities of court systems, the legal community, and the paralegal. Also covers procedures for preparing cases for trial, adjudication,	Prerequisites: A grade of C or better in PAR102, or permission of Program Director.	LEC 3.0 3.0 3.0
PAR112	Civil Litigation I	Responsibilities of the paralegal in the civil litigation process. Includes review of the American court system and techniques for case investigation. Also covers case management and evidence procedures as well as settlements and pleadings.	Prerequisites: A grade of C or better in (ENG101 or ENG107) and (BPC110 or CIS105) and (CRE101 or equivalent as indicated by assessment), or permission of	LEC 3.0 3.0 3.0
PAR114	Civil Litigation II	Civil litigation responsibilities of the paralegal in the areas of discovery, depositions, pretrial, and post-trial procedures. Includes preparation of clients, witnesses, and exhibits for the courtroom. Also covers responsibilities of the paralegal in the evidentiary phase of trial, post-trial, and the appeals process in addition to	Prerequisites: A grade of C or better in PAR112, or permission of Program Director.	LEC 3.0 3.0 3.0
PAR206	Paralegal Business Law	Overview of business law for the paralegal. Includes a review of basic contract formation and enforcement, fundamental law concepts, ethics, and social responsibility. Also includes topics such as white collar and corporate crime, consumer protection, employment	Prerequisites: A grade of C or better in PAR103 and PAR112, or permission of Program Director.	LEC 3.0 3.0 3.0
PAR208	Introduction to Tort Law	Introduction to tort law and the responsibilities of the paralegal. Includes elements of types of various types of torts, negligence, and defenses in addition to classification of and legal issues pertaining to damages. Also covers insurance and its application to tort law as well as procedures for records evaluation and	Prerequisites: A grade of C or better in PAR103 and PAR112, or permission of Program Director.	LEC 3.0 3.0 3.0
PAR224	Law Office Technology for the Paralegal	Technology resources and procedures for the law office. Includes types of hardware and software in addition to office security. Also covers paperless office and electronic research procedures as well as use of	Prerequisites: A grade of C or better in PAR104 or Corequisites: PAR104.	LEC 3.0 3.0 3.0
PAR230	Family Law for the Paralegal	Paralegal responsibilities in the area of family law. Includes procedures for the initial client interview as well as drafting of applicable documents in dissolution, post-decree, and custody proceedings. Also covers discovery tools and procedures in addition to methods	Prerequisites: A grade of C or better in PAR103 and PAR112, or permission of Program Director.	LEC 3.0 3.0 3.0

PAR232	Bankruptcy Law for the Paralegal	Paralegal responsibilities in the area of bankruptcy law. Emphasis on chapters 7, 11, and 13 of the bankruptcy code of Title 11 of the United States Code. Also covers bankruptcy documentation, automatic stay, dischargeable and non-dischargeable debts, and	Prerequisites: A grade of C or better in PAR103 and PAR112, or permission of Program Director.	LEC 3.0 3.0 3.0
PAR233	Real Estate Law for the Paralegal	Paralegal responsibilities in the area of real estate law. Covers real estate transactions and agreements of sale as well as title and deed procedures. Also includes procedures for completing title abstractions and legal documentation pertinent to arbitration and foreclosure. The role of the paralegal in completing real estate client	Prerequisites: A grade of C or better in PAR103 and PAR114, or permission of Program Director.	LEC 3.0 3.0 3.0
PAR234	Administrative Law for the Paralegal	Paralegal responsibilities in the area of administrative law. Overview of types and sources of administrative law. Includes accountability, agency discretion and due process in addition to delegation and rule-making. Also covers agency investigations and adjudication	Prerequisites: A grade of C or better in PAR103 and PAR112, or permission of Program Director.	LEC 3.0 3.0 3.0
PAR236	Estate and Elder Law for the Paralegal	Paralegal responsibilities in the area of estate law and elder law. Includes estate planning and administration. Covers procedures for preparing wills and trusts in addition to handling probate issues and elder long-term	Prerequisites: A grade of C or better in PAR103 and PAR112, or permission of Program Director.	LEC 3.0 3.0 3.0
PAR237	Paralegals and Environmental Law	Overview of role and key responsibilities of a paralegal supporting environmental law concerns. Covers the essentials of environmental law, including types of organizations and agencies. Also covered, process of environmental laws and rulemaking with an emphasis	Prerequisites: A grade of C or better in PAR103 and PAR112, or permission of Program Director.	LEC 3.0 3.0 3.0
PAR238	Immigration Law for the Paralegal	Overview of role and key responsibilities of a paralegal working with immigration law cases. Includes immigration laws and essentials of federal regulations. Covers process and procedures for citizenship and naturalization including, establishing temporary and permanent legal citizenship and types of visas. Also	Prerequisites: A grade of C or better in PAR103 and PAR112, or permission of Program Director.	LEC 3.0 3.0 3.0
PAR239	Legal Investigation for the Paralegal	Overview of role and key responsibilities of a legal investigator. Covers the process for conducting an interview including discovery methods and research techniques. Also covers procedures for documenting and writing accurate statements and preparing legal	Prerequisites: A grade of C or better in PAR103 and PAR112, or permission of Program Director.	LEC 3.0 3.0 3.0

PAR240	Introduction to eDiscovery for the Paralegal	Overview of electronic discovery and the impact of electronic data on the legal field. Includes a review of the development of technology assisted review (TAR), preservation procedures, and collection methods for electronic stored information (ESI). Also covers	Prerequisites: A grade of C or better in PAR114.	LEC 3.0 3.0 3.0
PAR260	Legal Career Preparation	Overview of the essential skills necessary for the paralegal student in the internship environment. Covers essential skills, self-evaluation and resources available	Prerequisites: A grade of C or better in PAR114.	LEC 1.0 1.0 1.0
PAR290AA	Internship for the Paralegal	Paralegal work experience in industry. Eighty (80) hours of designated work per credit	Prerequisites: Permission of Department or Division.	L+L 1.0 1.0 0.0
PAR290AB	Internship for the Paralegal	Paralegal work experience in industry. Eighty (80) hours of designated work per credit.	Prerequisites: Permission of Department or Division. Corequisites:	L+L 2.0 2.0 0.0
PED101	Physical Activities:	Individual, dual, or team sports activities at the basic	Prerequisites: None.	L+L 1.0 2.0 2.0
PED101AD	Aerobic Dance	A cardiovascular workout through dance.	Prerequisites: None.	L+L 1.0 2.0 2.0
PED101AK	Aikido	Covers the fundamentals of Aikido including rules, moves, and traditional discipline of the sport.	Prerequisites: None.	L+L 1.0 2.0 2.0
PED101AP	Adapted PE	Fitness for persons with disabilities.	Prerequisites: None.	L+L 1.0 2.0 2.0
PED101AQ	Aquatic Fitness	This aquatic fitness class offers knowledge and skills to keep fit for life. It teaches safe performance of movement and exercise in a progressive approach and offers an opportunity to improve and/or maintain a high level of fitness through application of aerobic training principles in an aquatic environment. Swimming skills are not required. This class is designed for all fitness	Prerequisites: None.	L+L 1.0 2.0 2.0
PED101BA	Baseball	Basic skills and game strategy of baseball. Class emphasis on competition and drills.	Prerequisites: None.	L+L 1.0 2.0 2.0
PED101BB	Basketball	Basic skills and game strategy of basketball. Class emphasis on competition and drills.	Prerequisites: None.	L+L 1.0 2.0 2.0
PED101BC	Boot Camp	Vigorous physical and mental conditioning incorporating cardiovascular, core fitness, strength training, and flexibility. Emphasis will be placed on proper body	Prerequisites: None.	L+L 1.0 2.0 2.0
PED101BD	Ballroom Dancing	Basic level instruction on ballroom dancing footwork, timing, techniques, and style. Partners rotate.	Prerequisites: None.	L+L 1.0 2.0 2.0

PED101BE	Belly Dance	Practice and demonstration of basic belly dance skills and movements. Basic posture and muscularity, primary upper and lower body isolations, footwork, simple combination movements. Rhythms broken down, and at least one prop demonstrated. Basic routine, improvisation, and current styles and trends in belly	Prerequisites: None.	L+L 1.0 2.0 2.0
PED101BL	Ballet	Basics of ballet incorporating steps, poses, and graceful movements including leaps and spins.	Prerequisites: None.	L+L 1.0 2.0 2.0
PED101BP	Backpacking	Covers basic skills and techniques of backpacking and the application of these to wilderness travel.	Prerequisites: None.	L+L 1.0 2.0 2.0
PED101BS	Body Sculpting	Stretch and strengthen. Emphasizes increasing fitness, muscle tone, and body flexibility. Great for reducing	Prerequisites: None.	L+L 1.0 2.0 2.0
PED101CP	Camping	Learn the skills of camping in an outdoor setting. Length of overnight stay varies.	Prerequisites: None.	L+L 1.0 2.0 2.0
PED101CY	Cycling - Indoor	Basic skills for bike set up and proper body mechanics. Increase leg strength, lung capacity, and metabolism.	Prerequisites: None.	L+L 1.0 2.0 2.0
PED101DF	Self Defense	Basic self-defense skills, ground-fighting skills, and stand-up fighting capabilities. Modified for all skill levels. Practice is based on real-life experiences and	Prerequisites: None.	L+L 1.0 2.0 2.0
PED101FB	Football	Basic skills and game strategy of football. Class emphasis on competition and drills.	Prerequisites: None.	L+L 1.0 2.0 2.0
PED101FE	Fencing	Introduction to the sport of fencing. Instruction and practice in proper body mechanics with the use of a foil,	Prerequisites: None.	L+L 1.0 2.0 2.0
PED101FL	Fitness for Life	Learn the basics of designing and implementing a personalized fitness program to meet your needs in the areas of Cardiovascular Fitness, Weight Control,	Prerequisites: None.	L+L 1.0 2.0 2.0
PED101FW	Fitness Walking	Development of safe and effective walking skills through proper exercises and use of equipment to enhance a	Prerequisites: None.	L+L 1.0 2.0 2.0
PED101GF	Group Fitness/Aerobics	Group exercise incorporating a variety of equipment to increase respiration, heart rates, strength, and flexibility.	Prerequisites: None.	L+L 1.0 2.0 2.0
PED101GO	Golf	Instruction and practice for all skill levels, beginning through advanced. Assistance on shot making, club	Prerequisites: None.	L+L 1.0 2.0 2.0
PED101HH	Hip Hop	Basic skills of hip hop with instruction, practice, and performance including proper body mechanics, choreography, and behavioral competencies.	Prerequisites: None.	L+L 1.0 2.0 2.0
PED101HK	Hiking	Develop safe and effective hiking skills. Essentials and requirements for safe hiking; proper hiking clothing and attire; impact of hiking on the environment.	Prerequisites: None.	L+L 1.0 2.0 2.0

PED101JR	Jogging/Running	Introduction to jogging/running. Learn proper technique to decrease injury and increase training distance. All	Prerequisites: None.	L+L 1.0 2.0 2.0
PED101JS	Japanese Swordmanship	Vigorous martial arts swordmanship training program utilizing historical principles that promotes the development of fitness, coordination, agility, balance,	Prerequisites: None.	L+L 1.0 2.0 2.0
PED101JU	Judo	Japanese martial art in which opponents use balance and body weight to throw, pin and lock.	Prerequisites: None.	L+L 1.0 2.0 2.0
PED101KA	Karate	Training emphasizes fundamentals, traditional form, and applied sparring that follows the theory of Karate.	Prerequisites: None.	L+L 1.0 2.0 2.0
PED101KB	Kickboxing	Techniques to increase muscular endurance and strength, enhance flexibility and increase body awareness and self-confidence. Jabs, kicks, and blocks	Prerequisites: None.	L+L 1.0 2.0 2.0
PED101KF	Kung Fu	Techniques of one of the most comprehensive martial	Prerequisites: None.	L+L 1.0 2.0 2.0
PED101KY	Kayaking	For leisure or competition, basic skills and techniques of	Prerequisites: None.	L+L 1.0 2.0 2.0
PED101LD	Latin Dancing	Spicy, energetic style of dance. Cha Cha, Merengue, Salsa, Rumba, and Bolero. Partners rotate.	Prerequisites: None.	L+L 1.0 2.0 2.0
PED101LT	Lifeguard Training	Designed to provide the knowledge and skills for preventing, recognizing, and responding to aquatic emergencies. Practical skills in water rescue, CPR, and	Prerequisites: None.	L+L 1.0 2.0 2.0
PED101MD	Modern Dance	Learn the skills and techniques to express yourself through dance. Practice and drills included.	Prerequisites: None.	L+L 1.0 2.0 2.0
PED101PB	Pickleball	Basic skills and game strategy of pickleball. Class emphasis on competition and drills.	Prerequisites: None.	L+L 1.0 2.0 2.0
PED101PC	Physical Conditioning	Exercise program with access to free weights, strength machines and cardio equipment.	Prerequisites: None.	L+L 1.0 2.0 2.0
PED101PS	Pilates	Mat-based exercise system focused on improving flexibility and strength for the total body. Teaches core control and stabilization while improving postural	Prerequisites: None.	L+L 1.0 2.0 2.0
PED101QG	Qi Gong	Ancient Chinese Qi Gong breathing exercises for healing and opening channels of energy. Includes Power of Positive thought along with relaxation and	Prerequisites: None.	L+L 1.0 2.0 2.0
PED101RC	Rock Climbing	Beginning climbing skills including equipment, knots, anchoring, belaying, and climbing techniques in an indoor climbing gym. No previous experience needed.	Prerequisites: None.	L+L 1.0 2.0 2.0
PED101RQ	Racquetball	Basic skills and game strategy of racquetball. Class emphasis on competition and drills.	Prerequisites: None.	L+L 1.0 2.0 2.0

PED101RT	Resistance Training for Improved Sports Performance	Introduction to sport-specific resistance training programs to enhance athletic performance. Includes focus on advanced assessment and sport-related resistance training, including Olympic lifting with a	Prerequisites: None.	L+L 1.0 2.0 2.0
PED101SA	Salsa	Basic moves for the popular, hot Latin dance Salsa.	Prerequisites: None.	L+L 1.0 2.0 2.0
PED101SB	Softball	Basic skills and game strategy of softball. Class emphasis on competition and drills.	Prerequisites: None.	L+L 1.0 2.0 2.0
PED101SM	Swimming	Designed to improve cardiovascular fitness, flexibility and muscular endurance in an aquatic environment. Includes instruction in, practice with and individualized coaching on the basic swim strokes, breathing techniques and strategies to improve efficiency of	Prerequisites: None.	L+L 1.0 2.0 2.0
PED101SO	Soccer	Basic skills and game strategy of soccer. Class emphasis on competition and drills.	Prerequisites: None.	L+L 1.0 2.0 2.0
PED101SR	Stretch and Relaxation	A mat-based stretching class with guided meditation. Stretching increases flexibility and relieves stress, promoting an overall sense of well being.	Prerequisites: None.	L+L 1.0 2.0 2.0
PED101ST	Strength Training	Introduction to techniques of basic weight training, concentrating on incorporating an exercise regimen for	Prerequisites: None.	L+L 1.0 2.0 2.0
PED101SU	SCUBA Diving	Introduction to the theory and practice of SCUBA diving. Course includes lectures, pool dives, open water dives, and SCUBA Certification.	Prerequisites: None.	L+L 1.5 2.5 2.5
PED101SW	Swing Dancing	Popular Swing dance moves and rhythms, including basic Lindy. All students will rotate.	Prerequisites: None.	L+L 1.0 2.0 2.0
PED101TA	Tango	Beginning, basic footwork and body mechanics for Tango. Partners rotate.	Prerequisites: None.	L+L 1.0 2.0 2.0
PED101TC	Tai Chi	Fundamentals of Tai Chi including moves, breathing	Prerequisites: None.	L+L 1.0 2.0 2.0
PED101TE	Tennis	Basic skills and game strategy of tennis. Class emphasis on competition and drills.	Prerequisites: None.	L+L 1.0 2.0 2.0
PED101TF	Track and Field	Instruction and practice in track and field events, running, throwing and jumping.	Prerequisites: None.	L+L 1.0 2.0 2.0
PED101TK	Taekwondo	Fundamentals of Taekwondo including the moves, rules, and traditional discipline of the sport.	Prerequisites: None.	L+L 1.0 2.0 2.0
PED101TT	Triathlon Training	Train for triathlons. Beginners to elite. Learn training techniques for triathlon competition: Swim, Bike, Run.	Prerequisites: None.	L+L 1.0 2.0 2.0

PED101TX	Suspension Training	Suspension training using TRX or similar equipment. Designed to develop strength, balance, flexibility and core stability. Incorporates a variety of exercises using adjustable positions, stability levels and intensities.	Prerequisites: None.	L+L 1.0 2.0 2.0
PED101VB	Volleyball	Basic skills and game strategy of volleyball. Class emphasis on competition and drills.	Prerequisites: None.	L+L 1.0 2.0 2.0
PED101WW	Weight Training for Women	Designed to introduce students of all fitness levels to the fundamentals of resistance training in a safe and supportive environment. Includes hands-on demonstrations of and practice using equipment such as machine weights, free weights, and/or Olympic lifts. Individual workout programs developed under instructor	Prerequisites: None.	L+L 1.0 2.0 2.0
PED101YG	Gentle Yoga	Focuses on the use of such props as blankets, blocks, and chairs to modify traditional Yoga poses, enabling participation with moderate effort and without strain; suitable for all levels but especially for students needing	Prerequisites: None.	L+L 1.0 2.0 2.0
PED101YH	Hatha Yoga	Combination of traditional and flow style yoga that utilizes breathing, yoga poses, relaxation and meditation to create balance and inner peace.	Prerequisites: None.	L+L 1.0 2.0 2.0
PED101YI	Iyengar Yoga	Form of Hatha Yoga using various props such as belts, blocks, and straps used to focus on precise body	Prerequisites: None.	L+L 1.0 2.0 2.0
PED101YK	Kundalini Yoga	Energetically guided Yoga focusing on psycho-spiritual growth with special consideration of the spine and	Prerequisites: None.	L+L 1.0 2.0 2.0
PED101YO	Yoga	Promotion of overall health by strengthening muscles and stimulating glands and organs. Basic postures, breathing and relaxation techniques.	Prerequisites: None.	L+L 1.0 2.0 2.0
PED101YP	Power Yoga	Yoga postures performed in a dynamic series designed to gain strength, add flexibility, release toxins, This is a vigorous, athletic form of yoga.	Prerequisites: None.	L+L 1.0 2.0 2.0
PED101YR	Restorative Yoga	Gentle form of Yoga poses utilizing props to create fully supported postures; focuses on relaxation and involves non-rigorous physical activity, providing rest and recovery and promoting the restoration of tranquility;	Prerequisites: None.	L+L 1.0 2.0 2.0
PED101ZU	Zumba Fitness	Uses easy to follow dance movements and high energy music to enhance cardiovascular fitness and to promote self-esteem and confidence in physical movement. Provides an accepting and encouraging atmosphere for students of all levels to participate in a group fitness	Prerequisites: None.	L+L 1.0 2.0 2.0

PED102	Physical Activities: Intermediate	Individual, dual, or team sports activities at the intermediate level.	Prerequisites: None. Prior experience recommended.	L+L 1.0 2.0 2.0
PED102BA	Baseball - Intermediate	To improve upon basic skills and game strategy of baseball at the intermediate level. Class emphasis on	Prerequisites: None. Prior experience recommended.	L+L 1.0 2.0 2.0
PED102BB	Basketball - Intermediate	To improve upon basic skills and game strategy of basketball at the intermediate level. Class emphasis on	Prerequisites: None. Prior experience recommended.	L+L 1.0 2.0 2.0
PED102BC	Boot Camp - Intermediate	Vigorous training at an intermediate level incorporating cardiovascular, core fitness, strength training, and flexibility. Emphasis will be placed on proper body	Prerequisites: None. Prior experience recommended.	L+L 1.0 2.0 2.0
PED102BD	Ballroom Dancing - Intermediate	Intermediate level instruction on ballroom dancing footwork, timing, techniques, and style. Partners rotate.	Prerequisites: None. Prior experience recommended.	L+L 1.0 2.0 2.0
PED102BE	Belly Dance - Intermediate	Practice and demonstration of basic belly dance skills and movements at the intermediate level. Posture and muscularity, primary upper and lower body isolations, footwork, intermediate level combination movements. Rhythms broken down, and at least two props demonstrated. Routine, improvisation, and current	Prerequisites: None. Prior experience recommended.	L+L 1.0 2.0 2.0
PED102BL	Ballet - Intermediate	Ballet steps, poses and graceful movements including leaps and spins at the intermediate level.	Prerequisites: None. Prior experience recommended.	L+L 1.0 2.0 2.0
PED102CH	Cheerleaders - Intermediate	Intermediate skills of cheerleading with instruction, practice, and performance including proper body mechanics, choreography, and behavioral	Prerequisites: None. Prior experience recommended.	L+L 1.0 2.0 2.0
PED102DF	Self Defense - Intermediate	Intermediate self-defense skills, ground-fighting skills, and stand-up fighting capabilities. Practice is based on real-life experiences and endurance enhanced drills. Develops self confidence. Not recommended for	Prerequisites: None. Prior experience recommended.	L+L 1.0 2.0 2.0
PED102FB	Football - Intermediate	Improve upon basic skills and game strategy of football at the intermediate level. Class emphasis on	Prerequisites: None. Prior experience recommended.	L+L 1.0 2.0 2.0
PED102FE	Fencing - Intermediate	Build upon the basic skills in the sport of fencing. Intermediate level instruction in the use of a foil, saber, and epee. Emphasis on skill practice and competition.	Prerequisites: None. Prior experience recommended.	L+L 1.0 2.0 2.0
PED102FL	Fitness for Life - Intermediate	Intermediate level design and implementation of a personalized fitness program to increase your fitness level in the areas of Cardiovascular Fitness, Weight	Prerequisites: None. Prior experience recommended.	L+L 1.0 2.0 2.0
PED102GO	Golf - Intermediate	Improving techniques of putting, chipping, the full swing, rules and scoring will be covered in this class.	Prerequisites: None. Prior experience recommended.	L+L 1.0 2.0 2.0

PED102HH	Hip Hop - Intermediate	Intermediate level dance instruction and practice in the skills of hip hop. Emphasis on performance including proper body mechanics, choreography, and behavioral	Prerequisites: None. Prior experience recommended.	L+L 1.0 2.0 2.0
PED102HK	Hiking - Intermediate	Improve your hiking skills on more challenging terrain. Includes Physical training.	Prerequisites: None. Prior experience recommended.	L+L 1.0 2.0 2.0
PED102JR	Jogging/Running - Intermediate	Intermediate training for jogging/running. Learn proper technique to decrease injury and increase training distance. Not recommended for beginners.	Prerequisites: None. Prior experience recommended.	L+L 1.0 2.0 2.0
PED102JS	Japanese Swordmanship - Intermediate	Intermediate level of vigorous martial arts swordmanship training program utilizing historical principles that promotes the development of fitness, coordination, agility, balance, mindfulness/focus, and knowledge of	Prerequisites: None.	L+L 1.0 2.0 2.0
PED102KA	Karate - Intermediate	Applied technique and theory of Karate at the intermediate level.	Prerequisites: None. Prior experience recommended.	L+L 1.0 2.0 2.0
PED102KB	Kickboxing - Intermediate	Intermediate level kickboxing techniques to increase muscular endurance and strength, enhance flexibility and increase body awareness and self- confidence. Not	Prerequisites: None. Prior experience recommended.	L+L 1.0 2.0 2.0
PED102LD	Latin Dancing - Intermediate	Incorporate intermediate dance moves while performing Latin Dance.	Prerequisites: None. Prior experience recommended.	L+L 1.0 2.0 2.0
PED102PB	Pickleball - Intermediate	Intermediate skills and game strategy of pickleball. Class emphasis on competition and drills.	Prerequisites: None. Prior experience suggested but not required.	L+L 1.0 2.0 2.0
PED102PC	Physical Conditioning - Intermediate	Intermediate level exercise program with access to free weights, strength machines and cardio equipment. Not recommended for the beginner.	Prerequisites: None. Prior experience recommended.	L+L 1.0 2.0 2.0
PED102PS	Pilates - Intermediate	Intermediate level Mat-based exercise system focused on improving flexibility and strength for the total body. Teaches core control and stabilization while improving	Prerequisites: None. Prior experience recommended.	L+L 1.0 2.0 2.0
PED102RC	Rock Climbing - Intermediate	Improve upon basic skills of climbing including, knots, anchoring, belaying, and climbing techniques in an indoor climbing gym. Develop strength and confidence.	Prerequisites: None. Prior experience recommended.	L+L 1.0 2.0 2.0
PED102RT	Resistance Training for Improved Sports Performance - Intermediate	Intermediate level of sport specific programs designed to enhance athletic performance. Includes a focus on advanced assessment and sport related resistance training including Olympic lifting and plyometrics with a	Prerequisites: None. Prior experience recommended.	L+L 1.0 2.0 2.0
PED102SA	Salsa - Intermediate	Learn the intermediate dance moves for Salsa. Not recommended for the beginning Salsa dancer.	Prerequisites: None. Prior experience recommended.	L+L 1.0 2.0 2.0
PED102SB	Softball - Intermediate	Improve upon basic skills and game strategy of softball at the intermediate level. Class emphasis on	Prerequisites: None. Prior experience recommended.	L+L 1.0 2.0 2.0

PED102SO	Soccer - Intermediate	To improve upon basic skills and game strategy of soccer at the intermediate level. Class emphasis on	Prerequisites: None. Prior experience recommended.	L+L 1.0 2.0 2.0
PED102ST	Strength Training - Intermediate	Intermediate techniques of strength training, concentrating on incorporating an exercise regimen for increased strength and endurance. Not recommended	Prerequisites: None. Prior experience recommended.	L+L 1.0 2.0 2.0
PED102TC	Tai Chi - Intermediate	Intermediate level techniques of Tai Chi including moves, breathing and meditation.	Prerequisites: None. Prior experience recommended.	L+L 1.0 2.0 2.0
PED102TE	Tennis - Intermediate	Improve upon basic skills and game strategy of tennis at the intermediate level. Class emphasis on	Prerequisites: None. Prior experience recommended.	L+L 1.0 2.0 2.0
PED102TF	Track and Field - Intermediate	To improve upon basic track and field event skills at the intermediate level. Class emphasis on competition and	Prerequisites: None. Prior experience recommended.	L+L 1.0 2.0 2.0
PED102TK	Taekwondo - Intermediate	Intermediate level training in Taekwondo.	Prerequisites: None. Prior experience recommended.	L+L 1.0 2.0 2.0
PED102TT	Triathlon Training - Intermediate	Intermediate level training for triathletes. Improve your training techniques for triathlon competition: Swim, Bike,	Prerequisites: None. Prior experience recommended.	L+L 1.0 2.0 2.0
PED102VB	Volleyball - Intermediate	Improve upon basic skills and game strategy of volleyball at the intermediate level. Class emphasis on	Prerequisites: None. Prior experience recommended.	L+L 1.0 2.0 2.0
PED102WW	Weight Training for Women - Intermediate	Designed to advance the resistance training routines of more experienced students in a progressive fashion. Includes principles of and practice with the safe use of free and machine weights and Olympic lifts as well as strategies for effective workouts. Customized training programs devised with instructor guidance. Consideration of resistance training as part of a	Prerequisites: None. Prior experience recommended.	L+L 1.0 2.0 2.0
PED102YO	Yoga - Intermediate	Yoga for the experienced practitioner.	Prerequisites: None. Prior experience recommended.	L+L 1.0 2.0 2.0
PED102YP	Power Yoga - Intermediate	Intermediate level Yoga postures performed in a dynamic series designed to gain strength, add flexibility, release toxins, This is a vigorous, athletic form of yoga.	Prerequisites: None. Prior experience recommended.	L+L 1.0 2.0 2.0
PED103	Physical Activities:	Individual, dual, or team sports activities at the basic	Prerequisites: None.	L+L 0.5 1.0 1.0
PED103AQ	Aquatic Fitness	This aquatic fitness class offers knowledge and skills to keep fit for life. It teaches safe performance of movement and exercise in a progressive approach and offers an opportunity to improve and/or maintain a high level of fitness through application of aerobic training principles in an aquatic environment. Swimming skills are not required. This class is designed for all fitness	Prerequisites: None.	L+L 0.5 1.0 1.0

PED103BC	Boot Camp	Vigorous physical and mental conditioning incorporating cardiovascular, core fitness, strength training, and flexibility. Emphasis will be placed on proper body	Prerequisites: None.	L+L 0.5 1.0 1.0
PED103BD	Ballroom Dancing	Basic level instruction on ballroom dancing footwork, timing, techniques, and style. Partners rotate.	Prerequisites: None.	L+L 0.5 1.0 1.0
PED103BE	Belly Dance	Practice and demonstration of basic belly dance skills and movements. Basic posture and muscularity, primary upper and lower body isolations, footwork, simple combination movements. Rhythms broken down, and at least one prop demonstrated. Basic routine, improvisation, and current styles and trends in belly	Prerequisites: None.	L+L 0.5 1.0 1.0
PED103BS	Body Sculpting	Stretch and strengthen. Emphasizes increasing fitness, muscle tone, and body flexibility. Great for reducing	Prerequisites: None.	L+L 0.5 1.0 1.0
PED103DF	Self Defense	Basic self-defense skills, ground-fighting skills, and stand-up fighting capabilities. Modified for all skill levels. Practice is based on real-life experiences and	Prerequisites: None.	L+L 0.5 1.0 1.0
PED103FL	Fitness for Life	Learn the basics of designing and implementing a personalized fitness program to meet your needs in the areas of Cardiovascular Fitness, Weight Control,	Prerequisites: None.	L+L 0.5 1.0 1.0
PED103GF	Group Fitness/Aerobics	Group exercise incorporating a variety of equipment to increase respiration, heart rates, strength, and flexibility.	Prerequisites: None.	L+L 0.5 1.0 1.0
PED103HK	Hiking	Develop safe and effective hiking skills. Essentials and requirements for safe hiking; proper hiking clothing and attire; impact of hiking on the environment.	Prerequisites: None.	L+L 0.5 1.0 1.0
PED103KB	Kickboxing	Techniques to increase muscular endurance and strength, enhance flexibility and increase body awareness and self-confidence. Jabs, kicks, and blocks	Prerequisites: None.	L+L 0.5 1.0 1.0
PED103KF	Kung Fu	Techniques of one of the most comprehensive martial	Prerequisites: None.	L+L 0.5 1.0 1.0
PED103LD	Latin Dancing	Spicy, energetic style of dance. Cha Cha, Merengue, Salsa, Rumba, and Bolero. Partners rotate.	Prerequisites: None.	L+L 0.5 1.0 1.0
PED103PC	Physical Conditioning	Exercise program with access to free weights, strength machines and cardio equipment.	Prerequisites: None.	L+L 0.5 1.0 1.0
PED103PS	Pilates	Mat-based exercise system focused on improving flexibility and strength for the total body. Teaches core control and stabilization while improving postural	Prerequisites: None.	L+L 0.5 1.0 1.0
PED103QG	Qi Gong	Ancient Chinese Qi Gong breathing exercises for healing and opening channels of energy. Includes Power of Positive thought along with relaxation and	Prerequisites: None.	L+L 0.5 1.0 1.0

PED103SA	Salsa	Basic moves for the popular, hot Latin dance Salsa.	Prerequisites: None.	L+L 0.5 1.0 1.0
PED103SM	Swimming	Designed to improve cardiovascular fitness, flexibility and muscular endurance in an aquatic environment. Includes instruction and coaching in basic swim strokes and breathing techniques as well as tips for improving	Prerequisites: None.	L+L 0.5 1.0 1.0
PED103SR	Stretch and Relaxation	A mat-based stretching class with guided meditation. Stretching increases flexibility and relieves stress, promoting an overall sense of well being.	Prerequisites: None.	L+L 0.5 1.0 1.0
PED103TC	Tai Chi	Fundamentals of Tai Chi including moves, breathing	Prerequisites: None.	L+L 0.5 1.0 1.0
PED103TX	Suspension Training	Suspension training using TRX or similar equipment. Designed to develop strength, balance, flexibility and core stability. Incorporates a variety of exercises using adjustable positions, stability levels and intensities.	Prerequisites: None.	L+L 0.5 1.0 1.0
PED103VB	Volleyball	Basic skills and game strategy of volleyball. Class emphasis on competition and drills.	Prerequisites: None.	L+L 0.5 1.0 1.0
PED103YG	Gentle Yoga	Focuses on the use of such props as blankets, blocks, and chairs to modify traditional Yoga poses, enabling participation with moderate effort and without strain; suitable for all levels but especially for students needing	Prerequisites: None.	L+L 0.5 1.0 1.0
PED103YH	Hatha Yoga	Combination of traditional and flow style yoga that utilizes breathing, yoga poses, relaxation and meditation to create balance and inner peace.	Prerequisites: None.	L+L 0.5 1.0 1.0
PED103YO	Yoga	Promotion of overall health by strengthening muscles and stimulating glands and organs. Basic postures, breathing and relaxation techniques.	Prerequisites: None.	L+L 0.5 1.0 1.0
PED103YR	Restorative Yoga	Gentle form of Yoga poses utilizing props to create fully supported postures; focuses on relaxation and involves non-rigorous physical activity, providing rest and recovery and promoting the restoration of tranquility;	Prerequisites: None.	L+L 0.5 1.0 1.0
PED103ZU	Zumba Fitness	Zumba dynamic fitness program. Features high energy, easy to follow rhythmic moves set to energizing Latin and international beats. Provides an enjoyable way to	Prerequisites: None.	L+L 0.5 1.0 1.0
PED105	Army Master Fitness	Introduces the student to the Army Master Fitness Program. Designed to enhance the student's level of	Prerequisites: None.	L+L 1.0 3.0 0.0
PED114	Fitness	Fitness activity and wellness study to help develop a lifetime of regular exercise, stress management, and proper nutrition. Workout includes warm-up/stretch, aerobic exercise, selected strength exercises, and cool	Prerequisites: None.	L+L 1.5 3.0 3.0

PED115	Lifetime Fitness	Increase personal fitness, strength, and vitality. Current principles of cardiovascular exercise, weight training, flexibility, and balance exercises applicable to lifetime fitness goals. Personalized fitness plans developed and implemented with support of highly trained fitness professionals. Techniques to make sessions more	Prerequisites: None.	L+L 2.0 4.0 4.0
PED116	Cardiovascular Fitness	Blends an effective warm-up, challenging cardiovascular and strength/endurance training strategies and a relaxing cool-down. Tailored by certified fitness	Prerequisites: None.	L+L 2.0 4.0 4.0
PED117	Weight Training for Wellness	Strength training and muscular fitness activity to help develop a lifetime of regular exercise and muscular strength maintenance. Development of full body strength and stability of the body's core musculature, translating to increased power, balance, and functional movement ability including assessment of current	Prerequisites: None.	L+L 2.0 4.0 4.0
PED118	Exercise is Medicine(r)	Group exercise that is individualized by highly trained fitness professionals to help meet personal health enhancement goals. Designed to follow the national initiative, "Exercise is Medicine(r)", coordinated by the American College of Sports Medicine (ACSM) and the American Medical Association (AMA) to help improve	Prerequisites: None.	L+L 1.5 3.0 3.0
PED120AF	Special Emphasis Activities: Weight	Intensive experience in weight training.	Prerequisites: None.	L+L 2.0 4.0 4.0
PED124	Strength and Conditioning for Sport Performance: Basic	Introduction to the principles and training techniques of strength and conditioning for sport performance. Emphasis is placed on beginning instructional techniques and safety of Olympic lifts; plyometrics; muscular endurance, strength and power development;	Prerequisites: None.	L+L 2.0 4.0 4.0
PED125	Strength and Conditioning for Sport Performance: Intermediate	Principles and training techniques of strength and conditioning for sport performance. Emphasis is placed on instructional techniques and safety of Olympic lifts; plyometrics; muscular endurance, strength and power	Prerequisites: A grade of C or better in PED124.	L+L 2.0 4.0 4.0
PED133	Olympic Style Weight Lifting	Advanced study of the science, strategy, and techniques of Olympic Style Weightlifting. For the fitness professional who is interested in competing, or is seeking to incorporate advanced strength and conditioning modalities. Addresses current topics,	Prerequisites: None.	L+L 2.0 4.0 4.0

PED158	Tradition and Practice of Yoga III	A deep exploration of the yogic path as it relates to the self, to teaching yoga, and to society as a whole. Emphasis on the early and modern intellectual	Prerequisites: A grade of C or better in YOG150 and YOG250.	LEC 2.0 2.0 2.0
PED191	Corrective Exercise for Athletes: Basic	Evaluation of functional movement ability and corrective activity to improve specific functional movements. Optimize functional movement abilities by designing corrective activity to improve weaknesses, correct imbalances and asymmetries in order to contribute to	Prerequisites: None.	L+L 1.0 2.0 2.0
PED192	Corrective Exercise for Athletes: Intermediate	Evaluation of functional movement ability and corrective activity to improve functional movement at the intermediate level. Optimize functional movement abilities and dynamic sport movement by designing corrective activity at the intermediate level to improve weaknesses, correct imbalances and asymmetries in	Prerequisites: A grade of C or better in PED191 or permission of Instructor.	L+L 1.0 2.0 2.0
PED201BA	Baseball - Advanced	To improve upon intermediate skills and game strategy of baseball at the advanced level. Class emphasis on	Prerequisites: None. Prior experience at competitive level recommended.	L+L 1.0 2.0 2.0
PED201BB	Basketball - Advanced	To improve upon intermediate skills and game strategy of basketball at the advanced level. Class emphasis on	Prerequisites: None. Prior experience at competitive level recommended.	L+L 1.0 2.0 2.0
PED201BD	Ballroom Dancing - Advanced	Advanced level instruction on ballroom dancing footwork, timing, techniques, and style. Partners rotate.	Prerequisites: None. Prior experience at competitive level recommended.	L+L 1.0 2.0 2.0
PED201CH	Cheerleaders - Advanced	Advanced skills of cheerleading with instruction, practice, and performance including proper body mechanics, choreography, and behavioral	Prerequisites: None. Prior experience at competitive level recommended.	L+L 1.0 2.0 2.0
PED201GO	Golf - Advanced	Experienced golfers gain helpful hints and practice to improve their game.	Prerequisites: None. Prior experience at competitive level recommended.	L+L 1.0 2.0 2.0
PED201PC	Physical Conditioning - Advanced	Advanced level training program with access to free weights, strength machines and cardio equipment.	Prerequisites: None. Prior experience at competitive level recommended.	L+L 1.0 2.0 2.0
PED201SA	Salsa - Advanced	Learn the advanced dance moves for Salsa.	Prerequisites: None. Prior experience at competitive level recommended.	L+L 1.0 2.0 2.0
PED201SB	Softball - Advanced	Improve upon intermediate skills and game strategy of softball at the advanced level. Class emphasis on	Prerequisites: None. Prior experience at competitive level recommended.	L+L 1.0 2.0 2.0
PED201SO	Soccer - Advanced	To improve upon intermediate skills and game strategy of soccer at the advanced level. Class emphasis on	Prerequisites: None. Prior experience at competitive level recommended.	L+L 1.0 2.0 2.0
PED201ST	Strength Training - Advanced	Advanced techniques of strength training, concentrating on incorporating a vigorous exercise regimen for increasing muscle strength and endurance.	Prerequisites: None. Prior experience at competitive level recommended.	L+L 1.0 2.0 2.0

PED201SU	Scuba Diving: Advanced	Additional training in SCUBA techniques. Pool sessions and weekend open water dives will provide training in: Underwater Navigation, Underwater Naturalist, Deep	Prerequisites: None. Prior experience at competitive level recommended.	L+L 1.0 2.0 2.0
PED201TC	Tai Chi - Advanced	Advanced level techniques of Tai Chi including moves, breathing and meditation.	Prerequisites: None. Prior experience at competitive level recommended.	L+L 1.0 2.0 2.0
PED201TF	Track and Field - Advanced	Advanced level training in track and field events. Class emphasis on competition and drills.	Prerequisites: None. Prior experience at competitive level recommended.	L+L 1.0 2.0 2.0
PED201VB	Volleyball - Advanced	Improve upon intermediate skills and game strategy of volleyball at the advanced level. Class emphasis on	Prerequisites: None. Prior experience at competitive level recommended.	L+L 1.0 2.0 2.0
PED201WT	Weight Training - Advanced	Advanced level training with a qualified instructor on the use of Olympic and Free Weights.	Prerequisites: None. Prior experience at competitive level recommended.	L+L 1.0 2.0 2.0
PED201YO	Yoga - Advanced	Advanced yoga postures.	Prerequisites: None. Prior experience recommended.	L+L 1.0 2.0 2.0
PED202	Physical Activities: Elite	Individual, dual, or team sports activities at the elite level.	Prerequisites: None. Prior experience at competitive level recommended.	L+L 1.0 2.0 2.0
PED202BA	Baseball - Elite	Improve upon advanced skills and game strategy of baseball at the elite level. Class emphasis on	Prerequisites: None. Prior experience at competitive level recommended.	L+L 1.0 2.0 2.0
PED202BB	Basketball - Elite	Improve upon advanced skills and game strategy of basketball at the elite level. Class emphasis on	Prerequisites: None. Prior experience at competitive level recommended.	L+L 1.0 2.0 2.0
PED202SB	Softball - Elite	Improve upon advanced skills and game strategy of softball at the elite level. Class emphasis on competition	Prerequisites: None. Prior experience at competitive level recommended.	L+L 1.0 2.0 2.0
PED202SO	Soccer - Elite	Improve upon advanced skills and game strategy of soccer at the elite level. Class emphasis on competition	Prerequisites: None. Prior experience at competitive level recommended.	L+L 1.0 2.0 2.0
PED202TF	Track and Field - Elite	Improve upon advanced skills and game strategy of track and field at the elite level. Class emphasis on	Prerequisites: None. Prior experience at competitive level recommended.	L+L 1.0 2.0 2.0
PED202VB	Volleyball - Elite	Improve upon advanced skills and game strategy of volleyball at the elite level. Class emphasis on	Prerequisites: None. Prior experience at competitive level recommended.	L+L 1.0 2.0 2.0
PED224	Strength and Conditioning for Sport Performance: Advanced	Principles and training techniques of strength and conditioning for sport performance. Emphasis placed on instructional techniques and safety of Olympic lifts; plyometrics; muscular endurance, strength and power development; anaerobic and aerobic capacity; and	Prerequisites: A grade of C or better in PED124 and PED125.	L+L 2.0 4.0 4.0
PED225	Strength and Conditioning for Sport Performance: Elite	Principles and training techniques of strength and conditioning for sport performance. Emphasis placed on instructional techniques and safety of Olympic lifts; plyometrics; muscular endurance, strength and power development; anaerobic and aerobic capacity; injury	Prerequisites: A grade of C or better in PED124, PED125 and PED224.	L+L 2.0 4.0 4.0

PED280	Introduction to Yoga Therapy	Introduction to the therapeutic use of yoga. Includes basic concepts of yoga therapy, identification of common therapeutic problems and application of yoga asana as a modality of healing. Demonstration and practice of therapeutic techniques and sequences to	Prerequisites: A grade of C or better in YOG170 or permission of Instructor.	L+L 2.0 2.0 2.0
PED281	Yoga Therapy - Upper Body Principles	Basic concepts of yoga therapy, review of therapeutic interventions, identification of common therapeutic problems, and application of yoga asana as a modality of healing. Demonstration and practice of therapeutic techniques and sequences to improve movement capability and promote health and well-being of the upper body. Emphasis on the study of chronic problem	Prerequisites: A grade of C or better in PED280 or permission of Instructor.	L+L 2.0 2.0 2.0
PED282AA	Service-Learning Experience in Physical Education	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 1.0 1.0 0.0
PED282AB	Service-Learning Experience in Physical Education	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 2.0 2.0 0.0
PED282AC	Service-Learning Experience in Physical Education	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 3.0 3.0 0.0
PED283	Yoga Therapy - Low Back Principles	Basic concepts of yoga therapy, review of therapeutic interventions, identification of common therapeutic problems, and application of yoga asana as a modality of healing. Demonstration and practice of therapeutic techniques and sequences to improve movement capability and promote health and well-being. Emphasis on the study of chronic problem areas and therapeutic	Prerequisites: A grade of C or better in PED280 or permission of Instructor.	L+L 2.0 2.0 2.0
PED284	Yoga Therapy - Knee Principles	Basic concepts of yoga therapy, review of therapeutic interventions, identification of common therapeutic problems of the knee, and application of yoga asana as a modality of healing. Demonstration and practice of therapeutic techniques and sequences to improve movement capability and promote health and well-	Prerequisites: A grade of C or better in PED280 or permission of Instructor.	L+L 2.0 2.0 2.0
PED288	Yoga Therapy Practicum	Focus on immersion in the area of Yoga Therapy. Yoga Therapy application onsite at the community college with a current instructor of Yoga. Requires minimum of	Prerequisites: A grade of C or better in (PED280, PED281, PED283, and PED284) or permission of Program	LAB 2.0 10.0 0.0

PED291	Corrective Exercise for Athletes: Advanced	Evaluation of functional movement ability and corrective activity to improve functional movement at an advanced level. Optimize functional movement abilities by designing advanced corrective activity to improve weaknesses, correct imbalances and asymmetries in order to contribute to athletic and fitness performance. Self-assessment at an advanced level of imbalances	Prerequisites: A grade of C or better in PED192 or permission of Instructor.	L+L 1.0 2.0 2.0
PED296WA	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 1.0 5.0 0.0
PED296WB	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 2.0 10.0 0.0
PED296WC	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 3.0 15.0 0.0

PED296WD	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 4.0 20.0 0.0
PED298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
PED298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
PED298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
PHC101	Pharmacology for Pharmacy Technicians	Overall history of pharmacy from ancient times to today; pharmacy technician job ethics and responsibilities; state and national drug laws and regulations; pharmacy information reference material; pharmaceutical abbreviations and introduction to prescription sig codes.	Prerequisites: 1. Successful completion of RDG100 or higher or appropriate reading placement into CRE101. 2. Successful completion of MAT090, MAT091, MAT092 or higher, or appropriate math	60

PHC120	Pharmacology and Pharmacy Technology	This course is designed to offer incumbent pharmacy technician trainees foundational knowledge in pharmacy history, evolving roles and responsibilities of the pharmacy technician, ethics, and state and national drug laws and regulations in order to prepare for the national certification examination. Students will focus on learning the top 200 prescribed medications, pharmaceutical abbreviations, and prescription sig codes. Additionally, students will practice prescription dispensing, adjudication with insurance companies, and medication distribution in retail and hospital pharmacy settings. Students will practice computer skills, bulk compounding, packaging, inventory control, medication storage, and drug delivery systems. Students will	Prerequisites: Successful completion of RDG100 or higher or appropriate reading placement into CRE101. Successful completion of MAT090, MAT091, MAT092 or higher, or appropriate math placement into MAT103.	230
PHC122	Pharmacy Technician Certification Review	This course is designed to prepare Pharmacy Technician trainees, incumbent workers, or Pharmacy Technician certificate students for the NHA Exam for the Certification of Pharmacy Technicians (ExCPT) and the PTSB Pharmacy Technician Certification Exam (PTCE),	Prerequisites: A grade of C or better PHC155 or Pharmacy Technician Training License or permission of Department or Division.	30
PHC150	Introduction to Pharmacy Practice	This course provides a basic overview of the pharmacy industry to prepare students for an entry level pharmacy technician role. Students will be introduced to the knowledge and skills required for a pharmacy technician including roles and responsibilities, anatomy, physiology and health science, as well as pharmacology, scope of	Prerequisites: 1. Successful completion of RDG100 or higher or appropriate reading placement into CRE101. 2. Successful completion of MAT090, MAT091, MAT092 or higher, or appropriate math	90
PHC153	Basic Pharmacy Practice	Technical aspects of prescription dispensing and drug distribution in the retail and hospital setting utilizing the computer. Bulk compounding, packaging, inventory control, drug storage and a variety of drug delivery	Prerequisites: A grade of C or better in PHC150.	132
PHC155	Advanced Pharmacy Practice	Responsibilities of a pharmacy technician specific to working in a hospital and community setting; common drugs and their uses; drug routes of administration; basic biopharmaceutics; billing and reimbursement; sterile and non-sterile compounding; pharmacy career	Prerequisites: A grade of C or better in PHC153.	150

PHC253	Pharmacy Technician Practicum	Consists of 160 hours at a clinical site, under the supervision of a pharmacist or senior pharmacy technician. Includes hands-on experience with patients, staff, and other healthcare professionals while applying the knowledge and skills obtained in the pharmacy technician program. Preparation for work experience in	Prerequisites: A grade of C or better in PHC155.	160
PHC253DC	Pharmacy Technician Practicum	Consists of 200 hours at a clinical site, under the supervision of a pharmacist or senior pharmacy technician. Includes hands-on experience with patients, staff, and other healthcare professionals while applying the knowledge and skills obtained in the pharmacy technician program. Preparation for work experience in	Prerequisites: A grade of C or better in PHC155.	200
PHI101	Introduction to Philosophy	General consideration of human nature and the nature of the universe. Knowledge, perception, freedom and determinism, and the existence of God	Prerequisites: None.	LEC 3.0 3.0 3.0
PHI103	Introduction to Logic	Comprehensive introduction to logical reasoning. Exploration of informal logic, including common logical fallacies, delving into symbolic logic to analyze and construct valid arguments using formal methods such as truth tables, truth trees, or proofs. Emphasis on developing critical thinking skills essential for evaluating	Prerequisites: A grade of C or better in ENG101 or ENG107 or equivalent.	LEC 3.0 3.0 3.0
PHI104	World Philosophy	Examination of questions such as the meaning of life and death, social justice, appearance and reality, human nature, the identity of the self freedom and destiny, the ethical life, and the relationship of science and religion. Comparative analysis of diverse Eastern	Prerequisites: None.	LEC 3.0 3.0 3.0
PHI105	Introduction to Ethics	A survey of ethical theory in Western Philosophy, including the major normative theories and selected	Prerequisites: None.	LEC 3.0 3.0 3.0
PHI201	History of Ancient Philosophy	Historical survey of the intellectual history of the Greco-Roman world, focusing on the philosophical tradition	Prerequisites: None.	LEC 3.0 3.0 3.0
PHI212	Contemporary Moral Issues	Philosophical consideration of such moral issues as abortion, free speech, physician-assisted suicide, the death penalty, drug legalization, environmental issues,	Prerequisites: None.	LEC 3.0 3.0 3.0
PHI213	Medical and Bio-Ethics	A philosophical consideration of moral problems that arise in relation to medicine and biology, e.g., death, patient's rights and biological experimentation	Prerequisites: None.	LEC 3.0 3.0 3.0

PHI214	Business Ethics	Philosophical consideration of moral problems arising in business, including the purpose of corporations, corporate responsibility, acceptable consumer and occupational risk, employee and employer rights and obligations, marketing and disclosure, hiring and firing, environmental responsibility of business, and	Prerequisites: A grade of C or better in ENG101 or ENG107 or equivalent.	LEC 3.0 3.0 3.0
PHI216	Environmental Ethics	Philosophical consideration of diverse theories and perspectives on the environment, and application of these theories to global moral issues such as animal rights, preservation of wilderness and species,	Prerequisites: None.	LEC 3.0 3.0 3.0
PHI218	Philosophy of Sexuality	Philosophical examination of sexuality in human life. Historical and critical survey of philosophical and theological views from Greeks, Christianity, and Kant. Includes examinations of gender identity, sexual orientation, monogamy, polyamory, autoeroticism, (bondage and discipline, dominance and submission,	Prerequisites: A grade of C or better in ENG101 or ENG107 or permission of Instructor.	LEC 3.0 3.0 3.0
PHI224	Political Philosophy	Predominant figures and theories in Euroamerican political philosophy from Plato to contemporary social/political philosophers.	Prerequisites: A grade of C or better in ENG101, or ENG107, or permission of Instructor.	LEC 3.0 3.0 3.0
PHI234	Plato	Philosophy of Plato in depth and Socrates' influence on Plato's thought.	Prerequisites: None.	LEC 3.0 3.0 3.0
PHI244	Philosophy of Religion	Philosophical investigation of the relation of faith and reason, religious language, the existence and nature of God, the problem of evil, and alternatives to the	Prerequisites: None.	LEC 3.0 3.0 3.0
PHI245	Introduction to Eastern Philosophy	Fundamental theories of Indian and Chinese metaphysics, epistemology, and ethics.	Prerequisites: None.	LEC 3.0 3.0 3.0
PHI251	Philosophy of Sport	General consideration of sport in its philosophical dimensions. Possible topics include the Zen of sport, strategy and competition, sport, practice, and play, and	Prerequisites: None.	LEC 3.0 3.0 3.0
PHI298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0

PHI298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
PHI298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
PHS110	Fundamentals of Physical Science	Survey of the principles of physics and chemistry.	Prerequisites: A grade of C or better in MAT090 or higher level mathematics course or eligibility for MAT120 or higher as indicated by	LEC 4.0 3.0 3.0 LAB 0.0 3.0 3.0
PHS115	The Science of Musical Instruments	A science class set in a musical context where students learn about music, musical instruments, and about the underlying scientific and mathematical principles of sound.	Prerequisites: A grade of C or better in MAT090, or higher level mathematics course, or eligibility for MAT120 or higher as indicated by	LEC 4.0 3.0 3.0 LAB 0.0 3.0 3.0
PHS120	Introduction to Physical Science: Astronomy, Meteorology, Geology and Oceanography	Designed primarily for students with limited background in physical science and mathematics and for nonscience majors. Topics from astronomy, meteorology, geology and oceanography. A laboratory course designed to help the students learn the basic laws and facts of the physical sciences which provide	Prerequisites: None.	LEC 4.0 3.0 3.0 LAB 0.0 3.0 3.0
PHT104	Pharmacology for Pharmacy Technicians	Overview of pharmacology for pharmacy technicians. Includes drug conversion factors and dosage calculations as well as disease states and	Prerequisites: Permission of Department or Division.	LEC 1.0 1.0 1.0
PHT109	Drug Actions and Effects	Drug names, dosage forms, indications, routes of administration and side effects of drugs. Basic anatomy and functions of body systems relevant to most	Prerequisites: None.	LEC 3.0 3.0 3.0

PHT120	Pharmacy Technician Responsibilities	Responsibilities and skills of pharmacy technicians. Emphasis on federal and state laws, prescription entry and fulfillment, drug regulations, and drug calculations, as well as pharmaceutical products, abbreviations, and terminology. Includes inventory management,	Prerequisites: None.	LEC 3.0 3.0 3.0
PHT150	Introduction to Pharmacy Practice	This course provides a basic overview of the pharmacy industry to prepare students for an entry level pharmacy technician role. Students will be introduced to the knowledge and skills required for a pharmacy technician including roles and responsibilities, anatomy, physiology and health science, as well as pharmacology, scope of	Prerequisites: Acceptance into the Pharmacy Technician program.	L+L 3.0 4.0 4.0
PHT153	Basic Pharmacy Practice	Technical aspects of prescription dispensing and drug distribution in the retail and hospital setting utilizing the computer. Bulk compounding, packaging, inventory control, drug storage and a variety of drug delivery	Prerequisites: A grade of C or better in PHT150.	L+L 5.0 8.0 8.0
PHT155	Advanced Pharmacy Practice	Responsibilities of a pharmacy technician specific to working in a hospital and community setting; common drugs and their uses; drug routes of administration; basic biopharmaceutics; billing and reimbursement; sterile and non-sterile compounding; pharmacy career	Prerequisites: A grade of C or better in PHT153.	L+L 5.0 8.0 8.0
PHT225	Accelerated Pharmacy Technology	Overview of the pharmacy industry and entry-level pharmacy technician roles and responsibilities. Covers anatomy, physiology and health science, as well as pharmacology, scope of practice, and federal laws and regulations. Includes technical aspects of prescription dispensing and drug distribution in the retail and hospital setting. Also provides coverage of computer	Prerequisites: Acceptance into the Accelerated Pharmacy Technology program.	L+L 7.0 9.0 9.0
PHT250	Pharmacy Technician Certification Review	This course is designed to prepare Pharmacy Technician trainees, incumbent workers, or Pharmacy Technician certificate students for the NHA Exam for the Certification of Pharmacy Technicians (ExCPT) and the PTSB Pharmacy Technician Certification Exam (PTCE),	Prerequisites: A grade of C or better PHT155, or Pharmacy Technician Training License, or permission of Department or Division.	LEC 1.0 1.0 1.0
PHT253	Pharmacy Technician Externship	Consists of 200 hours at a clinical site, under the supervision of a pharmacist or senior pharmacy technician. Includes hands-on experience with patients, staff, and other healthcare professionals while applying the knowledge and skills obtained in the pharmacy technician program. Preparation for work experience in	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: PHT155 or PHT225.	LAB 2.0 15.0 0.0

PHT296WA	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 1.0 5.0 0.0
PHT296WB	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 2.0 10.0 0.0
PHT296WC	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 3.0 15.0 0.0

PHT296WD	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 4.0 20.0 0.0
PHT298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
PHT298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
PHT298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
PHY101	Introduction to Physics	A survey of physics emphasizing applications of physics to modern life.	Prerequisites: A grade of C or better in MAT090 or higher level mathematics course or eligibility for MAT120 or higher as indicated by	LEC 4.0 3.0 3.0 LAB 0.0 3.0 3.0

PHY111	General Physics I	Includes motion, energy, and properties of matter.	Prerequisites: A grade of C or better in MAT182 or MAT187 or MAT188 or MAT220 or MAT221 or eligibility for MAT220 as indicated by appropriate placement or one year high school Trigonometry with a grade of C or better or permission of Department or	LEC 4.0 3.0 3.0 LAB 0.0 3.0 3.0
PHY112	General Physics II	Includes electricity, electromagnetism, and modern physics.	Prerequisites: A grade of C or better in PHY111.	LEC 4.0 3.0 3.0 LAB 0.0 3.0 3.0
PHY121	University Physics I: Mechanics	Kinematics, Newton's laws, work, energy, momentum, conservation laws, dynamics of particles, solids, fluids, mechanical waves, and sound.	Prerequisites: A grade of C or better in MAT220, or MAT221, or permission of Department or Division. One year of high school physics	LEC 4.0 3.0 3.0 LAB 0.0 3.0 3.0
PHY131	University Physics II: Electricity and Magnetism	Electric charge and current, electric and magnetic fields in vacuum and in materials, and induction. AC circuits, displacement current, and electromagnetic waves.	Prerequisites: A grade of C or better in MAT230 or MAT231 or permission of Department or Division and PHY121. Corequisites: MAT241 or permission of Department or Division.	LEC 4.0 3.0 3.0 LAB 0.0 3.0 3.0
PHY241	University Physics III: Thermodynamics, Optics, and Wave	Heat, entropy, and laws of thermodynamics; wave propagation; geometrical and physical optics; introduction to special relativity.	Prerequisites: A grade of C or better in PHY131 or permission of Instructor.	LEC 4.0 3.0 3.0 LAB 0.0 3.0 3.0
PHY282AA	Service-Learning Experience in Physical Science	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 1.0 1.0 0.0
PHY282AB	Service-Learning Experience in Physical Science	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 2.0 2.0 0.0
PHY282AC	Service-Learning Experience in Physical Science	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 3.0 3.0 0.0
PHY285	Introduction to Astrodynamics	Introduction to celestial mechanics and the dynamics of spacecraft navigation. Introduction to rocket propulsion and spacecraft design. Orbital and interplanetary celestial mechanics and maneuvers. Astrophysics and characteristics of the space environment. Lab is project-	Prerequisites: A grade of C or better in ENG101 and PHY121.	LEC 4.0 3.0 3.0 LAB 0.0 3.0 3.0
PHY294	Special Topics in Physics	Conceptual, experimental, and computational aspects of a special topic in physics.	Prerequisites: Permission of Department or Division.	LEC 3.0 3.0 3.0

PHY294AA	Special Topics in Physics	Conceptual, experimental, and computational aspects of a special topic in physics.	Prerequisites: Permission of Department or Division.	LEC 2.0 2.0 2.0
PHY294AB	Special Topics in Physics	Conceptual, experimental, and computational aspects of a special topic in physics.	Prerequisites: Permission of Department or Division.	LEC 1.0 1.0 1.0
PHY298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
PHY298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
PHY298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
PIM115	Beginning Pima Conversation I	Conversational Pima. Basic sentence structure, pronunciation, and vocabulary necessary to develop speaking ability in Pima. Designed to develop speaking and listening abilities, with little emphasis on grammar	Prerequisites: None.	LEC 3.0 3.0 3.0
PIM116	Beginning Pima Conversation II	Reviews basic Pima vocabulary, pronunciation, and sentence structure. Designed to develop speaking, listening, and writing skills in O'Odham for effective communication in Pima.	Prerequisites: A grade of C or better in NAV201 or permission of Department or Division. Completion of prerequisites within the last three	LEC 3.0 3.0 3.0
PLB109	Phlebotomy: Basic Skills	Theory and practice of basic phlebotomy including laboratory test codes, equipment, and procedures.	Prerequisites: (Acceptance into the Laboratory Assisting or Phlebotomy program or permission of Instructor) and permission of Program Director.	L+L 2.0 4.0 4.0

PLB110	Practicum: Fundamental Phlebotomy Skills	Application of fundamental phlebotomy techniques in a clinical laboratory setting or health care environment.	Prerequisites: A grade of C or better in PLB109 and submit to a drug screening and demonstrate negative results and acceptance into the Medical Assisting or Phlebotomy program or permission of Program	LAB 0.5 3.0 0.0
PLB110AA	Practicum: Basic Phlebotomy: Training for Law Enforcement	Application of basic phlebotomy techniques in a clinical laboratory setting or health care environment for law enforcement purposes.	Prerequisites: Certified Law Enforcement Officer or permission of Program Director. Corequisites:	LAB 2.0 6.0 0.0
PLB111	Specimen Processing and Advanced Techniques in Phlebotomy	Theory and practice of advanced techniques in phlebotomy and specimen processing including laboratory test codes, equipment, and procedures.	Prerequisites: A grade of C or better in PLB109 and permission of Program Director.	L+L 2.0 4.0 4.0
PLB112	Practicum: Specialized Phlebotomy Techniques	Application of specialized phlebotomy techniques in a clinical laboratory setting or health-care environment.	Prerequisites: A grade of C or better in PLB109 and PLB110. Corequisites: PLB111 and PLB121, or permission of Program Director.	LAB 0.5 3.0 0.0
PLB114	Refresher Course for Phlebotomists	Review of phlebotomy theory and practices including equipment, procedures, and special considerations. Reinforces and updates basic skills and competencies of phlebotomy techniques for individuals who have not worked in the field for between 6 months and 24 months and for those who have completed a formal structured phlebotomy training program but have not	Prerequisites: (Must provide proof of 2 years employment as a phlebotomist within the last 4 years or completion of a formal structured phlebotomy training program within the last 2 years with proof of a minimum of 100 successful	L+L 1.0 1.0 1.0
PLB115	Developmental Skills for Law Enforcement Phlebotomy	Provides an update for specific law enforcement phlebotomy. Includes phlebotomy theory and practices including equipment, procedures, and special	Prerequisites: Permission of Program Director.	L+L 1.0 1.0 1.0
PLB121	Practicum: Basic Specimen Processing	Application of specimen processing techniques in a clinical laboratory setting or health care environment.	Prerequisites: A grade of C or better in PLB109 and PLB110. Corequisites: PLB111 and PLB112 or permission of Program Director.	LAB 2.0 8.0 0.0
PLB122	Practicum: Phlebotomy and Specimen Processing	Application of phlebotomy and specimen processing techniques in a clinical laboratory setting or health care environment.	Prerequisites: A grade of C or better in PLB109 or permission of Program Director. Prerequisites: A grade of C or better in PLB111 or Corequisites: PLB111 or permission of Program	LAB 3.0 12.0 0.0

PLB250	Phlebotomy Program Review	Provides review of phlebotomy theory fundamental knowledge, and advanced concepts required for phlebotomy national certification examinations. Topics include anatomy and physiology, specimen collection, specimen processing and handling, non-blood	Prerequisites: (A grade of C or better in PLB122 or current employment with a minimum of one (1) year experience as a phlebotomist) and permission of Program Director.	LEC 1.0 1.0 1.0
PLB280	Quality Assurance for Phlebotomy	Components, tests, and procedures for evaluation of phlebotomy to assure consistency in the collection, processing, and analysis process.	Prerequisites: Current employment in a law enforcement agency with a minimum of one (1) year of experience as a law enforcement phlebotomist or permission of	LEC 3.0 3.0 3.0
PLC109	Phlebotomy Basic Skills	Theory and practice of basic phlebotomy including laboratory test codes, equipment, and procedures.	Prerequisites: Admission into the Phlebotomy program. Successful completion of RDG100 or higher or appropriate reading placement into CRE101.	90
PLC111	Specimen Processing and Advanced Techniques in Phlebotomy	Theory and practice of advanced techniques in phlebotomy and specimen processing including laboratory test codes, equipment, and procedures.	Prerequisites: PLC109 or with Program Manager approval.	90
PLC122	Phlebotomy Practicum	Application of phlebotomy and specimen processing techniques in a clinical laboratory setting or health care environment.	Prerequisites: 1. A grade of C or better in PLC111 or with Program Manager approval. 2. Background check requirements in compliance with the Maricopa County Community College District Supplemental Background Check policy. 3. Students also must provide a copy of an Arizona Department of Public Safety Level One Fingerprint Clearance Card. Students must maintain current fingerprint clearance throughout the externship(s). 4. Complete and submit the Allied Health Student Health and Safety Documentation Checklist, with included documentation. 5. Students are responsible to meet the requirements of the background	120

PLC211	Advanced Phlebotomy Skills	This phlebotomy training course is tailored to healthcare clinicians with training in another field. This course is designed to further develop the knowledge and skill necessary to perform the art of obtaining blood samples for laboratory analysis in a medical laboratory environment. The learning experience includes 40 hours of class and lab instruction. The course is also designed to prepare you to take the National	Prerequisites: None.	40
PLG124	Plumbing: Pipes and Fittings	This course introduces the various types of plumbing materials, pipe schedules and material properties, and applications of piping. Trainees will learn how to determine the appropriate types of fittings, valves, hangers, and supports needed for piping jobs. Trainees	Prerequisites: None.	81
PLG125	Plumbing: Fixtures	This course introduces commonly used fixtures in plumbing systems. Students will select and operate each type of fixture for a variety of installations. The course provides an overview of plumbing system	Prerequisites: None.	61
PLG126	Plumbing: Drain, Waste, and Vent	This course addresses drainage, waste movement and ventilation for construction application. Course provides instruction in locating, installing, connecting, and testing a complete drain, waste, and vent (DWV) system.	Prerequisites: None.	81
PLG127	Plumbing: Water Distribution Systems	This course discusses the processes through which potable water is distributed. Students will learn to identify the components and functions of a water distribution system and explain the relationships among the components. The course also includes installation	Prerequisites: None.	61
PLG224	Plumbing: Pipe Systems and Controls	This course covers applied calculations to determine size, types and service of pipe systems. Course also includes the application of drawings, codes, and specifications for assembly and installation of gas, air,	Prerequisites: None.	81
PLG225	Plumbing: Water Disposal Systems	Course covers water disposal and drainage systems, to include the types, components, functions, codes, safety, design, installation and repair.	Prerequisites: None.	102
PLG226	Plumbing: Fixtures and Appliances	Course covers the safety, codes, installation, maintenance, and repair of appliances, fixtures, and	Prerequisites: None.	81
PLG227	Plumbing: Water Resource Solutions	Course introduces water supply disinfection, filtration systems, and sustainable water practices.	Prerequisites: None.	40

PME160	Emergency Medical Services Professionals:	Designed to provide emergency medical response personnel with the knowledge of the human systems required to perform life saving measures in the practice	Prerequisites: None.	LEC 3.0 3.0 3.0
PME190	Introduction to ECG Rhythm Analysis and Interpretation for EMS Professionals	Designed to provide an overview of the anatomy and physiology of the cardiovascular system and electrophysiology of the cardiac conduction system for Emergency Medical Service (EMS) professionals. Basic electrocardiograph (ECG) multi-lead acquisition,	Prerequisites: None.	LEC 3.0 3.0 3.0
PME191	Introduction to Pharmacology for EMS Professionals	Designed to provide an overview of the principles of pharmacology and pharmacologic agents utilized in patient management plans. Includes pharmacokinetics, pharmacodynamics, physiology of pharmacology,	Prerequisites: None.	LEC 3.0 3.0 3.0
PME201	Advanced Cardiac Life Support (ACLS) Initial Provider in Paramedicine	Designed to provide the knowledge and skills needed to recognize and manage cardiopulmonary arrest, acute dysrhythmia, stroke, and acute coronary syndromes according to current emergency cardiovascular care (ECC) guidelines. Integrates knowledge of basic electrocardiographic rhythm interpretation,	Prerequisites: Admission into the Paramedic Education Program.	L+L 1.0 2.0 2.0
PME202	Pediatric Advanced Life Support (PALS) Initial Provider in Paramedicine	Designed to provide the knowledge and skills needed to recognize and manage an infant, child or adolescent in respiratory compromise, circulatory compromise, or cardiopulmonary arrest according to current Pediatric Advanced Life Support (PALS) and emergency cardiovascular care (ECC) guidelines. Integrates knowledge of basic electrocardiographic rhythm	Prerequisites: Admission into the Paramedic Education Program.	L+L 1.0 1.5 1.5
PME203	Pediatric Emergencies for Prehospital Professionals (PEPP) Initial Provider in Paramedicine	Designed to provide the knowledge and skills needed to recognize and manage an infant, child or adolescent in respiratory compromise, circulatory compromise, or cardiopulmonary arrest according to current Pediatric Emergencies for Prehospital Professionals (PEPP) and emergency cardiovascular care (ECC) guidelines. Integrates knowledge of basic electrocardiographic rhythm interpretation, pharmacologic agents, and other	Prerequisites: Admission into the Paramedic Education Program.	L+L 1.0 1.5 1.5

PME204	Neonatal Resuscitation Provider (NRP) in Paramedicine	Designed to provide the knowledge and skills needed to recognize and manage a neonate with respiratory compromise, circulatory compromise, or cardiopulmonary arrest according to current American Academy of Pediatrics (AAP) and emergency cardiovascular care (ECC) guidelines. Integrates knowledge of basic electrocardiographic rhythm interpretation,	Prerequisites: Admission into the Paramedic Education Program.	L+L 0.5 1.5 1.5
PME205	Advanced Medical Life Support (AMLS) Initial Provider in Paramedicine	Designed to provide the knowledge and skills needed to recognize and manage various medical conditions according to the National Association of EMTs (NAEMT) Advanced Medical Life Support (AMLS) guidelines.	Prerequisites: Admission into the Paramedic Education Program.	L+L 1.0 1.5 1.5
PME206	International Trauma Life Support (ITLS) Provider/Pre-Hospital Trauma Life Support (PHTLS)	Designed to provide the knowledge and skills needed to recognize and manage various trauma conditions and environmental injuries according to the International Trauma Life Support (ITLS) or Provider/Pre-Hospital Trauma Life Support (PHTLS) guidelines.	Prerequisites: Admission into the Paramedic Education Program.	L+L 1.0 1.5 1.5
PME211	Advanced Cardiac Life Support (ACLS) Refresher	Designed to meet Advanced Cardiac Life Support (ACLS) refresher requirements for the healthcare provider who initiates, directs, or participates in the management of cardiopulmonary arrest and other cardiovascular emergencies according to current cardiopulmonary resuscitation and emergency cardiovascular care guidelines. Provides the healthcare provider with the knowledge and skills needed to recognize and manage cardiopulmonary arrest, acute dysrhythmia, stroke, and acute coronary syndromes according to current emergency cardiovascular care	Prerequisites: None.	L+L 0.5 1.0 1.0
PME212	Pediatric Advanced Life Support (PALS) Refresher	Designed to meet Pediatric Advanced Life Support (PALS) refresher requirements for the healthcare provider who initiates, directs, or participates in the management of an infant, child or adolescent in respiratory compromise, circulatory compromise, or cardiopulmonary arrest according to current emergency cardiovascular care (ECC) guidelines. Integrates knowledge of basic electrocardiographic rhythm	Prerequisites: None.	L+L 0.5 1.0 1.0

PME213	Pediatric Emergencies for Prehospital Professionals (PEPP) Refresher	Designed to meet Pediatric Emergencies for Prehospital Professions (PEPP) refresher requirements for the healthcare provider who initiates, directs, or participates in the management of an infant, child or adolescent in respiratory compromise, circulatory compromise, or cardiopulmonary arrest according to current PEPP and emergency cardiovascular care (ECC) guidelines. Integrates knowledge of basic electrocardiographic	Prerequisites: None.	L+L 0.5 1.0 1.0
PME215	Advanced Medical Life Support (AMLS) Refresher	Designed to meet the National Association of EMTs (NAEMT) Advanced Medical Life Support (AMLS) refresher requirements for the healthcare provider who performs assessment and management of the most common medical crises in patients. Skills are sequenced	Prerequisites: None.	L+L 0.5 1.0 1.0
PME216	International Trauma Life Support (ITLS)/Pre-Hospital Trauma Life Support (PHTLS) Refresher	Designed to meet International Trauma Life Support (ITLS) or Pre-Hospital Trauma Life Support (PHTLS) refresher requirements for the healthcare provider who performs assessment and management of various trauma conditions and environmental injuries. Skills are	Prerequisites: None.	L+L 0.5 1.0 1.0
PME221	Basic Level and Advanced Level Skills Course for the EMS Instructor and Examiner	Designed to provide an overview of the roles and responsibilities of basic level and advanced level instructors and examiners. Includes instructional strategies and methodologies, methods of evaluation, documentation of skill competency, and management strategies of emergency medical services (EMS)	Prerequisites: None.	LEC 2.0 2.0 2.0
PME222	Advanced Cardiac Life Support (ACLS) Instructor Preparation	Designed to prepare Advanced Cardiac Life Support (ACLS) instructor candidates to deliver American Heart Association (AHA) instructor-led and blended learning courses. Provides an overview of the roles and responsibilities of the ACLS instructor. Includes instructional considerations, methods of evaluation, documentation of ACLS student skill competency, and	Prerequisites: None.	LEC 2.0 2.0 2.0
PME223	Pediatric Advanced Life Support (PALS) Instructor Preparation	Designed to prepare Pediatric Advanced Life Support (PALS) instructor candidates to deliver American Heart Association (AHA) instructor-led and blended learning courses. Provides an overview of the roles and responsibilities of the PALS instructor. Includes instructional considerations, methods of evaluation, documentation of PALS student skill competency, and	Prerequisites: None.	LEC 2.0 2.0 2.0

PME240	Pharmacology in Paramedicine	Designed to provide an overview of the pathophysiologic principles of pharmacology, pharmacologic agents in the Paramedic scope of practice, and the practice of medication administration. Develops psychomotor skills in the paramedic scope of practice through sequenced lab simulations. Prepares students to integrate comprehensive knowledge of the pathophysiologic principles of pharmacology and pharmacologic agents to formulate a differential	Prerequisites: Admission into the Paramedic Education Program.	L+L 3.0 5.0 5.0
PME245	Airway and Ventilatory Management in Paramedicine	Designed to prepare students to integrate knowledge of the respiratory system, comprehensive assessment practices, and pharmacologic agents to formulate a differential diagnosis and implement airway and ventilatory management plans for medical emergencies and trauma. Develops psychomotor skills in the paramedic scope of practice through sequenced lab simulations. Prepares students to perform comprehensive assessment and techniques in the	Prerequisites: Admission into the Paramedic Education Program.	L+L 3.0 4.0 4.0
PME250	Comprehensive Patient Assessment in Paramedicine	Designed to provide an overview of comprehensive patient assessment. Develops psychomotor skills in the paramedic scope of practice. Integrates the pathophysiological significance of comprehensive assessment findings to formulate a differential diagnosis and implement a management plan for medical	Prerequisites: Admission into the Paramedic Education Program.	L+L 1.0 3.0 3.0
PME251	Medical Emergencies in Paramedicine I	Designed to provide an overview of pathophysiologic principles, epidemiology, comprehensive assessment, differential diagnosis, and pharmacology for respiratory and cardiovascular emergencies. Develops psychomotor skills in the paramedic scope of practice through sequenced lab simulations. Prepares students to implement a management plan in the Paramedic	Prerequisites: Admission into the Paramedic Education Program.	L+L 4.0 8.0 8.0
PME252	Medical Emergencies in Paramedicine II	Designed to provide an overview of pathophysiologic principles, epidemiology, comprehensive assessment, differential diagnosis, and pharmacology for various medical emergencies. Develops psychomotor skills in the paramedic scope of practice through sequenced lab simulations. Prepares students to implement a	Prerequisites: Admission into the Paramedic Education Program.	L+L 4.0 6.0 6.0

PME253	Medical Emergencies in Paramedicine III	Designed to provide an overview of pathophysiologic principles, epidemiology, comprehensive assessment, differential diagnosis, and pharmacology for various medical conditions. Develops psychomotor skills in the paramedic scope of practice through sequenced lab simulations. Prepares students to implement a management plan in the Paramedic scope of practice for gynecologic, obstetric, pediatric, and geriatric	Prerequisites: Admission into the Paramedic Education Program.	L+L 4.0 4.0 4.0
PME254	Technical Operations in Paramedicine	Designed to provide an overview of transport operations, incident management, multi-casualty incidents, extrication, special rescue, hazardous materials incidents, terrorism incidents, and disaster response. Examines the Paramedic's operational roles	Prerequisites: Admission into the Paramedic Education Program.	L+L 2.5 3.0 3.0
PME260	Trauma Patient Management in Paramedicine	Designed to provide an overview of pathophysiologic principles, epidemiology, comprehensive assessment, differential diagnosis, and pharmacology for various trauma conditions. Develops psychomotor skills in the paramedic scope of practice through sequenced lab simulations. Prepares students to implement a management plan in the Paramedic scope of practice for hemorrhage, soft tissue trauma, burns, face and neck trauma, head and spine trauma, chest trauma,	Prerequisites: Admission into the Paramedic Education Program.	L+L 2.0 2.0 2.0
PME270	Immersive Total Patient Management Experience (ITPME)	Designed to provide immersive-simulated live patient interactive out-of-hospital scenarios. This course creates an environment which facilitates incident stress	Prerequisites: Admission into the Paramedic Education Program.	L+L 2.0 2.0 2.0
PME280	Preparation for Paramedicine Practicum	Designed to provide an overview of Emergency Medical Service (EMS) systems, safety and wellness, resiliency, health, medical/legal and ethical issues, EMS communications, documentation, and crime scene awareness. Examines the Paramedic's roles and responsibilities to assure personal, patient, and public	Prerequisites: Admission into the Paramedic Education Program.	LEC 1.0 1.0 1.0
PME281	Paramedicine Clinical Practicum: Comprehensive	Designed as the precepted Paramedicine clinical practicum in which the student synthesizes standard of care and scope of practice with comprehensive assessment and diagnostic technology, patient advocacy, ethical and professional behaviors, critical thinking, decision-making, and patient management of	Prerequisites: Admission into the Paramedic Education Program.	L+L 2.0 15.0 15.0

PME281AA	Paramedicine Clinical Practicum: Phase I	Designed as the precepted Paramedicine clinical practicum in which the student synthesizes standard of care and scope of practice with comprehensive assessment and diagnostic technology, patient advocacy, ethical and professional behaviors, critical thinking, decision-making, and patient management of	Prerequisites: Admission into the Paramedic Education Program.	L+L 1.0 7.5 7.5
PME281AB	Paramedicine Clinical Practicum: Phase II	Designed as the precepted Paramedicine clinical practicum in which the student synthesizes standard of care and scope of practice with comprehensive assessment and diagnostic technology, patient advocacy, ethical and professional behaviors, critical thinking, decision-making, and patient management of	Prerequisites: Admission into the Paramedic Education Program.	L+L 1.0 7.5 7.5
PME288	Paramedicine Comprehensive Field Internship Practicum	Designed as the precepted Paramedicine field internship in which the student synthesizes standard of care and scope of practice with comprehensive assessment and diagnostic technology, patient advocacy, ethical and professional behavior, critical thinking, decision-making, and patient management of	Prerequisites: Admission into the Paramedic Education Program.	L+L 5.0 34.0 34.0
PME289	Preparation for Paramedic National Credentialing	Designed to provide preparation for the national cognitive and psychomotor examinations, and other credentials required for national and state Paramedic	Prerequisites: Admission into the Paramedic Education Program.	L+L 2.0 3.0 3.0
PME290	Advanced Life Support (ALS) Refresher	Designed to provide a refresher of Advanced Life Support (ALS) to meet national and Arizona Department of Health Services Bureau of Emergency Services and Trauma System (AzDHS/BEMSTS)	Prerequisites: None.	L+L 1.0 1.0 1.0
PME291	Community Health Paramedicine	Designed as the capstone Community Health Paramedicine experience in which the student synthesizes standard of care and expanded scope of practice with comprehensive assessment, diagnostic technology, patient advocacy, ethical and professional behaviors, to practice patient-centered evidence-based	Prerequisites: None.	L+L 8.0 11.0 11.0
PME292	Critical Care Paramedicine	Designed as the capstone Critical Care Paramedicine experience in which the student synthesizes standard of care and expanded scope of practice with comprehensive assessment, diagnostic technology, patient advocacy, ethical and professional behaviors, to practice patient-centered evidence based paramedicine	Prerequisites: None.	L+L 8.0 11.0 11.0

PME293	Tactical Emergency Casualty Care (TECC)	Designed to provide strategies, skills, and simulations to decrease preventable death in the prehospital unstable environment according to National Association of EMTs (NAEMT) and Tactical Emergency Casualty Care (TECC) guidelines. Strategies include integration of rapid patient assessment with trauma patient management in tactical and hazardous environments. Promotes a common approach for the transition of rescue to patient care while limiting the risk of further casualties.	Prerequisites: None.	L+L 2.5 2.5 2.5
PME298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
PME298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
PME298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
PMP120	Massage Therapy Basics	A massage basics course covering: sanitation, hygiene, safety, contraindications, ethics, healthy therapeutic relationships, professional communication, overview of the human body (integumentary, muscular, and skeletal systems), healthcare terminology, muscle theory, client care, self-care, and Swedish massage.	Prerequisites: Admission into the Massage Therapy program.	175

PMP121	Massage Therapy Advanced	Advanced anatomy and massage, focusing in greater detail on the skeletal and muscular components and manipulations of the body. Students are taught all the bones and muscles of the body and introduced to the kinesiology that develops from their interactions. Deep tissue, Thai massage, and reflexology are introduced.	Prerequisites: PMP120 or Program Manager's permission.	175
PMP220	Massage Therapy Mastery I	An advanced anatomy and massage course focusing in detail on the skeletal and muscular components and manipulations of the upper body. Students will review the bones and muscles of the upper body and the kinesiology that develops from their interactions. Corresponding deep-tissue massage for the upper body is taught in conjunction with the advanced anatomy to ensure its practical application. Integration of deep tissue, Thai massage, myofascial, and structural massage are emphasized. Subjective, Objective,	Prerequisites: PMP121 or Program Manager's permission.	175
PMP221	Massage Therapy Mastery II	An advanced anatomy and massage course focusing in detail on the skeletal and muscular components and manipulations of the lower body. Students will review all of the bones and muscles of the lower body and the kinesiology that develops from their interactions. Corresponding deep-tissue massage for the lower body is taught in conjunction with the advanced anatomy to ensure its practical application. Students combine all of their program skills, integrating anatomy, kinesiology, concepts, theories, and techniques to properly assess clients and apply critical thinking in tailoring treatments to individuals with documentation. Clients with unique needs are covered such as athletes, expecting mothers, infants, older adults, obese individuals, people with disabilities, and end of life care. Persons with common injuries and conditions are also covered, teaching specific strategies and protocols to address them. Entrepreneurial skills conducive to the industry of massage therapy will continue to be reinforced while an exit plan is created for the student's entrance into the	Prerequisites: PMP220 or Program Manager's permission.	175

PNT101	Introduction to Painting-Decorating Trade	Orientation to the trade, apprentice responsibilities and professionalism, communication skills and workplace behavior. Tools and equipment used in the trade. Preparation and application procedures of various types of surfaces, utilizing various types of materials used in	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	L+L 4.0 4.0 4.0
PNT102	Surface Preparation and Cleaning	Overview of surface preparation and cleaning, emphasis on materials, coating applications, various surface finishes, and safety procedures. Causes of paint failures and remedies. Also preparation procedures of plaster drywall, masonry and metal.	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	L+L 4.0 4.0 4.0
PNT104	Wood and Decorative Finishes	Wood and decorative finishing techniques including glazing, antiquing, wood graining and marbelizing. Sanding techniques of hardwoods and softwoods	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	L+L 2.0 2.0 2.0
PNT105	Painting and Drywalling Orientation	Overview of the painting and drywalling labor history, workplace performance, green construction, work place issues and sexual harassment.	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	LEC 1.0 1.0 1.0
PNT106	Health and Safety for Drywall Finishers	Purpose and limitation of Material Safety Data Sheet (MSDS). Occupational Safety and Health Administration (OSHA). Common safety and fall hazards. Requirements for erecting and dismantling scaffolds.	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	L+L 3.0 3.0 3.0
PNT107	Introduction to the Drywall Trade	Basic terminology and tools used in the drywall trade. Exhibiting professionalism in the trade in appearance, dealing with difficult customers, following workplace	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	L+L 2.0 2.0 2.0
PNT108	Materials of the Drywall Trade	Characteristics of drywall panels, types of fillers and proper lighting requirements. Surface preparation, ventilation and materials handling.	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	L+L 2.0 2.0 2.0
PNT109	Tools of the Drywall Trade	Selection, use, maintenance and safety procedures for common tools of the drywall trade.	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	L+L 2.0 2.0 2.0
PNT118	OSHA Standards and Regulations	Provisions of and implementation of Occupational Safety and Health Administration (OSHA) Act in the work place. Rights and responsibilities under the OSHA Act. Appeals process, record keeping, and voluntary protection programs. OSHA's construction and general industry standards. Overview of the requirements of the	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	L+L 1.5 1.5 1.5

PNT120	Basic Calculations for Construction	Addition, subtraction, multiplication and division of whole, decimal, fraction and metric numbers. Percentage and fraction conversions. Metric units of length, weight, volume and temperature. Metric system as it relates to the construction trade. Basic algebra and	Prerequisites: None.	L+L 1.5 1.5 1.5
PNT121	Introduction to Hand and Power Tools	Overview of the use, maintenance and safety procedures for common hand and power tools.	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	LEC 1.0 1.0 1.0
PNT123	Introduction to Blueprints	Basic concepts of blueprints, including terms and symbols, grid line systems and blueprint production techniques. Dimensions and blueprint reading	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	LEC 1.0 1.0 1.0
PNT150	Construction Foreman	Examine the basic supervisory and leadership concepts and skills needed to manage a construction project. Includes basic theories of motivation, role of communications in construction project management, decision making process, planning and organizing, strategies, developing production schedules	Prerequisites: None.	LEC 2.0 2.0 2.0
PNT201	Coverings and Blasting	Application, installation, and estimating procedures for wallcoverings including abrasive and wet blasting guidelines and systems.	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	L+L 2.0 2.0 2.0
PNT202	Spray Painting	Operating and maintenance procedures for spray painting equipment and materials. Use of specialized painting systems and equipment. Application	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	L+L 3.0 3.0 3.0
PNT203	Non-Spray Application of Coatings	Best practices in the application of stain, clear coat, and wood finish application on wood substrates.	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	L+L 3.0 3.0 3.0
PNT205	Paints, Coatings and Materials	Coating products and solvent type and compatibility following Product Data Sheet and Material Safety Data Sheet for products. Including common failures, causes and corrections, weatherization, properties and	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	L+L 2.0 2.0 2.0
PNT208	Filling, Taping and Sanding Applications	Characteristics of fillers, filling compounds, drying times. Taping techniques including taping and wiping procedures, tools and equipment. Functions and operations of boxes and fasteners as well as sanding	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	L+L 4.0 4.0 4.0
PNT209	Automatic Taping Tools of the Drywall Trade	Inspection and maintenance procedures for keeping automatic taping tools in proper working condition.	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	L+L 3.0 3.0 3.0

PNT210	Advanced Drywall Applications and Systems	Methods for making repairs, mixing procedures, and recognizing common defects in drywall finishing and wallboards. General texture spraying techniques and basics of Exterior Insulated and Finish Systems (EIFS)	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	L+L 3.0 3.0 3.0
PNT296WA	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 1.0 5.0 0.0
PNT296WB	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 2.0 10.0 0.0
PNT296WC	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 3.0 15.0 0.0

PNT296WD	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 4.0 20.0 0.0
PNT298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
PNT298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
PNT298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
PON105	Surgical Technology for the Operating Room Nurse	Direct observation of principles and culture of operating room. Traffic patterns, aseptic techniques, roles, professional surgical team work, case management, perioperative record, instrument handling, safety precautions with regard to exposure, surgical attire,	Prerequisites: Acceptance into the Surgical Technology for the Operating Room Nurse Program or permission of Department or Division.	L+L 2.0 2.0 2.0

PON210	PeriOperative Principles I	Role and responsibilities of the professional nurse in the perioperative setting. Team concepts, patient care, nursing process and impact of quality assurance. Role of Association of Operating Room Nurse Standards of	Prerequisites: Acceptance into the Surgical Technology for the Operating Room Nurse program or permission of Department or Division.	LEC 3.0 3.0 3.0
PON212	PeriOperative Principles II	Common pathogenic organisms and methods of sanitation/sterilization. Instruments, procedures intervention measures related to the operating room. State and Federal regulating agencies. Moral and	Prerequisites: A grade of C or better in PON210 or permission of Department or Division. Corequisites: PON214.	LEC 3.0 3.0 3.0
PON214	PeriOperative Laboratory	Practical application of perioperative nursing. Aseptic technique. Scrubbing, gowning, gloving, instrumentation, and maintenance of a sterile field. Accountability emphasized.	Prerequisites: Acceptance into the Surgical Technology for Operating Room Nurse Program. Corequisites: PON210 and PON212.	LAB 4.0 9.5 9.5
PON218	PeriOperative Clinical Practice I	Application of the nursing process in care of surgical patients during the perioperative period. Statements of competency established by the Association of	Prerequisites: A grade of C or better in PON214.	LAB 3.0 15.0 0.0
PON220	PeriOperative Clinical Practice II	Application of the nursing process in care of surgical patients during the perioperative period. Statements of competency established by the Association of	Prerequisites: A grade of C or better in PON214 or permission of Department or Division.	LAB 3.0 15.0 0.0
PON230	Surgical Technology Materials Update	Current surgical technology materials. Surgical specialty modifications, introductions, technology. Specific uses, handling, application to surgical procedures.	Prerequisites: Currently enrolled in Surgical Technology or Surgical Technology for the Operating Room Nurse program, or Certified Surgical Technologist, or permission of	LEC 2.0 2.0 2.0 LAB 1.0 3.0 3.0
PON296WA	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 1.0 5.0 0.0

PON296WB	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 2.0 10.0 0.0
PON296WC	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 3.0 15.0 0.0
PON296WD	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 4.0 20.0 0.0
PON298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0

PON298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
PON298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
POR101	Elementary Portuguese I	Basic grammar, pronunciation, and vocabulary of the Portuguese language. Includes study of Lusophone culture. Practice in listening, speaking, reading, and	Prerequisites: None.	L+L 5.0 6.0 6.0
POR102	Elementary Portuguese II	Continued study of basic grammar, pronunciation, and vocabulary of the Portuguese language. Includes study of Lusophone cultures and practice in listening, speaking, reading and writing skills	Prerequisites: A grade of C or better in POR101 or permission of Department or Division. Completion of prerequisites within the last three	L+L 5.0 6.0 6.0
POR201	Intermediate Portuguese I	Review of essential grammar of the Portuguese language and study of the Portuguese cultures. A continued practice and development of reading, writing, and speaking skills. Emphasis on both fluency and	Prerequisites: A grade of C or better in POR102 or permission of the Department or Division. Completion of prerequisites within the last three	LEC 5.0 6.0 5.7
POS100	Introduction to Political Science	Introduction to the discipline of political science and its relation to other disciplines with emphasis on the major philosophies and institutions of government.	Prerequisites: None.	LEC 3.0 3.0 3.0
POS101	Current Issues	Introduction to current issues in politics, economics, social relations, foreign affairs. Presentations by local, state and national civic and cultural leaders.	Prerequisites: None.	LEC 1.0 1.0 1.0
POS110	American National Government	Study of the historical backgrounds, governing principles, and institutions of the national government of	Prerequisites: None.	LEC 3.0 3.0 3.0
POS113	United States and Arizona Social Studies	Overview of government, history, and geography of the United States and Arizona. Includes the relationship of Arizona to the U.S. government as well as the influences and developments that have shaped U.S. and Arizona history. Also covers geographical systems,	Prerequisites: None.	LEC 3.0 3.0 3.0

POS114	World Social Studies	Introduction to the world from the integrated social science perspectives of history, geography, and	Prerequisites: None.	LEC 3.0 3.0 3.0
POS115	Issues in American Politics	Examination of major issues in current affairs in the fields of politics, economics, social relations, foreign affairs, aesthetics, and others through the reading and	Prerequisites: A grade of C or better in ENG101 or ENG107 or equivalent.	LEC 3.0 3.0 3.0
POS120	International Relations	Introduction to the principles and issues relating to the study of international relations. Evaluation of the political, economic, national, and transnational rationale	Prerequisites: None.	LEC 3.0 3.0 3.0
POS125	Issues in World Politics	Contemporary issues and factors in international relations. Stress conditions in civil order, trade, and	Prerequisites: None.	LEC 3.0 3.0 3.0
POS130	State and Local Government	Survey of state and local government in the United States. Special attention on Arizona State government.	Prerequisites: None.	LEC 3.0 3.0 3.0
POS140	Comparative Government	Overview and evaluation of the sub-field of comparative politics. Covers various national governments from around the world: their structure, system, method of governance. Examines methods of assessing these	Prerequisites: None.	LEC 3.0 3.0 3.0
POS180	United Nations Studies	Historical origins, structural makeup, political and operational characteristics, and legal activities of the United Nations. Analysis of the overall institution's	Prerequisites: None.	L+L 3.0 3.0 3.0
POS210	Political Ideologies	Leading political ideas and belief systems, e.g., Marxism, liberalism, conservatism, theories of	Prerequisites: None.	LEC 3.0 3.0 3.0
POS220	U.S. and Arizona Constitution	Examination of the constitutions of the United States and the state of Arizona.	Prerequisites: None.	LEC 3.0 3.0 3.0
POS221	Arizona Constitution	Examination of the Constitution of the State of Arizona.	Prerequisites: None.	LEC 1.0 1.0 1.0
POS222	U.S. Constitution	Examination of the United States Constitution.	Prerequisites: None.	LEC 2.0 2.0 2.0
POS223	Civil Rights and Liberties	The historic background and current status of major civil rights and civil liberties issues in the United States.	Prerequisites: None.	LEC 3.0 3.0 3.0
POS281AB	Public Policy/Service Internship	Field experience in community service, public policy or public service.	Prerequisites: Minimum of 15 credit hours at college granting internship with minimum GPA of 3.0 and	LAB 3.0 3.0 0.0
POS282AA	Volunteerism for Political Science: A Service Learning	Service-learning field experience within government agencies, political organizations, citizen advocacy groups, and human service organizations/agency.	Prerequisites: Permission of Instructor.	LAB 1.0 1.0 0.0
POS282AC	Volunteerism for Political Science: A Service Learning	Service-learning field experience within government agencies, political organizations, citizen advocacy groups, and human service organizations/agency.	Prerequisites: Permission of Instructor.	LAB 3.0 3.0 0.0
POS285	Political Issues and Public Policy	Introduction to public policy, how policy is made, and how public policy decisions are affected.	Prerequisites: None.	L+L 3.0 3.0 3.0

POS296WA	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify) or permission of instructor. Corequisites: Must be concurrent in at least one class which is related to student's major or career interest or with	LAB 1.0 5.0 0.0
POS298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
POS298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
PPT101	Hand and Power Tools	Identification and use of hand and hand-held power tools used in a power plant. Tool construction and purpose. Maintenance of hand and power tools	Prerequisites: None.	LEC 1.0 1.0 1.0
PPT103	Print Reading and Plant Drawings	Introduction to print reading and plant drawings. Flow diagrams and symbols on drawings. Dimension, tolerance and clearance on drawings. Amendments to drawings. Specific types of drawings. Proper procedures	Prerequisites: None.	LEC 1.0 1.0 1.0
PPT107	Lubrication	Principles, properties, and safe handling requirements of lubricants. Lubrication of bearings, lubrication systems, and system components. Oil settling systems. Construction, operation, and maintenance of oil purifiers	Prerequisites: None.	LEC 1.0 1.0 1.0

PPT108	Turbines	Operations, steam properties, energy transfer, parts, and types of turbines. Components and function. Turbine maintenance for oil and hydraulic systems, inspection of casings, nozzles and rotors. Turbine alignment and the tightening of joints using appropriate	Prerequisites: None.	LEC 1.0 1.0 1.0
PPT112	Principles of Machining	Safety practices, machining methods, and principles of material removal. Types of cutting tools, lathe, milling, drill, and bandsaw components. Principles of operation of specific machines found in the machine shop	Prerequisites: None.	LEC 3.0 3.0 3.0
PPT114	Drive and Gear Components	Terminology, identification and inspection of the component parts of a drive and gear system. Operation, maintenance and inspection of couplings, clutches, brakes, belt drives, chain drives, shafts and gears.	Prerequisites: None.	LEC 1.0 1.0 1.0
PPT115	Hydraulics and Pneumatics	Hydraulic and pneumatic safety, physical concepts, and fluid laws. Hydraulic and pneumatic system components and operation. Troubleshooting procedures of hydraulic	Prerequisites: None.	LEC 2.0 2.0 2.0
PPT117	Forklift Operations	Safe and proper operation of forklift. Parts and function of forklift, principles of operation, and safety precautions. Inspection procedures, proper care, and	Prerequisites: None.	LEC 1.0 1.0 1.0
PPT118	Conduct of Maintenance	Safety and management expectations. Defense in Depth strategy and Conduct of Verifications. Maintenance procedures. Work control process. Performance of work standards and documentation including pre-job preparation, pre-job notification, job	Prerequisites: None.	LEC 1.0 1.0 1.0
PPT119	Instrument Air Compressor Maintenance	Purpose, function, and identification of system drawings. Identification of major components. Instrument air compressor components and function. Air flow operations. Free air unloader components and function. Fluids and flow paths. Compressor cooling	Prerequisites: None.	LEC 2.0 2.0 2.0
PPT124	Power Systems Components I	Principles, properties, and safe handling requirements of lubricants. Lubrication of bearings, lubrication systems, and system components. Oil settling systems. Construction, operation, and maintenance of oil purifiers. Terminology, identification and inspection of the component parts of a drive and gear system. Application, inspection, maintenance, and failure modes	Prerequisites: None.	L+L 3.0 3.0 3.0

PPT126	Power Systems Components II	Functional components of turbines, including parts, steam properties and maintenance of oil and hydraulic systems. Heat exchanger theory, including types, operations, and maintenance of heat transfer systems. Operational principles of pneumatic and hydraulic valve	Prerequisites: None.	L+L 3.0 3.0 3.0
PPT128	Power Systems Components III	Hydraulic and pneumatic safety, physical concepts, and fluid laws. Hydraulic and pneumatic system components and operation. Troubleshooting procedures of hydraulic and pneumatic systems. Mechanical component types and characteristics, common failure mechanisms, and	Prerequisites: None.	L+L 3.0 3.0 3.0
PPT170	Instrumentation and Process Control	Principles and practices of instrumentation and process control systems used in industry. Topics cover the proper installation, troubleshooting, repair, and maintenance of various industrial process instrumentation (temperature, pressure, level, flow, etc.)	Prerequisites: A grade of C or better in college-level math course, or appropriate District placement, or permission of Department/Division Chair.	LEC 3.0 3.0 3.0
PPT202	Power Plant Systems I	Components and function of reactor coolant, volume control, safety injection, and nuclear sampling systems. Function and operation of main steam and turbine systems, main and auxiliary feedwater systems, pressurizer, control rod drive, and recirculation systems. Operation and function of steam and heater drain	Prerequisites: A grade of C or better in PPT120 and PPT121, or permission of Program Director.	LEC 3.0 3.0 3.0
PPT203	Power Plant Systems II	Advanced plant systems. Water, electrical and cooling systems. Safe shutdown cooling water system. Waste drain system. Fuel handling and storage systems. Fuel pool cooling and cleanup. Purpose and operation of radioactive waste management. Service air and gas systems. Ventilation and fire protection systems. Containment, Containment Spray, Emergency Core Cooling, Emergency Power, Environmental Monitoring,	Prerequisites: A grade of C or better in PPT120 and PPT121, or permission of Program Director.	LEC 3.0 3.0 3.0
PPT204	Measuring and Test Equipment	Administrative controls for precision measurement. Use of precision measuring equipment. Emphasis on proper use, accurate reading, and calculations using precision	Prerequisites: None.	LEC 1.0 1.0 1.0
PPT205	Rigging	Safe and proper operation of lifting equipment. Weight calculations. Identification and proper location of rigging equipment. Hand signals and industry standards. Safe rigging practices. Inspection and maintenance	Prerequisites: None.	LEC 2.0 2.0 2.0

PPT206	Bearings	Application, inspection and maintenance of plant bearings. Design and operation of sliding and anti-friction bearings. Function, design and applications of bearing seals. Reasons for bearing failure and related	Prerequisites: None.	LEC 1.0 1.0 1.0
PPT207	Heat Exchangers	Heat exchanger theory including heat transfer and operating principles. Classification of heat exchangers including types, construction, and operation. Inspection of heat exchangers. Cleaning of exchanger tubes and shells. Cleaning of component parts. Troubleshooting	Prerequisites: None.	LEC 1.0 1.0 1.0
PPT209	Pipefitting Auxiliaries II	Purpose, terminology and system stress factors related to piping systems. Principles of fluid flow, and piping inspection procedures. Fabrication and installation of tubing materials, specific joints, and flanges. Basic piping system component maintenance, rework and	Prerequisites: A grade of C or better in PPT109.	LEC 2.0 2.0 2.0
PPT211	Couplings	Types, functions, and specific applications of couplings. Coupling removal and inspection procedures. Coupling	Prerequisites: None.	LEC 0.5 0.5 0.5
PPT212	Control Valves and Actuators	Modulating control terminology. Disassembly, inspection and assembly processes. Construction and operation of specific actuators. Maintenance of pneumatic and hydraulic valve actuators. Principles of operation,	Prerequisites: None.	LEC 1.0 1.0 1.0
PPT214	Machine Alignment	Calculations and practical lab exercises using alignment principles. Determination of indicator sag and thermal growth. Obtaining readings for alignment or misalignment. Rim- face method of alignment stressed	Prerequisites: None.	L+L 3.0 5.0 5.0
PPT215	Relief and Safety Valves	Concepts of pressure and pressure measurement. Components and operation of rupture discs, relief valves, and safety valves. Maintenance procedures	Prerequisites: None.	LEC 1.0 1.0 1.0
PPT218	Lathe Operations	Safe and proper operation of the lathe. Component and accessories and their functions. Cutting tools and methods. Processes of machining including mounting, aligning, knurling, grooving, turning, thread cutting, drilling, reaming boring, and tapping. Machining	Prerequisites: None.	L+L 2.0 4.0 4.0
PPT219	Milling Machine Operations	Components of horizontal and vertical milling machines. Common milling machine accessories and cutters. Cutting speeds, feeds and depths for materials and cutters. Machine set up and operations. Common cutter failure. Operation of horizontal and vertical milling	Prerequisites: None.	LEC 2.0 2.0 2.0

PPT220	Heat Transfer and Fluid Flow	Course covers topics in heat transfer, fluid flow and thermodynamics. Topics include the properties of fluids, modes of heat transfer, and the energy relationships in fluid systems.	Prerequisites: A grade of C or better in college-level math course, or appropriate District placement, or permission of Department/Division	LEC 3.0 3.0 3.0
PPT221	Reactor Theory	Basic nuclear reactor theory to include atomic and nuclear physics, thermodynamics, and heat transfer and fluid flow.	Prerequisites: A grade of C or better in PPT120 and GTC108, or permission of Program Director.	LEC 3.0 3.0 3.0
PPT222	Reactor Plant Chemistry and Materials	Basic nuclear reactor theory to include reactor chemistry, water chemistry, radiation detection and protection principles, and reactor plant materials.	Prerequisites: A grade of C or better in PPT120 or permission of Program Director.	LEC 3.0 3.0 3.0
PPT224EI	Components for Maintenance Technicians	Electrical component types and characteristics, such as circuit breakers and fuses, instrumentation schematics, protective relaying, and inverters.	Prerequisites: A grade of C or better in PPT202 or PPT203, or permission of Program Director.	LEC 1.0 1.0 1.0
PPT224EM	Electrical Components for Maintenance Technicians	In-depth reading and troubleshooting of electrical engineering and vendor prints. Operation and control of emergency power systems. Diesel Generators will also	Prerequisites: A grade of C or better in PPT202 or PPT203, or permission of Program Director.	LEC 1.0 1.0 1.0
PPT224MM	Mechanical Components for Maintenance	Mechanical component types and characteristics, common failure mechanisms, and operating principles of plant components.	Prerequisites: A grade of C or better in PPT202 or PPT203.	LEC 1.0 1.0 1.0
PPT225	Industrial Plant Chemistry and Materials	Fundamentals of industrial chemistry and materials to include chemistry principles, water chemistry control, cooling water chemistry, chemical hazards, and material science.	Prerequisites: A grade of C or better in college-level math course, or appropriate District placement, or permission of Department/Division	LEC 3.0 3.0 3.0
PPT230	Nuclear Plant Systems	Operation, components, instrumentation and controls, automatic features, and precautions and limitations of nuclear plant systems.	Prerequisites: A grade of C or better in college-level math course, or appropriate District placement, or permission of Department/Division	LEC 3.0 3.0 3.0
PPT235	Nuclear Physics	Course provides a foundation for understanding atomic and nuclear physics, neutron characteristics, reactor theory, reactor operation, and radiation fundamentals.	Prerequisites: A grade of C or better in college-level math course, or appropriate District placement, or permission of Department/Division	LEC 3.0 3.0 3.0
PPT242	Components for Maintenance Technicians	Electrical component types and characteristics, such as circuit breakers and fuses, instrumentation schematics, protective relaying, and inverters. In-depth reading and troubleshooting of electrical engineering and vendor prints. Operation and control of emergency power	Prerequisites: A grade of C or better in (ELC119 and ELC120) or permission of Program Director.	L+L 2.0 2.0 2.0

PPT250	Power Plant Position Preparation	Prepares students for the Power Plant Maintenance Positions Selection System (MASS) examination. Reading comprehension, mechanical concepts, spatial	Prerequisites: None.	LEC 2.0 2.0 2.0
PPT255	Fossil Systems	Upon completion, the student will be able to explain how fossil plant systems operate in accordance with	Prerequisites: None.	L+L 3.0 3.0 3.0
PPT270AA	Power Systems Technology Internship	Work experience in power plant industry and / or related field. Five (5) hours of work weekly. Approval, supervision and evaluation by an internship coordinator.	Prerequisites: Permission of Department or Division.	L+L 1.0 5.0 0.0
PPT270AB	Power Systems Technology Internship	Work experience in power plant industry and / or related field. Ten (10) hours of work weekly. Approval, supervision and evaluation by an internship coordinator.	Prerequisites: Permission of Department or Division.	L+L 2.0 10.0 0.0
PPT270AC	Power Systems Technology Internship	Work experience in power plant industry and / or related field. Fifteen (15) hours of work weekly. Approval, supervision and evaluation by an internship coordinator.	Prerequisites: Permission of Department or Division.	L+L 3.0 15.0 0.0
PPT298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
PPT298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
PPT298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0

PSA301	Foundations of Public Safety Administration	Foundation in the principles and study of public safety administration including legal, political, and social factors. Overview of organizational theory and management, human capital management, resource management, leadership, and ethics that guide	Prerequisites: None.	LEC 3.0 3.0 3.0
PSA305	Communication Strategies for Public Safety Professionals	Overview of communication and public relations for public safety professionals. Topics include organization's internal and external environment and identifying and addressing public relations situations that emerge in these environments including the use of social media and other news media channels. Emphasis	Prerequisites: A grade of C or better in [(COM100, or COM110, or COM230, or COM225) and (ENG102 or ENG108)] or permission of Program Director or Department/Division.	LEC 3.0 3.0 3.0
PSA310	Research Methods for Public Safety Administration	Overview of research methods and presentation of research results for public safety administration. Introduction to quantitative and qualitative methods including statistics for conducting and analyzing discipline-specific research within the fields of public safety.	Prerequisites: A grade of C or better in [(ENG102 or ENG108), and (MAT14+, or MAT15+, or equivalent), and [MAT206, or PSY230, or (PSY230 and PSY231), or PSY230WL, or SWU225]], or permission of Instructor or Program	L+L 4.0 6.0 6.0
PSA315	Public Policy and Public Safety Organizations	Overview of public policy as it relates to the administration and management of public safety organizations. Topics include the political environment, laws and regulations, and the interrelationship among law, regulations, budget and finance, and public policy. Focus on current issues surrounding public administration and bureaucracy, as well as how public	Prerequisites: A grade of C or better in [PAD100 and (ENG102 or ENG108)], or permission of Instructor or Program Director or Department/Division Chair.	LEC 3.0 3.0 3.0
PSA320	Human Capital Management for Public Safety Organizations	Examination of the role and functions of human capital management in public safety organizations including recruitment, hiring, retention, and training. Focus on the impact and intersections of strategic planning, employee benefits and compensation, personnel issues, performance management, employment laws, labor relations, and responding to internal and external	Prerequisites: None.	LEC 3.0 3.0 3.0
PSA398AA	Special Topics in the Public Safety Administration	Explores special topics including current issues within the field of public safety administration. Focuses on examination and investigation of existing and innovative program solving techniques also related to the field.	Prerequisites: None.	LEC 1.0 1.0 1.0

PSA398AB	Special Topics in the Public Safety Administration	Explores special topics including current issues within the field of public safety administration. Focuses on examination and investigation of existing and innovative program solving techniques also related to the field.	Prerequisites: None.	LEC 2.0 2.0 2.0
PSA398AC	Special Topics in the Public Safety Administration	Explores special topics including current issues within the field of public safety administration. Focuses on examination and investigation of existing and innovative program solving techniques also related to the field.	Prerequisites: None.	LEC 3.0 3.0 3.0
PSA401	Public Safety Leadership	Examines the nature and roles of leadership in public safety, including concepts of organizational culture, leadership principles, and management strategies	Prerequisites: None.	LEC 3.0 3.0 3.0
PSA405	Public Safety Finance and Budget	Overview of the public finance system at all levels of government as it relates to the development of a budget for a public safety department. Topics include state and local budget process, revenue and funding sources involving taxes and revenue forecasting, as well as capital planning, projects, and budgets related to public safety. The course will consider alternative	Prerequisites: None.	LEC 3.0 3.0 3.0
PSA410	Program Planning and Evaluation for Public Safety Organizations	Focus on knowledge and skills required of public safety leaders in strategic planning for the design, development, implementation, and evaluation of social intervention initiatives related to public safety, health, and disaster management. Exploration of theories related to public services considered in the development of programs, the application of evaluation	Prerequisites: A grade of C or better in PSA310 or permission of Instructor or Program Director or Department/Division Chair.	LEC 3.0 3.0 3.0
PSA439	Critical Incident Management for Public Safety Professionals	In-depth examination of the process of critical incident management for supervisors, encompassing a variety of events that impact public safety organizations. Focus on the four phases of emergency management in relation to critical incident management.	Prerequisites: A grade of C or better in (AJS/FSC147 and AJS/FSC148), or permission of Program Director or Department/Division Chair. Prerequisites or Corequisites: AJS/FSC149 or permission of Program Director or	LEC 3.0 3.0 3.0
PSA449	Strategic Hazard Mitigation	In-depth examination of the process of strategic hazard mitigation for supervisors, encompassing a variety of events that impact Public Safety Organizations. Focus on mitigation planning to address community risks and vulnerabilities including the stakeholders involved and	Prerequisites: A grade of C or better in PSA439 or permission of Program Director or Department/Division Chair.	LEC 3.0 3.0 3.0

PSA450	21st Century Public Safety Practices	Examination of emerging trends in public safety administration and organizational responsiveness through policy and practice. Topics include an overview of public safety administration, components of ethical leadership, sustainable and evolving practices, internal and external influences on policy, technology, effective data collection, and strategic planning to address	Prerequisites: None.	LEC 3.0 3.0 3.0
PSA460	Crime Scene Coordination for Public Safety Professionals	Overview of the crime scene logistics needed to effectively coordinate the work of law enforcement officers, police dispatch, forensic science services personnel, emergency medical personnel, and others	Prerequisites: A grade of C or better in AJS275, or LET225, or permission of Program Director or Department/Division Chair.	LEC 3.0 3.0 3.0
PSA470	Administrative Law for Public Safety Professionals	Introduction to the basic principles of administrative law for public safety professionals including the structure of federal, state, and local administrative institutions. Topics include the sources of law for administrative agencies, the basic procedures for administrative rulemaking, adjudication, and compliance, as well as	Prerequisites: None.	LEC 3.0 3.0 3.0
PSA490	Public Safety Administration Capstone	Completion of a professional project within the field of public safety administration applying concepts covered throughout the program. Students will demonstrate the steps for issue identification, related research, analysis, and presentation of information. Project topics will follow	Prerequisites: Permission of Program Director or Department/Division Chair.	L+L 3.0 4.0 4.0
PSG201	Fundamentals of Polysomnography	Introduction to the fundamental concepts of Polysomnography (PSG) and related clinical procedures.	Prerequisites: A grade of C or better in NDT101 and admission into the Clinical Neurodiagnostic Technology program. Corequisites: NDT103LL.	LEC 3.0 3.0 3.0
PSG202	Sleep Therapeutics	Overview of sleep therapies and treatment of sleep disorders in adult and pediatric patients.	Prerequisites: A grade of C or better in PSG201 and admission into the Clinical Neurodiagnostic Technology program. Corequisites: PSG202LL.	LEC 2.0 2.0 2.0
PSG202LL	Sleep Therapeutics Laboratory	Application of sleep therapies and treatments of sleep disorders in adult and pediatric patients.	Prerequisites: A grade of C or better in NDT103LL and admission into the Clinical Neurodiagnostic Technology program. Corequisites: PSG202.	LAB 0.5 1.5 1.5
PSG203	Record Scoring	Polysomnography (PSG) record scoring using American Academy of Sleep Medicine (AASM) standards.	Prerequisites: A grade of C or better in PSG202 and PSG202LL and admission into the Clinical Neurodiagnostic Technology	LEC 1.0 1.0 1.0

PSG215	Polysomnography (PSG) Clinical Rotation I	Introduction to the Neurodiagnostic Technology (NDT) facility for conducting Polysomnography (PSG). Emphasis on patient preparation, testing protocol, instrument calibration and operation, documentation,	Prerequisites: A grade of C or better in NDT200LL and admission into the Clinical Neurodiagnostic Technology program. Corequisites: EEG215.	LEC 3.0 15.0 0.0
PSG225	Polysomnography (PSG) Clinical Rotation II	Participation in clinical polysomnography testing. Emphasis on patient preparation, troubleshooting, therapeutics, documentation, record review, scoring, and report generation.	Prerequisites: A grade of C or better in PSG215 and admission into the Clinical Neurodiagnostic Technology program. Corequisites: EEG225.	LEC 3.0 15.0 0.0
PSG235	Polysomnography (PSG) Clinical Rotation III	Advanced participation in clinical polysomnography testing with emphasis on independent function, decision making, time management, record review, scoring, and report preparation.	Prerequisites: A passing grade in PSG225 and admission into the Clinical Neurodiagnostic Technology program. Corequisites: EEG235.	LEC 3.0 15.0 0.0
PSG280	PSG Board Exam Review	Includes a review of all material covered in the Sleep Medicine Technology program. Taught during students' final semester of coursework to prepare them for their	Prerequisites: Admission into the Sleep Medicine Polysomnographic Technology program or permission of	LEC 2.0 2.0 2.0
PSY101	Introduction to Psychology	Overview of the methods, concepts, and applications of psychological science. Includes an introduction to key domains of psychology: Biological, Cognitive, Developmental, Social and Personality, and Mental and	Prerequisites: None.	LEC 3.0 3.0 3.0
PSY102	Introduction to Psychology Lab	Application of psychology as a science in areas such as: learning, memory, emotion, motivation, cognition, intelligence, development, personality, physical and mental health in a socially and culturally diverse world.	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: PSY101 or permission of Instructor.	LAB 1.0 1.0 1.0
PSY123	Psychology of Parenting	The study of major psychological theories that pertain to parenting. Includes current research findings to foster effective relationships within modern families. Explores evidence-based practices for parenting individuals from	Prerequisites: None.	LEC 3.0 3.0 3.0
PSY132	Psychology and Culture	Examines how psychology is inherently shaped by cultural contexts. Explores how cultural influences relate to enculturated psychological processes, gaining insights into how individuals think, feel, and behave	Prerequisites: None.	LEC 3.0 3.0 3.0

PSY143	Psychology of Sexual Orientation and Gender Identity	Introduction to the psychological study of sexual orientation and gender identity. Focus on psychological, developmental, social, biological, historical, and cultural aspects. Includes topics related to the recognition and development of sexual orientation and gender identity throughout the lifespan and lived experiences of LGBTQIA+ individuals and communities. Examines prejudice, discrimination, family dynamics, contributions,	Prerequisites: None.	LEC 3.0 3.0 3.0
PSY156	Understanding Death and Dying	Designed to give the student an understanding of the research and theories of death, dying, bereavement process, and aspects of end-of-life care and decision-	Prerequisites: None.	LEC 3.0 3.0 3.0
PSY157	African/Black Psychology	Historical overview of the development of Black Psychology and the African-American "frame of reference." Includes topics such as family, psychological assessment, mental health, male/female relationships, personality and community development as well as educational, ethical and contemporary issues. Critical examination of psycho-cultural forces which have helped to shape and determine the unique thought,	Prerequisites: None.	LEC 3.0 3.0 3.0
PSY210	Educational Psychology	Scientific research and psychological principles as they apply to teaching and learning. The role of psychology in educational settings, human diversity, theories of learning, intelligence, memory, creativity, assessment,	Prerequisites: A grade of C or better in PSY101 or permission of Instructor.	LEC 3.0 3.0 3.0
PSY215	Sports Psychology	Application of the physiological, behavioral, social, cognitive, and humanistic perspectives in psychology to sport. Includes topics such as optimal performance, correlation, motivation, co-action effect, self-actualization, psycho-behavioral techniques, self-	Prerequisites: None.	LEC 3.0 3.0 3.0
PSY218	Health Psychology	Behavioral and mental foundations of health, wellness, illness, and disease, and psychological dimensions of	Prerequisites: A grade of C or better in PSY101, or permission of	LEC 3.0 3.0 3.0

PSY225	Psychology of Religion	Provides an introduction to the history, varieties and theories of the psychology of religion from an empirical, research-based perspective. Specific areas of study include the role of gender, age, socioeconomic status, and personality on religious experience, the effects of religion and prayer on mental and physical health, the development of religious thought and behavior over the lifespan, and the social psychology of new religious movements. In addition, the role of cultural differences	Prerequisites: A grade of C or better in PSY101 or Permission of Instructor.	LEC 3.0 3.0 3.0
PSY230	Introduction to Statistics	An introduction to basic concepts in descriptive and inferential statistics, with emphasis upon application to psychology. Consideration given to the methods of data collection, sampling techniques, graphing of data, and the statistical evaluation of data collected through	Prerequisites: A grade of C or better in (PSY101 and eligibility for MAT14+ or higher as indicated by appropriate district mathematics placement) or permission of Instructor.	LEC 3.0 3.0 3.0
PSY230WL	Introduction to Statistics with Lab	An introduction to basic concepts in descriptive and inferential statistics, with emphasis upon application to psychology. Consideration given to the methods of data collection, sampling techniques, graphing of data, use of statistical software, and the statistical evaluation of data collected through experimentation. Required of	Prerequisites: A grade of C or better in (PSY101 and eligibility for MAT14+ or higher as indicated by appropriate district mathematics placement) or permission of Instructor.	L+L 4.0 5.0 5.0
PSY231	Laboratory for Statistics	Applications of inferential and descriptive statistics to statistical software in the field of psychology.	Prerequisites: None. Corequisites: PSY230.	LAB 1.0 2.0 2.0
PSY235	Psychology of Gender	To assess historical and psychological perspectives on women and men and to evaluate contemporary viewpoints regarding the psychology of women and	Prerequisites: A grade of C or better in PSY101 or permission of Instructor.	LEC 3.0 3.0 3.0
PSY240	Developmental Psychology	Human development from conception through death. Includes biological, physical, cognitive, emotional, and sociocultural development across various ages.	Prerequisites: A grade of C or better in PSY101 or permission of Instructor.	LEC 3.0 3.0 3.0
PSY241	Understanding and Changing Behavior	Theory and methods for observing, analyzing, and modifying behavior.	Prerequisites: A grade of C or better in PSY101 or permission of	LEC 3.0 3.0 3.0
PSY242	Understanding and Changing Behavior Lab	Advanced course designed to enable students to apply the principles of Applied Behavior Analysis (ABA) in a lab setting. Incorporates case studies and hands-on employment of best practices. Reviews current research in areas including, but not limited to, schedules of reinforcement, functional behavior assessment, stimulus	Prerequisites: A grade of C or better in PSY241.	LAB 1.0 1.0 1.0

PSY243	The Psychology of Developmental Disabilities	The interrelationships among the physical, intellectual, social, and psychological aspects of developmental disabilities (DD). Various service approaches, policies, and programs designed to foster an adequate adjustment for individuals with DD and their families.	Prerequisites: A grade of C or better in PSY101.	LEC 3.0 3.0 3.0
PSY244	Internship in Psychology	Experience in working in a wide variety of settings including but not limited to schools, non-profit agencies, advocacy agencies and other governmental agencies. 80 hours of designated volunteer or paid work.	Prerequisites: A grade of C or better required in all prerequisites. Prerequisites or Corequisites: Any two (2) 200-level PSY courses and	L+L 1.0 1.0 0.0
PSY248	Psychology of Adolescent Development	Explores the highly specialized developmental stage of adolescence. Includes biological, cognitive, psychosexual, and sociocultural factors as well as	Prerequisites: A grade of C or better in PSY101 or permission of Instructor.	LEC 3.0 3.0 3.0
PSY250	Social Psychology	The scientific study of how people's thoughts, feelings, and behaviors are influenced by other people and situations. Includes how we think about ourselves and others, persuasion and influence, sexual and romantic attraction, friendship and helping others, aggression	Prerequisites: A grade of C or better in PSY101 or permission of Instructor.	LEC 3.0 3.0 3.0
PSY260	Psychology of Personality	Introduction to theories of personality with emphasis upon application of specific theories towards the	Prerequisites: A grade of C or better in PSY101, or permission of	LEC 3.0 3.0 3.0
PSY262	Positive Psychology: The Science of Well-Being	Overview and application of psychological principles based on strengths and resilience of human beings as opposed to dysfunction and symptoms of mental disorders. Topics include happiness, relationships, resilience, optimism, well-being, and brain research	Prerequisites: None.	LEC 3.0 3.0 3.0
PSY266	Psychological Disorders	Distinguishes between healthy psychological functioning and psychological disorders. Includes topics in psychopathology such as problems with anxiety and depression, eating disorders, substance-use, schizophrenia, sexuality, and personality. Also covers	Prerequisites: A grade of C or better in PSY101 or permission of Instructor.	LEC 3.0 3.0 3.0
PSY267	Introduction to Forensic Psychology	Overview of the practice of psychology in the law, by the law, and of the law. Focuses on the complementary functions and distinctions between psychology and the legal justice system. Topics include, but are not limited to, criminal investigations, risk and level of danger, competency, interrogations, confessions, assessment,	Prerequisites: A grade of C or better in PSY101.	LEC 3.0 3.0 3.0

PSY275	Biopsychology	Biological basis of behavior and mental functions. Biological foundations of sensation, perception, motivation, emotion, cognition, and psychopathology. Designed for students in the life and behavioral	Prerequisites: A grade of C or better in PSY101, or permission of Instructor.	L+L 4.0 5.0 5.0
PSY277	Psychology of Human Sexuality	Survey of biopsychosocial aspects of human sexual behavior. Emphasis placed on the integration of the cognitive, emotional, and behavioral factors in sexuality.	Prerequisites: A grade of C or better in PSY101.	LEC 3.0 3.0 3.0
PSY280	Industrial/Organizational Psychology	The application of psychological principles to business and industry practices including organizational structure, leadership, personnel, employee stress and conflict, workplace conditions and job performance.	Prerequisites: A grade of C or better in PSY101, or permission of Instructor.	LEC 3.0 3.0 3.0
PSY282AA	Volunteerism Service Learning Experience in Psychology	Service learning field experience within private/public agencies, and citizen volunteer groups.	Prerequisites: A grade of C or better in PSY101 and permission of Instructor.	LAB 1.0 1.0 0.0
PSY282AB	Volunteerism Service Learning Experience in Psychology	Service learning field experience within private/public agencies, and citizen volunteer groups.	Prerequisites: A grade of C or better in PSY101 and permission of Instructor.	LAB 2.0 2.0 0.0
PSY282AC	Volunteerism Service Learning Experience in Psychology	Service learning field experience within private/public agencies, and citizen volunteer groups.	Prerequisites: A grade of C or better in PSY101 and permission of Instructor.	LAB 3.0 3.0 0.0
PSY290AB	Research Methods	Planning, execution, analysis, and written reporting of psychological research using American Psychological Association guidelines (APA). Critical review of literature and methods in representative areas of psychological research.	A grade of C or better required in all Prerequisites. Prerequisites: ENG101 or ENG107. Prerequisites or Corequisites: PSY230 or PSY230WL or permission of Instructor.	LEC 4.0 3.0 3.0 LAB 0.0 3.0 3.0
PSY290AC	Research Methods	Planning, execution, analysis, and written reporting of psychological research using American Psychological Association guidelines (APA). Critical review of literature and methods in representative areas of psychological research.	A grade of C or better required in all Prerequisites. Prerequisites: ENG101 or ENG107. Prerequisites or Corequisites: PSY230 or PSY230WL or permission of Instructor.	LEC 3.0 3.0 3.0 LAB 1.0 2.0 2.0
PSY295AA	Independent Research in Psychology	Original scientific investigation of psychology-related phenomenon.	Prerequisites: A grade of C or better in PSY290++ or Corequisites: PSY290++ or permission of	LAB 1.0 1.0 0.0

PSY298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
PSY298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
PSY298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
PTA101	Survey of Physical Therapy	History of physical therapy. Purpose, benefits, and goals of the Arizona Physical Therapy Association (AzPTA) and the American Physical Therapy Association (APTA). Roles and responsibilities of physical therapists (PTs) and physical therapist assistants (PTAs). Patient care, legal issues, principles of physical therapy treatment, education requirements, and functions of the APTA. Clinical practice settings used in the provision of physical therapy services.	Prerequisites: Admission to the Physical Therapist Assisting program or permission of the Program Director.	LEC 1.5 1.5 1.5
PTA102	Structured Physical Therapist Assisting Review	Structured physical therapist assisting tutorial assistance and physical therapist assisting study skills related to physical therapist assisting courses. Physical therapist assisting process and critical thinking	Prerequisites: None. Corequisites: Enrollment in the Physical Therapist Assisting program or permission of Department Chair.	LEC 1.0 1.0 1.0

PTA103	Kinesiology	Physical principles of human motion. Emphasis on structure, movement, and stability of specific joints. Normal and abnormal human locomotion. Stabilizing and motion producing forces upon extremities and the spine including muscles, ligaments, and cartilage. Discussion of common joint deformities. Kinesiological	Prerequisites: Admission to the Physical Therapist Assisting program or permission of the Program Director.	LEC 3.0 3.0 3.0
PTA104	Musculo-Skeletal Assessment Techniques	Theory and principles of goniometry and manual muscle testing. Measure range of motion of joints and strength of muscles of the head, face, neck, trunk and extremities. Normal range of motion of the spine and extremities. Assess posture and common postural deviations. Palpate and identify pertinent bony and soft tissue structures. Document results of goniometric measurement, muscle testing, palpation and posture assessment. Perform data collection in a time efficient manner following the plan of care established by the	Prerequisites: Admission to the Physical Therapist Assisting program or permission of the Program Director.	LAB 1.5 4.5 4.5
PTA152	Musculoskeletal Kinesiology and Assessment Techniques in	Joint movements and planes of motion. Normal anatomy of the extremities. Tissue physiology. Pathological structures and their relationships. External palpation and relation to imaging.	Prerequisites: Admission to Diagnostic Medical Sonography program or permission of the Program Director.	L+L 4.0 6.0 6.0
PTA200	Patient Mobility Techniques	Theory, principles and practice of proper body mechanics. Principles and techniques of gait training, bed mobility and transfers, wheelchair mobility. Patient instruction, data collection, assistive devices and equipment used by the physical therapist assistants and their patients. Safety and first aid in physical therapy practice settings including contraindications for therapeutic interventions. Document physical therapy interventions. Perform physical therapy interventions in a time efficient manner following the plan of care	Prerequisites: A grade of C or better in (PTA101, PTA103, and PTA104) or permission of the Program Director.	LEC 4.0 2.0 2.0 LAB 0.0 6.0 6.0
PTA203	Clinical Pathology	Terminology and definitions used in discussion of human pathology. Disease processes frequently encountered in physical therapy practice. Functional anatomy, select medical tests for diagnoses, and medication and effects in providing physical therapy.	Prerequisites: Admission to the Physical Therapist Assisting program or permission of the Program Director.	LEC 3.0 3.0 3.0

PTA204	Preclinical Practicum I	Supervised physical therapy clinical practice in the Healthcare United at GateWay (HUG) Clinic with moderate to maximal supervision with emphasis on performance of data collection and treatment interventions for a diverse patient population in an	Prerequisites: A grade of C or better in (PTA101, PTA103, and PTA104), or permission of the Program Director. Corequisites: PTA209.	LAB 0.5 1.5 1.5
PTA205	Communication in Physical Therapy	Communication skills in the Physical Therapy setting. Self-image in communication. Active listening, responding to problems, body language, patient interview skills. Communicating with chronically ill and dying patients and their families. Communicating with persons with disabilities. Cultural differences in	Prerequisites: Admission to the Physical Therapist Assisting program or permission of Department or Division.	LEC 1.5 1.5 1.5
PTA206	Clinical Practicum I	Clinical experience with advanced beginner or higher level of performance for physical therapist assisting students. Application of physical therapy skills and techniques in specific clinical settings including	Prerequisites: A grade of C or better in (PTA200, PTA204, PTA209, and PTA217) or permission of the Program Director. Corequisites:	LAB 3.0 15.0 0.0
PTA207	Clinical Practicum Seminar I	Integration of non-clinical aspects of clinical practicums with clinical performance in Clinical Practicum I. Emphasis on clinical journaling, in-service and case presentations, and documentation of patient care	Prerequisites: Admission to the Physical Therapist Assisting program or permission of the Program Director. Corequisites: PTA206.	LEC 1.0 1.0 1.0
PTA208	Rehabilitation of Special Populations	Rehabilitation strategies for brain injured patients. Neurodevelopmental treatment emphasized. Theories and alternative physical therapy treatment for neurologically impaired patients. Clinical applications and treatment of patients. Proprioceptive neuromuscular facilitation (PNF), cardiopulmonary rehabilitation, spinal cord injury and amputee management, and prosthetics/orthotics. Motor development and changes across the lifespan including	Prerequisites: A grade of C or better in (PTA200, PTA204, PTA209, and PTA217), or permission of the Program Director.	LEC 5.0 3.0 3.0 LAB 0.0 6.0 6.0
PTA209	Orthopedics for the Physical Therapist Assistant	Response of human bone and soft tissue to injury. Orthopedic and medical management and physical therapy interventions for common injuries of the extremities and spine. Common orthopedic surgeries. Joint mobilization techniques. Body mechanics and therapeutic exercise programs. Documentation procedures. Perform physical therapy interventions including relevant data collection in a time efficient manner following the plan of care established by the	Prerequisites: A grade of C or better in (PTA101, PTA103, and PTA104) or permission of the Program Director.	LEC 5.0 3.0 3.0 Lab 0.0 6.0 6.0

PTA215	Wound Care for the Physical Therapist Assistant	Introduction to current concepts in wound care management techniques for the physical therapist assistant including skin anatomy and physiology, principles of healing, types of wounds, and therapeutic	Prerequisites: Admission to the Physical Therapist Assisting program or permission of Department or Division.	LEC 1.0 1.0 1.0
PTA216	Biophysical Agents in Physical Therapy	Mastery of the use of biophysical agents under the physical therapist plan of care. Understanding tissue healing, pain theories, indications, contraindications, and safe patient positioning to guide effective physical therapy interventions. Data collection and communication to optimize patient care, emphasizing	Prerequisites: A grade of C or better in (PTA200, PTA209, and PTA217) or permission of the Program Director.	LEC 5.0 3.0 3.0 Lab 0.0 6.0 6.0
PTA217	Clinical Neurology	Anatomy and function of the brain, spinal cord and peripheral nervous system. Review of motor and sensory innervation and spinal tracts. Specific diseases of the central and peripheral nervous systems related to the physical therapy plan of care. Emphasis on clinical	Prerequisites: A grade of C or better in (PTA101, PTA103, PTA104, and PTA203) or permission of the Program Director.	LEC 2.0 2.0 2.0
PTA230	Physical Therapy Seminar	Current practices and issues in physical therapy. Clinical problem solving, ethics, legal aspects, reimbursement, management, research. Resume preparation and job interviewing skills. Stress management techniques. Total quality management principles. Employment issues. Prevention of fraud and abuse. Career and professional development. Job descriptions,	Prerequisites: Admission to the Physical Therapist Assisting program or permission of the Program Director.	LEC 2.0 2.0 2.0
PTA240	Peripheral Joint Mobilization Techniques for the Physical Therapist	Peripheral joint mobilization techniques for the upper and lower extremity joints. Concepts, indications, and contraindications. Documentation. Statutes and policies regarding joint mobilizations.	Prerequisites: Certification or licensure as a Physical Therapist Assistant and six months clinical practice.	L+L 1.0 1.0 1.0
PTA279	Preclinical Practicum II	More advanced supervised physical therapy clinical practice in the Healthcare United at GateWay (HUG) Clinic with minimal supervision with emphasis on performance of data collection and treatment interventions for a diverse patient population in an	Prerequisites: A grade of C or better in PTA206, or permission of the Program Director. Corequisites: PTA216.	LAB 0.5 1.5 1.5
PTA280	Clinical Practicum II	Clinical experience requiring an intermediate or higher level of clinical performance by the physical therapist assisting students. Application of physical therapy skills and techniques in various clinical settings including	Prerequisites: A grade of C or better in (PTA208, PTA216, and PTA279) or permission of Program Director. Corequisites: PTA281.	LAB 3.0 15.0 0.0

PTA281	Clinical Practicum Seminar II	Integration of non-clinical aspects of clinical practicums with clinical performance in Clinical Practicum II. Emphasis on clinical journaling, in-service and case presentations, and documentation of patient care	Prerequisites: Admission to the Physical Therapist Assisting program, or permission of Department or Division. Corequisites: PTA280.	LEC 1.0 1.0 1.0
PTA290	Clinical Practicum III	Clinical experience with entry-level performance for physical therapist assisting students. Application of physical therapy skills and techniques in specific clinical settings including outpatient, hospital, rehabilitation and	Prerequisites: A grade of C or better in (PTA280 and PTA281) or permission of Department or Division. Corequisites: PTA292.	LAB 3.0 15.0 0.0
PTA292	Clinical Practicum Seminar III	Integration of non-clinical aspects of clinical practicums with clinical performance in Clinical Practicum III. Emphasis on clinical journaling, in-service and case presentations, and documentation of patient care	Prerequisites: Admission to the Physical Therapist Assisting program or permission of the Department or Division. Corequisites: PTA290.	LEC 1.0 1.0 1.0
PTA295	Physical Therapist Assistant Examination Review	Preparation for the physical therapist assistant examination administered by the Federation of State Boards of Physical Therapy. Topics include physical therapy management of patients with musculoskeletal, neurological, integumentary and cardiopulmonary system diseases and complications. Therapeutic modalities, therapeutic exercise, functional mobility activities, and data collection techniques.	Prerequisites: Admission to the Physical Therapist Assisting program or permission of the Program Director.	LEC 2.0 2.0 2.0
QST200	Introduction to Queer Studies	Provides a general introduction to queer studies, including review of queer theory, intersectionality, social and political institutions, representation, and identity related to sex, gender, and sexual orientation.	Prerequisites: A grade of C or better in ENG101 or ENG107.	LEC 3.0 3.0 3.0
QST210	Queer Media Studies	Brings together media studies and queer studies to examine the history and ongoing development of media produced by queer and non-queer creators in national and global contexts. Interrogates the relationship between sex, gender, and sexuality as it is and has been represented in media. Offers an overview of	Prerequisites: A grade of C or better in ENG101 or ENG107.	LEC 3.0 3.0 3.0
RAD100	Introduction to Radiologic Science and Health Care	Provides an overview of the foundations of radiography and the practitioner's role in health care delivery. Principles, practices and policies of health care organizations will be examined and discussed in	Prerequisites: Admission to the Radiologic Technology Program.	LEC 3.0 3.0 3.0
RAD101	Ethics and Law in the Radiologic Sciences	Foundation in ethics and law related to the practice of medical imaging. An introduction to terminology, concepts and principles will be presented.	Prerequisites: Admission to the Radiologic Technology Program.	LEC 1.0 1.0 1.0

RAD102	Structured Diagnostic Medical Imaging Skills Enhancement I	Structured medical imaging cognitive and non-cognitive learning, study skills, and strategies to help students achieve success in their respective imaging courses. Medical imaging learning process and critical thinking	Prerequisites: Admission to the Radiologic Technology Program.	LEC 1.0 1.0 1.0
RAD103	Radiation Biology and Health Physics I	Overview of the principles of radiation protection, including the responsibilities of the radiographer for patients, personnel and the public. Radiation health and safety requirements of federal and state regulatory agencies, accreditation agencies and health care	Prerequisites: Admission to the Radiologic Technology program.	LEC 2.0 2.0 2.0
RAD104	Image Production I	Comprehensive exploration of the fundamental principles and techniques governing radiographic exposure factors and their effect on creating	Prerequisites: Admission to the Radiologic Technology program.	LEC 2.5 2.0 2.0 LAB 0.0 1.5 1.5
RAD105	Radiation Physics and Instrumentation	Basic knowledge of atomic structure and terminology, the nature and characteristics of radiation, x-ray production, and the fundamentals of photon interactions with matter. Establishes a knowledge base	Prerequisites: Admission to the Radiologic Technology program.	LEC 2.0 2.0 2.0
RAD106	Patient Care in Radiologic Sciences I	Foundational concepts of optimal patient care, including consideration for the physical and psychological needs of the patient and family. Routine and emergency patient care procedures are described, as well as infection control procedures using standard	Prerequisites: Admission to the Radiologic Technology program.	LEC 2.5 2.0 2.0 LAB 0.0 1.5 1.5
RAD107	Radiographic Procedures I	Content provides the knowledge base necessary to perform standard imaging procedures. Focus is on upper extremities, lower extremities, shoulder, and thorax. Consideration is given to the evaluation of	Prerequisites: Admission to the Radiologic Technology Program.	LEC 3.0 3.0 3.0 LAB 0.0 3.0 3.0
RAD109	Radiography Practicum I	Clinical practice experience to develop and apply concepts and theories in the performance of radiologic procedures. Concepts of team practice, patient-centered clinical practice, and professional development are discussed, examined and evaluated. Focus is on patient care and assessment and competent performance of radiologic imaging. Imaging procedures	Prerequisites: Admission to the Radiologic Technology Program.	LAB 3.5 19.0 0.0

RAD112	Structured Diagnostic Medical Imaging Skills Enhancement II	Focus is on the application of structured medical imaging cognitive and non-cognitive learning, study skills, and strategies to help students achieve success in their respective imaging courses and their first clinical experience. Medical imaging learning process and critical thinking application skills introduced in the Structured Diagnostic Medical Imaging Skills	Prerequisites: Admission to the Radiologic Technology Program.	LEC 1.0 1.0 1.0
RAD114	Image Production II	Components, principles, and operation of digital imaging systems found in diagnostic radiology. Factors that impact image acquisition, display, archiving, and	Prerequisites: Admission to the Radiologic Technology program.	LEC 2.0 2.0 2.0
RAD116	Patient Care in Radiologic Sciences II	Content provides advanced concepts of optimal patient care, including consideration for assessment of vital signs. Trauma and emergency patient care procedures are described, as well as surgical asepsis concepts. The role of the radiographer in surgical settings is also	Prerequisites: Admission to the Radiologic Technology program.	LEC 2.5 2.0 2.0 LAB 0.0 1.5 1.5
RAD117	Radiographic Procedures II	Content provides the knowledge base necessary to perform standard imaging procedures. Focus is on abdomen, pelvic girdle, vertebral column, and cranium. Contrast studies specific to the gastrointestinal system are also addressed. Consideration is given to the	Prerequisites: Admission to the Radiologic Technology Program.	LEC 3.0 3.0 3.0 LAB 0.0 3.0 3.0
RAD119	Radiography Practicum II	Clinical practice experience to develop, apply, reinforce, and integrate concepts and theories in the performance of radiologic procedures. Concepts of team practice, patient-centered clinical practice, and professional development are practiced, examined, and evaluated. Focus is on patient care and assessment and competent performance of radiologic imaging. Imaging	Prerequisites: Admission to the Radiologic Technology Program.	LAB 6.0 36.0 0.0
RAD203	Radiation Biology and Health Physics II	Provides an overview of the principles of the interaction of radiation with living systems. Radiation effects on molecules, cells, tissues and the body as a whole are presented. Factors affecting biological response are presented, including acute and chronic effects of	Prerequisites: Admission to the Radiologic Technology program.	LEC 2.0 2.0 2.0
RAD206	Pharmacology and Venipuncture	Content provides basic concepts of pharmacology, venipuncture and administration of diagnostic contrast agents and intravenous medications. The appropriate delivery of patient care during these procedures is	Prerequisites: Admission to the Radiologic Technology Program.	LEC 1.0 1.0 1.0 LAB 0.0 1.0 1.0

RAD207	Radiographic Procedures III	Content provides the knowledge base necessary to perform advanced imaging procedures. Focus is on special studies, trauma, and surgical procedures. Contrast studies specific to the urinary system are also addressed. Consideration is given to the evaluation of	Prerequisites: Admission to the Radiologic Technology program.	LEC 3.0 3.0 3.0 LAB 0.0 1.5 1.5
RAD208	Image Analysis I	Provides a basis for analyzing radiographic images. Included are the importance of optimal imaging standards, the use of problem-solving techniques for image evaluation, and the factors that can affect image quality. Focus on the analysis of images for the upper	Prerequisites: Admission to the Radiologic Technology Program.	LEC 1.0 1.0 1.0
RAD209	Radiography Practicum III	Continued clinical practice experience to further develop, apply, reinforce, and integrate concepts and theories in the performance of radiologic procedures. Concepts of team practice, patient-centered clinical practice, and professional development are practiced, examined, and evaluated. Focus remains on patient care and assessment and competent performance of radiologic imaging. New experiences in special procedural environments. Imaging procedures are	Prerequisites: Admission to the Radiologic Technology Program.	LAB 5.0 29.0 0.0
RAD212	Structured Diagnostic Medical Imaging Skills Enhancement III	Use of skills and resources for preparing for the American Registry of Radiologic Technologists (ARRT) exam. Utilization of career and educational planning	Prerequisites: Admission to the Radiologic Technology Program.	LEC 1.0 1.0 1.0
RAD214	Image Production III	Imparts knowledge on how to optimize image quality while managing radiation exposure during digital imaging exams and procedures. Emphasis is placed on quality management and continuous quality improvement. Fluoroscopic systems are discussed and	Prerequisites: Admission to the Radiologic Technology program.	LEC 2.0 2.0 2.0 LAB 0.0 1.5 1.5
RAD217	Radiographic Pathology and Additional Modalities	Introduces concepts related to disease and etiological considerations with emphasis on radiographic appearance of disease. Additional modalities are also	Prerequisites: Admission to the Radiologic Technology Program.	LEC 2.0 2.0 2.0
RAD218	Image Analysis II	Provides a basis for analyzing radiographic images. Included are the importance of optimal imaging standards, the use of problem-solving techniques for image evaluation, and the factors that can affect image quality. Focus on analysis of images for the abdomen,	Prerequisites: Admission to the Radiologic Technology Program.	LEC 1.0 1.0 1.0

RAD219	Radiography Practicum IV	Continued clinical practice experience to further develop, apply, reinforce, and integrate concepts and theories in the performance of radiologic procedures. Concepts of team practice, patient-centered clinical practice, and professional development are practiced, examined, and evaluated. Focus remains on patient care and assessment and competent performance of radiologic imaging. Continued experiences in special procedural environments. Imaging procedures are	Prerequisites: Admission to the Radiologic Technology Program.	LAB 5.0 29.0 0.0
RBT296WA	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 1.0 5.0 0.0
RBT296WB	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 2.0 10.0 0.0

RBT296WC	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 3.0 15.0 0.0
RBT296WD	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 4.0 20.0 0.0
RBT298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
RBT298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0

RBT298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
RDG100	Successful College Reading	Emphasis on reading study strategies for any introductory class in any subject area. Introduction to Learning Management System (LMS), how to successfully read course textbooks and assessments, how to navigate information technology and development of academic vocabulary.	Prerequisites: A grade of C or better in ALT100 or ESL202 or appropriate reading placement or permission of Instructor. Corequisites: Any 100-level course in another content area or permission of Instructor.	LEC 3.0 3.0 3.0
RDG100AA	Successful College Reading - Organizing for Success	Includes goal setting, time management, college orientation, reading content materials. Emphasis on organizational skills and strategies for any introductory class in any subject area. Introduction to Learning Management System (LMS), how to organize and manage college reading assignments, and how to	Prerequisites: None.	LEC 1.0 1.0 1.0
RDG100AB	Successful College Reading - Notetaking and Studying for	Emphasis on reading study and notetaking techniques applicable to any introductory class in any subject area. Includes effective use of textbooks, notetaking, and	Prerequisites: None.	LEC 1.0 1.0 1.0
RDG100AC	Successful College Reading - Taking College Exams with	Emphasis on successful lecture notetaking and synthesis of information, studying skills and strategies, types of exams, and exam taking strategies for success	Prerequisites: None.	LEC 1.0 1.0 1.0
RDG100LL	Disciplinary Literacy Lab	Supplemental instruction for college-level discipline courses. Focus on developing effective reading processes to address a range of literacy needs including reading, writing, digital, numerical, financial	Prerequisites: None. Corequisites: Any 100-level course in another content area or permission of Instructor.	LAB 1.0 3.0 3.0
RDG111	Successful College Reading for Cultural or Social Sciences	Emphasis on reading study strategies for an introductory class in the Cultural and Social Sciences. Introduction to Learning Management System (LMS), how to successfully read course textbook and assessments and development of academic vocabulary.	Prerequisites: A grade of C or better in ALT100 or appropriate reading placement score or permission of Instructor. Corequisites: Any 100-level course in Cultural Science or Social Science area or permission of	LEC 3.0 3.0 3.0

RDG112	Successful College Reading for Life Sciences, Mathematics, Physical Sciences or Technology	Emphasis on reading study strategies for an introductory class in the Life Science, Mathematics, Physical Sciences, or Technology. Introduction to Learning Management System (LMS), how to successfully read course textbook and assessments and development of academic vocabulary.	Prerequisites: A grade of C or better in ALT100 or appropriate reading placement or permission of Instructor. Corequisites: Any 100-level class in the Life Sciences or Mathematics or Physical Sciences or	LEC 3.0 3.0 3.0
RDG113	Successful College Reading for Communication, Humanities or Behavioral Science	Emphasis on reading study strategies for an introductory class in the Communication, Humanities, or Behavioral Science. Introduction to Learning Management System (LMS), how to successfully read course textbook and assessments and development of academic vocabulary.	Prerequisites: A grade of C or better in ALT100 or appropriate reading placement or permission of Instructor. Corequisites: Any 100-level course in Communication or Humanities or Behavioral Sciences or	LEC 3.0 3.0 3.0
RDG282AA	Service-Learning Experience in Reading	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 1.0 1.0 0.0
RDG282AB	Service-Learning Experience in Reading	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 2.0 2.0 0.0
RDG282AC	Service-Learning Experience in Reading	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 3.0 3.0 0.0
RDG298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
REA150	Supervisory Appraiser/Appraiser Trainee	Examine the national minimum requirements, responsibilities, and expectations for Trainee Appraisers and Supervisory Appraisers that are included in the	Prerequisites: None.	LEC 1.0 1.0 1.0
REA179	Real Estate Principles I	Basics of real estate principles including introduction to the profession and license law, definition of real property, legal descriptions, rights and interests in property, ownership, contracts, title transfer and escrow procedures. Also covers an introduction to water rights and environmental hazards as well as procedures for	Prerequisites: None.	LEC 3.0 3.0 3.0
REA180	Real Estate Principles II	Advanced work in real estate including governmental restrictions and limitations, property management, insurance and warranties, appraisal procedures, financing and loan security instruments. Also covers	Prerequisites: None.	LEC 3.0 3.0 3.0

REA201	Real Estate Principles I and II	Comprehensive survey of real estate principles to include careers in real estate, nature and description of real estate, rights and interests in land, forms of real property ownership, forms of business organization, methods of title transfer, title search and insurance, contract law, real estate sales contracts, mortgage and notes payable, deeds of trust, lending practices, loans and consumer rights, sources of financing real estate loans, types of financing instruments, real property taxes and assessments, title closing, escrow and settlement procedures, property management and real estate leases, real estate appraisal, state licensing laws and professional affiliations, real estate brokerage, real	Prerequisites: None.	LEC 6.0 6.0 6.0
REA205	Introduction to Commercial Real Estate	Introduces key features of the commercial real estate industry and its differences from residential real estate. Provides residential agents with a starting point to	Prerequisites: None.	LEC 2.0 2.0 2.0
REA208	Ethics in Commercial Real Estate	Course covers ethics in commercial real estate. Review of National Association of Realtors (NAR) code of ethics and scenarios common in commercial real estate	Prerequisites: None.	LEC 1.0 1.0 1.0
REA211	Compliance in Commercial Real Estate	Course covers compliance in commercial real estate. Review of federal, state, and municipal regulations and scenarios common in commercial real estate	Prerequisites: None.	LEC 1.0 1.0 1.0
REA214	Finances in Commercial Real Estate	Course covers finances in commercial real estate, including funding sources, taxes, and relevant data and analytic tools. Also includes review of financial	Prerequisites: None.	LEC 1.0 1.0 1.0
REA220	Multiunit Properties in Commercial Real Estate	This course covers various considerations of the multiunit commercial properties industry sector. Overview of the types of properties, financial considerations, transaction processes, resources, and compliance	Prerequisites: None.	LEC 1.0 1.0 1.0
REA225	Industrial Properties in Commercial Real Estate	Covers various aspects of the industrial commercial properties industry sector. Overview of the types of properties, financial considerations, transaction	Prerequisites: None.	LEC 1.0 1.0 1.0
REA230	Land Properties in Commercial Real Estate	Covers various aspects of the land commercial properties industry sector. Overview of the types of land and land use, financial considerations, transaction processes, resources, and compliance considerations.	Prerequisites: None.	LEC 1.0 1.0 1.0
REA235	Commercial Real Estate Essential Tools	Covers various tools for research, analysis, and presentation of data relevant to commercial real estate.	Prerequisites: None.	LEC 1.0 1.0 1.0

REA240	Introduction to Commercial Property Management	Provides an overview of the commercial property management industry. Covers the key aspects of commercial property management, including compliance requirements, financial considerations, and ethical practices. Includes application of commercial property management knowledge and skills in a variety of settings such as medical, office, mixed-used, industrial,	Prerequisites: An Arizona real estate license, or completion of MCCCDC's CCL Real Estate: Prelicense (5139N) or its equivalent, or a real estate license from another state, or completion of pre licensure coursework from another approved	LEC 2.0 2.0 2.0
REA260	Real Estate Broker Pre-Licensing	Advanced study of the real estate industry in Arizona which focuses on the duties and responsibilities of a real estate broker. Designed to meet Arizona Department of Real Estate (ADRE) requirements to take	Prerequisites: Permission of Instructor.	LEC 6.0 6.0 6.0
REA261	Broker Management	Exploration of Real Estate Broker topics. Provides an in-depth study of Arizona statutes, rules, policies and	Prerequisites: Permission of Instructor.	LEC 0.5 0.5 0.5
REA270	Basic Appraisal Principles	Overview of real property concepts and characteristics, legal considerations, value influences, real estate finance, types of value, economic principles, real estate markets and analysis, and ethics in appraisal practice	Prerequisites: None.	LEC 2.0 2.0 2.0
REA271	Basic Appraisal Procedures	Overview of real estate appraisal approaches to valuation procedures, value, property description, residential applications, commercial applications, improvement construction, home inspection, and appraisal math. Practical application of appraisal	Prerequisites: A grade of C or better in REA270 or permission of Instructor.	LEC 2.0 2.0 2.0
REA272	Uniform Standards of Professional Appraisal Practice (USPAP)	Basic rules for ethical behavior and competent performance. USPAP requirements for state certified appraisers. Highlights role of the appraiser and implied impartiality of this role. Requirements of the Uniform Standards of Professional Appraisal Practice (USPAP)	Prerequisites: None.	LEC 1.0 2.0 1.7
REA273	Residential Market Analysis Highest and Best Use	Recognize and evaluate market conditions affecting the buyers' and sellers' activities in understanding and reporting values. Gather and evaluate market data. Markets, sub-markets, market segmentation, supply side analysis, demand analysis and the importance of	Prerequisites: None.	LEC 1.0 1.0 1.0
REA274	Residential Appraiser Site Valuation and Cost Approach	Learn theories and methodologies for arriving at residential site values and applying the Cost Approach for new and reproduction factors. The advantages and disadvantages of using the cost methods for estimating accrued depreciation. Reading of residential building	Prerequisites: None.	LEC 1.0 1.0 1.0

REA275	Residential Sales Comparison and Income Approaches	Basic understanding and knowledge of the residential sales comparison and income approaches to appraisal including valuation principles and procedures applicable to these approaches. Development of market analysis, including the application and use of matched pairs and capitalization rates, and gross rent multipliers. Includes	Prerequisites: None.	LEC 2.0 2.0 2.0
REA276AA	Residential Report Writing and Case Studies I	Exposes appraiser to realistic writing skills essential to producing realistic appraisal reports in their practice. Includes study of writing techniques, grammar, punctuation, and analytical techniques. Actual report	Prerequisites: None.	LEC 1.0 1.0 1.0
REA280AA	Appraiser Practicum I	Application of appraisal theory and methodology through real-world simulations to help students meet the minimum experience requirements to take the Appraisal Qualification Board (AQB)-approved Licensed Residential Real Property Appraiser examination or its equivalent. Appraisal practice under the direct	Prerequisites: A grade of C or better in REA150, REA270, REA271, REA272, REA273, REA274, REA275, and REA276AA.	LEC 6.0 15.0 0.0
REA280AB	Appraiser Practicum II	Application of appraisal theory and methodology through real-world simulations to help students meet the minimum experience requirements to take the Appraisal Qualification Board (AQB)-approved Licensed Residential Real Property Appraiser examination or its equivalent. Appraisal practice under the direct	Prerequisites: A grade of C or better in REA280AA.	LEC 6.0 15.0 0.0
REA281	Principles of Real Estate Law	Incidents of ownership and use of real estate, legal principles, procedures, and methods of acquisition and disposition of real estate	Prerequisites: A grade of C or better in REA179 or permission of Department or Division.	LEC 3.0 3.0 3.0
REA282	Real Estate Finance	Study of lending institutions, including banks, savings and loans, conventional loans, Federal Housing Administration (FHA), Veterans Administration (VA) for	Prerequisites: A grade of C or better in REA179 or permission of Instructor.	LEC 3.0 3.0 3.0
REA283	Property Management	Emphasizes realty laws, survey of rentals, housing needs, and rents in Phoenix metropolitan area	Prerequisites: A grade of C or better in REA179 or permission of	LEC 3.0 3.0 3.0
REA290AH	Real Estate Seminar: Contract Writing	Contract writing skills, techniques, and requirements. Writing of basic real estate contracts, including purchase offers, counter offers, sales listing	Prerequisites: None.	LEC 0.5 0.5 0.5
REC120	Leisure and the Quality of Life	Overview of the historical, psychological, social, and cultural aspects of play, leisure, and recreation and their role in contemporary society. Nature of play and leisure behavior in human development within different cultures and the contribution play, recreation, and leisure make	Prerequisites: None.	LEC 3.0 3.0 3.0

REC210	Leisure Delivery Systems	Systematic study of Delivery of Leisure Services in public, commercial, and independent sectors; particular emphasis placed on the urban setting.	Prerequisites: None.	LEC 3.0 3.0 3.0
REC230	Programming of Recreation Services	Foundations for designing, planning, delivering and managing recreational and leisure events. Emphasis on application of recreation programming concepts and practices in a variety of settings and situations for a	Prerequisites: None.	LEC 3.0 3.0 3.0
REC250	Recreation Leadership	An examination of roles and methods of leadership in leisure services settings. Overview of theories and models of leadership, group dynamics, participant motivation, communication, and face-to-face leadership. Exploration of leadership contexts, including coaching and officiating sports, leading community groups and volunteers, working with persons in various life stages	Prerequisites: None.	LEC 3.0 3.0 3.0
REL100	World Religions	The development of various religions from the prehistoric to modern times. Political, economic, social and geographic relationships among world religions.	Prerequisites: None.	LEC 3.0 3.0 3.0
REL101	Introduction to Religion	Various religious expressions of humankind. Focuses on basic religious themes common to religions, such as encounter with the Holy, search for self and community,	Prerequisites: None.	LEC 3.0 3.0 3.0
REL151	Religion in the Hispanic World	Survey of various religious traditions within Spain and the Spanish-settled world. Considers the impact of and impact on both major world religions and indigenous	Prerequisites: None.	LEC 3.0 3.0 3.0
REL200	Religion and Film	A course examining the relationships between religion and film, with particular attention to representations of religious beliefs, institutions, and practices in film and	Prerequisites: None.	LEC 3.0 3.0 3.0
REL202	Classics of Asian Religions	Academic study of selected works from Hindu, Buddhist, Taoist and Confucian traditions. Study of cultural and concepts of the world, history, culture, and human	Prerequisites: None.	LEC 3.0 3.0 3.0
REL203	American Indian Religions	An examination of the historical and cultural background of diverse lifeways and worldviews belonging to the peoples indigenous to the North American continent over time, including a study of	Prerequisites: A grade of C or better in ENG101, or ENG107, or equivalent.	LEC 3.0 3.0 3.0
REL205	Religion and the Modern World	Introduction to the nature and role of religious beliefs and practices in shaping the lives of individuals and societies, with particular attention to the modern world	Prerequisites: A grade of C or better in ENG101 or ENG107 or equivalent.	LEC 3.0 3.0 3.0

REL206	Religion in America	Introduction of the rich tapestry of religious traditions and movements that have helped to shape the United States of America. Investigate how religion has impacted American culture and institutions, and how the United States has in turn transformed long-standing	Prerequisites: None.	LEC 3.0 3.0 3.0
REL207	Ritual, Symbol, and Myth	Introduction to the academic study of religion through the study of myths, symbols, and rituals. Includes methods and theories used by scholars to study the complex subject of religion. Attention to literate and	Prerequisites: A grade of C or better in ENG101 or ENG107 or permission of Department or Division.	LEC 3.0 3.0 3.0
REL212	Introduction to Islam	Introduction to History, scriptures, practices and impact	Prerequisites: None.	LEC 3.0 3.0 3.0
REL218	Religion and Culture	Examination of the relationship between religion and culture, with a particular emphasis on how culture influences religion and how religion influences culture	Prerequisites: None.	LEC 3.0 3.0 3.0
REL244	Philosophy of Religion	Philosophical investigation of the relation of faith and reason, religious language, the existence and nature of God, the problem of evil, and alternatives to the	Prerequisites: None.	LEC 3.0 3.0 3.0
REL248	Religion, Peace and Violence	Exploration of the understandings and attitudes toward peace, war and violence in religious traditions from the pre-historical to the present. Includes consideration of a variety of religious scripture traditions, theological and philosophical reflections, and religious symbolism.	Prerequisites: A grade of C or better in ENG101, or ENG107, or permission of Instructor.	LEC 3.0 3.0 3.0
REL250	Religion in Ireland: Neolithic to Early Medieval	Survey of the Ancient religious traditions of Ireland. Students investigate the beliefs and practices of Irish Religions in the context of their social, economical and political systems from the late Neolithic to the early	Prerequisites: None.	LEC 3.0 3.0 3.0
REL270	Introduction to Christianity	The nature and content of the Christian tradition developed over time, with overview of the New Testament, major historical trends and figures, major Christian ideas and practices, and survey of	Prerequisites: None.	LEC 3.0 3.0 3.0
REL271	Introduction to the New Testament	Focuses on the origins, development, and selection of the New Testament (NT) books in the Christian religion. Includes authorship, historical reliability, translation and transmission over the centuries, and investigative techniques used by modern scholars. Also considers the varieties of literature contained in the NT, its portrayal of the status of women, and the influence of	Prerequisites: None.	LEC 3.0 3.0 3.0

REL282AA	Service Learning Experience in Religious Studies	Service learning field experience within private/public agencies, and citizen volunteer groups.	Prerequisites: A grade of C or better in REL100 or permission of Instructor.	LAB 1.0 1.0 0.0
REL282AC	Service Learning Experience in Religious Studies	Service learning field experience within private/public agencies, and citizen volunteer groups.	Prerequisites: A grade of C or better in REL100 or permission of Instructor.	LAB 3.0 3.0 0.0
REL290	Women and World Religions	Focus on the role of women in several organized religions and/or religious sects. Study of myth and symbols as they are used to establish, maintain, and enforce sex-roles within specific cultural contexts around	Prerequisites: None.	LEC 3.0 3.0 3.0
REL291	Religion and Sexuality	Exploration of the perspectives of various religious traditions on human sexuality. Includes consideration of all aspects of sexual practice as well as its incorporation into religious discourse and practice and its impact on	Prerequisites: None.	LEC 3.0 3.0 3.0
REL296WA	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 1.0 5.0 0.0
RES109	CPR for Health Care Provider	Current American Heart Association standards for one and two rescuer cardiopulmonary resuscitation (CPR) and obstructed airway procedures on the adult, infant, and pediatric victim. Use of automatic, external	Prerequisites: None.	LEC 0.5 0.5 0.5
RES118	Vascular Access for Clinical Practice	Scope of practice and regulations governing vascular access. Anatomy and physiology of the vascular system. Occupational Safety and Health Administration (OSHA) guidelines. Theory and practice of vascular	Prerequisites: None. Corequisites: RES130 or permission of the Program Director.	L+L 1.0 1.5 1.5

RES130	Respiratory Care Fundamentals I	Review of existing clinical data and recommendations. Data required to determine appropriateness of prescribed respiratory care plan. Administration of basic respiratory care therapeutics to include medical gas administration, oxygen therapy administration, and humidity/aerosol therapy administration. Use and maintenance of select respiratory equipment. Use of communication skills during interactions with members of	Prerequisites: Admission into the Respiratory Care program.	LEC 4.5 3.0 3.0 LAB 0.0 5.0 5.0
RES131	Infection Control for Respiratory Care	Techniques and procedures used by Respiratory Therapist to clean and sterilize equipment and environments, and prevent the transmission of nosocomial and other healthcare related infections.	Prerequisites: Admission into the Respiratory Care program or admission into the Polysomnographic Technology program.	LEC 1.0 1.0 1.0
RES133	Respiratory Care Clinical Seminar	Clinical application of concurrent respiratory care course work with emphasis on professionalism, medical record evaluation, communication, universal precaution, infection control, patient safety, patient assessment, age related care, cultural competence, routine hospital regulations, patient education and introduction to	Prerequisites: Admission into the Respiratory Care program.	LEC 2.0 2.0 2.0
RES134	Respiratory Care Pharmacology I	Pharmacologic principles related to the treatment of acute and chronic pulmonary diseases. Information on mucokinetics, anti-inflammatory, antiasthmatic and anti-infective agents to include mechanism of action, general drug information, side effects, and respiratory	Prerequisites: Admission into the Respiratory Care program or permission of the Program Director.	LEC 2.0 2.0 2.0
RES136	Applied Biophysics for Respiratory Care	Physical principles specific to ventilation. Laws of physics and their relationship to the respiratory system and the application of respiratory care equipment. Role of respiratory care during specific diagnostic	Prerequisites: Admission into the Respiratory Care program.	LEC 3.0 3.0 3.0
RES140	Respiratory Care Fundamentals II	Continuation of basic respiratory care procedures to include patient assessment and monitoring, chest physiotherapy techniques and pulmonary rehabilitation. Hyperinflation therapy, airway management and introduction to mechanical ventilation. Equipment operation, quality assurance and maintenance. Use of communications skills during interactions with health	Prerequisites: Admission into the Respiratory Care program.	LEC 5.0 3.0 3.0 LAB 0.0 6.0 6.0

RES142	Respiratory Care Clinical I	Clinical application of concurrent respiratory care course work with emphasis on professionalism, medical record evaluation and performance of oxygen therapy, aerosol therapy, chest physiotherapy techniques, hyperinflation therapy, airway management devices and techniques,	Prerequisites: Admission into the Respiratory Care program.	LAB 4.0 27.0 0.0
RES144	Introduction to Mechanical Ventilation	Introduction to mechanical ventilation including, technology, impact of the use of technology on patient physiology, and how it affects the oxygenation and	Prerequisites: Admission into the Respiratory Care program.	LEC 1.0 1.0 1.0
RES220	Respiratory Care Fundamentals III	Advanced respiratory care therapy and assessment techniques to include ventilator setup and management. Diagnostic testing specific to assessment of oxygenation and ventilation and specific respiratory	Prerequisites: Admission into the Respiratory Care program.	LEC 4.5 3.0 3.0 LAB 0.0 5.0 5.0
RES222	Cardiopulmonary Resuscitation	Standards of the American Heart Association for Basic Life Support. Procedures and skills for teaching	Prerequisites: Health care provider CPR card.	L+L 1.0 1.0 1.0
RES224	Pathophysiology for Respiratory Care	Causes of disease and their impact on the human body. Common physiologic effects of disease on body systems. Role of the respiratory therapist and the members of a multidisciplinary health care team in the diagnosis and treatment of disease. Cultural	Prerequisites: Admission into the Respiratory Care program.	LEC 2.0 2.0 2.0
RES226	Respiratory Care Clinical II	Clinical application of all prerequisite respiratory care course work with emphasis on adult critical care and neonatal/pediatric care. Basic and critical care therapeutics, advanced patient assessment and monitoring. Assisting physician during special procedures. Increased responsibility for total patient	Prerequisites: Admission into the Respiratory Care program.	LAB 4.0 27.0 0.0
RES230	Respiratory Care Fundamentals IV	Advanced respiratory care therapy and assessment techniques to include advanced modes of ventilation, hemodynamic monitoring, performance and interpretation of pulmonary function testing. Assisting physicians during special procedures. Development of advanced respiratory care plans and clinical research techniques. Equipment operation, quality assurance, and maintenance. Use of effective communication skills	Prerequisites: Admission into the Respiratory Care program.	LEC 4.5 3.0 3.0 LAB 0.0 5.0 5.0
RES232	Respiratory Care Clinical III	The study and scientific inquiry of issues and demands placed on business enterprise by owners, customers, government, employees and society. Included are social, ethical and public issues and analysis of the	Prerequisites: None.	LAB 4.0 27.0 0.0

RES235	Respiratory Care Pharmacology II	Pharmacologic principles specific to the care of the respiratory patient in the acute care environment to include the following agents: cardiac, renal, blood pressure, antithrombotic, neuromuscular, anesthetic, sedative, and analgesics. Utilization of evidence-based	Prerequisites: Admission into the Respiratory Care program or permission of the Program Director.	LEC 2.0 2.0 2.0
RES240	Respiratory Physiology	Physiology of the respiratory, cardiovascular and renal systems as related to oxygenation and ventilation of the human body. Physiologic mechanisms of breathing. Role of capillary circulation in fluid regulation. Impact of respiratory care procedures on the organ systems.	Prerequisites: Admission into the Respiratory Care program.	LEC 3.0 3.0 3.0
RES270	Neonatal and Pediatric Respiratory Care	Neonatal and pediatric respiratory care to include development, anatomical and physiological differences, assessment, basic respiratory care procedures, mechanical ventilation and common disorders and	Prerequisites: Admission into the Respiratory Care program or permission of the Program Director.	LEC 2.0 2.0 2.0
RES278	Vascular Access Review	Scope of practice and regulations governing venipuncture and maintenance of vascular devices specific to the vascular access board certification credentialing examination. Anatomy and physiology of the vascular system. Administration and discontinuation of vascular devices based on best practice guidelines. The use of communication skills for different patient	Prerequisites: Current license in a medical profession or permission of the Program Director.	LEC 2.0 2.0 2.0
RES280	Respiratory Care Review	Data interpretation, equipment operation and therapeutic procedures specified for the National Board for Respiratory Care (NBRC) Registered Respiratory Therapist (RRT) examination. Quality control and therapeutic procedures. Pharmacologic agents and	Prerequisites: Admission into the Respiratory Care program or permission of the Program Director.	LEC 2.0 2.0 2.0
RES291	Respiratory Care Advanced Life Support	Airway management for the adult, patient. Endotracheal and suctioning procedures. Usage of specific medications for cardiovascular emergencies. Interpretation of electrocardiogram (ECG) dysrhythmias. Performance of defibrillation and synchronized cardioversion in simulated situations. Procedure to be followed during cardiovascular collapse. Special resuscitation techniques for adult, patients. Current	Prerequisites: Admission into the Respiratory Care program or permission of the Program Director.	LEC 1.0 1.0 1.0

RES292	Respiratory Care Pediatric Advanced Life Support	Airway management for the pediatric patient. Endotracheal and suctioning procedures. Usage of specific medications for cardiovascular emergencies. Interpretation of electrocardiograms (ECG) dysrhythmias. Performance of defibrillation and synchronized cardioversion in simulated situations. Procedure followed during cardiovascular collapse in the pediatric patient. Special resuscitation techniques	Prerequisites: Admission into the Respiratory Care program or permission from the Program Director.	LEC 1.0 1.0 1.0
RES297	Respiratory Care Seminar	Presentation of case scenarios of various patient type and disease processes. Application of general principles of respiratory care to arrive at clinical	Prerequisites: Admission into the Respiratory Care program or permission of the Program Director.	LEC 2.0 2.0 2.0
RES298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
RES298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
RES298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
RPM125	Youth Development Programming	Key principles of positive youth development. Skills to become effective youth development professionals and successfully develop positive youth development programs with a focus on behavior management,	Prerequisites: None.	L+L 2.0 3.0 3.0

RPM132	Landscape Management	Identification of plants commonly used in Arizona landscaping. Includes trees, shrubs, vines, flowers, and ground covers. Techniques for planting, watering, and fertilizing recreational grounds. Pest control planning.	Prerequisites: None.	L+L 2.0 3.0 3.0
RPM135	Managing Community Recreation Organizations	Effectively manage community recreation organizations focusing on the principles of community development, organizational leadership, evaluation and research methodologies, and justice, equity, diversity, and	Prerequisites: None.	L+L 2.0 3.0 3.0
RPM140	Wilderness First Aid	Patient assessment system, including how to provide effective first aid treatment for common injuries and illnesses in remote outdoor settings, and how to make appropriate evacuation decisions. Cardio-Pulmonary Resuscitation (CPR) and Automated External	Prerequisites: None.	L+L 2.0 3.0 3.0
RPM145	Interpretation for Recreation	Foundational competencies of interpretation for recreational activities. Definition of effective interpretation, the skills of interpretation, the purpose of interpretation, and how to provide high quality	Prerequisites: None.	L+L 2.0 3.0 3.0
RPM150AA	Outdoor Adventure Skills Field Experience	Practical application of camping and outdoor skills including camping, equipment selection and use, cooking, fire building, camp programs, backpacking,	Prerequisites: None.	LAB 1.0 2.0 0.0
RPM150AB	Outdoor Adventure Skills	Camping and outdoor skills including types of camping, equipment selection and use, cooking and fire building, camp programs, backpacking, and safety.	Prerequisites: None.	LEC 3.0 3.0 3.0
RPM155AA	Canyoneering	Basic canyoneering skills. Includes hydrology, navigation, safety systems, climbing and hiking skills, wading/swimming techniques and flood/weather	Prerequisites: None.	L+L 1.0 2.0 2.0
RPM155AB	Caving	Basic caving skills. Includes cave ecology, navigation, safety systems, lighting systems and equipment	Prerequisites: None.	L+L 1.0 2.0 2.0
RPM155AC	Outdoor Rock Climbing	Basic outdoor rock climbing skills. Includes belaying, climbing techniques, rope systems and anchor systems.	Prerequisites: None.	L+L 1.0 2.0 2.0
RPM155AD	Rowing	Basic rowing skills for a four or eight person shell. Includes physical conditioning, rowing etiquette and safety, boat handling, proper rowing techniques, and	Prerequisites: None.	L+L 1.0 2.0 2.0
RPM155AE	Indoor Rock Climbing	Basic indoor rock climbing skills. Includes belaying, climbing techniques, rope systems, anchor systems and	Prerequisites: None.	L+L 1.0 2.0 2.0
RPM155AF	Backpacking	Covers basic skills and techniques of backpacking and the application of these to wilderness travel.	Prerequisites: None.	L+L 1.0 2.0 2.0

RPM155AG	Hiking	Development of safe and enjoyable hiking skills. Essentials and requirements for safe hiking.	Prerequisites: None.	L+L 1.0 2.0 2.0
RPM155AJ	Outdoor Survival	Introduction to and practice of essential skills needed for procuring shelter, water and fire in a wilderness	Prerequisites: None.	L+L 1.0 2.0 2.0
RPM155AK	Leave No Trace Trainer Certification	Emphasis on seven (7) Leave No Trace principles. Skills needed to effectively teach and demonstrate minimum impact techniques and outdoor ethics.	Prerequisites: None.	L+L 1.0 2.0 2.0
RPM240	Wilderness First Responder	Introduces and provides practical training in the essentials of medical assistance in backcountry emergencies. Includes patient assessment, first aid for trauma victims, and treatment of other medical	Prerequisites: None.	L+L 3.0 6.0 6.0
RPM271AC	Recreational Resources and Facilities Management	Work experience in a recreational resources and facilities setting. Fifteen (15) hours of work weekly. Supervision and evaluation by internship coordinator.	Prerequisites: Permission of Department or Division.	LAB 3.0 15.0 0.0
RPM282AA	Volunteerism for Recreation: A Service Learning Experience	Service learning field experience within private/public agencies, educational institution, and citizen volunteer groups.	Prerequisites: Permission of Instructor.	LAB 1.0 1.0 0.0
RPM282AB	Volunteerism for Recreation: A Service Learning Experience	Service learning field experience within private/public agencies, educational institution, and citizen volunteer groups.	Prerequisites: Permission of Instructor.	LAB 2.0 2.0 0.0
RPM282AC	Volunteerism for Recreation: A Service Learning Experience	Service learning field experience within private/public agencies, educational institution, and citizen volunteer groups.	Prerequisites: Permission of Instructor.	LAB 3.0 3.0 0.0
RPM296WA	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify) or permission of instructor. Corequisites: Must be concurrent in at least one class which is related to student's major or career interest or with	LAB 1.0 5.0 0.0

RPM296WB	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify) or permission of instructor. Corequisites: Must be concurrent in at least one class which is related to student's major or career interest or with	LAB 2.0 10.0 0.0
RPM296WC	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify) or permission of instructor. Corequisites: Must be concurrent in at least one class which is related to student's major or career interest or with	LAB 3.0 15.0 0.0
RPM296WD	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify) or permission of instructor. Corequisites: Must be concurrent in at least one class which is related to student's major or career interest or with	LAB 4.0 20.0 0.0
RPM298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0

RPM298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
RPM298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
RUS101	Elementary Russian I	Basic grammar, pronunciation, and vocabulary of the Russian language. Practice of listening, speaking,	Prerequisites: None.	LEC 4.0 4.0 4.0
RUS102	Elementary Russian II	Continued study of grammar and vocabulary, with emphasis on speaking, reading, and writing skills.	Prerequisites: A grade of C or better in RUS101 or permission of Department or Division. Completion of prerequisites within the last three	LEC 4.0 4.0 4.0
RUS201	Intermediate Russian	A continuation of RUS102. Review of essential grammar and continued practice and development of reading, writing, and speaking skills.	Prerequisites: A grade of C or better in RUS102 or permission of Department or Division. Completion of prerequisites within the last three	LEC 4.0 4.0 4.0
RUS202	Intermediate Russian	Continued development of Russian language skills.	Prerequisites: A grade of C or better in RUS201 or permission of Department or Division. Completion of prerequisites within the last three	LEC 4.0 4.0 4.0
SBS200	Small Business Operations	In-depth analysis of and individual plan development for the "day-to-day" problems encountered in the operation of a small business. Includes the development of an individual business operations plan including finance, purchasing, production scheduling, maintenance, shipping/receiving, personnel management and insurance/risk management requirements. Investigation	Prerequisites: None.	LEC 2.0 2.0 2.0

SBS202	Small Business Bookkeeping and Tax Preparation	Introduces accounting and record-keeping with emphasis on practical use of financial data for the successful management of a small business. Develops an understanding of the accounting cycle and preparation of financial statements. Includes section on tax consequences and preparation for small business	Prerequisites: None.	LEC 1.0 1.0 1.0
SBS203	Financing and Cash Management For a Small Business	Planning for and meeting the financial needs of the small business including cash flow planning, identification of financial needs and sources, equity and debt financing, and preparation of loan packages. Participants complete a financial plan for their individual company, with emphasis on cost controls, sales revenue projection, expense allocation, and inventory	Prerequisites: None.	LEC 1.0 1.0 1.0
SBS204	Small Business Marketing and Advertising	Introduction to marketing and advertising strategies and methods including business image, target market analysis, and customer buying behavior profile. Analysis and selection of advertising/business promotion methods and timing. Methods of deciding product and market segment focus included. Design of an individual	Prerequisites: None.	LEC 2.0 2.0 2.0
SBS213	Hiring and Managing Employees	Methods and techniques for managing employees in a small business. Includes supervisor's role, leadership styles, interpersonal communications, staff planning, employee work styles, techniques for handling problem employees, and employee motivation. Focuses on real life situations to enable the business owner to gain high performance from their employee team. Includes segment on hiring, new employee orientation, training,	Prerequisites: None.	LEC 1.0 1.0 1.0
SBS214	Small Business Customer Relations	Developing and improving customer relations for the small business. Planning and delivering quality customer service. Includes topics on attitude of employees, customer perceptions and motivations, handling customer dissatisfaction, and developing	Prerequisites: None.	LEC 1.0 1.0 1.0
SBS216	Planning for a Small Business	Relates business management issues to a specific small business through development of an individual study plan. Provides on-site review of business operation by	Prerequisites: A grade of C or better in (SBS200 and SBS204) or SBS220 or permission of Instructor.	LEC 2.0 2.0 2.0

SBS217	Starting/Managing a Home Business	Analysis of the successful operation of a home-based business. Includes study of economic feasibility, practicality, and adjustments for the family. Analysis of the advantages/disadvantages of operating a home based business, versus a "store-front" business. Review of current trends in home business opportunities and franchises. Descriptions of home businesses that have	Prerequisites: None.	LEC 1.0 1.0 1.0
SBS220	Internet Marketing for Small Business	Focuses on "e-Commerce"-doing business on the Internet and planning a web site. Topics include: how the Internet can help growth and success of business; examples of successful marketing on the Internet; availability of Internet services; necessary hardware and software for marketing on the Internet; determining products/services appropriate for Internet marketing;	Prerequisites: None.	LEC 2.0 2.0 2.0
SBS221	Social Media Marketing for Small Business	Focuses on use of Social Media for Small Businesses and Entrepreneurs. Topics include: Use of Social Media, types of Social Media, how Social Media can help growth and success of business; examples of successful Social Media marketing, setting up and deploying various types of Social Media. Options for hardware and software for Social Media, determining products/services appropriate for Social Media,	Prerequisites: None.	LEC 2.0 2.0 2.0
SBS230	Financial and Tax Management for Small Business	An overview of accounting and record-keeping for the successful management of a small business. Develops an understanding of the accounting cycle and preparation of financial statements. Includes section on tax consequences and the choice of legal entity choice	Prerequisites: None.	LEC 2.0 2.0 2.0
SBS290AA	Developing a Practical Small Business Plan	Practical techniques for developing, writing, and implementing a business plan. Designed for the small	Prerequisites: None.	LEC 0.5 0.5 0.5
SBS298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0

SBS298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
SBS298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
SBU200	Society and Business	The study and scientific inquiry of issues and demands placed on business enterprise by owners, customers, government, employees and society. Included are social, ethical and public issues and analysis of the	Prerequisites: None.	LEC 3.0 3.0 3.0
SCT100	Introduction to Sustainable Built Environments	Study of the built environment and implications on human health, the natural environment, and society. Understanding of strategies that achieve sustainable design. Exploration of positive and negative sustainable product attributes. Emphasis on Leadership in Energy	Prerequisites: None.	LEC 3.0 3.0 3.0
SEM104AA	Secondary Basic Emergency Medical Technology: Patient Assessment	Techniques of emergency medical care in accordance with national and state curriculum. Study of patient assessment.	Prerequisites: Current enrollment in the Phoenix Union High School District Current CPR (Cardiopulmonary Resuscitation) certification from the American Heart Association American Red Cross or other equivalent organization at the Healthcare Provider level meeting the American Heart Association Guidelines 2002 Proof of TB testing	L+L 0.5 0.75 0.75
SEM104AB	Secondary Basic Emergency Medical Technology: Basic Life Support and Airway Management	Techniques of emergency medical care in accordance with national and state curriculum. Study of the use of mechanical aids for breathing and circulation, administration of oxygen, and techniques of basic life support (BLS)	Prerequisites: Current enrollment in the Phoenix Union High School District and SEM104AA with a grade of C or better.	L+L 0.5 0.75 0.75

SEM104AC	Secondary Basic Emergency Medical Technology: Soft Tissue and Environmental	Techniques of emergency medical care in accordance with national and state curriculum. Study of soft tissue and environmental injuries	Prerequisites: Current enrollment in the Phoenix Union High School District and SEM104AB with a grade of C or better.	LEC 0.5 0.5 0.5
SEM104AD	Secondary Basic Emergency Medical Technology: Head, Brain, Neck, and	Techniques of emergency medical care in accordance with national and state curriculum. Study of injuries to the head, brain, neck, and spine.	Prerequisites: Current enrollment in the Phoenix Union High School District and SEM104AC with a grade of C or better.	L+L 0.5 0.75 0.75
SEM104AE	Secondary Basic Emergency Medical Technology: Shock	Techniques of emergency medical care in accordance with national and state curriculum. Study of shock, hypotension, and hypoperfusion	Prerequisites: Current enrollment in the Phoenix Union High School District and SEM104AD with a grade of C or better.	LEC 0.5 0.5 0.5
SEM104AF	Secondary Basic Emergency Medical Technology: Head ,Chest, and Abdomen	Techniques of emergency medical care in accordance with national and state curriculum. Study of injuries to head, chest, abdomen, genitalia, and acute abdominal disorders	Prerequisites: Current enrollment in the Phoenix Union High School District and SEM104AE with a grade of C or better.	LEC 0.5 0.5 0.5
SEM104AG	Secondary Basic Emergency Medical Technology: Medical- Legal	Techniques of emergency medical care in accordance with national and state curriculum. Includes the role and scope of the duties and practice of the Basic Emergency Medical Technician. Includes standard of care, consents, and associated statutes, rules, and	Prerequisites: Current enrollment in the Phoenix Union High School District and SEM104AF with a grade of C or better.	LEC 0.5 0.5 0.5
SEM104AH	Secondary Basic Emergency Medical Technology: Pediatrics	Techniques of emergency medical care in accordance with national and state curriculum. Study of the human body from birth to 12 years of age. Includes pediatric patient assessment, treatment of medically or traumatically compromised patients, special hazards	Prerequisites: Current enrollment in the Phoenix Union High School District and SEM104AG with a grade of C or better.	L+L 0.5 1.0 1.0
SEM104AI	Secondary Basic Emergency Medical Technology: Respiratory, Behavioral,	Techniques of emergency medical care in accordance with national and state curriculum. Study of acute and chronic respiratory emergencies, behavioral and environmental emergencies, and diabetic states	Prerequisites: Current enrollment in the Phoenix Union High School District and SEM104AH with a grade of C or better.	L+L 0.5 1.0 1.0
SEM104AJ	Secondary Basic Emergency Medical Technology: Gynecologic or Obstetrical	Techniques of emergency medical care in accordance with national and state curriculum. Study of gynecologic and obstetrical emergencies	Prerequisites: Currently enrolled in the Phoenix Union High School District and SEM104AI with a grade of C or better.	L+L 0.5 1.0 1.0

SEM104AK	Secondary Basic Emergency Medical Technology: Musculoskeletal Extremity Injuries	Techniques of emergency medical care in accordance with national and state curriculum. Study of techniques for stabilization and splinting of musculoskeletal injuries in extremities, including participation in two eight-hour clinical rotations through a local emergency department or an ambulance agency scheduled during the	Prerequisites: Current enrollment in the Phoenix Union High School District and SEM104AJ with a grade of C or better.	L+L 0.5 1.0 1.0
SEM104AL	Secondary Basic Emergency Medical Technology: Patient Movement and Ambulance Equipment	Techniques of emergency medical care in accordance with national and state curriculum. Study of techniques for lifting, moving, or positioning a patient, and use of ambulance/rescue vehicle equipment	Prerequisites: Current enrollment in the Phoenix Union High School District and SEM104AK with a grade of C or better.	L+L 0.5 1.0 1.0
SEM104AM	Secondary Basic Emergency Medical Technology: Triage Management	Techniques of emergency medical care in accordance with national and state curriculum. Study of techniques for triage and disaster management in simulated situations	Prerequisites: Current enrollment in the Phoenix Union High School District and SEM104AL with a grade of C or better.	L+L 0.5 0.75 0.75
SEM104AN	Secondary Basic Emergency Medical Technology: Intravenous Fluids	Techniques of emergency medical care in accordance with national and state curriculum. Study of techniques for assessing a patient with intravenous (IV) fluids	Prerequisites: Current enrollment in the Phoenix Union High School District and SEM104AM with a grade of C or better.	L+L 0.25 0.5 0.5
SEM104AO	Secondary Basic Emergency Medical Technology: Evaluations	Techniques of emergency medical care in accordance with national and state curriculum. Includes final written and practical evaluations according to the National Registry of EMTs (NREMT) and Arizona Rules and	Prerequisites: Current enrollment in the Phoenix Union High School District and SEM104AN with a grade of C or better.	L+L 0.5 1.0 1.0
SEM106	Secondary Vehicular Extrication and Patient Stabilization	Participative course designed to enhance the knowledge base of the Emergency Medical Technician (EMT) and to incorporate new knowledge and skills necessary to access, extricate, and care for victims of crash incidents. Provides exposure to scene management skills, including size-up, disentanglement, victim stabilization for single- and multi-victim situations, hazardous materials incidents, integration of local emergency medical services (EMS) for patient	Prerequisites: Current enrollment in the Phoenix Union High School District and (a grade of C or better in SEM104AO or permission of instructor).	L+L 1.0 2.5 2.5
SEM108	Secondary Trauma Patient Management	Provides exposure to victim assessment, initial treatment, resuscitative techniques, victim stabilization, victim transportation to an emergency care facility, and	Prerequisites: Current enrollment in the Phoenix Union High School District and SEM104AO with a grade	L+L 0.5 2.0 2.0

SFS101AA	Secondary Introduction to Fire Service Selection: Application Process	Overview of the application and selection processes used by various fire departments and fire service organizations. Identification of the job qualifications and requirements used by various fire departments and fire	Prerequisites: Current enrollment in the Phoenix Union High School District.	LEC 0.5 0.5 0.5
SFS101AB	Secondary Introduction to Fire Service Selection: Selection Process and	Major components of written application processes, requirements, preparation of resumes, and their effect on employment prospects	Prerequisites: Current enrollment in the Phoenix Union High School District and SFS101AA with a grade of C or better.	LEC 1.0 1.0 1.0
SFS101AC	Secondary Introduction to Fire Service Selection: Interview Process	Preparation for the interview to include communications skills, mental preparation techniques, behaviors, and the importance of the interview in the pre-employment process. Role of the applicant and interviewer in the	Prerequisites: Current enrollment in the Phoenix Union High School District and SFS101AB with a grade of C or better.	LEC 1.0 1.0 1.0
SFS101AD	Secondary Introduction to Fire Service Selection: Fire Station	Elements of fire service culture and their effects on personal growth and interpersonal relationships. Preparation for on-site experiences at a fire station	Prerequisites: Current enrollment in the Phoenix Union High School District and SFS101AC with a grade of C or better.	L+L 0.5 1.0 1.0
SFS101AE	Secondary Introduction to Fire Service Selection:	General components of the selection process, the importance of general education, and components of lifelong learning in career choices	Prerequisites: Current enrollment in the Phoenix Union High School District and SFS101AD with a grade	LEC 0.5 0.5 0.5
SFS102AA	Secondary Fire Department Operations: Organization and	Introductory fire science course designed primarily for the potential fire department recruit. Includes fire department organization and dispatch.	Prerequisites: Currently enrolled in the Phoenix Union High School District.	LEC 0.25 0.25 0.25
SFS102AB	Secondary Fire Department Operations: Fire Behavior and Classes	Introductory fire science course designed primarily for the potential fire department recruit. Includes fire behavior, phases of fire, classes of fire, and fire control methods	Prerequisites: Currently enrolled in the Phoenix Union High School District and SFS102AA with a grade of C or better.	LEC 0.5 0.5 0.5
SFS102AC	Secondary Fire Department Operations: Fireground and	Introductory fire science course designed primarily for the potential fire department recruit. Includes firefighter safety on the fireground and in the fire station	Prerequisites: Currently enrolled in the Phoenix Union High School District and SFS102AB with a grade of C or better.	L+L 0.25 0.5 0.5
SFS102AD	Secondary Fire Department Operations: Self-Contained Breathing	Introductory fire science course designed primarily for the potential fire department recruit. Includes self-contained breathing apparatus (SCBA)	Prerequisites: Currently enrolled in the Phoenix Union High School District and SFS102AC with a grade of C or better.	L+L 0.25 0.5 0.5

SFS102AE	Secondary Fire Department Operations: Ropes, Knots, and Hitches	Introductory fire science course designed primarily for the potential fire department recruit. Includes ropes, knots, and hitches.	Prerequisites: Currently enrolled in the Phoenix Union High School District and SFS102AD with a grade of C or better.	L+L 0.25 0.5 0.5
SFS102AF	Secondary Fire Department Operations: Water	Introductory fire science course designed primarily for the potential fire department recruit. Includes water supply and use of foam	Prerequisites: Currently enrolled in the Phoenix Union High School District and SFS102AE with a grade	L+L 0.25 0.5 0.5
SFS102AG	Secondary Fire Department Operations: Fire	Introductory fire science course designed primarily for the potential fire department recruit. Includes fire apparatus	Prerequisites: Currently enrolled in the Phoenix Union High School District and SFS102AF with a grade	L+L 0.25 0.5 0.5
SFS102AH	Secondary Fire Department Operations: Hoses	Introductory fire science course designed primarily for the potential fire department recruit. Includes standard hose rolls, carries, and evolutions	Prerequisites: Currently enrolled in the Phoenix Union High School District and SFS102AG with a grade	L+L 0.5 2.0 2.0
SFS102AI	Secondary Fire Department Operations: Hand	Introductory fire science course designed primarily for the potential fire department recruit. Includes standard hand ladder evolutions	Prerequisites: Currently enrolled in the Phoenix Union High School District and SFS102AH with a grade	L+L 0.25 0.5 0.5
SFS102AJ	Secondary Fire Department Operations: Power	Introductory fire science course designed primarily for the potential fire department recruit. Includes power tools.	Prerequisites: Currently enrolled in the Phoenix Union High School District and SFS102AI with a grade	L+L 0.5 0.75 0.75
SFS102AK	Secondary Fire Department Operations: Building	Introductory fire science course designed primarily for the potential fire department recruit. Includes building construction.	Prerequisites: Currently enrolled in the Phoenix Union High School District and SFS102AJ with a grade	L+L 0.25 0.5 0.5
SFS102AL	Secondary Fire Department Operations: Forcible	Introductory fire science course designed primarily for the potential fire department recruit. Includes forcible entry	Prerequisites: Currently enrolled in the Phoenix Union High School District and SFS102AK with a grade	L+L 0.5 1.0 1.0
SFS102AM	Secondary Fire Department Operations: Search	Introductory fire science course designed primarily for the potential fire department recruit. Includes search and rescue techniques	Prerequisites: Currently enrolled in the Phoenix Union High School District and SFS102AL with a grade	L+L 0.5 1.0 1.0
SFS102AN	Secondary Fire Department Operations: Ventilation	Introductory fire science course designed primarily for the potential fire department recruit. Includes structure ventilation	Prerequisites: Currently enrolled in the Phoenix Union High School District and SFS102AM with a grade	L+L 0.5 1.0 1.0
SFS102AO	Secondary Fire Department Operations: Salvage	Introductory fire science course designed primarily for the potential fire department recruit. Includes salvage and overhaul.	Prerequisites: Currently enrolled in the Phoenix Union High School District and SFS102AN with a grade	L+L 0.25 1.0 1.0
SFS102AP	Secondary Fire Department Operations: Electrical	Introductory fire science course designed primarily for the potential fire department recruit. Includes electrical hazards.	Prerequisites: Currently enrolled in the Phoenix Union High School District and SFS102AO with a grade	L+L 0.25 0.5 0.5

SFS102AQ	Secondary Fire Department Operations:	Introductory fire science course designed primarily for the potential fire department recruit. Includes radiological hazards	Prerequisites: Currently enrolled in the Phoenix Union High School District and SFS102AP with a grade	L+L 0.25 0.5 0.5
SFS102AR	Secondary Fire Department Operations: Special	Introductory fire science course designed primarily for the potential fire department recruit. Includes special emergencies	Prerequisites: Currently enrolled in the Phoenix Union High School District and SFS102AQ with a grade	L+L 0.5 1.0 1.0
SFS102AS	Secondary Fire Department Operations: Physical and Mental Fitness	Introductory fire science course designed primarily for the potential fire department recruit. Includes physical and mental fitness	Prerequisites: Currently enrolled in the Phoenix Union High School District and SFS102AR with a grade of C or better.	LEC 0.5 0.5 0.5
SFS102AT	Secondary Fire Department Operations: Prevention and	Introductory fire science course designed primarily for the potential fire department recruit. Includes prevention and investigation.	Prerequisites: Currently enrolled in the Phoenix Union High School District and a grade of C or better in SFS102AS.	LEC 0.5 0.5 0.5
SFS102AU	Secondary Fire Department Operations: Code	Introductory fire science course designed primarily for the potential fire department recruit. Includes code violation	Prerequisites: Currently enrolled in the Phoenix Union High School District and SFS102AT with a grade	LEC 0.25 0.25 0.25
SFS102AV	Secondary Fire Department Operations: Incident Organization and	Introductory fire science course designed primarily for the potential fire department recruit. Includes incident organization and communication	Prerequisites: Currently enrolled in the Phoenix Union High School District and SFS102AU with a grade of C or better.	LEC 0.5 0.5 0.5
SFS102AW	Secondary Fire Department Operations: Tactical	Introductory fire science course designed primarily for the potential fire department recruit. Includes tactical priorities	Prerequisites: Currently enrolled in the Phoenix Union High School District and SFS102AV with a grade	LEC 1.0 1.0 1.0
SFS102AX	Secondary Fire Department Operations: Structural	Introductory fire science course designed primarily for the potential fire department recruit. Includes operations applied to structural fires	Prerequisites: Currently enrolled in the Phoenix Union High School District and SFS102AW with a grade	L+L 0.5 1.0 1.0
SFS102AY	Secondary Fire Department Operations:	Introductory fire science course designed primarily for the potential fire department recruit. Includes final written evaluation and International Fire Service	Prerequisites: Currently enrolled in the Phoenix Union High School District and SFS102AX with a grade	L+L 0.25 1.0 1.0
SFS134AA	Secondary Fitness and Conditioning for Firefighters: Physical Requirements	Overview of firefighters' physical fitness, nutrition, and protective clothing.	Prerequisites: Current enrollment in the Phoenix Union High School District.	LEC 0.5 0.5 0.5

SGT100	Fundamentals of Surgical Services	Preparation for the Certified Registered Central Service Technician (CRCST) role. Central Service work flow, job responsibilities, growth and development in the field, anatomy and physiology, microbiology for Central Service regulations and standards, infection prevention and control, tools for cleaning, decontamination, cleaning and decontamination, disinfection, sterile packaging and storage, processing, sterilization, management of patient care equipment, tracking	Prerequisites: Admission into the Hospital Central Service Technology or Surgical Technology program or permission of the Program Director.	LEC 5.0 3.0 3.0 LAB 0.0 6.0 6.0
SGT101	Medical Terminology for Surgical Services	Medical Terminology for patient care in surgery related areas. Use of word parts, term spelling, pronunciation and abbreviations related to all surgical specialties.	Prerequisites: None. Corequisites: HCS/SGT100. Xref: HCS100	LEC 1.0 1.0 1.0
SGT102	Basic Surgical Instrumentation for Surgical Services	History, construction and assembly of surgical instrumentation, categories, instrument set assembly, soft tissue foundation sets, general surgery instrumentation sets.	Prerequisites: Admission into the Hospital Central Service Technology or Surgical Technology program or permission of the Program Director.	LEC 2.0 1.0 1.0 LAB 0.0 3.0 3.0
SGT107	Equipment and Supplies for Surgical Services	Introduction to the surgical equipment and supplies used in surgical services areas.	Prerequisites: Admission into the Hospital Central Service Technology or Surgical Technology program or permission of the Program Director.	L+L 1.0 1.0 1.0
SGT135	Instrument Handling I	Classification of surgical instruments for general surgery including basic laparoscopy, appendectomy, breast procedures, cholecystectomy, colon resection, gastrectomy, hemorrhoidectomy, herniorrhaphy, laparoscopic Nissen fundoplication, liver resection, splenectomy, thyroidectomy, Whipple procedure. Common and proper names for instruments in general surgery. Introduction to aseptic technique for handling	Prerequisites: None. Corequisites: HCS/SGT102 or permission of Program Director. Xref: HCS102	L+L 3.0 4.0 4.0
SGT152	Advanced Surgical Instruments for Surgical Services	Surgical specialty instrumentation care and assembly of instruments to include plastic, gynecologic, urologic, basic bone and joint, head and neck, neurosurgery, cardiovascular and thoracic, microscopic, endoscopes,	Prerequisites: A grade of C or better in HCS/SGT102. Xref: HCS102	LEC 2.0 1.0 1.0 LAB 0.0 3.0 3.0

SGT155	Instrument Handling II	Classification of specialized surgical instruments for surgical specialties including obstetric and gynecological procedures, genitourinary, otorhinolaryngology, orthopedic, oral and maxillofacial, plastic and reconstructive, ophthalmic, cardiothoracic, peripheral vascular, and neurosurgery. Common and proper names for instruments in the surgical specialties.	Prerequisites: A grade of C or better in SGT135.	L+L 1.0 2.0 2.0
SGT156	Hospital Central Service Practicum for Surgical Technology	Short-term supervised student observation and application for 40 hours of central service theory and laboratory skills. Exposure to limited compilation of case carts, building of instrument trays, distribution of supplies, sterilization and inventory.	Prerequisites: A grade of C or better in HCS/SGT102 or permission of Program Director. Corequisites: HCS/SGT152 or permission of Instructor. Xref: HCS102 HCS152	LAB 0.5 1.5 0.0
SGT165	Surgical Procedures I	General Surgery arena procedures. Pre-operative procedures to include patient's charts and consent forms. Common diagnostic procedures prior to surgery. Operating room admission procedures and interview, charting, and checklist. Purpose of the post anesthesia care unit (PACU). Impact of specific chronic illnesses on body functions. Issues pertaining to death and dying.	Prerequisites: A grade of C or better in SGT135.	LEC 4.0 2.0 2.0 LAB 0.0 6.0 6.0
SGT180	Pharmacology for Surgical Technology I	Role of surgical technologist in safe handling of drugs according to operating room policies and procedures. Uses and classification of drugs. Federal and state pharmacy regulations applicable to the surgical patient. Complications and safety issues during topical, local, regional, and general anesthesia. Antibiotic, diagnostic agent, and hemostatic agent administration in the	Prerequisites: A grade of C or better in SGT135.	L+L 2.0 3.0 3.0
SGT200	Operating Room Practicum I	Roles and responsibilities of operating room personnel focusing on the surgical technician under the direction of the clinical facility preceptor demonstrating the role of the surgical technologist and scope of practice and	Prerequisites: A grade of C or better in SGT165.	LAB 1.0 6.0 0.0
SGT205	Operating Room Practicum II	Reinforcement and broadening of knowledge and skills of the surgical technologist required for pre-operative, intra-operative and post-operative care of the patient undergoing general surgery and specialties.	Prerequisites: A grade of C or better in SGT200.	LAB 2.0 12.0 0.0

SGT210	Surgical Procedures II	General surgical procedures to include ophthalmic, plastic surgery, reconstruction with grafting, obstetric, gynecological, genitourinary, otorhinolaryngology, oral and maxilla facial surgery with lasers and scopes. Surgical techniques as applied to major body systems, anatomical structures. Related abbreviations and usage in the pre-operative, intra-operative and post-operative areas of surgical technology. Surgical care provided by	Prerequisites: A grade of C or better in SGT165.	LEC 4.0 2.0 2.0 LAB 0.0 6.0 6.0
SGT220	Operating Room Practicum III	Intermediate level reinforcement and broadening of knowledge and skills of the surgical technologist required for pre-operative, intra-operative and post-operative care of the patient undergoing general	Prerequisites: A grade of C or better in SGT205.	LAB 3.0 15.0 0.0
SGT225	Operating Room Practicum IV	Advanced level reinforcement and broadening of knowledge and skills of the surgical technologist required for pre-operative, intra-operative and post-operative care of the patient undergoing general	Prerequisites: A grade of C or better in SGT220.	LAB 3.0 15.0 0.0
SGT227	Operating Room Practicum V	Continued advanced level reinforcement and broadening of knowledge and skills of the surgical technologist required for pre-operative, intra-operative and post-operative care of the patient undergoing	Prerequisites: A grade of C or better in SGT225.	LAB 3.0 15.0 0.0
SGT230	Surgical Technology Materials Update	Current surgical technology materials. Surgical specialty modifications, introductions, technology. Specific uses, handling, application to surgical procedures.	Prerequisites: Currently enrolled in Surgical Technology or Surgical Technology for the Operating Room Nurse program, or Certified Surgical Technologist, or permission of	LEC 2.0 2.0 2.0 LAB 1.0 3.0 3.0
SGT260	Surgical Procedures III	Specialized surgical procedures of orthopedic, peripheral vascular, cardiovascular, thoracic, and neurosurgery to include open and minimally invasive, including a range of techniques, interventional radiology, robot assisted, lasers, and scopes. Surgical techniques as applied to major body systems, anatomical structures. Related abbreviations and usage in the pre-operative, intra-operative, and post-operative	Prerequisites: A grade of C or better in SGT210.	LEC 2.0 1.0 1.0 LAB 0.0 3.0 3.0
SGT275	Certification Examinations Preparation	Preparation for the National Surgical Technology Certification Examination. Review of the content specifications, techniques for preparation and review of current literature determined by the Liaison Council on Certification for Surgical Technologists. Exploration of	Prerequisites: A grade of C or better in SGT210 or permission of the Program Director.	L+L 2.0 3.0 3.0

SGT298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment are made available for student use. Allows the best aspects of independent study and individualized learning to be	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
SGT298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment are made available for student use. Allows the best aspects of independent study and individualized learning to be	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
SGT298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment are made available for student use. Allows the best aspects of independent study and individualized learning to be	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
SLC201	Introduction to Linguistics	Introduction to the study of language. Study of the nature and diversity of world languages, linguistic structures and functions of language, language variation, pragmatics and the learning/acquisition of first	Prerequisites: None.	LEC 3.0 3.0 3.0
SLC202	Introduction to Literary and Cultural Theory	Introduction to the study of literary and cultural theory. Interdisciplinary approaches to analyzing literary texts for context, meaning and form. Assessment of various literary genres which may include fiction, film, visual arts	Prerequisites: A grade of C or better in ENG101 or ENG107. Corequisites: ENG102 or ENG108.	LEC 3.0 3.0 3.0
SLP104	Speech, Language, and Hearing Development	Provides an overview of the normal development of human communication. Emphasis on normative processes involved in speech, language, and hearing development. Examines the impact of multicultural, multi-linguistic environments on speech and language	Prerequisites: None.	LEC 3.0 3.0 3.0

SLP205	Introduction to Communication Disorders	Explore a variety of communication disorders in children and adults that speech-language pathologists diagnose and treat. Provides an introduction to typical versus disordered communication, the causes, characteristics of a variety of speech, language, hearing, and swallowing disorders, and the effects that they can	Prerequisites: None.	LEC 3.0 3.0 3.0
SLP210	Speech and Hearing Anatomy and Physiology	Provides a review of the anatomical systems of respiration, phonation, articulation and resonance and hearing and their relationship to pathologies of speech, language and hearing. Includes basic physiology of systems and the neuroanatomy and neurophysiology related to speech and hearing production mechanisms. Examines the physical characteristics of sound and the	Prerequisites: None.	LEC 3.0 3.0 3.0
SLP212	Language Disorders and Rehabilitation	Examines the nature, causes and treatment of language disorders across the lifespan. Focuses on developmental and acquired language disorders in childhood through adulthood. Includes	Prerequisites: None.	LEC 3.0 3.0 3.0
SLP214	Speech Sound Disorders and Phonetics	Provides an overview of English phonetics and phonetic transcription including practice with transcription of normal and disordered speech at the entry-level using the International Phonetic Alphabet (IPA). Examines the nature, causes, characteristics and treatment of a variety of speech sound disorders across the lifespan including phonological processes/disorders, articulation, dysarthria, apraxia, and other organic disorders.	Prerequisites: None.	LEC 3.0 3.0 3.0
SLP215	Speech, Language, Hearing Disorders and Rehabilitation	Examines the nature, causes, and treatment of a variety of speech, language, hearing disorders. Focuses on fluency, voice, hearing, and swallowing/feeding disorders. Expands on language disorders in adolescents and young adults including	Prerequisites: None.	LEC 3.0 3.0 3.0
SLP217	Clinical Ethics and Documentation	Examines issues associated with professional and ethical behaviors, including the Speech Language Pathology Assistant (SLPA) scope of practice as specified by state and national governing bodies for the profession. Focuses on indirect activities related to client treatment including creation of lessons, implementation of treatment, and documentation. Includes an overview of universal safety precautions,	Prerequisites: None.	LEC 3.0 3.0 3.0

SLP218	Behavior Management	Examines a variety of behavior principles, strategies and techniques used with individuals with communication disorders. Focuses on setting up a positive learning environment, increasing motivation and attention, and using Positive Behavioral Interventions	Prerequisites: None.	LEC 3.0 3.0 3.0
SLP235AA	Speech-Language Pathology Practicum	Practical experience in completing clinical fieldwork as a Speech Language Pathology Assistant (SLPA). Provides opportunity to create lesson plans, implement therapy, record client performance and maintain appropriate documentation for a variety of speech-language disorders in a therapeutic environment. A	Prerequisites: None.	L+L 1.0 1.0 0.0
SLP235AB	Speech-Language Pathology Practicum	Practical experience in completing clinical fieldwork as a Speech Language Pathology Assistant (SLPA). Provides opportunity to create lesson plans, implement therapy, record client performance and maintain appropriate documentation for a variety of speech-language disorders in a therapeutic environment. A	Prerequisites: None.	L+L 2.0 2.0 0.0
SLP240	Assistive Technology and Augmentative Communication	Examines the use of Assistive Technology (AT) and Augmentative Alternative Communication (AAC) systems within various environments to support functional interaction with individuals with disabilities. Focuses on a variety of guiding principles, strategies, accommodations, modifications, computer hardware and software as well as low-tech and high-tech AT and AAC systems. Provides guidelines for need	Prerequisites: None.	LEC 3.0 3.0 3.0
SLP242	Low Incidence Disabilities	Examines disabilities with a focus on treatment techniques for low incidence disabilities. Focuses on blindness, deafness, moderate to severe intellectual disability, complex health issues, serious motor and physical impairment, multiple disabilities, genetic syndromes, moderate to severe autism, and social	Prerequisites: None.	LEC 3.0 3.0 3.0

SLP296WA	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 1.0 5.0 0.0
SLP296WB	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 2.0 10.0 0.0
SLP296WC	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 3.0 15.0 0.0

SLP296WD	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 4.0 20.0 0.0
SLP298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
SLP298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
SLP298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
SOC101	Introduction to Sociology	The systematic study of social behavior and human groups, particularly the influence of culture, socialization, social structure, stratification, social institutions, differentiation by region, race, ethnicity, sex/gender, age, class, and socio/cultural change upon	Prerequisites: None.	LEC 3.0 3.0 3.0

SOC105	Introduction to American Indian Studies	Introduction to political, economic, and social structures of American Indian Nations. Provides overview of American Indian tribal cultures prior to contact, the impact of European contact, and the influence of	Prerequisites: None.	LEC 3.0 3.0 3.0
SOC110	Drugs and Society	Provides an introduction to the sociological study of legal and illicit drugs, including their use, misuse, abuse, dependency, and addiction. Examines the history and classification of drug use. Reviews theories and research relating to the causes and consequences of drug use and drug culture. Explores the demographics, patterns and cultural determinants of drug use to understand the individual, group and societal impact of	Prerequisites: None.	LEC 3.0 3.0 3.0
SOC112	American Indian Policy	Reviews United States government policies and their impact on American Indian sovereignty. Examines historic, legal, economic, and social issues regarding Indian policies and how they impact Indian Nations and individual Indians. Studies historical as well as contemporary policies created by the Federal Government that define the trust relationship between	Prerequisites: None.	LEC 3.0 3.0 3.0
SOC130	Human Sexuality	Sociological study of human sexuality. Course examines the social forces that shape a culture's sexual practices, attitudes, and inequalities. Topics include the social construction of sexuality, social change, sexual identities, sexual inequalities, institutional influence and regulation of sexuality, as well as current trends and	Prerequisites: None.	LEC 3.0 3.0 3.0
SOC141	Sovereign Indian Nations	Explores the sovereign status of American Indians as it relates to social relationships, traditions, and culture of American Indians. Reviews historic relations with non-Indian societies, the development of federal Indian law, tribal governments and their functions. Examines treaty rights, environmental issues, public policy, economic	Prerequisites: None.	LEC 3.0 3.0 3.0
SOC143	Sociology of African American Problems	Social, economic, political and domestic problems encountered by African Americans in typical urban environments. Emphasis on the specific dynamics of adjustment, survival and empowerment of urban African	Prerequisites: None.	LEC 3.0 3.0 3.0

SOC157	Sociology of Families and Relationships	Systemic analysis of socio-cultural and historical origins of modern families in the U.S. and their importance, major challenges and changing trends. Explores being single, dating and attraction, love, cohabitation and marriage, family planning and parenthood, conflict and	Prerequisites: None.	LEC 3.0 3.0 3.0
SOC160	American Indian Law	Analyzes the legal system of the United States Government as it applies to American Indian Nations. Examines how United States legal institutions have impacted Indian sovereignty. Units of analysis include the development of Indian law, United States Supreme Court decisions, Congressional Acts, treaty rights and the development of tribal governments. Focuses on	Prerequisites: None.	LEC 3.0 3.0 3.0
SOC180	Social Implications of Technology	Exploration of the transformative power of technology on society, focusing on historical roots, cultural impact, and future implications. Engagement with critical concerns and opportunities that technology presents in shaping human connections, societal structures, and	Prerequisites: None.	LEC 3.0 3.0 3.0
SOC212	Gender and Society	A sociological exploration of the way culture shapes and defines gender in contemporary U.S. society. Major emphasis on gender roles, gender stereotypes, power and the relationship between gender and other intersecting social identities such as race, ethnicity,	Prerequisites: None.	LEC 3.0 3.0 3.0
SOC220	Sport and Society	Applies the sociological perspective to the study of sport. Emphasizes how hierarchies of race, class, and gender in the United States impact the sport experience of fans, athletes, and athletic administrators, as well as how professional, collegiate, and amateur sports have	Prerequisites: None.	LEC 3.0 3.0 3.0
SOC241	Race and Ethnic Relations	Examines how the social construction of race shapes social interaction and social institutions. Explores the consequences of power, privilege and oppression among major ethnic and racial groups in the United	Prerequisites: None.	LEC 3.0 3.0 3.0
SOC245	Social Deviance	This course explores the social construction of deviance and deviant behavior, with an emphasis on the connections between deviant behavior, societal reactions, and social control. Various forms of deviant behavior, theoretical perspectives, concepts, and methods used by sociologists to describe and explain	Prerequisites: None.	LEC 3.0 3.0 3.0

SOC251	Social Problems	An overview of the sociological study of social problems and inequalities confronting the United States. Emphasis is placed on what is known about social problems, recent trends, causes and consequences, individual and societal responses, and how social policies might solve social problems. Issues to be examined may include: health care, education, family,	Prerequisites: None.	LEC 3.0 3.0 3.0
SOC253	Social Class and Stratification	Focus on social class structure in American society with emphasis on the socio-economic factors, public policy, and individual life chances due to ascribed and	Prerequisites: None.	LEC 3.0 3.0 3.0
SOC265	Sociology of Aging	A sociological examination of aging, using theoretical perspectives, historical contexts, and contemporary trends to explain the influences of various social institutions and social factors such as race, ethnicity,	Prerequisites: None.	LEC 3.0 3.0 3.0
SOC266	Sociology Through Film	Examines movie-going and the experience of spectatorship. Studies how motion pictures reflect, influence, and are influenced by American culture and societal institutions. Explores the role of the movie	Prerequisites: None.	LEC 3.0 3.0 3.0
SOC270	The Sociology of Health and Illness	The scientific study of the social patterns and social factors (e.g., class, race, gender, religion, ethnicity, kinship networks, marriage, educational status, age, place, and cultural practices) that influence health. The roles of health care providers and patients, various modalities of treatment, prevention and access, and the history, current status, future trends in medicine and medical technology, and complementary health care	Prerequisites: None.	LEC 3.0 3.0 3.0
SOC282AA	Service-Learning Experience in	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: A grade of C or better in SOC101 and permission of	LAB 1.0 1.0 0.0
SOC282AB	Service-Learning Experience in	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: A grade of C or better in SOC101 and permission of	LAB 2.0 2.0 0.0
SOC282AC	Service-Learning Experience in	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: A grade of C or better in SOC101 and permission of	LAB 3.0 3.0 0.0

SOC296WA	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify) or permission of instructor. Corequisites: Must be concurrent in at least one class which is related to student's major or career interest or with	LAB 1.0 5.0 0.0
SOC296WB	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify) or permission of instructor. Corequisites: Must be concurrent in at least one class which is related to student's major or career interest or with	LAB 2.0 10.0 0.0
SOC296WC	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify) or permission of instructor. Corequisites: Must be concurrent in at least one class which is related to student's major or career interest or with	LAB 3.0 15.0 0.0

SOC296WD	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify) or permission of instructor. Corequisites: Must be concurrent in at least one class which is related to student's major or career interest or with	LAB 4.0 20.0 0.0
SOC298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
SOC298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
SOC298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
SPA055	Fundamentals of Spanish Grammar	Introduces basic concepts of Spanish pronunciation and grammar for successful study of the language. Emphasis on grammar, sentence structure, and practice	Prerequisites: None.	LEC 1.0 1.0 1.0
SPA085AA	Speedy Spanish I	Basic vocabulary and grammar to develop conversational skills in Spanish. Emphasis on speaking	Prerequisites: None.	LEC 1.0 1.0 1.0

SPA085AB	Speedy Spanish II	Intermediate development of vocabulary and grammar to develop conversational skills in Spanish. Emphasis on speaking skills.	Prerequisites: A grade of C or better in SPA085AA. Completion of prerequisites within the last three	LEC 1.0 1.0 1.0
SPA101	Elementary Spanish I	Basic grammar, pronunciation and vocabulary of the Spanish language. Includes the study of the Spanish-speaking cultures. Practice of listening, speaking,	Prerequisites: None.	LEC 4.0 4.0 4.0
SPA102	Elementary Spanish II	Continued study of grammar and vocabulary of the Spanish language and study of the Spanish-speaking cultures. Emphasis on speaking, reading, and writing skills.	Prerequisites: A grade of C or better in SPA101 or permission of Department or Division. Completion of prerequisites within the last three	LEC 4.0 4.0 4.0
SPA103	Elementary Spanish for Spanish Speakers I	Review of basic Spanish grammar and pronunciation. Emphasis on reading and writing skills in Spanish. For native speakers needing review of essential language	Prerequisites: Spanish-speaking or permission of Department or Division.	LEC 4.0 4.0 4.0
SPA104	Elementary Spanish for Spanish Speakers II	Continued review of grammatical problems in speaking and writing and reading in Spanish.	Prerequisites: A grade of C or better in SPA103 or permission of Department or Division. Completion of prerequisites within the last three	LEC 4.0 4.0 4.0
SPA109	Law Enforcement Spanish I	Conversational and written Spanish for law enforcement personnel. Emphasis on basic sentence structure, pronunciation and vocabulary used in common job-	Prerequisites: None.	LEC 3.0 3.0 3.0
SPA111	Fundamentals of Spanish	Accelerated study of elementary Spanish for students with previous Spanish coursework. Includes basic Spanish grammar, pronunciation, vocabulary and the study of the Spanish- speaking cultures. Emphasis on speaking, listening, reading, and writing skills.	Prerequisites: A grade of C or better in SPA101 or SPA115 or two years of high school Spanish or permission of Department or Division. Completion of prerequisites within the last three years is required.	LEC 4.0 4.0 4.0
SPA115	Beginning Spanish Conversation I	Basic pronunciation, vocabulary, sentence structures, and cultural awareness, necessary to develop speaking and listening skills in Spanish	Prerequisites: None.	LEC 3.0 3.0 3.0
SPA116	Beginning Spanish Conversation II	Continued study of basic pronunciation, vocabulary, sentence structures, and a cultural awareness necessary to develop speaking and listening skills in Spanish.	Prerequisites: A grade of C or better in SPA115 or permission of Department or Division. Completion of prerequisites within the last three	LEC 3.0 3.0 3.0
SPA117	Health Care Spanish I	Basic conversational Spanish for health care workers or students. Emphasis on basic sentence structure, pronunciation and vocabulary used in health care	Prerequisites: None.	LEC 3.0 3.0 3.0

SPA118	Health Care Spanish II	Basic conversational Spanish for health care personnel or students. Emphasis on basic sentence structure, pronunciation, and vocabulary used in health care settings.	Prerequisites: A grade of C or better in SPA117 or permission of Department or Division. Completion of prerequisites within the last three	LEC 3.0 3.0 3.0
SPA119	Spanish for Educational Settings I	Basic conversational Spanish for teachers, counselors, administrators and other school personnel. Emphasis on basic sentence structure, pronunciation and	Prerequisites: None.	LEC 3.0 3.0 3.0
SPA120	Spanish for Educational Settings II	Basic conversational Spanish for teachers, counselors, administrators and other school personnel. Continuation of SPA119, expanding into secondary and post-secondary educational settings. Emphasis on basic	Prerequisites: A grade of C or better in SPA119 or permission of Department or Division. Completion of prerequisites within the last three	LEC 3.0 3.0 3.0
SPA130	Spanish for First Responders and 911 Emergencies	Beginning conversational Spanish for first responders and 911 emergency personnel. Emphasis on basic sentence structure, pronunciation, vocabulary, and cultural awareness necessary to develop Spanish speaking and listening skills in medical and non-medical	Prerequisites: None.	LEC 3.0 3.0 3.0
SPA201	Intermediate Spanish I	Continued study of essential Spanish grammar and Spanish-speaking cultures. Continued practice and development of reading, writing, and speaking skills in Spanish. Emphasis on fluency and accuracy in spoken Spanish.	Prerequisites: A grade of C or better in SPA102 or SPA111 or permission of Department or Division. Completion of prerequisites within the last three years is required.	LEC 4.0 4.0 4.0
SPA202	Intermediate Spanish II	Review of grammar, continued development of Spanish language skills with continued study of the Spanish-speaking cultures.	Prerequisites: A grade of C or better in SPA201, or permission of Department or Division. Completion of prerequisites within the last three	LEC 4.0 4.0 4.0
SPA203	Spanish for Spanish-Speaking Students I	Designed for Spanish-speaking students. Emphasis on written composition, grammar review, punctuation and spelling, literature and conversation. May be taken in	Prerequisites: Permission of Instructor or Department Chair.	LEC 4.0 4.0 4.0
SPA204	Spanish for Spanish-Speaking Students II	Designed for Spanish-speaking students. Advanced study of Spanish grammar, composition, literature, and conversation.	Prerequisites: A grade of C or better in SPA203 or SPA201 or permission of Department or Division. Completion of prerequisites within the last three years is required.	LEC 4.0 4.0 4.0
SPA205	Spanish for Medical Interpretation I	Introduction to Spanish interpretation for medical interpreters. Covers code of ethics, national standards and medical interpreter's responsibilities as well as cultural awareness and legal issues. Interpretation for	Prerequisites: A grade of B or better in SPA202 or permission of Department or Division. Completion of prerequisites within the last three	LEC 3.0 3.0 3.0

SPA206	Spanish for Medical Interpretation II	Continuation of Spanish interpretation for medical interpreters. Medical vocabulary and translation relating to human anatomy and physiology emphasized.	Prerequisites: A grade of B or better in SPA205 or permission of Department or Division. Completion of prerequisites within the last three	LEC 3.0 3.0 3.0
SPA225	Intermediate Spanish Conversation I	Continued study of vocabulary, sentence structures, and cultural awareness necessary to improve speaking and listening skills in Spanish. Emphasis on fluency and accuracy in spoken Spanish.	Prerequisites: A grade of C or better in SPA102 or SPA116 or permission of Department or Division. Completion of prerequisites within the last three years is required.	LEC 3.0 3.0 3.0
SPA226	Intermediate Spanish Conversation II	Continued study of vocabulary, sentence structures, and cultural awareness necessary to improve speaking and listening skills in increasingly complex Spanish. Emphasis on fluency and moderate accuracy in spoken Spanish.	Prerequisites: A grade of C or better in SPA201 or SPA225 or permission of Department or Division. Completion of prerequisites within the last three years is required.	LEC 3.0 3.0 3.0
SPA235	Advanced Spanish Conversation I	Continued development of skills in conversational fluency. Class conducted completely in Spanish.	Prerequisites: A grade of C or better in SPA226 or permission of Department or Division. Completion of prerequisites within the last three	LEC 3.0 3.0 3.0
SPA236	Advanced Spanish Conversation II	Further development of skills in conversational fluency. Grammar presented only to clarify student errors.	Prerequisites: A grade of C or better in SPA235 or permission of Department or Division. Completion of prerequisites within the last three	LEC 3.0 3.0 3.0
SPA241	Spanish and Spanish-American Film I	Analysis of Spanish and Spanish-American film as art form and as social commentary. Includes documentary, biography, and films based on works of literature. All films, coursework, class participation, and oral and	Prerequisites: A grade of C or better in SPA202 or permission of Department or Division. Completion of prerequisites within the last three	LEC 3.0 3.0 3.0
SPA242	Spanish and Spanish-American Film II	Analysis and critique of movies presented in the Spanish language and produced by cinematographers from Bolivia, Paraguay, Venezuela, Ecuador, Puerto Rico, Costa Rica and the Mexican independent film producers. Includes documentary, biography, and works of literature and their film versions as art form and social	Prerequisites: A grade of C or better in SPA241 or permission of Department or Division. Completion of prerequisites within the last three years is required.	LEC 3.0 3.0 3.0
SPA251	Spanish Civilization	An introduction to Spanish civilization with a focus on the culture of Spain. History of Spain and each period's cultural manifestations, including economic, sociological, and political factors as well as cultural artifacts such as architecture, literature, visual arts, music, and	Prerequisites: Four years of high school Spanish or a grade of C or better in SPA202 or permission of Department or Division. Completion of prerequisites within the last three	LEC 3.0 3.0 3.0

SPA265	Advanced Spanish I	Introduction and study of Spanish and Spanish-American literature. Selected readings from most Spanish-speaking countries. All discussions, oral reports, and written assignments are in Spanish.	Prerequisites: A grade of C or better in SPA202 or permission of Department or Division. Completion of prerequisites within the last three	LEC 3.0 3.0 3.0
SPA266	Advanced Spanish II	Further study of Spanish and Spanish-American literature. Reading selections from most Spanish-speaking countries. All oral reports, discussions, and written reports in Spanish. Graduated level of difficulty	Prerequisites: A grade of C or better in SPA265 or permission of Department or Division. Completion of prerequisites within the last three	LEC 3.0 3.0 3.0
SPA282AA	Service-Learning Experience in Spanish	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 1.0 1.0 0.0
SPA282AC	Service-Learning Experience in Spanish	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 3.0 3.0 0.0
SPA298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
SPA298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
SPA298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0

SPE341	Special Education: Language Development and Disorders	Language development and language acquisition of typical children and children with disabilities. Includes language characteristics of children with a variety of disabilities and the creation of enhanced learning experiences in the classroom. Covers augmentative and alternative communication tools. Also compares	Prerequisites: Formal acceptance to a Maricopa Community College state approved teacher preparation program or permission of Department or Division.	LEC 2.0 2.0 2.0
SPE343	Special Education: Effective Collaboration and Communication Practices	Focuses on principles of effective collaboration, consultation, and co-teaching to improve programs, services, and outcomes for students with disabilities and their families. Topics include interpersonal communication strategies and collaboration tools for	Prerequisites: Formal acceptance to a Maricopa Community College state approved teacher preparation program or permission of Department or Division.	LEC 1.0 1.0 1.0
SPE376	Special Education: Classroom Management and Behavioral Analysis	Application of research-based strategies in classroom management and behavioral analysis. Focuses on the classroom as a multidimensional environment in which principles of design, communication, management, and resources determine behavioral management success. Emphasis on positive behavior supports, group dynamics, student motivation, discipline models, and	Prerequisites: Formal acceptance to a Maricopa Community College state approved teacher preparation program or permission of Department or Division. EDU221 recommended but not required.	LEC 3.0 3.0 3.0
SPE409	Special Education: Law, Policy, and Practice	Overview of special education legislation and litigation as it applies in K-12 settings. Examines federal and state level statutes and regulations, including the Individuals with Disabilities Education Act (IDEA), the Americans with Disabilities Act (ADA), Section 504 of the Rehabilitation Act of 1973. Covers regulations governing assessment and evaluation procedures, due process, mediation, manifestation determination, and disciplinary action. Emphasis on the development, implementation, and evaluation of individual education plans (IEPs), free appropriate public education (FAPE), and least restrictive environment (LRE). Focuses on	Prerequisites: Formal acceptance to a Maricopa Community College state approved teacher preparation program or permission of Department or Division. EDU222 recommended but not required.	LEC 3.0 3.0 3.0
SPE422	Special Education: Mild to Moderate Disabilities	Application of research-based instruction in special education, including lesson planning, instructional design, assessment accommodations, modification, strategies, and materials appropriate for teaching individuals with mild to moderate disabilities in a variety of educational settings. Covers characteristics,	Prerequisites: Formal acceptance to a Maricopa Community College state approved teacher preparation program or permission of Department or Division.	LEC 4.0 4.0 4.0

SPE424	Special Education: Assessment and Eligibility of Exceptional Learners	Examines eligibility criteria for students to receive and maintain special education and related services. Overviews nondiscriminatory assessments and adaptive behavior measurements, including educational achievement tests, standardized diagnostic tests, and intelligence tests, as well as the concepts, laws, current issues, and procedures that relate to formal and	Prerequisites: Formal acceptance to a Maricopa Community College undergraduate state approved teacher preparation program or permission of Department or Division.	LEC 4.0 4.0 4.0
SPE477	Student Teaching: Special Education (Mild to Moderate Disabilities)	Supervised student teacher practicum in a K-12 special education setting. Students are expected to demonstrate appropriate assessment strategies, develop lesson plans, implement instructional strategies, and utilize behavior management systems and programs. Emphasis on the provision of	Prerequisites: Formal acceptance to a Maricopa Community College state approved teacher preparation program or permission of Department or Division.	LAB 6.0 6.0 0.0
SPH241	Spanish and Latin American Film in Translation	A survey of Spanish and Spanish-American film as art form and as social commentary. Includes documentary, biography, and films based on works of literature. Coursework, class participation, and oral and written	Prerequisites: None.	LEC 3.0 3.0 3.0
SPH245	Hispanic Heritage in the Southwest	A survey of Hispanic heritage in the Southwest. Cultural and social institutions and their contribution to the development of the region and its heritage	Prerequisites: None.	LEC 3.0 3.0 3.0
SPH296WA	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify) or permission of instructor. Corequisites: Must be concurrent in at least one class which is related to student's major or career interest or with	LAB 1.0 5.0 0.0

SPH296WB	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify) or permission of instructor. Corequisites: Must be concurrent in at least one class which is related to student's major or career interest or with	LAB 2.0 10.0 0.0
SPH296WC	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify) or permission of instructor. Corequisites: Must be concurrent in at least one class which is related to student's major or career interest or with	LAB 3.0 15.0 0.0
SPH296WD	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify) or permission of instructor. Corequisites: Must be concurrent in at least one class which is related to student's major or career interest or with	LAB 4.0 20.0 0.0
SPH298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0

SPH298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
SPH298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
SPT150	Introduction to Sports Management	Introduction to the field of sports management, including sports marketing and sales, facility management, event management, professional sports, public relations, intercollegiate and interscholastic	Prerequisites: None.	LEC 3.0 3.0 3.0
SPT265	Theory of Coaching	Discusses the impact of sports on the American culture, legal liabilities of coaching, principles of a coaching philosophy, the role of teaching skill, physical conditioning and nutrition in coaching, components of team/group psychology and dynamics, motivation and	Prerequisites: None. SPT281 suggested but not required.	LEC 3.0 3.0 3.0
SPT265BA	Baseball Theory of Coaching	Reviews the principles, philosophy, strategies and theory of coaching baseball, as a competitive sport.	Prerequisites: None.	LEC 3.0 3.0 3.0
SPT265BB	Basketball Theory of Coaching	Reviews the principles, philosophy, strategies and theory of coaching basketball, as a competitive sport.	Prerequisites: None.	LEC 3.0 3.0 3.0
SPT265GO	Golf Theory of Coaching	Reviews the principles, philosophy, strategies and theory of coaching golf, as a competitive sport.	Prerequisites: None.	LEC 3.0 3.0 3.0
SPT265SB	Softball Theory of Coaching	Reviews the principles, philosophy, strategies and theory of coaching softball, as a competitive sport.	Prerequisites: None.	LEC 3.0 3.0 3.0
SPT271	Sports Medicine Foundations	Introduction to sports medicine knowledge, techniques, and careers. Exploration of current trends in athletic injury prevention, management and rehabilitation including wound care, taping, wrapping, bracing,	Prerequisites: None.	LEC 3.0 3.0 3.0
SPT273	Athletic Training: Advanced Wrapping and Taping	Expands and enhances practical uses of basic taping and wrapping skills. Hands-on experience in the use of braces, athletic taping, and elastic wraps to care for	Prerequisites: A grade of C or better in SPT271 or permission of Instructor.	LEC 2.0 2.0 2.0

SPT275	Rehabilitation and Therapeutic Interventions in Sports Medicine	Exploration of current trends in the basic and advanced methodologies used in the rehabilitation of athletic injuries. Incorporates demonstrations of injury-appropriate strength and fitness training and	Prerequisites: A grade of C or better in SPT271 or permission of Department or Division.	L+L 3.0 4.0 4.0
SPT281	Methods of Coaching	Comprehensive overview of the art and science of coaching, including development of coaching philosophy, techniques of sport pedagogy, practical application of sports skill teaching, sport physiology,	Prerequisites: None. PED265 suggested but not required.	LEC 3.0 3.0 3.0
SPT281BA	Baseball Methods of Coaching	Overview of the art and science of coaching baseball including: identifying various coaching styles, elements of effective communication, methods and techniques of	Prerequisites: None.	LEC 3.0 3.0 3.0
SPT281GO	Golf Methods of Coaching	Overview of the art and science of coaching golf including: identifying various coaching styles, elements of effective communication, methods and techniques of	Prerequisites: None.	LEC 3.0 3.0 3.0
SPT281SO	Soccer Methods of Coaching	Overview of the art and science of coaching soccer including: identifying various coaching styles, elements of effective communication, methods and techniques of	Prerequisites: None.	LEC 3.0 3.0 3.0
SSH111	Sustainable Cities	Introduction to the field of sustainability and exploration of the practices leading to the development of sustainable cities. Explores the concept of sustainable development of cities within local, regional, and global	Prerequisites: None.	LEC 3.0 3.0 3.0
SSH298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
SSH298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0

SSH298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
STO100AC	How to Tell Personal Stories	Introduction to the art of storytelling. Finding, crafting and telling personal stories in and out of class	Prerequisites: None.	LEC 1.0 1.0 1.0
STO101	Storytelling for Literacy	Introduction to the natural process from oral to written language and the role of storytelling in both. Focus will be on the development and sharing of oral and written	Prerequisites: None.	LEC 1.0 1.0 1.0
STO200AA	Biographical Storytelling	Exploration of the art and craft of finding, developing and telling biographical stories	Prerequisites: None.	LEC 1.0 1.0 1.0
STO202	Bilingual Storytelling	Introduction to bilingual storytelling as a genre. Research, develop, and craft bilingual stories. Find appropriate contexts and venues for telling. Assist in the integration and application of bilingual storytelling to	Prerequisites: None.	LEC 3.0 3.0 3.0
STO205	Establishing a Family Storytelling Tradition	Developing a family storytelling tradition. Finding, crafting, telling and preserving the stories of family members past and present, including the traditional stories associated with the family's cultural heritages.	Prerequisites: None.	LEC 3.0 3.0 3.0
STO273	The Biblical Storytelling Tradition	Introduction to the history and practice of biblical storytelling. Overview of the oral foundation of biblical texts and teachings. Utilization of exegesis to develop and adapt stories for modern audiences. Researching, developing, and crafting Bible stories for telling. Telling	Prerequisites: None.	LEC 3.0 3.0 3.0
STO279	Creating and Telling Fact-Based Historical	Creating and telling fact-based stories and stories from history.	Prerequisites: A grade of C or better in EDU/HUM/STO292. Xref: EDU292	LEC 3.0 3.0 3.0
STO282AC	Service-Learning Experience in	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 3.0 3.0 0.0
STO283	The African Storytelling Tradition	Introduction to the history and practice of storytelling in Africa. Overview of African myths, legends, folktales, parables, and fables. Great story tellers and story collectors of the past and present. Researching,	Prerequisites: None.	LEC 3.0 3.0 3.0
STO284	Storytelling and Music	Introduction to the role and importance of music in storytelling. Research, craft, and tell stories that include percussion, vocal, or instrumental elements.	Prerequisites: None.	LEC 3.0 3.0 3.0

STO285	Creating/Performing Solo/Collaborative	Developing, rehearsing, and performing solo and collaborative works for fringe festivals and other	Prerequisites: None.	LEC 3.0 3.0 3.0
STO286	Using Storytelling in a Variety of Settings	The application of storytelling and storytelling activities in the world of health care, business, parks, museums,	Prerequisites: None.	LEC 3.0 3.0 3.0
STO287	Norse and Scandinavian Storytelling Tradition	Overview of Norse and Scandinavian myths, legends, folktales. Impact of Norse and Scandinavian myth on popular culture. Researching, developing, and crafting Norse and Scandinavian stories for telling, game	Prerequisites: None.	LEC 3.0 3.0 3.0
STO288	Telling Sacred Stories from Around the World	Introduction to sacred stories as a genre. Researching, developing, and crafting traditional and personal sacred stories. Finding appropriate applications and venues for	Prerequisites: None.	LEC 3.0 3.0 3.0
STO289AA	Using Storytelling in Educational Settings	The application of storytelling and storytelling activities in educational settings.	Prerequisites: None.	LEC 1.0 1.0 1.0
STO289AB	Using Storytelling in Business Settings	The application of storytelling and storytelling activities in business settings	Prerequisites: None.	LEC 1.0 1.0 1.0
STO289AC	Using Storytelling in Healing Settings	The application of storytelling and storytelling activities in healing settings	Prerequisites: None.	LEC 1.0 1.0 1.0
STO289AD	Using Storytelling in Interpretive Settings	The application of storytelling and storytelling activities in interpretive settings including museums, gardens,	Prerequisites: None.	LEC 1.0 1.0 1.0
STO289AF	Using Storytelling in Family Settings	The application of storytelling and storytelling activities in family settings, such as family story nights, holidays, and reunions. Emphasis on finding and sharing family	Prerequisites: None.	LEC 1.0 1.0 1.0
STO289AG	Using Storytelling in Advocacy Settings	The application of storytelling and storytelling activities in contexts of advocacy and civic engagement. Focus on stories that reflect the goals and aims of a civic	Prerequisites: None.	LEC 1.0 1.0 1.0
STO290	The Irish Storytelling Tradition	Introduction to the history and practice of storytelling in Ireland. Overview of Irish myths, legends, folktales, and humorous tales. Great story tellers and story collectors of the past and present. Researching, developing, and	Prerequisites: None.	LEC 3.0 3.0 3.0
STO291AA	Storytelling Circle	Designed to provide opportunities for students to practice and develop critical listening and storytelling skills.	Prerequisites: A grade of C or better in EDU/HUM/STO292 or permission of Instructor. Xref: EDU292 HUM292	L+L 1.0 1.5 1.5
STO292	The Art of Storytelling	Explore the art and origin of storytelling. Provide a variety of storytelling techniques, styles and exercises to enhance the delivery of telling stories. Assist in the integration and application of storytelling to the learning	Prerequisites: None.	LEC 3.0 3.0 3.0

STO293	The Art of Storytelling II	Further exploration of the art of storytelling. Provide opportunities for the expansion of storytelling skills and a deeper appreciation of storytelling and its	Prerequisites: A grade of C or better in EDU/HUM/STO292. Xref: EDU292 HUM292	LEC 3.0 3.0 3.0
STO294	Multicultural Folktales	Study of multicultural folktales, exploring the impact of the oral tradition in American society and showing	Prerequisites: None.	LEC 3.0 3.0 3.0
STO295	Traditional Storytelling Around the World	Introduction to traditional storytelling practices around the world. Understanding the roles and techniques of traditional storytellers. Telling traditional stories ethically.	Prerequisites: None.	LEC 3.0 3.0 3.0
STO297	Creating and Telling Personal Stories	Exploration of the art and craft of finding, developing and telling personal stories.	Prerequisites: A grade of C or better in EDU/HUM/STO292. Xref: EDU292	LEC 3.0 3.0 3.0
STO298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
STO298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
STO298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
SUN101	Basic Math for Carpenters	Mathematical concepts and operations for the carpentry trade. Addition, subtraction, multiplication and division of whole, decimal, fractional and metric numbers. Linear, angular, circular, surface and volume	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	LEC 2.0 2.0 2.0
SUN104	Site Preparation I	Trade terms, local zoning and building ordinances, and plot plan layout. Installation of batter boards and establishing building lines. Set up and use of a builder's level.	Prerequisites: (Registered apprentice status and a grade of C or better in SUN101) or permission of the Apprenticeship Coordinator.	LEC 1.0 1.0 1.0

SUN105	Reading Plans and Elevations	Construction drawings, lines, symbols, dimensions and abbreviations. Specifications and site and plot plan development. Includes plan and elevation reading exercises.	Prerequisites: (Registered apprentice status and a grade of C or better in ABC123) or permission of the Apprenticeship Coordinator.	LEC 2.0 2.0 2.0
SUN108	Wall Systems, Tilt-Up	History and evolution of tilt-up construction processes. Tilt- up versus concrete block or poured in place concrete walls. Testing of concrete and preparation of the slab for tilt-up. Grading and finishing concrete slabs	Prerequisites: (Registered apprentice status and a grade of C or better in SUN103) or permission of the Apprenticeship Coordinator.	LEC 1.5 1.5 1.5
SUN109	Site Preparation II	Basic field engineering including terminology, methods of land description and the use of tools and instruments. Government land survey system procedures and specific procedures for field surveying.	Prerequisites: Registered apprentice status and a grade of C or better in SUN101 and SUN104 or permission of the Apprenticeship Coordinator.	LEC 2.0 2.0 2.0
SUN110	Forming	Concrete formwork including terminology, layout, materials and tolerances. Construction forms for columns, footings, walls, beams and stairs.	Prerequisites: (Registered apprentice status and a grade of C or better in SUN101) or permission of the Apprenticeship Coordinator.	LEC 1.5 1.5 1.5
SUN110AA	Forming (Loose) Fundamentals	Cushion cone and cam-lock forming system. Various form and scaffold bracket systems. Forming teams, snap ties, aluma gang forms. Lumber versus Laminated	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	LEC 1.0 1.0 1.0
SUN111	Introduction to Light Equipment	Use, operation and maintenance of light equipment used in the construction trades. Types, assemblies, operator qualifications, controls, safety precautions, operating procedures, and maintenance of aerial lifts, skid steer loaders, trenchers, generators, compressors,	Prerequisites: None.	LEC 1.0 1.0 1.0
SUN112	Framing Fundamentals	Wall and ceiling layout procedures. Assembly and erection of exterior walls using common materials and methods. Masonry construction wall framing techniques	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	LEC 1.0 1.0 1.0
SUN201	Reinforcing Concrete	Use of reinforced concrete and reinforcing steel. Reinforced concrete in specific settings. Reinforcing steel; bar supports, bar lists, fabrication options, cutting	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	LEC 1.5 1.5 1.5
SUN202	Horizontal and Vertical Formwork	Concrete forming and shoring systems and accessories, panel and gang wall patented wall forming systems. Column patented forms, flying form systems and culvert and roof support systems. Slipforming, paving and architectural forms. Application and construction methods for various types of forming and form hardware systems for walls, columns, and stairs as well as slip	Prerequisites: (Registered apprentice status and a grade of C or better in SUN201) or permission of the Apprenticeship Coordinator.	LEC 2.0 2.0 2.0

SUN207	Metal Studs and Drywall	Installation of metal framing members and gypsum dry wall. Gypsum ceiling products and installation procedures	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	LEC 1.5 1.5 1.5
SUN208	Construction Plans and Elevations	Construction drawings, plans and elevations. Lines, symbols, dimensions and abbreviations. Specifications and site and plot plan development. Includes plan and elevation reading exercises.	Prerequisites: (Registered apprentice status and a grade of C or better in SUN105) or permission of the Apprenticeship Coordinator.	LEC 1.5 1.5 1.5
SUN298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
SUN298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
SUN298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
SUS100	Introduction to Sustainability	Introduction to the basic concepts of sustainability. Includes challenges of land, ocean, and resource management as well as the built environment. Also covers connections between global, local and personal	Prerequisites: None.	LEC 3.0 3.0 3.0
SUS110	Sustainable World	Introduction to the field of sustainability and exploration of the interaction between human and natural global systems. Framework for analyzing and investigating the global challenges such as land use change, competition for water and other natural resources, and	Prerequisites: None.	LEC 3.0 3.0 3.0

SUS230	Practical Skills for Sustainability Problem Solving	Introduction to professional skills in sustainability problem solving. Emphasis on four skill areas: teamwork basics, project management tools and professional behaviors, self-directed learning techniques, and stakeholder engagement. Also covers techniques for	Prerequisites: None.	LEC 1.0 1.0 1.0
SUS231	Careers in Sustainability	Introduction to career pathways in sustainability. Exploration of career paths, development of interview skills, and resume creation covered in addition to articulation of personal interests and values related to careers in sustainability. Also includes an introduction to	Prerequisites: None.	LEC 1.0 1.0 1.0
SUS232	Professional Skills in Sustainability Practice	Introduction to professional skills in sustainability through interpersonal competence. Emphasis on teamwork, project management, stakeholder	Prerequisites: A grade of C or better in SUS110 and SSH111 and (ENG101 or ENG107).	LEC 3.0 3.0 3.0
SWU130	Addictions and Substance Use Disorders	Sociological, psychological and physiological aspects of addictive behaviors and chemical abuse. Consideration of a variety of treatment programs offered in community	Prerequisites: None.	LEC 3.0 3.0 3.0
SWU171	Introduction to Social Work	Analysis of contemporary social welfare services and professional social work.	Prerequisites: None.	LEC 3.0 3.0 3.0
SWU181	Economics: A Social Issues Perspective	Introduction to economic principles through the lens of contemporary social issues for social work and related	Prerequisites: None.	LEC 3.0 3.0 3.0
SWU182	A Social Services Perspective of Government	Government and the role of policy practice in advancing social and economic justice and effective social services within the southwest.	Prerequisites: None.	LEC 3.0 3.0 3.0
SWU183	Introductory Ethics: A Social Service Perspective	Introductory exploration of ethics from a historical and multicultural perspective viewed through the lens of contemporary social issues.	Prerequisites: None.	LEC 3.0 3.0 3.0
SWU225	Statistics for Social Research/Justice and Government	Introductory course in descriptive and inferential statistics for social research. Designed to serve as preparation for interpreting and understanding research related to Justice and Government related agencies.	Prerequisites: A grade of C or better in MAT092 or completion of higher level mathematics course.	LEC 3.0 3.0 3.0
SWU250	Mindfulness for Stress Management	Introduction to the theory, research and practice behind mindfulness and stress management as it relates to quality of life issues and professional self-care. Focus on maintaining a healthy lifestyle and managing personal/professional stress by incorporating evidence based research on nutrition, mindfulness, communication, positive psychology, exercise, environmental factors contributing to wellness and	Prerequisites: None.	LEC 3.0 3.0 3.0

SWU258	Victimology and Crisis, a Social Services Perspective	A social work response to victimology, working with the criminal justice system, evidence-based techniques in crisis intervention, and the importance of a multicultural and global perspective. Includes a therapeutic approach to topics such as sexual assault, family violence, post-traumatic stress disorder, stress management, natural disasters, effective coping skills,	Prerequisites: None.	LEC 3.0 3.0 3.0
SWU275AA	Case Report Writing I	Documentation skills for human service helpers. Includes privacy and legal issues.	Prerequisites: None.	LEC 1.0 1.0 1.0
SWU282AA	Volunteerism for Social Work: A Service Learning Experience	Service-learning field experience within private/public agencies, and citizen volunteer groups.	Prerequisites: Permission of Instructor.	LAB 1.0 1.0 0.0
SWU282AB	Volunteerism for Social Work: A Service Learning Experience	Service-learning field experience within private/public agencies, and citizen volunteer groups.	Prerequisites: Permission of Instructor.	LAB 2.0 2.0 0.0
SWU282AC	Volunteerism for Social Work: A Service Learning Experience	Service-learning field experience within private/public agencies, and citizen volunteer groups.	Prerequisites: Permission of Instructor.	LAB 3.0 3.0 0.0
SWU285	Social Services Seminar	Special topics in social services with an emphasis on current issues not covered in other Social Work courses.	Prerequisites: None.	LEC 1.0 1.0 1.0
SWU291	Social Service Delivery Systems	Purposes, structures, and delivery systems of human service agencies. Includes 40 hours of volunteer experience in local human service agencies.	Prerequisites: A grade of C or better in SWU171, or permission of Department or Division or	LEC 3.0 3.0 3.0
SWU295	Foundations of Social Work Practice	Introduction to professional helper communication skills with respect to cross-cultural practice and diversity	Prerequisites: None. SWU171 suggested but not required.	LEC 3.0 3.0 3.0
SWU298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0

SWU298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
SWU298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
TDR102	Construction Soft Skills I: Workplace Skills	First impressions, relationship building, and team work. Diversity in the work place. Individual and group activities.	Prerequisites: Registered apprentice status or permission of Apprenticeship Coordinator.	LEC 1.0 1.0 1.0
TDR104	Construction Soft Skills II: Listening and Speaking	Effective listening, speaking, reading and writing skills for the construction industry. Communication process: channel, receiver and feedback. Communication issues, problems, and noise. Business and form writing for the construction industry. On-the-job site factors. Individual	Prerequisites: A grade of C or better in TDR102.	LEC 1.0 1.0 1.0
TDR106	Construction Soft Skills III: Resolving Workplace Issues	Stress recognition and management. Time management. Critical thinking and problem solving. Conflict prevention and resolution. Annoying behavior. Coping skills. Criticism. Sexual harassment. drug,	Prerequisites: A grade of C or better in TDR104.	LEC 1.0 1.0 1.0
TDR122	Basic Electrical Theory	Introduction to electrical theory, direct current (DC) circuits, series, parallel, and series-parallel circuits, DC power sources, DC motors, DC generators	Prerequisites: Permission of Instructor.	LEC 5.0 5.0 5.0

TDR296WA	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 1.0 5.0 0.0
TDR296WB	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 2.0 10.0 0.0
TDR296WC	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 3.0 15.0 0.0

TDR296WD	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 4.0 20.0 0.0
TDR298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
TDR298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
TDR298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
TEC103	Developing Your Fashion Business	Creating and understanding a financial plan, developing operating and control systems, planning growth strategies and a business plan for the Fashion Entrepreneur. Emphasis on fashion merchandise and	Prerequisites: None.	LEC 2.0 2.0 2.0
TEC105	Cultural Aspects of Clothing	Psychological, aesthetic, and economic factors applied to the systematic study of dress and adornment in relationship to world cultures and the global fashion	Prerequisites: None.	LEC 3.0 3.0 3.0

TEC106	History of Fashion	Consideration of historic factors influencing fashion and fashion change with special emphasis on historic	Prerequisites: None.	LEC 3.0 3.0 3.0
TEC107	Color in Fashion	Fundamental study of color as it relates to uses in the fashion industry for yarns, fabrics, materials, fashion illustration, fashion photography, collection seasons,	Prerequisites: None.	L+L 3.0 3.0 3.0
TEC108	Flat-Pattern Design	Beginning flat-pattern design techniques. Introductory work with pattern accuracy, markings, style variations, seams, and garment features to create basic designs.	Prerequisites: A grade of C or better in TEC110 or permission of Instructor.	L+L 3.0 4.0 4.0
TEC109	Introduction to Fashion Merchandising	Explores the various levels and specialized segment of the fashion industry, the principles of fashion, the fundamentals of merchandising apparel, consumers'	Prerequisites: None.	LEC 3.0 3.0 3.0
TEC110	Beginning Apparel Construction	Basic apparel construction techniques. Use of commercial patterns and sewing machine in the	Prerequisites: None.	L+L 3.0 5.0 5.0
TEC111	Intermediate Apparel Construction	Intermediate clothing construction techniques. Emphasis on fit and construction details of commercial	Prerequisites: A grade of C or better in TEC110 or permission of	L+L 3.0 5.0 5.0
TEC112AQ	Pattern Alteration and Fit	Structural features of patterns and altering patterns to achieve proper fit. Includes figure irregularities, pattern style variations, fashion, and individual figure problems.	Prerequisites: A grade of C or better in TEC111 or permission of Instructor.	L+L 2.0 3.0 3.0
TEC112AU	Sewing Clothing Accessories	Construction of clothing accessories for personal or professional use. Includes overview of accessories, principles of design, selection of fabrics and trims, use of commercial patterns, creation of custom patterns,	Prerequisites: A grade of C or better in TEC111 or permission of Instructor.	L+L 3.0 5.0 5.0
TEC113	Textiles: Dyeing	Demonstrations and projects emphasizing skills and techniques in creating textile designs on fabric for fashion and interior design applications. Fabric dyeing techniques through hands-on practices such as tie	Prerequisites: None.	L+L 1.0 1.5 1.5
TEC114	Textiles: Block Printing/Silk Screening	Block printing and silk screening techniques used to create designs on fabric for apparel and interiors.	Prerequisites: None.	L+L 1.0 2.0 2.0
TEC115	Textiles: Hand Painting	Techniques used to hand paint designs on textiles for fashion and interior design. Techniques include water color and ombre, marbleizing, stenciling, stamping and various resist methods such as gutta and taping.	Prerequisites: None.	L+L 1.0 1.5 1.5
TEC116	Textiles: Stitchery and Embellishment	Materials and techniques used for stitchery and embellishment on textiles. Includes color schemes and	Prerequisites: None.	L+L 1.0 1.5 1.5
TEC120	Specialty Apparel Construction	Application of specialty fabrics in clothing construction. Emphasis on improved construction quality and garment fit.	Prerequisites: A grade of C or better in TEC111, or THP206, or permission of Instructor.	L+L 3.0 5.0 5.0

TEC121	Creative Sewing Machine Use	Use of the sewing machine for other than construction of garments or household items. Emphasis on decorative uses of the sewing machine on items made	Prerequisites: A grade of C or higher in TEC110 or permission of Instructor.	L+L 3.0 3.0 3.0
TEC122	Sewing with Knits	Skills and techniques used in the construction of garments made from knit fabrics.	Prerequisites: A grade of C or better in TEC111, or THP206, or permission of Instructor.	L+L 3.0 5.0 5.0
TEC125	Fashion Design	Overview of the fashion design industry. Includes terminology, fashion trends, elements and principles of design, sources of inspiration, fabric selection, sketching and costing a collection, an introduction to pattern making techniques, and global fashion centers'	Prerequisites: None.	LEC 3.0 3.0 3.0
TEC126	Sewing for the Home	Provides students systemic skills and knowledge to plan and construct draperies, shades, pillows, bedding and other home furnishings through instructional projects. Emphasizes techniques used in producing textile goods	Prerequisites: None.	LEC 3.0 3.0 3.0
TEC128	Home Upholstery	Demonstration and application of knowledge and skills involved in upholstering stools, chairs, headboards, and other home furnishings. Includes measuring and cutting upholstery fabric and sewing outdoor/indoor cushions.	Prerequisites: None.	L+L 3.0 5.0 5.0
TEC129	Sewing with a Serger	Operation of a home serger. Use in constructing, finishing, and decorating garments and home	Prerequisites: A grade of C or better in TEC110 or permission of	L+L 3.0 5.0 5.0
TEC130	Alteration of Ready-Made Garments	Knowledge, skills, and techniques of altering ready-made garments for personal or professional use. Experience using a sewing machine and constructing	Prerequisites: A grade of C or better in TEC111 or permission of Instructor.	L+L 3.0 4.0 4.0
TEC133	Fashion Illustration: Croquis	Techniques for working with female and male croquis. Applications for illustrating clothing on croquis and	Prerequisites: None.	L+L 2.0 4.0 4.0
TEC134	Fashion Illustration I	Proportions and techniques used in drawing fashion figures and clothing. Introduction of media and illustrative styles for portfolio design, trade sketches,	Prerequisites: None.	L+L 3.0 5.0 5.0
TEC135	Fashion Illustration II	Intermediate-level study of proportion and techniques used in drawing fashion figures, clothing, and flats. Continued study of garments, fabric textures and patterns. Development of skills in presentation drawing	Prerequisites: A grade of C or better in TEC134 or permission of Instructor.	L+L 3.0 5.0 5.0
TEC136	Fashion Illustration III	Advanced-level study of proportions and techniques used in drawing fashion figures, clothing, and flats. Continued study of illustrative styles for garments, fabric textures and patterns. Further development of skills in	Prerequisites: A grade of C or better in TEC135 or permission of Instructor.	L+L 3.0 5.0 5.0

TEC138	Fashion Illustration: Menswear	Study of proportions and techniques used in drawing menswear fashion figures, clothing, accessories, and flats. Focus on the male physique and specific fitting variations of clothing. Introduction of traditional menswear fabrications and poses for tailored clothing	Prerequisites: A grade of C or better in TEC134 or permission of Instructor.	L+L 3.0 5.0 5.0
TEC139	Fashion Illustration: Children's Wear	Study of proportions and techniques used in drawing children's wear fashion figures, clothing, and flats from infants through teenagers. Introduction of body and feature characteristics unique to the various ages of growth for children. Includes emphasis on common	Prerequisites: A grade of C or better in TEC134 or permission of Instructor.	L+L 3.0 5.0 5.0
TEC143	Industrial Sewing I	Introduction to industrial sewing machine usage with emphasis on techniques, applications, and stitching control. Basic methods used in constructing, finishing,	Prerequisites: A grade of C or better in TEC111 or permission of Instructor.	L+L 2.0 3.0 3.0
TEC144	Industrial Sewing II	Use of standard industrial sewing machines with emphasis on techniques, applications, speed, and stitching control. Expanded methods in intermediate and advanced construction, finishing, and decorating	Prerequisites: A grade of C or better in TEC143 or permission of Instructor.	L+L 2.0 3.0 3.0
TEC146	Manufacturing Sewing Methods I	Introduction to skills and techniques of sewing for apparel manufacturing ready-made-garments. Focus on applying correct clothing construction methods required to achieve the right quality level for the apparel customer using the proper commercial design and	Prerequisites: A grade of C or better in TEC144 or permission of Instructor.	L+L 2.0 3.0 3.0
TEC147	Manufacturing Sewing Methods II	Advanced skills and techniques of sewing for apparel manufacturing ready-made-garments. Advanced application of correct clothing construction methods required to achieve the right quality level for the apparel	Prerequisites: A grade of C or better in TEC146 or permission of Instructor.	L+L 2.0 3.0 3.0
TEC150	Fashion Show Production	Students will learn and experience real-time production techniques and skills of a fashion show. Includes but not limited to, budget planning, project management, marketing, staffing, décor, staging, and production.	Prerequisites: None.	L+L 3.0 4.0 4.0
TEC151	Display and Visual Merchandising	An examination of the principles of design including line, color, balance, and texture as they relate to the display of merchandise. Participation in displays, field	Prerequisites: None.	L+L 3.0 4.0 4.0
TEC161	Digital Machine Embroidery Laboratory	Use of the sewing machine and computer for development of decorative designs for garment and	Prerequisites: None.	LAB 1.0 2.0 2.0
TEC200	Retail Buying	Examines management/buyer role in investment, pricing, planning, controlling sales and inventories Any BPC/CIS spreadsheet course recommended	Prerequisites: None. A grade of C or better in any BPC/CIS spreadsheet course recommended.	LEC 3.0 3.0 3.0

TEC201	Custom-Made Jeans	Construction and fit of standard denim jeans. Includes use of flat-felled seams, fly-front zipper, waistband with belt-loops, topstitched pockets and hems.	Prerequisites: A grade of C or better in TEC111 or permission of Instructor.	L+L 1.0 1.0 1.0
TEC212	Advanced Apparel Construction	Advanced garment construction techniques. Emphasis on lined jacket construction and working with patterned and specialty fabrics.	Prerequisites: A grade of C or better in TEC111, or THP206, or permission of Instructor.	L+L 3.0 5.0 5.0
TEC220	Sustainable Fashion Design	Fundamental study of sustainable fabrics, materials, fashions, and industry measures to improve waste prevention and maintain emerging fashions, including reuse, repurpose, recycling, upcycling, and related	Prerequisites: A grade of C or better in TEC111, or THP206, or permission of Instructor.	L+L 3.0 4.0 4.0
TEC221	Computer-Assisted Fashion Design	The use of computer hardware and software in the fashion design industry. Create and illustrate fashion designs using computer hardware and software. Color and design principles applied in creating an apparel line	Prerequisites: A grade of C or better in (TEC125 and TEC134) or permission of Instructor.	L+L 3.0 5.0 5.0
TEC222	Textiles	Study of textile fibers, yarns, fabrication, color and finishes and their impact on product performance. Includes labeling laws, fiber manufacturing processes, technical textiles, fiber properties, care, end use, and	Prerequisites: None.	L+L 3.0 4.0 4.0
TEC223	Tailoring	Principles of tailoring as applied in the construction of a coat or suit. Alteration of patterns and fitting	Prerequisites: A grade of C or better in TEC212 or permission of	L+L 3.0 6.0 6.0
TEC224	Pattern Drafting	Draft patterns from measurements of dress forms and human figures. Development of slopers and garment patterns. Design and produce an original garment using	Prerequisites: A grade of C or better in TEC108, or TEC225, or TEC226, or permission of Instructor.	L+L 2.0 4.0 4.0
TEC225	Pattern Design I	Creation of pattern designs by flat pattern methods. Produce a variety of styles. Production of an original pattern design and garment.	Prerequisites: A grade of C or better in TEC111, or THP206, or permission of Instructor.	L+L 3.0 5.0 5.0
TEC226	Draping for Fashion Design	Manipulation of fabrics on a dress form and/or live figure to create designs and patterns. Use of woven fabrics to create basic and intermediate designs. Introduction of knitwear draping. Drape and construct an original	Prerequisites: A grade of C or better in TEC111, or THP206, or permission of Instructor.	L+L 3.0 5.0 5.0
TEC227	Couture Sewing	Construction techniques used in couture sewing. Includes fabric selection, fabric preparation, hand sewing, garment shaping, edge finishes, embellishments, and closures. Emphasis on fitting and couture construction techniques used to construct	Prerequisites: A grade of C or better in TEC111, or THP206, or permission of Instructor.	L+L 3.0 5.0 5.0

TEC228	Advanced Draping for Fashion Design	Advanced draping techniques for fashion design. Includes draping jackets/coats, shorts/pants, dresses/gowns and other woven fabrics. Also includes draping swimwear/leotards and other garments in knit	Prerequisites: A grade of C or better in TEC226 or permission of Instructor.	L+L 3.0 5.0 5.0
TEC229	Advanced Serging	Operation of a home serger in advanced application of construction and embellishment for garments and home decoration projects. Home serger required.	Prerequisites: A grade of C or better in TEC129 or permission of Instructor.	L+L 3.0 5.0 5.0
TEC230	Pattern Design II	Practical application in designing clothing/patterns using flat pattern method. Principles of flat pattern and use of sloper reviewed. Includes creation of woven and knit	Prerequisites: A grade of C or better in TEC225 or permission of Instructor.	L+L 3.0 5.0 5.0
TEC231	Pattern Grading	Grading patterns to change sizes. Includes grading terminology, grading methods, figure types, grading charts, types of grade, even and uneven grades, and	Prerequisites: A grade of C or better in TEC111 or permission of Instructor.	L+L 3.0 5.0 5.0
TEC232	Costume Construction	Costume construction techniques applied to period reproduction, vintage, fantasy and anime; stage and dance costumes. Includes alteration of commercial patterns, drafting of original patterns, and fitting	Prerequisites: A grade of C or better in TEC111 and (TEC224 or TEC225 or TEC226 or permission of Instructor).	L+L 3.0 5.0 5.0
TEC233	Computer-Assisted Pattern Making	Pattern making using the computer and various software programs. Includes measuring, block patterns, pattern development, production patterns, modifications	Prerequisites: A grade of C or better in TEC225 or permission of Instructor.	L+L 3.0 5.0 5.0
TEC234	Vintage Fashion Design	Research of 20th-century fashions from the 1920s through the 1990s influencing vintage garment styles. Analysis of vintage era and revival trends. Development and construction of an original vintage garment/ensemble including design, fabric selection,	Prerequisites: A grade of C or better in (TEC225 or TEC226) or permission of Instructor.	L+L 3.0 5.0 5.0
TEC235	Custom Tailored Pants	Designed for the home sewing enthusiast or dressmaker who desires a perfectly fitted pant pattern. Pattern adjustments; selecting proper size; fitting procedures for a personalized pant. Fabric draft of the	Prerequisites: A grade of C or better in TEC111 or equivalent.	L+L 2.0 3.0 3.0
TEC236	Portfolio Development	This course is designed to assist students in the preparation and presentation of an original professional portfolio. Students will design, produce, and present artistic sketches and illustrations of fashion figures wearing designs, flats for garment designs, and fabric swatches/samples selected for designs. Including but not limited to using computer-assisted design software,	Prerequisites: A grade of C or better in TEC134 and permission of Department or Division. TEC221 is recommended.	LAB 1.0 3.0 2.40

TEC237	Intermediate Computer-Assisted Fashion Design	Intermediate-level study in the use of computer hardware and software in the fashion design industry. Draw fashion figures, create textile designs, develop	Prerequisites: A grade of C or better in (TEC134 and TEC221) or permission of Instructor.	L+L 3.0 5.0 5.0
TEC238	Industry Patternmaking	Study of patternmaking techniques for industry. Specifications for production patterns, labeling	Prerequisites: A grade of C or better in TEC225 or permission of	L+L 1.0 2.0 2.0
TEC240	Apparel Production Management	Overview of apparel production management for the global marketplace examining component details of the technical package, tech-pack, which include specifications and costing in the most time-efficient	Prerequisites: None.	L+L 2.0 3.0 3.0
TEC241	Advanced Computer-Assisted Fashion Design	Advanced techniques and use of computer hardware and software in the fashion design industry. Create and illustrate fashion designs using multiple computer applications. Create advanced textile surface pattern design using color and design principles on the computer. Manipulate CAD pattern design for original	Prerequisites: A grade of C or better in TEC124 and TEC237.	L+L 3.0 5.0 5.0
TEC244	Industrial Sewing III	Mastery study of industrial sewing machine usage for straight-stitch, zigzag, over-lock, cover stitch and blind-hem machines. Use in detailed or complex constructing, finishing, and decorating apparel and home decor.	Prerequisites: A grade of C or better in TEC144 or permission of Instructor.	L+L 2.0 3.0 3.0
TEC245	Wardrobe Strategies	Methods of clothing selection, coordination, evaluation, and planning to meet men's and women's wardrobe	Prerequisites: None.	LEC 3.0 3.0 3.0
TEC247	Manufacturing Sewing Methods III	Mastery knowledge, skills, and techniques of sewing for apparel manufacturing ready-made-garments. Mastery level application of correct clothing construction methods required to achieve the right quality level for the apparel customer using the proper commercial	Prerequisites: A grade of C or better in TEC147 or permission of Instructor.	L+L 2.0 3.0 3.0
TEC255	Fashion Retail Merchandising	Surveys the structure and operation of fashion retail organizations. Emphasizes the global nature of fashion merchandising and techniques of merchandising for the	Prerequisites: A grade of C or better in MKT/TEC109. Xref: MKT109	LEC 3.0 3.0 3.0
TEC260	Fashion Sales Management	Emphasizes the fashion aspects of sales, and the application and management of a sales force for the	Prerequisites: A grade of C or better in MKT/TEC109. Xref: MKT109	LEC 3.0 3.0 3.0
TEC270	Design Studio	Design and production of original garments for a line/collection. Includes design inspirations, sketches/illustrations, fabric/materials selection, pattern	Prerequisites: A grade of C or better in (TEC225 or TEC226) or permission of Instructor.	LAB 3.0 4.0 4.0
TEC271AA	Fashion Design Internship	Work experience in fashion design business or industry. Work hours are coordinated for a minimum of 80 hours per semester. Supervision and evaluation by internship	Prerequisites: Permission of Department or Division.	LAB 1.0 5.0 0.0

TEC271AC	Fashion Design Internship	Work experience in fashion design business or industry. Fifteen hours of work weekly. Supervision and evaluation by an internship coordinator	Prerequisites: Permission of Department or Division.	LAB 3.0 15.0 0.0
TEC272AA	Retail Merchandising Internship	Retail Merchandising work experience in a Fashion Retail business or industry. Supervision and evaluation by an internship coordinator. Eighty hours of designated work, per credit per semester.	Prerequisites: Completion of at least twelve (12) college credits, minimum 2.6 grade point average, and be able to obtain a position related to student's academic or career goals (student's present job may qualify);	LAB 1.0 1.0 0.0
TEC272AC	Retail Merchandising Internship	Retail Merchandising work experience in a Fashion Retail business or industry. Supervision and evaluation by an internship coordinator. Eighty hours of designated work, per credit per semester.	Prerequisites: Completion of at least twelve (12) college credits, minimum 2.6 grade point average, and be able to obtain a position related to student's academic or career goals (student's present job may qualify);	LAB 3.0 3.0 0.0
TEC274AA	Fashion Merchandising Study Tour	A tour of the fashion merchandising industry outside the metropolitan Phoenix area. Includes a variety of experiences and activities to enhance awareness of this	Prerequisites: Permission of Department or Division.	LAB 1.0 5.0 1.0
TEC274AB	Fashion Merchandising Study tour	A tour of the fashion merchandising industry outside the metropolitan Phoenix area. Includes a variety of experiences and activities to enhance awareness of this	Prerequisites: Permission of Department or Division.	LAB 2.0 10.0 2.0
TEC274AC	Fashion Merchandising Study Tour	A tour of the fashion merchandising industry outside the metropolitan Phoenix area. Includes a variety of experiences and activities to enhance awareness of this	Prerequisites: Permission of Department or Division.	LAB 3.0 15.0 3.0
TEC275AA	Image Consultant Internship	Image Consultant work experience in a Fashion Retail business or industry. Supervision and evaluation by an internship coordinator. Eighty hours of designated work, per credit per semester.	Prerequisites: Completion of at least twelve (12) college credits, minimum 2.6 grade point average, and be able to obtain a position related to student's academic or career goals (student's present job may qualify);	LAB 1.0 1.0 0.0
TEC275AC	Image Consultant Internship	Image Consultant work experience in a Fashion Retail business or industry. Supervision and evaluation by an internship coordinator. Eighty hours of designated work, per credit per semester.	Prerequisites: Completion of at least twelve (12) college credits, minimum 2.6 grade point average, and be able to obtain a position related to student's academic or career goals (student's present job may qualify);	LAB 3.0 3.0 0.0

TEC277AA	Alteration Internship	Alteration work experience in a business or industry. Supervision and evaluation by an internship coordinator. Eighty hours of designated work, per credit per semester.	Prerequisites: Completion of at least twelve (12) college credits, minimum 2.6 grade point average, and be able to obtain a position related to student's academic or career goals (student's present job may qualify);	LAB 1.0 1.0 0.0
TEC277AC	Alteration Internship	Alteration work experience in a business or industry. Supervision and evaluation by an internship coordinator. Eighty hours of designated work, per credit per semester.	Prerequisites: Completion of at least twelve (12) college credits, minimum 2.6 grade point average, and be able to obtain a position related to student's academic or career goals (student's present job may qualify);	LAB 3.0 3.0 0.0
TEC278AA	Costume Design and Production Internship	Costume Design and Production work experience in a business or industry. Supervision and evaluation by an internship coordinator. Eighty hours of designated work, per credit per semester.	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify) or	LAB 1.0 1.0 0.0
TEC278AC	Costume Design and Production Internship	Costume Design and Production work experience in a business or industry. Supervision and evaluation by an internship coordinator. Eighty hours of designated work, per credit per semester.	Prerequisites: Completion of at least twelve (12) college credits, minimum 2.6 grade point average, and be able to obtain a position related to student's academic or career goals (student's present job may qualify);	LAB 3.0 3.0 0.0
TEC282AA	Service-Learning in Fashion Merchandising and	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 1.0 1.0 0.0
TEC282AB	Service-Learning Experience in Fashion Merchandising and Design	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 2.0 2.0 0.0
TEC282AC	Service-Learning Experience in Fashion Merchandising and Design	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 3.0 3.0 0.0

TEC296WA	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 1.0 5.0 0.0
TEC296WB	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 2.0 10.0 0.0
TEC296WC	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 3.0 15.0 0.0

TEC296WD	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 4.0 20.0 0.0
TEC298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
TEC298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
TEC298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
THE111	Introduction to Theatre	A survey of theatre, including basic elements and principles of production, styles, and/or historical perspectives of theatre, dramatic literature, and criticism	Prerequisites: None.	LEC 3.0 3.0 3.0
THE220	Modern Drama	Analysis of dramatic literature studied within political, historical, and cultural contexts and examined from the perspective of the playwright's structure and style.	Prerequisites: A grade of C or better in ENG101 or ENG107 or equivalent.	LEC 3.0 3.0 3.0

THE260	Film Analysis	Understanding and enjoyment of film and its correlation to literature, art, music, and other disciplines	Prerequisites: None.	LEC 3.0 3.0 3.0
THE274AA	Theatre Study Tour	A tour that focuses on theatre production outside of the metropolitan Phoenix area. Includes a variety of experiences and activities to enhance knowledge about	Prerequisites: Permission of Department or Division.	LAB 1.0 5.0 1.0
THE274AB	Theatre Study Tour	A tour that focuses on theatre production outside of the metropolitan Phoenix area. Includes a variety of experiences and activities to enhance knowledge about	Prerequisites: Permission of Department or Division.	LAB 2.0 10.0 2.0
THE274AC	Theatre Study Tour	A tour that focuses on theatre production outside of the metropolitan Phoenix area. Includes a variety of experiences and activities to enhance knowledge about	Prerequisites: Permission of Department or Division.	LAB 3.0 15.0 3.0
THE282AA	Service-Learning Experience in Theatre	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 1.0 1.0 0.0
THE282AB	Service-Learning Experience in Theatre	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 2.0 2.0 0.0
THE282AC	Service-Learning Experience in Theatre	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 3.0 3.0 0.0
THE298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
THE298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
THE298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0

THF120AA	Audition Techniques for Stage and Screen: Prepared Monologue	Practice in the techniques of auditioning for stage and screen. Identifies and illustrates techniques of the prepared monologue audition.	Prerequisites: None.	L+L 1.0 2.0 2.0
THF120AB	Audition Techniques for Stage and Screen: Cold Readings	Practice in the techniques of auditioning for stage and screen. Identifies and illustrates techniques of the cold reading audition.	Prerequisites: None.	L+L 1.0 2.0 2.0
THF205	Introduction to Cinema	Survey of the history and development of the art of motion pictures, including criticism of aesthetic and	Prerequisites: None.	LEC 3.0 3.0 3.0
THF206	Introduction to Television Arts	History and development of electronic media and its impact on popular arts.	Prerequisites: None.	LEC 3.0 3.0 3.0
THF209	Acting for the Camera	Special technical aspects of acting before a camera.	Prerequisites: A grade of C or better in THP112 or permission of	L+L 3.0 4.0 4.0
THF210	Contemporary Cinema	A study of contemporary films, directors and critics with emphasis on evaluating film as an art form.	Prerequisites: None.	LEC 3.0 3.0 3.0
THF219	Advanced Acting for the Camera	Focuses on special technical aspects of advanced acting before a camera.	Prerequisites: A grade of C or better in THF209 or permission of	L+L 3.0 4.0 4.0
THO115	Makeup for Stage and Screen	Purposes, materials, and techniques of makeup for stage and screen.	Prerequisites: None.	L+L 3.0 4.0 4.0
THO118	Playwriting	Practice and study of theories and techniques of writing for the stage; creating characters, dialogue, and plot for monodramas, scenes, and plays	Prerequisites: None.	L+L 3.0 3.0 3.0
THO130	Combat for Stage and Screen	Fundamental techniques and terminology of staged combat with and without weapons. Analysis and performance of safely choreographed violence that tells	Prerequisites: None.	L+L 3.0 4.0 4.0
THO130AA	Specialized Stage Combat: Unarmed	Teaches fundamental techniques and terminology of unarmed staged combat as required for professional certification by the Society of American Fight Directors (SAFD). Includes the analysis and performance of safely choreographed violence that tells a story for stage and screen. Prepares students for the SAFD skills	Prerequisites: None.	L+L 1.5 2.0 2.0
THO130AB	Specialized Stage Combat: Broadsword	Teaches fundamental techniques and terminology of staged combat utilizing the broadsword as required for professional certification by the Society of American Fight Directors (SAFD). Includes the analysis and performance of safely choreographed violence that tells a story for stage and screen. Prepares students for the	Prerequisites: None.	L+L 1.5 2.0 2.0

THO130AC	Specialized Stage Combat: Rapier and Dagger	Teaches fundamental techniques and terminology of staged combat utilizing the rapier and dagger as required for professional certification by the Society of American Fight Directors (SAFD). Includes the analysis and performance of safely choreographed violence that tells a story for stage and screen. Prepares students for	Prerequisites: None.	L+L 1.5 2.0 2.0
THO130AD	Specialized Stage Combat: Single Sword	Teaches fundamental techniques and terminology of staged combat utilizing the single sword as required for professional certification by the Society of American Fight Directors (SAFD). Includes the analysis and performance of safely choreographed violence that tells a story for stage and screen. Prepares students for the	Prerequisites: None.	L+L 1.5 2.0 2.0
THO130AE	Specialized Stage Combat: Small Sword	Teaches fundamental techniques and terminology of staged combat utilizing the small sword as required for professional certification by the Society of American Fight Directors (SAFD). Includes the analysis and performance of safely choreographed violence that tells a story for stage and screen. Prepares students for the	Prerequisites: None.	L+L 1.5 2.0 2.0
THO130AF	Specialized Stage Combat: Sword and Shield/Buckler	Teaches fundamental techniques and terminology of staged combat utilizing the sword and shield/buckler as required for professional certification by the Society of American Fight Directors (SAFD). Includes the analysis and performance of safely choreographed violence that tells a story for stage and screen. Prepares students for the SAFD skills proficiency test in the use of the sword	Prerequisites: None.	L+L 1.5 2.0 2.0
THO130AG	Specialized Stage Combat: Quarterstaff	Teaches fundamental techniques and terminology of staged combat utilizing the quarterstaff as required for professional certification by the Society of American Fight Directors (SAFD). Includes the analysis and performance of safely choreographed violence that tells a story for stage and screen. Prepares students for the	Prerequisites: None.	L+L 1.5 2.0 2.0
THO130AH	Specialized Stage Combat: Knife	Teaches fundamental techniques and terminology of staged combat utilizing the knife as required for professional certification by the Society of American Fight Directors (SAFD). Includes the analysis and performance of safely choreographed violence that tells a story for stage and screen. Prepares students for the	Prerequisites: None.	L+L 1.5 2.0 2.0

THO135AA	Stage Combat Recertification: Unarmed	Course to provide Society of American Fight Directors (SAFD) recertification in unarmed stage combat. Course taught by SAFD certified teacher, Fight Director, or Fight	Prerequisites: Certification in specified weapon by SAFD or permission of Program Director.	L+L 0.5 1.0 1.0
THO135AB	Stage Combat Recertification: Broadsword	Course to provide Society of American Fight Directors (SAFD) recertification in using the broadsword in stage combat. Course taught by SAFD certified teacher, Fight	Prerequisites: Certification in specified weapon by SAFD or permission of Program Director.	L+L 0.5 1.0 1.0
THO135AC	Stage Combat Recertification: Rapier and Dagger	Course to provide Society of American Fight Directors (SAFD) recertification in using the rapier and dagger in stage combat. Course taught by SAFD certified teacher,	Prerequisites: Certification in specified weapon by SAFD or permission of Program Director.	L+L 0.5 1.0 1.0
THO135AD	Stage Combat Recertification: Single Sword	Course to provide Society of American Fight Directors (SAFD) recertification in using the single sword in stage combat. Course taught by SAFD certified teacher, Fight	Prerequisites: Certification in specified weapon by SAFD or permission of Program Director.	L+L 0.5 1.0 1.0
THO135AE	Stage Combat Recertification: Small Sword	Course to provide Society of American Fight Directors (SAFD) recertification in using the small sword in stage combat. Course taught by SAFD certified teacher, Fight	Prerequisites: Certification in specified weapon by SAFD or permission of Program Director.	L+L 0.5 1.0 1.0
THO135AF	Stage Combat Recertification: Sword and Shield/Buckler	Course to provide Society of American Fight Directors (SAFD) recertification in using the sword and shield/buckler in stage combat. Course taught by SAFD certified teacher, Fight Director, or Fight Master.	Prerequisites: Certification in specified weapon by SAFD or permission of Program Director.	L+L 0.5 1.0 1.0
THO135AG	Stage Combat Recertification: Quarterstaff	Course to provide Society of American Fight Directors (SAFD) recertification in using the quarterstaff in stage combat. Course taught by SAFD certified teacher, Fight	Prerequisites: Certification in specified weapon by SAFD or permission of Program Director.	L+L 0.5 1.0 1.0
THO135AH	Stage Combat Recertification: Knife	Course to provide Society of American Fight Directors (SAFD) recertification in using the knife in stage combat. Course taught by SAFD certified teacher, Fight Director,	Prerequisites: Certification in specified weapon by SAFD or permission of Program Director.	L+L 0.5 1.0 1.0
THO169	Theatrical Career Preparation	Development and preparation for performing arts careers, including portfolio and resume building, initial design of an unpublished digital presence, exploration of educational and employment opportunities in the	Prerequisites: None.	LAB 1.0 2.0 2.0
THO202AA	Theatre Production I Scene Shop	The objective of this course is to provide hands-on experience in the creation of a theatrical production. This course is tailored around the work done in a Theatre Scenic Shop. Structured to provide the student with an atmosphere of professional expertise and guidance. Professional-type facilities and equipment are	Prerequisites: None.	LAB 1.0 2.0 2.0

THO202AB	Theatre Production I Electrics	The objective of this course is to provide hands-on experience in the creation of a theatrical production. This course is tailored around the work done in a Theatre Electric Shop. Structured to provide the student with an atmosphere of professional expertise and guidance. Professional-type facilities and equipment are	Prerequisites: None.	LAB 1.0 2.0 2.0
THO202AC	Theatre Production I Costume Shop	The objective of this course is to provide hands-on experience in the creation of a theatrical production. This course is tailored around the work done in a Theatre Costume Shop. Structured to provide the student with an atmosphere of professional expertise and guidance. Professional-type facilities and	Prerequisites: None.	LAB 1.0 2.0 2.0
THO202AD	Theatre Production Advanced Projects	The objective of this course is to provide hands-on experience in the creation of a theatrical production. This course is tailored around the work done in a leadership role on a theatrical production. Structured to provide the student with an atmosphere of professional expertise and guidance. Professional-type facilities and	Prerequisites: None.	LAB 1.0 2.0 2.0
THO203	Technical Theatre Production	Designed to give college credit to the technical production crews of college theatre productions.	Prerequisites: None.	LAB 3.0 6.0 6.0
THO208	Costume Play Solo Performance Practicum	Introduction to Costume Play (Cosplay) skills for the creation of a solo based performance through practical experience. Focus on the origins of Cosplay and use of tools for prop and costume development, design and application of make-up, safety practices, character development and performance, and growing a social	Prerequisites: None.	L+L 3.0 4.0 4.0
THO209	Costume Play Group Performance Practicum	Introduction to Costume Play (Cosplay) skills for the creation of a group based performance through practical experience. Focus on the development and collaborative performance of Cosplay characters within a canon/shared world. Use of tools for prop and costume development, design and application of make-	Prerequisites: None.	L+L 3.0 4.0 4.0
THO215	Advanced Makeup Techniques for Stage and Screen	Advanced character analysis and makeup design for stage and screen. Technical application of makeup for stage and screen.	Prerequisites: A grade of C or better in THO115.	L+L 3.0 4.0 4.0
THO216	Wig and Hair Production for Theatre	Introduction to wig technology, including the use of tools and techniques for making, ventilating, measuring,	Prerequisites: None.	L+L 3.0 4.0 4.0

THO218	Beginning Stage Lighting	Basic theories and methods of stage lighting for all production types. Emphasis on technical/theoretical facts, artistic/design concept development, and teamwork structure of theatre. Examines stage lighting optics, instrument selection and application, color	Prerequisites: A grade of C or better in THP213 or permission of Instructor.	L+L 3.0 4.0 4.0
THO219	Introduction to Puppetry	Use of different types of puppets in a variety of performance settings. Practical experience with diverse	Prerequisites: None.	L+L 3.0 4.0 4.0
THO225	Visual Script Analysis	Theory and practice in analysis of dramatic literature for the technician and designer. Emphasis on techniques of script analysis for visual information.	Prerequisites: None.	LEC 2.0 2.0 2.0
THO226	Theatrical Design: Costuming	Basic techniques involved in researching and designing costumes for the stage.	Prerequisites: None.	L+L 3.0 4.0 4.0
THO235	Principles of Stage Combat Safety/Fight Captain	Evaluate stage combat performances for safety in order to identify issues that might require intervention, communication, and revision. Course to prepare students for work as a fight captain in a stage or film environment. Provides opportunity to practice weapon maintenance and instruction; safe choreography; analysis of how choreography design elements affect safety; written and recorded choreography notation; and the implementation and communication of choreography and intervention strategies. Includes	Prerequisites: A grade of C or better in at least four (4) stage combat courses (THO130AA, THO130AB, THO130AC, THO130AD, THO130AE, THO130AF, THO130AG, or THO130AH) or permission of Program Director.	L+L 4.0 5.0 5.0
THO246	Digital Fabrication	Introduction to concepts and application of computer visualization, modeling, and rapid prototyping for interdisciplinary arts. Students will design sculptures applying 3D computer modeling techniques, rapid prototyping, and other available digital output devices	Prerequisites: None.	L+L 3.0 6.0 6.0
THO250	Stage Properties	Introduction to stage properties including design, construction and maintenance features. Provides skills in property design and construction using an	Prerequisites: None.	L+L 3.0 4.0 4.0
THO251	Safety Practices in Theatre and Film Production	Safety practices in theatre and film production. Includes Focus on national safety organizations and production practices of theatre stages and soundstages, theatrical rigging, electrical, scenic construction, paint and chemical handling, automation, special effects, welding,	Prerequisites: None.	L+L 1.0 2.0 2.0
THO260	Theatrical Design: Rendering	Provides experience and explores multiple illustration techniques used to communicate ideas in entertainment production. Provides basic skills including pictorial	Prerequisites: None.	L+L 2.0 4.0 4.0

THO261	Previsualization Modeling	Provides experience and explores basic pre-visualization methods used to communicate ideas in entertainment preproduction. Provides basic models	Prerequisites: None.	L+L 2.0 4.0 4.0
THO262	Entertainment Industry Design Drafting	The fundamentals of drafting for the Entertainment Industry. Includes drafting equipment, geometry, lettering, symbols, drawings (orthographic, isometric, oblique, sectional) and standard drawings used in the entertainment industry including floor plans, sections,	Prerequisites: None.	L+L 3.0 6.0 6.0
THO263	Entertainment Industry Drafting I: 2D CAD	Introduction to Computer Aided Drafting (CAD) for the Entertainment industry, including stage, screen and television venues, using CAD software. Includes basic set-ups, formats, two-dimensional drawing and editing commands, dimensions, text, and plotting typical to	Prerequisites: None.	L+L 3.0 6.0 6.0
THO265	Introduction to Stage Management	The focus of this course is the role of the stage manager. Topics include all aspects of preparation and implementation of rehearsals and performances for the	Prerequisites: None.	L+L 3.0 4.0 4.0
THO266	Production Careers in Technical Theatre	Provides the continuing design, stage management and technical student with opportunities to explore the versatility of the job opportunities within the Tech Theatre industry. Emphasis on presenting the work and talent both in person and on paper. Development of a	Prerequisites: None.	L+L 1.0 2.0 2.0
THO267	Painting Techniques for Film, TV and Theatre	Theory and skills in scenic artistry. Techniques of painting two-dimensional and three-dimensional scenery, tools, and the use of color.	Prerequisites: A grade of C or better in THP213.	L+L 3.0 4.0 4.0
THO268	Opportunities in Production	Provides the continuing design student, dramaturge, stage management, technical director, and directing students with opportunities to expand the versatility of professional skills. Emphasis on relating their work to the total production process. Linking design ideas to production concept. Maintain dramaturge, stage manager, director documentation. Practical application	Prerequisites: Permission of Department or Division.	L+L 3.0 6.0 6.0
THO269	Technical Theatre Portfolio Development	The analysis and preparation of all elements of a Technical Theatre/Design Portfolio including the use of digital portfolios and application to specific disciplines. Practice with portfolio presentation and maintaining and	Prerequisites: None.	L+L 1.0 1.0 1.0

THO270	Musical Theatre Workshop	Workshop in the study and performance of Musical Theatre repertoire. Includes audition techniques, stage directions, character role development, rehearsal techniques, vocal acting styles and vocal technique,	Prerequisites: None.	L+L 2.0 5.0 5.0
THO270AA	Musical Theatre Workshop	Workshop in the study and performance of musical theatre repertoire. Includes audition techniques, stage directions, character role development, rehearsal techniques, vocal acting styles and vocal technique,	Prerequisites: None.	LAB 1.0 3.0 3.0
THO296WA	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify) or permission of instructor. Corequisites: Must be concurrent in at least one class which is related to student's major or career interest or with	LAB 1.0 5.0 0.0
THO296WB	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify) or permission of instructor. Corequisites: Must be concurrent in at least one class which is related to student's major or career interest or with	LAB 2.0 10.0 0.0
THO296WC	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify) or permission of instructor. Corequisites: Must be concurrent in at least one class which is related to student's major or career interest or with	LAB 3.0 15.0 0.0

THO296WD	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify) or permission of instructor. Corequisites: Must be concurrent in at least one class which is related to student's major or career interest or with	LAB 4.0 20.0 0.0
THP101	Introduction to Theatrical Production	Introduction to the positions and process of theatrical production through participation in a fully-realized educational or community theatre production.	Prerequisites: None.	LAB 1.0 2.0 2.0
THP102	Theatre Service Practicum	Use and develop theatrical skills for service to the community through practical experience.	Prerequisites: Permission of Department or Division.	LAB 1.0 2.0 0.0
THP112	Acting I	Fundamental techniques and terminology of acting through physical and vocal expression, improvisation, and monologue and scene work. Emphasis on	Prerequisites: None.	L+L 3.0 4.0 4.0
THP131	Stage Movement	Movement skills for the actor to develop a flexible, expressive physical instrument. Includes pantomime, physical isolation, and awareness exercises	Prerequisites: None.	L+L 3.0 4.0 4.0
THP151	Theatre for Youth	Principles and techniques of selecting plays, adapting stories, playwriting, directing, designing, producing, and acting in theatre for youth. The course will provide the opportunity to analyze and experience the production process from creating a script to performing a theatre	Prerequisites: None.	L+L 3.0 4.0 4.0
THP201AA	Theatre Production I	Designed to give college credit to the cast and technical production crews of college theatre productions.	Prerequisites: None.	LAB 1.0 2.0 2.0
THP201AB	Theatre Production II	Designed to give college credit to the cast and technical production crews of college theatre productions.	Prerequisites: None.	LAB 2.0 4.0 4.0
THP202	Theatre Production Projects	The objective of this course is to provide hands-on experience in the creation of a theatrical production. This course is tailored around the work done on a production. Structured to provide the student with an atmosphere of professional expertise and guidance.	Prerequisites: None.	LAB 1.0 2.0 0.0

THP206	Introduction to Costume Construction for Theatre	Introduction to basic principles used in costuming for theatre including the use of tools and techniques for costume construction, understanding of fabrics and materials, and a selected survey of historical fashion.	Prerequisites: None.	LEC 4.0 4.0 4.0 LAB 0.0 2.0 2.0
THP211	Creative Drama	Theory and practice of creative drama, including improvisation, storytelling, puppetry, and script and program development in drama, and their application to	Prerequisites: None.	LEC 3.0 3.0 3.0
THP211AA	Creative Drama: Improvisation	Theory and practice of creative drama, including improvisation. Covers improvisation theatre-based activities. Emphasis on application in elementary and	Prerequisites: None.	LEC 1.0 1.0 1.0
THP211AB	Creative Drama: Storytelling/ Puppets	Theory and practice of creative drama in storytelling and puppetry. Covers use of puppets to enhance storytelling skills. Emphasis on application in elementary	Prerequisites: None.	LEC 1.0 1.0 1.0
THP211AC	Creative Drama: Script Development	Theory and practice of creative drama in script development. Covers creation and adaptation of dramatic materials from a variety of sources. Emphasis	Prerequisites: None.	LEC 1.0 1.0 1.0
THP212	Acting II	Fundamental techniques of acting through script analysis, rehearsal, and performance	Prerequisites: A grade of C or better in THP112 or permission of Department or Division.	L+L 3.0 4.0 4.0
THP213	Introduction to Technical Theatre	Procedures of technical theatre production and demonstration. Topics include design and construction	Prerequisites: None.	LEC 4.0 4.0 4.0 LAB 0.0 2.0 2.0
THP214	Directing Techniques	Contemporary theory and practice in directing, the evolution of present-day directing procedures, and a sampling of scripts for directing practice. Principles of script analysis, blocking, casting, rehearsing, and	Prerequisites: A grade of C or better in THP112 or THE220, or permission of Instructor.	L+L 3.0 4.0 4.0
THP217	Introduction to Design Scenography	The role of the theatre designer in creating scenic, lighting, costume, sound, and multimedia effects for stage productions. Elements of the design process and communication of dramatic themes and visions to the	Prerequisites: None.	L+L 3.0 4.0 4.0
THP241	Oral Interpretation of Literature	The study, analysis, and preparation for performance of prose, poetry, and dramatic literature. Preparation of	Prerequisites: A grade of C or better in ENG101 or ENG107.	LEC 3.0 3.0 3.0
THP271	Voice and Diction	Exercises and techniques to free the voice and improve projection, resonance, and articulation. Covers international phonetic alphabet and standard stage	Prerequisites: None.	LEC 3.0 3.0 3.0
THP273	Musical Theatre Production	Principles and techniques for musical theatre production performance. Includes audition techniques, stage directions, character role development, rehearsal techniques, vocal acting styles and vocal technique,	Prerequisites: By audition.	LAB 1.0 5.0 5.0

THP281	Production and Acting I	Provides the continuing acting student with opportunities to expand the versatility of characterization skills. Emphasis on relating the actor's work to the total production process. Performance of	Prerequisites: Permission of Department or Division.	L+L 3.0 4.0 4.0
THP282	Production and Acting II	Provides the continuing acting student with opportunities to expand the versatility of characterization skills. Emphasis on relating the actor's work to the total production process. Performance of	Prerequisites: A grade of C or better in THP281 or permission of Department or Division.	L+L 3.0 4.0 4.0
THP285	Creating/Performing Solo/Collaborative	Developing, rehearsing, and performing solo and collaborative works for fringe festivals and other	Prerequisites: None.	LEC 3.0 3.0 3.0
THP291AA	Summer Conservatory: Stage Movement	Techniques of body centering, coordination, relaxation, energization, and physical expression for the actor.	Prerequisites: By audition and interview only, or permission of Instructor, or Program Director.	L+L 1.0 2.0 2.0
THP291AB	Summer Conservatory: Voice and Diction	Basic principles and techniques of voice production and stage speech for the actor.	Prerequisites: By audition and interview only, or permission of Instructor, or Program Director.	L+L 1.0 2.0 2.0
THP291AC	Summer Conservatory: Script Analysis (ACT)	Theory and practice in analysis of dramatic literature for the actor. Emphasis on techniques of character analysis	Prerequisites: By audition and interview only.	LEC 1.0 1.0 1.0
THP291AD	Summer Conservatory: Improvisation	Techniques of improvisation to develop the actor's creativity. Emphasis on inner resources, sensory memory, and emotional memory.	Prerequisites: By audition and interview only, or permission of Instructor, or Program Director.	L+L 1.0 2.0 2.0
THP291AE	Summer Conservatory: Scene Study	Basic methodology and process of rehearsing and creating a character through prepared scenes for faculty critique and analysis.	Prerequisites: By audition and interview only, or permission of Instructor, or Program Director.	L+L 1.0 2.0 3.0
THP291AG	Summer Conservatory: Production (ACT)	Practicum in rehearsal and stage performance through public productions.	Prerequisites: By audition and interview only.	L+L 4.0 5.0 5.0
THP292AA	Summer Conservatory: Theatre Technology	Theory and practice of technical phases of play production. Includes applications in scenery, properties,	Prerequisites: By interview only.	L+L 3.0 4.0 4.0
THP292AB	Summer Conservatory: Projects	Independent supervised studies in technical theatre applications. Emphasis on topic selection addressing individual student interests and abilities.	Prerequisites: By interview only.	L+L 3.0 4.0 4.0
THP292AC	Summer Conservatory: Script Analysis (TECH)	Theory and practice in analysis of dramatic literature as preparation for technical production applications.	Prerequisites: By interview only.	LEC 1.0 1.0 1.0
THP292AD	Summer Conservatory: Career Development (TECH)	Techniques of preparation and presentation of professional materials for the theatre technician and designer.	Prerequisites: By interview only.	L+L 1.0 2.0 2.0
THP292AE	Summer Conservatory: Production (TECH)	Practicum in various aspects of technical theatre production for public performance.	Prerequisites: By interview only.	L+L 4.0 5.0 5.0

THP296WA	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits, minimum 2.6 grade point average, and be able to obtain a position related to students academic or career goals (students present job may qualify) or permission of instructor. Corequisites: Must be concurrent in at least one class which is related to student's major or career interest or with	LAB 1.0 5.0 0.0
THP296WB	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits, minimum 2.6 grade point average, and be able to obtain a position related to students academic or career goals (students present job may qualify) or permission of instructor. Corequisites: Must be concurrent in at least one class which is related to student's major or career interest or with	LAB 1.0 5.0 0.0
THP296WC	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits, minimum 2.6 grade point average, and be able to obtain a position related to students academic or career goals (students present job may qualify) or permission of instructor. Corequisites: Must be concurrent in at least one class which is related to student's major or career interest or with	LAB 3.0 15.0 0.0

THP296WD	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students.	Prerequisites: Completion of at least twelve (12) college credits, minimum 2.6 grade point average, and be able to obtain a position related to students academic or career goals (students present job may qualify) or permission of instructor. Corequisites: Must be concurrent in at least one class which is related to student's major or career interest or with	LAB 4.0 20.0 0.0
THP298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment are made available for student use. Allows the best aspects of independent study and individualized learning to be	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
THP298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment are made available for student use. Allows the best aspects of independent study and individualized learning to be	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
THP298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment are made available for student use. Allows the best aspects of independent study and individualized learning to be	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
TLT100	Telecommunications Math	Application of the scientific calculator to solve mathematical problems in telecommunications electronics. Scientific notation, engineering notation, metric conversion, algebraic equations, linear equations, graph interpretation, exponents, logarithmic	Prerequisites: A grade of C or better in college-level math course, or appropriate District placement, or permission of Department/Division Chair.	LEC 2.0 2.0 2.0

TLT142	Drop Connections	Technical concepts for drop connections. Includes passive and active devices as well as use of filters. Also covers electronics hook up and troubleshooting	Prerequisites: None.	LEC 1.0 1.0 1.0
TLT143	Digital Video Systems	Customer cable digital video signal reception establishment procedures. Covers system feature information, signal fault identification, and system and end-use equipment troubleshooting procedures. Also	Prerequisites: None.	L+L 2.0 3.0 3.0
TLT144	Drop Planning and Maintenance	Procedures for the planning and installation of Broadband Networks to a customer address. Emphasis on drop connection location, configuration, and hardware component selection. Covers internal cable routing considerations and grounding, splitting, and directional tap/coupler component information. Also includes basic Broadband Network operation	Prerequisites: None.	L+L 2.0 3.0 3.0
TLT149	Digital Phone Network Installation	Telephone network installation procedures. Emphasis on multi dwelling unit, multiple broadband applications, and residential telephone networks. Covers component connection as well as basic electronics principles.	Prerequisites: None.	L+L 2.0 3.0 3.0
TLT162	High Speed Internet/Networking	High speed internet installation and networking. Includes features and services of high-speed internet as well as procedures for installation. Also covers home	Prerequisites: None.	L+L 3.0 4.0 4.0
TLT163	High Speed Internet Technical Training	Procedures for presenting high speed internet products and services. Includes service tiers as well as network facilities and responsibilities. Also covers navigation of operating systems and troubleshooting common	Prerequisites: None.	L+L 2.0 4.0 4.0
TLT298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0

TLT298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
TLT298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
TOO101	Elementary Tohono O'odham I	Basic grammar, pronunciation, and vocabulary of the Tohono O'odham language. Practice of listening, speaking, reading, and writing skills. Includes the study of the Tohono O'odham culture, with participation in an	Prerequisites: None.	LEC 4.0 4.0 4.0
TQM101	Quality Customer Service	Examines the nature of quality customer service and the attitudes, knowledge, and skill needed to work effectively in a quality customer service environment. Foundation skills for quality customer services are	Prerequisites: None.	LEC 3.0 3.0 3.0
TQM220	Leadership and Empowerment	Methods for facilitating teams and empowering employees which effectively enable all employees to act	Prerequisites: None.	LEC 2.0 2.0 2.0
TQM230	Teamwork Dynamics	Theory and practice of how team members and team leaders use listening, negotiating and interpersonal skills for the enhancement of team process. Included are concepts of team development and team problem-	Prerequisites: None.	LEC 2.0 2.0 2.0
TQM235	Motivation, Evaluation, and Recognition Systems	Presents methods for benchmarking, assessing team performance, linking recognition to team performance, and valuing victories and mistakes with all personnel.	Prerequisites: None.	LEC 2.0 2.0 2.0
TQM240	Project Management in Quality Organizations	Presents methods for quality organizations in how to plan and schedule a project in use of Critical Path Method (CPM) and Program Evaluation and Review Technique (PERT) techniques and software to monitor	Prerequisites: None.	LEC 3.0 3.0 3.0

UAS100	sUAS Batteries and Electronics	Small Unmanned Aircraft Systems (sUAS) basic electronics and circuits, communications, information display systems, transmitter and receiver fundamentals, flight controller installation and tuning, lithium polymer battery basics, radio telemetry, basic electrical	Prerequisites: Appropriate placement test score in Reading, Writing and Math, or [eligibility in ENG101, (RDG100 or RDG100LL), MAT120, MAT121 and MAT122].	LEC 5.0 5.0 5.0
UAS101	Introduction to Uncrewed Aircraft Systems Operation	Introduction to Small Unmanned Aircraft Systems (sUAS) and the National Airspace System. Familiarizes students with career paths such as emergency response, geographic information systems, and	Prerequisites: None.	LEC 2.0 2.0 2.0
UAS107	Uncrewed Aircraft Systems Operator Certification	This course offers in-depth preparation for students to take the Federal Aviation Administration (FAA) Remote Pilot Aeronautical Knowledge test. Topics include regulations, air space, charts, airport operations, weather, loading, flight performance, radio communications, aeronautical decision making, small Uncrewed Aircraft Systems (sUAS) flight operations, and maintenance. In the associated flight lab, students receive a sUAS and acquire practical skills and experience including maintenance and pre-flight	Prerequisites: None.	LEC 3.0 1.0 1.0 LAB 0.0 3.0 3.0
UAS205	sUAS Instruments and Autopilot Programming and Uses	Small unmanned aircraft systems (sUAS) proper operation of ground control stations with remote aircraft, troubleshooting radio link issues, changing parameters,	Prerequisites: A grade of C or better in UAS101 and UAS107. Corequisites: UAS206,	LEC 3.0 3.0 3.0
UAS206	sUAS Instrument and Autopilot Flight Lab	Students will use their advanced skills to manipulate a ground control station in the practical operation of Small Unmanned Aircraft Systems (sUAS) in a controlled, but	Prerequisites: A grade of C or better in UAS101 and UAS107. Corequisites: UAS205.	LAB 2.0 2.0 2.0
UAS207	sUAS Dynamics and Design	Design, configuration, and concepts of Small Unmanned Aircraft Systems (sUAS). Platform types including multi-rotors, single rotor, and fixed wing	Prerequisites: A grade of C or better in UAS205 and UAS206. Corequisites: UAS208.	LEC 5.0 5.0 5.0
UAS208	sUAS Dynamics and Design Lab	Students will assemble, program, preflight, and fly a Small Unmanned Aircraft System (sUAS) manufacturing equipment.	Prerequisites: A grade of C or better in UAS205 and UAS206. Corequisites: UAS207.	LAB 2.0 2.0 2.0
UAS211	sUAS Ground Control Stations, Telemetry, and Communications	Small Unmanned Aircraft Systems (sUAS) proper set-up, operation, and basic troubleshooting of many different Ground Control Stations used in the industry. Set-up, use, and configuration of different radio telemetry units. Proper use and procedures of communications with Air Traffic Control. Proper use of applications for use in Air	Prerequisites: A grade of C or better in UAS207 and UAS208.	L+L 3.0 4.0 4.0

UAS212	sUAS Maintenance Lab	Proper inspection, troubleshooting, and repair techniques for Small Unmanned Aircraft Systems	Prerequisites: A grade of C or better in UAS207 and UAS208.	LAB 2.0 2.0 2.0
UAS215	sUAS Commercial Flight Training	Proper pre-flight and operation techniques used in a Small Unmanned Aircraft (sUAS) Commercial Environment. Gathering digital information from an inspection or surveillance flight, then demonstrate post-	Prerequisites: A grade of C or better in UAS207 and UAS208.	L+L 3.0 6.0 6.0
UCS101	Introduction to Billing	An introduction to basic billing procedures in the public utility industry. Includes computer familiarization, coordinates system, billing cycle, payment plans, and	Prerequisites: None.	LEC 3.0 3.0 3.0
UCS108	Account Services for Public Utilities	Overview of procedures for accessing and maintaining customer accounts. Includes the billing cycle, rates and payment options as well as various types of service	Prerequisites: Permission of Department or Division.	LEC 1.0 1.0 1.0
UCS110	Meter and Trouble Orders	Fundamentals of meters and their functions. Instruction on handling trouble calls and determining and	Prerequisites: None.	LEC 2.0 2.0 2.0
UCS115	Introduction to Water Customer Services	Introduction to water customer account services. Includes the irrigation process, accounts, and schedules. Also covers delivery systems, controls, and use of a mapping system in addition to water rights and	Prerequisites: None.	LEC 2.0 2.0 2.0
UCS116	Water Services Accounts I	Water services procedures and restrictions for opening, combining, and updating accounts as well as responding to billing and payment inquiries and opening accounts. Also covers Supplemental Supply Program (SSP) water and various user accounts in	Prerequisites: A grade of C or better in UCS115.	LEC 2.0 2.0 2.0
UCS117	Water Services Accounts II	Water services rules and restrictions for handling property sales, special requests, and order revisions in addition to typical irrigation problems. Also covers procedures for handling private system controls, flood	Prerequisites: A grade of C or better in UCS116.	LEC 2.0 2.0 2.0
UCS118	Water Customer Services Procedures I	Practical application of water customer account services. Includes procedures for creating, accessing, and updating accounts as well as completing and documenting water orders. Also covers use of the	Prerequisites: A grade of C or better in UCS115.	L+L 2.0 4.0 4.0
UCS119	Water Customer Services Procedures II	Procedures for completing billing and payment account procedures. Covers refunds, overdraft accounts, and procedures for handling water theft. Also covers special requests, flood calls, and townsite issues in addition to	Prerequisites: A grade of C or better in UCS118.	L+L 2.0 4.0 4.0
UCS120	Payments, Credits and Rates	Examination of procedures to perform payment, deposit and credit operations. Includes various connect orders	Prerequisites: None.	LEC 3.0 3.0 3.0

UCS130	Service Orders I	Fundamentals of processing service orders. Emphasis on customer service, making determinations of services required and placing appropriate orders	Prerequisites: None.	LEC 3.0 3.0 3.0
UCS135	Service Orders II	Further examination of the processing of service orders. Emphasis on customer account data, account status, third party billings and placing appropriate orders	Prerequisites: A grade of C or better in UCS130.	LEC 2.0 2.0 2.0
UCS140	Service Order Procedures	Practical application of service order processing. Includes meter and trouble orders, requests for service, billings and rates, as well as account turn-offs and	Prerequisites: A grade of C or better in UCS135.	L+L 2.0 4.0 4.0
UCS180	Introduction to Water Delivery Customer Service	Introduction to water customer delivery operations. Includes an overview of the irrigation process, the irrigation system, delivery responsibilities and schedules. Also covers delivery systems, controls, and use of a mapping system in addition to water rights and typical	Prerequisites: None.	LEC 3.0 3.0 3.0
UCS182	Water Delivery Management	Water delivery procedures for managing the flow of irrigation water through the irrigation system to both residential and agricultural customers. Also covers field customer service for agricultural and residential water customers as well as role and responsibilities for	Prerequisites: None.	LEC 2.0 2.0 2.0
UCS184	Water Delivery Operations	Water delivery service areas, delivery devices, and responsibilities for managing irrigation water. Covers procedures for handling system controls and issues as it relates to water delivery in addition to procedures for dry-	Prerequisites: None.	L+L 2.0 3.0 3.0
UCS186	Water Delivery Measurements	Practical application of irrigation water delivery measurement. Includes procedures to safely and correctly open water delivery devices, determine accuracy of and correct water flow. Also covers safety	Prerequisites: None.	L+L 2.0 3.0 3.0
UCS188	Water Delivery Operations Lab	Practical application of water delivery procedures for managing the flow of water through the irrigation system to both residential and agricultural customers.	Prerequisites: None.	L+L 1.0 3.0 3.0
UTP110	Hand and Power Tools for Linemen	Use, maintenance, and safety procedures for common hand and power tools used in the electric power	Prerequisites: None.	LEC 1.0 1.0 1.0
UTP111	Line Work Equipment and Safety	Overview of the line work industry including its history, technological developments, and current practices. Covers an introduction to industry equipment and tools with a focus on safety practices and procedures. Inspection and maintenance of equipment and tools used in pole climbing and cover-up procedures.	Prerequisites: None.	LEC 4.0 4.0 4.0

UTP112	Line Construction	Introduction to line construction equipment and procedures. Includes personal protective equipment, climbing equipment, and basic line materials. Also covers procedures for handling wood poles, de-energized lines, and one-man pole-top rescues, in	Prerequisites: None.	LEC 3.0 3.0 3.0
UTP113	Rigging Fundamentals	Fundamentals of rigging for linemen. Includes safe use of rigging components including ropes, knots, handlines, and block and tackle. Covers rigging calculations and approaches to basic rigging tasks, in	Prerequisites: None.	LEC 3.0 3.0 3.0
UTP114	Line Construction Procedures	Line construction procedures including pole change out, horizontal line construction, and taking lines out of service. Covers distribution line symbols, compatible units, and second point of contact, in addition to calculating pulling tension and procedures for stringing	Prerequisites: A grade of C or better in UTP112.	LEC 3.0 3.0 3.0
UTP115	Underground Line Construction	Introduction to underground line construction. Includes a comparison of duct and vault underground systems. Also covers Blue Stake laws and markings, procedures for pulling and maintaining underground cable, and	Prerequisites: None.	LEC 2.0 2.0 2.0
UTP150	Introduction to Transformer Theory	Introduction to transformers and transformer theory. Covers the basic structure, components and applications of single-phase and three phase transformers. Includes interpretation of transformer	Prerequisites: None.	LEC 3.0 3.0 3.0
UTP151	Transformer Theory Design and Function	Comparison of function of various types of transformers. Includes design of single-phase and three-phase transformers, as well as safety procedures and precautions for energizing transformers. Also covers	Prerequisites: None.	LEC 3.0 3.0 3.0
UTP152	Transformer Diagramming and Calculations	Diagramming and calculations in transformer theory. Includes use of the Pythagorean Theorem and sine and cosine waves and functions to complete calculations. Also covers secondary and primary	Prerequisites: None.	LEC 3.0 3.0 3.0
UTP155	Introduction to Hot Stick	Introduction to hot stick terminology, tools, and procedures. Includes procedures for cleaning, storage, and handling in addition to inspection and testing. Also covers tie-wires, preform ties, hold tags, and live line	Prerequisites: None.	LEC 3.0 3.0 3.0
UTP156	Hot Stick Theory and Calculations	Rigging theory and calculations for hot stick application, including Working Load Limit (WLL). Also covers slings, personal protective grounding, and protective cover, in addition to energized conductors and lines.	Prerequisites: None.	LEC 3.0 3.0 3.0

UTP157	Hot Stick Work Site and Equipment	Hot stick work site, materials, and equipment procedures. Covers fault location, meter load, tower erection, and phasing sequences in addition to procedures for managing safety in confined spaces. Also includes cable preparation and pulling procedures	Prerequisites: None.	LEC 3.0 3.0 3.0
UTP210	Personal Protective Grounding	Considerations and procedures for personal protective grounding with a review of basic electrical circuits. Covers function, sizing, and installation of protective grounding sets on trucks, underground distribution systems, and construction projects. Also covers	Prerequisites: None.	LEC 2.0 2.0 2.0
UTP211	Overhead Distribution Line Design	Introduction to overhead distribution line construction design. Includes overhead construction standards, distribution pole standards, and primary construction units as well as controls and installation standards for various types of capacitors. Also covers clearances,	Prerequisites: None.	LEC 3.0 3.0 3.0
UTP212	Underground Distribution Line Design	Introduction to underground distribution line construction design. Includes construction assembly units, capacitor banks, switching, and fusing as well as applications for conduit and feeder riser compatible units. Also covers clearances, calculations, drawings,	Prerequisites: None.	LEC 3.0 3.0 3.0
UTP215	Emerging Technologies	Overview of emerging technologies in electrical energy production. Includes applications, limitations, and advantages of various types of alternative energy. Also covers characteristics of and advantages to the use of fiber optics. Design and function of Extra High Voltage	Prerequisites: None.	LEC 2.0 2.0 2.0
UTP216	Transformer Operations and Troubleshooting	Advanced transformer operation and troubleshooting procedures. Includes characteristics of three-phase systems, distribution capacitors, and fusing. Covers transformer calculation including voltage regulation, fault current, and load. Procedures for isolating and	Prerequisites: None.	LEC 3.0 3.0 3.0
UTP217	Electrical Substations	A comparison of operation and design of various types of substations. Includes construction planning, design, diagrams, and blueprints, in addition to hazards and safety issues. Also covers substation stresses,	Prerequisites: None.	LEC 3.0 3.0 3.0
UTP250	Maps and Schematics for Linemen	Components, coordinates, and symbols for maps and schematics used by linemen. Also includes procedures for access and navigation of mobile Geographic	Prerequisites: None.	LEC 1.0 1.0 1.0

UTP251	Metering Theory for Linemen	Concepts of energy measurement and metering theory for linemen. Includes the power triangle and various metering types, ratings, and strategies for	Prerequisites: None.	LEC 2.0 2.0 2.0
UTP255	Power Distribution Operations	Transmission and Generation Operations (TGO), Distribution Operations Center (DOC), and Power Distribution Operations (PDO) organization and	Prerequisites: None.	LEC 2.0 2.0 2.0
UTP258	Applied Line Topics	Applied line topics for linemen. Includes rigging calculations and derating factors as well as diagramming of three-phase vectors and wiring. Also covers procedures, documentation, and restrictions for	Prerequisites: None.	L+L 3.0 4.0 4.0
VET101	Introduction to Veterinary Technology	Introduces the role of the veterinary paraprofessional to the veterinary science industry. Addresses professional development, including ethics, professionalism, and legal implications of veterinary practice. Students will be introduced to animal husbandry and nutrition, animal behavior, species and breed identification, the human-animal bond, biosecurity, equine medicine, livestock	Prerequisites: None. Corequisites: VET101LL.	LEC 3.0 3.0 3.0
VET101LL	Animal Care Skills I Laboratory	Principles of daily animal husbandry, socialization, enrichment, and clinical care of animals housed in campus facilities. Introductory veterinary technology students work on building teamwork, communication and veterinary technical skills encountered in the daily	Prerequisites: None. Corequisites: VET101.	LAB 2.0 2.0 2.0
VET103	Veterinary Assisting I	Provides students with the hands-on skills needed to perform the duties of a veterinary assistant. Introduction of the basic veterinary assistant skills needed to assist veterinary professionals in the quality care of animals. Includes basic introduction to anatomy and physiology of domestic animals, front office skills, communication and client relations, animal restraint, nursing,	Prerequisites: None.	LEC 3.0 2.0 2.0 LAB 0.0 3.0 3.0
VET104	Veterinary Assisting II	This is a lecture/laboratory course where students will learn hands on skills needed to perform the duties of a veterinary assistant. The course will build foundation skills for veterinary clinical care for the veterinary assistant. This course includes foundations in pharmacy and pharmacology, surgical preparation and assisting, the veterinary assistant's role in collection of laboratory	Prerequisites: A grade of C or better in VET101 and VET103. High school biology strongly recommended.	LEC 3.0 2.0 2.0 LAB 0.0 3.0 3.0

VET109	Veterinary Assisting Internship	Provides students with clinical experience in a small animal general veterinary practice. Provides the opportunity for practical application and development of knowledge, skills, and abilities acquired in program coursework at a veterinary assistant level. Students have exposure to practice philosophies, methodologies, and real-life situations requiring critical thinking and decision-making abilities. Includes instruction and evaluation by veterinarians or veterinary technicians guided by the National Association of Veterinary	Prerequisites: A grade of C or better in VET101 and VET103. Corequisites: VET104.	LAB 1.0 1.0 0.0
VET112	Animal Nursing I	Training in and supervised performance of skills necessary in the husbandry and clinical care and treatment of animals. Occupational hazards and safety in livestock, companion animal, and laboratory animal facilities. Introduction to medical terminology. Restraint and handling, feeding, and housing of a variety of animal species. Physical examination of various species of animals. Principles of sanitation, disinfection, sterilization, and aseptic technique. Principles and techniques of medication administration, fluid therapy, and vaccination. Familiarization with operation of	Prerequisites: A grade of C or better in VET101 and admission to the Veterinary Technology/Animal Health program or permission of Instructor.	LEC 2.0 2.0 2.0 LAB 0.0 3.0 3.0
VET132	Veterinary Office Management and Client Communication	Principles and practice of veterinary office management for veterinary technology students. Client relations, receptionist skills, telephone techniques, interpersonal skills, and personnel management. Generation and maintenance of correspondence, medical records, legal forms, and hospital logs. Basic bookkeeping, accounting, and financial management principles. Marketing and public relations. Professional ethics and	Prerequisites: A grade of C or better in VET101 or permission of Instructor.	LEC 3.0 3.0 3.0
VET140	Animal Care Skills II	Practical application of animal care skills and principles of animal care and management using techniques and knowledge learned in the veterinary technology classes. Students expand their animal care knowledge, skills and abilities to include skills needed to be successful in	Prerequisites: Acceptance into the Veterinary Technology program. Corequisites: VET150 or VET151.	LAB 2.0 2.0 2.0

VET150	Veterinary Anatomy and Physiology I	Comparative evaluation of the anatomy and physiological functions of various body systems of livestock, companion animals, and laboratory animals.	Prerequisites: A grade of C or better in (BIO181, CHM130, CHM130LL, CRE101, ENG102, MAT120, and VET101) and admission to the Veterinary Technology/Animal Health	LEC 3.0 3.0 3.0
VET150LL	Veterinary Anatomy and Physiology	Laboratory experience in support of VET150. Includes dissection of preserved animal specimens.	Prerequisites: None. Corequisites: VET150.	LAB 1.0 3.0 3.0
VET151	Veterinary Anatomy and Physiology II	Focuses on unique anatomic structures and physiological processes which are clinically important in veterinary medicine. Anatomical and physiological bases of clinic procedures, animal disease processes,	Prerequisites: A grade of C or better in VET150 or permission of Instructor.	LEC 3.0 3.0 3.0 LAB 0.0 3.0 3.0
VET200	Veterinary Clinical Pathology Methods	Fundamental studies of laboratory techniques and procedures involved in evaluating veterinary clinical samples. Includes hematology, urinalysis, hemostasis, blood biochemistry and enzymology, serology, cytology, and parasitology. The veterinary technician's role in sample collection, sample storage and handling, and performance of analytic procedures. Use of laboratory	Prerequisites: A grade of C or better in BIO205 or permission of Instructor. Corequisites: VET223	LEC 2.0 2.0 2.0 LAB 0.0 3.0 3.0
VET201	Animal Care Skills III	Practical application of animal care skills and principles of animal care and management using techniques and knowledge learned in the veterinary technology classes. Students expand their animal care knowledge, skills and abilities to include skills needed to be successful in	Prerequisites: A grade of C or better in VET140, and acceptance into the Veterinary Technology program.	LAB 2.0 2.0 2.0
VET210	Animal Nursing II	Instruction in and hands-on application of techniques of veterinary nursing care, patient assessment, equipment operation, diagnostic sample collection, and medical treatment. Physical examination, clinical nutrition, and reproductive management of the dog and cat. Operation of E.C.G. and anesthetic machine. Fluid therapy, wound therapy, and bandaging. Surgical	Prerequisites: A grade of C or better in (VET112 and VET151) or permission of Instructor.	LEC 3.0 3.0 3.0 LAB 0.0 3.0 3.0
VET220	Veterinary Pharmacology for the Veterinary Technician	Actions and uses of pharmacological agents used in veterinary medicine; drug classifications, modes of action, indications and contraindications, routes of administration, and mechanisms of elimination. Dispensing and pharmacy management, and laws regulating controlled substances. Solving medical math	Prerequisites: A grade of C or better in VET101 and VET151.	LEC 3.0 3.0 3.0

VET223	Animal Diseases	Study of common infectious, parasitic, metabolic, immunologic, and degenerative diseases of domestic animals. Infectious disease transmission, mechanisms of disease, the host-parasite relationship, and host responses to disease agents. Clinical signs and management of common diseases. Life cycles of common parasites. Principles of disease prevention, environmental management, vaccination, and zoonosis.	Prerequisites: A grade of C or better in VET151. BIO205 recommended.	LEC 3.0 3.0 3.0
VET230	Veterinary Radiology and Imaging for the Veterinary Technician	Veterinary and radiographic terminology, radiation and electrical protection, technical principles, radiographic equipment operation - manual and digital, and radiographic duties of the Veterinary Technician. Introduction to ultrasound, MRI, CAT scans, and other non-traditional imaging uses and techniques. Lab allows for practical application of theories and	Prerequisites: A grade of C or better in (VET150 and VET150LL) or permission of Instructor.	LEC 3.0 3.0 3.0 LAB 0.0 3.0 3.0
VET235	Veterinary Technician Proficiency	Review of pertinent subject matter in preparation for the Arizona State Veterinary Technician Examination and the Veterinary Technician National Examination. Guided review and discussion of exam application process. Review of student's Veterinary Technology Student Essential and Recommended Skills to ensure completion for graduation as required by the American	Prerequisites: A grade of C or better in VET210, VET220, and VET223. Corequisites: VET240.	L+L 2.0 2.0 2.0
VET240	Veterinary Anesthesia, Surgery, and Emergency Nursing	Veterinary surgical and dental nursing skills associated with aseptic technique and proper protocol in the surgery/dental suite. Pre and post-op monitoring, record keeping, and client education skills. Procedures and techniques with intravenous and inhalation anesthetics, surgical asepsis, skin preparation, instrument sterilization techniques and monitoring veterinary	Prerequisites: A grade of C or better in VET210 and VET220.	LEC 3.0 3.0 3.0 LAB 0.0 4.0 4.0
VET250AA	Veterinary Technician Internship	Provides Veterinary Technology program students with off-campus clinical experience in a small animal general veterinary practice. Opportunity for practical application and development of knowledge, skills, and abilities acquired in program coursework. Exposure to practice philosophies, methodologies, and real-life situations requiring critical thinking and decision-making abilities. Includes instruction and evaluation by veterinarians or veterinary technicians guided by the American	Prerequisites: A grade of C or better in VET112, VET132, and VET151.	LAB 0.5 0.5 0.0

VET250AB	Veterinary Technician Internship	Provides Veterinary Technology program students with off-campus clinical experience in a large animal general veterinary practice. Opportunity for practical application and development of knowledge, skills, and abilities acquired in program coursework. Exposure to practice philosophies, methodologies, and real-life situations requiring critical thinking and decision-making abilities. Includes instruction and evaluation by veterinarians or veterinary technicians guided by the American	Prerequisites: A grade of C or better in VET250AA.	LAB 0.5 0.5 0.0
VET250AC	Veterinary Technician Internship	Provides Veterinary Technology program students with off-campus clinical experience in an emergency veterinary clinic and in a veterinary specialty practice. The internship hours will be split equally between the emergency clinic and the specialty practice. Specialty practices may include surgery, ophthalmology, internal medicine, dentistry, dermatology, radiology, exotics, zoo, research, and others. Opportunity for practical application and development of knowledge, skills, and abilities acquired in program coursework. Exposure to practice philosophies, methodologies, and real-life situations requiring critical thinking and decision-making abilities. Includes instruction and evaluation by	Prerequisites: A grade of C or better in VET250AA or permission of Instructor.	LAB 0.5 0.5 0.0
VET250AD	Veterinary Technician Internship	Continuing practical application and mastery of knowledge, skills, and abilities in the selected clinical setting. Exposure to practice philosophies, methodologies, and real-life situations requiring critical thinking and decision-making abilities. Includes instruction and evaluation by veterinarians or veterinary technicians guided by the American Veterinary Medical	Prerequisites: A grade of C or better in VET250AC or permission of Instructor.	LAB 0.5 0.5 0.0
VGP298AB	Special Projects	Focus on art, audio, coding, and/or narrative in the development, execution, and presentation of a capstone game or project of interactive media exhibiting	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0

WAC101	Writing Across the Curriculum	Expressive, expository, and academic writing experiences to develop students' rhetoric and composition foundation. Experience planning and drafting multi-paragraph essays through a writing process with emphasis on essay and paragraph structure and the elements of sentence structure. Participation in writing workshop, group work, reading to	Prerequisites: None.	LEC 3.0 3.0 3.0
WED106	Cardiopulmonary Resuscitation (CPR)/Automated External Defibrillator (AED)	Basic overview of Cardiopulmonary Resuscitation (CPR) and Automated External Defibrillator (AED). Covers choking procedures and the importance, guidelines, and techniques for performing CPR and utilizing an AED.	Prerequisites: None.	LEC 0.5 0.5 0.5
WED107	Community First Aid	Basic first aid course for the layperson. Training with the assessments and skills that be performed with minimal equipment in common home or workplace emergencies	Prerequisites: None.	L+L 0.5 0.5 0.5
WED120	Massage Therapy: Anatomy Refresher - Upper Body	This course is designed for individuals in the field of massage therapy and provides a review of upper body musculature affecting the neck, shoulder, spine, elbow and wrist joints. Origins and insertions and resistive	Prerequisites: None.	L+L 1.0 1.0 1.0
WED125	Reiki: Healing and Symbols	Introduction to Reiki as a Japanese technique for stress reduction and relaxation that also promotes healing. Instruction in the Usui method of Reiki and its symbols and applications to personal health and everyday life.	Prerequisites: None.	L+L 2.0 2.0 2.0
WED126	Cupping Therapy	Introduction to cupping therapy for individuals in the field of massage therapy. In addition but not limited to the history, techniques and application in various	Prerequisites: None.	L+L 1.0 1.0 1.0
WED145	Reflexology	History and application of specific pressure points on the hands and feet that have correlation to different body organs and systems. Practice of micromovement techniques with the goal of creating a response	Prerequisites: None.	L+L 1.0 1.0 1.0
WED151	Introduction to Alternative Medicine	Definition of health; exploration of mind-body-spirit connection in health; various therapeutic modalities; identification of strengths and limitations of alternative therapies. Also includes development of ability to	Prerequisites: None.	LEC 3.0 3.0 3.0
WED152	Comparative Healing Techniques	Comparative approaches to healing, including allopathy, homeopathy, chiropractic, osteopathy, Chinese medicine, Ayurveda, Shamanism, and therapeutic touch. Contrast explanations for causation	Prerequisites: None.	LEC 3.0 3.0 3.0

WED154	First Aid/Cardiopulmonary Resuscitation	Cardiopulmonary Resuscitation (CPR) and first aid for the adult, child and infant patients includes Automated External Defibrillator (AED), rescue breathing, obstructed airway, and other first aid procedures. Designed to train citizen responders in skills and	Prerequisites: None.	LEC 3.0 3.0 3.0
WED155	Introduction to Chinese Medicine	Basic theories, principles, and methods that constitute the backbone of Chinese Medicine. Explores concepts of Yin, Yang, the Five Elements (Wood, Fire, Earth, Metal, and Water), and the Five Vital substances (Qi, Blood, Body Fluids, Jing, and Shen). Overview of the physiology of the major internal organs (Five Zang and	Prerequisites: None.	LEC 3.0 3.0 3.0
WED162	Meditation and Wellness	Physiology of meditation and its effects on physical and mental health; scholastic abilities and interpersonal relationships; differentiation between meditation and	Prerequisites: None.	LEC 1.0 1.0 1.0
WED165	Overview of Massage Therapy	History of massage; overview of bodywork systems; benefits and indications of massage; legal requirements	Prerequisites: None.	LEC 2.0 2.0 2.0
WED166	Overview of FELDENKRAIS (R) Awareness Through Movement (R)	Movement activity lessons which are verbally directed, exploratory in nature, designed to clarify the full range of possibility for human movement and action. Self-paced lessons in a noncompetitive environment.	Prerequisites: None.	LEC 1.0 1.0 1.0
WED170	Principles of Homeopathy	Origins of homeopathy; key concepts; perceptions of disease; schools of homeopathy; scientific studies;	Prerequisites: None.	LEC 1.0 1.0 1.0
WED172	Overview of Herbal Remedies	History and evolution of herbs for healing applications. Preparation, usage, and effects of certain herbs used for healing purposes. Basic literature review skills in the	Prerequisites: None.	LEC 1.0 1.0 1.0
WED174	Myofascial Release	Introduction to myofascial release techniques and application. Myofascial Release (MFR) is a therapeutic modality that allows restricted fascia to release from a tightened state. MFR improves nerve conductivity and circulation of blood and lymph, which allows the healing powers of the body to flow to restricted tissues. The	Prerequisites: None.	L+L 1.0 1.0 1.0
WED176	Flower Essences	Healing properties of Bach flower remedies; Bach's development of remedies and his philosophy of healing; use and preparation of a variety of flower essences	Prerequisites: None.	LEC 1.0 1.0 1.0
WED181	Essential Oil Properties and Formulations	Focuses on the benefits of individual plant oils, profiling past to present day uses and documented properties; experiential evaluation of the oils; how to formulate topical blends; oil substitution using less expensive oils;	Prerequisites: None.	L+L 1.0 1.0 1.0

WED182	Health Conditions and Popular Herbs	In-depth look at some of today's most popular herbs and their relationship to specific health conditions. Emphasis on research skills in relation to popular herbs. Includes the effects, uses, and application strategies of	Prerequisites: None. WED172 suggested but not required.	LEC 2.0 2.0 2.0
WED183	Introduction to Ayurvedic Principles	Introduction to Ayurveda: "the science of life"; a complete system of balancing the body, mind and spirit, originating from ancient India. Introduction to foundational Ayurvedic principles, health philosophy and self assessment of basic constitution. Application of basic health and self care practices such as food selection and preparation, exercise and movement,	Prerequisites: None.	L+L 2.0 2.0 2.0
WED185	Overview of Movement Therapy Systems	Definition of health, exploration of mind-body-spirit connection in health, various therapeutic modalities, identification of strengths and limitation of movement based therapies. Also includes development of ability to critically review written material in the physical or	Prerequisites: None.	LEC 2.0 2.0 2.0
WED195	Special Topic in Wellness Education	Introduction to current topics and contemporary issues related to developing and maintaining a healthy	Prerequisites: None.	LEC 0.5 0.5 0.5
WED195AA	Special Topics in Wellness Education A	Introduction to current topics and contemporary issues related to developing and maintaining a healthy	Prerequisites: None.	L+L 0.5 1.0 1.0
WED195AB	Special Topics in Wellness Education A	Introduction to current topics and contemporary issues related to developing and maintaining a healthy lifestyle. Focuses on a variety of techniques and	Prerequisites: None.	L+L 1.0 1.0 1.0
WED195AC	Special Topics in Wellness Education A	Introduction to current topics and contemporary issues related to developing and maintaining a healthy lifestyle. Focuses on a variety of techniques and	Prerequisites: None.	L+L 2.0 2.0 2.0
WED195AD	Special Topics in Wellness Education A	Introduction to current topics and contemporary issues related to developing and maintaining a healthy lifestyle. Focuses on a variety of techniques and	Prerequisites: None.	LEC 3.0 3.0 3.0
WED195BB	Special Topics in Wellness Education B	Introduction to current topics and contemporary issues related to developing and maintaining a healthy	Prerequisites: None.	L+L 1.0 1.0 1.0
WED195BC	Special Topics in Wellness Education B	Introduction to current topics and contemporary issues related to developing and maintaining a healthy	Prerequisites: None.	L+L 2.0 2.0 2.0
WED204	Establishing a Massage Practice	Explore career options in therapeutic massage, including state licensing requirements, and determine how to lay the groundwork for a successful massage	Prerequisites: None.	LEC 3.0 3.0 3.0

WED210	Sports Massage	Purpose, benefits, and contraindications of sports massage; principles of sports physiology; massage techniques, applications, and procedures; treatment of	Prerequisites: A grade of C or better in WED165 and WED230 or permission of Program Director.	L+L 2.0 3.0 3.0
WED215	Self-Care for Health Care Providers	Emphasis on mind-body methods for personal wellness through integration of physical, emotional, social, and spiritual dimensions of being. Development of a personal practice to achieve and sustain a balanced	Prerequisites: None.	L+L 2.0 5.0 5.0
WED218	Aromatherapy	Physiology of aromatherapy; methods of use; preparation of oils; uses in sports, beauty care, massage, child care, health care, at work, and in the	Prerequisites: None.	LEC 1.0 1.0 1.0
WED220	Gentle Touch for Individuals Living with Cancer	Introduction to the gentle-touch approach to massage for individuals who are living with or have survived cancer. Overview of cancer and principal cancer treatments. Clinical considerations, including practice guidelines and hands-on adjustments related to cancer and treatment side effects. Administrative considerations for client intake, treatment plans and	Prerequisites: None.	L+L 2.0 2.0 2.0
WED225	Reiki: Master Level and Teacher Training	Advanced Usui method of Reiki, including but not limited to the preparation for placement of symbols, hand movements and attunements. Exploration of the four pillars of Reiki and 4th Reiki symbol and strategies for instruction, relationships and classroom	Prerequisites: A grade of C or better in WED125 or permission of Department or Division.	LEC 2.0 2.0 2.0
WED230	Therapeutic Massage Practices I	Principles of professionalism, ethics, and legalities. Includes use of terminology related to massage therapy. Applications, indications, and contraindications of the nine strokes of Swedish massage. Study of the human osseous and muscular structure. Emphasis on normal movement patterns, origins, insertions, and	Prerequisites: Acceptance into the Therapeutic Massage program or permission of Program Director.	L+L 6.0 9.0 9.0
WED231	Therapeutic Massage Practices II	Refined application of the nine strokes of Swedish massage and contraindications to avoid. Application of advanced principles and techniques of trigger point therapy, muscle energy technique, stretching, hydrotherapy protocols, hot and cold applications, reflexology, and corporate massage. Study of the human osseous and muscular structure. Emphasis on	Prerequisites: A grade of C or better in WED230.	L+L 6.0 9.0 9.0

WED232	Therapeutic Massage Practices III	Refinement and integration of technical skills, psychosocial competencies, and role identity. Exploration of techniques to assess and facilitate range of motion and function; purpose, benefits, indications, and contraindications of therapeutic massage for specific neuro-musculoskeletal disorders/injury and special populations. Application of massage techniques with therapists pre- and post-client evaluations of the	Prerequisites: A grade of C or better in WED231. Corequisites: WED250 or permission of Program Director.	L+L 6.0 10.0 10.0
WED250	Clinical Practicum	Application of fundamental massage techniques.	Prerequisites: A grade of C or better in WED231. Corequisites: WED232 and permission of Program Director.	LAB 3.0 6.0 0.0
WED250AA	Clinical Practicum: Part I	Application of fundamental massage techniques.	Prerequisites: A grade of C or better in WED231. Corequisites: WED232 and permission of Program Director.	LAB 1.5 3.0 0.0
WED250AB	Clinical Practicum: Part II	Continued application of fundamental massage techniques.	Prerequisites: A grade of C or better in WED250AA.	LAB 1.5 3.0 0.0
WED282AA	Service-Learning Experience in Wellness Education	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 1.0 1.0 0.0
WED282AB	Service-Learning Experience in Wellness Education	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 2.0 2.0 0.0
WED282AC	Service-Learning Experience in Wellness Education	Unpaid Service-Learning (SL) experience, completed with approved community partner.	Prerequisites: Permission of Instructor.	LAB 3.0 3.0 0.0
WED297AA	Special Topics: Therapeutic Massage	Explores a special topic related to therapeutic massage. Topics vary and include concepts relevant to those pursuing careers in therapeutic massage	Prerequisites: None.	L+L 1.0 1.0 1.0
WED297AB	Special Topics: Therapeutic Massage	Explores a special topic related to therapeutic massage. Topics vary and include concepts relevant to those pursuing careers in therapeutic massage	Prerequisites: None.	L+L 2.0 2.0 2.0
WED297AC	Special Topics: Therapeutic Massage	Explores a special topic related to therapeutic massage. Topics vary and include concepts relevant to those pursuing careers in therapeutic massage	Prerequisites: None.	L+L 3.0 3.0 3.0

WED298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
WED298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
WED298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
WFR110	Re-Entry Skills: Personal Skill Development	Personal skill development necessary for transition from incarceration to community. Includes development of a personal value system and decision-making strategies as well as conflict management. Also covers time and money management, goal setting, and the basics for	Prerequisites: Permission of Department or Division.	LEC 3.0 3.0 3.0
WFR112	Re-Entry Skills: Family Reunification	Reunification procedures for the incarcerated person's effective transition. Includes building and maintaining self- esteem and effective communication for healthy families or support systems. Also covers family and	Prerequisites: Permission of Department or Division.	LEC 3.0 3.0 3.0
WFR114	Re-entry Skills: Social Skill Development	Social skill development for the incarcerated person preparing to re-enter society. Includes identifying and establishing boundaries as well as modeling these behaviors. Also covers identification of core emotions	Prerequisites: Permission of Department or Division.	LEC 1.0 1.0 1.0
WFR116	Re-Entry Skills: Substance Abuse Education	Substance abuse education for incarcerated persons. Includes warning signs and the "chain of events" to addiction. Also covers decision making skills as well as strategies and resources available for prevention	Prerequisites: Permission of Department or Division.	LEC 1.0 1.0 1.0

WFR118	Re-Entry Skills: Job Readiness	Preparing the incarcerated person for release into the working world. Includes education, skills assessment, and work experience. Also covers job search skills such as resume writing, applications, and interviewing	Prerequisites: Permission of Department or Division.	LEC 3.0 3.0 3.0
WFR120	Re-Entry Skills: Job Retention	Job retention procedures and techniques for incarcerated persons in transition. Includes workplace protocol, job performance, and employer-employee interaction. Also covers stress management and communication skills as well as interpersonal	Prerequisites: Permission of Department or Division.	LEC 2.0 2.0 2.0
WLD100	Basic Welding	Shop procedures, safety and personal protection. Grinders, drill presses, and saws. Resistance and oxyacetylene welders. Arc welders: alternating current (AC) and direct current (DC) modes, electrodes,	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	LEC 2.0 2.0 2.0
WLD101	Introduction to Welding	Introduction to safe operation of shop equipment and common joining and thermal cutting processes used in the welding industry. It is designed to provide a brief exposure to the SMAW, GMAW, FCAW, GTAW, OFW, OFC, PAC processes while developing incremental	Prerequisites: None.	L+L 3.0 6.0 6.0
WLD102	Basic Welding Metal Sculpture	Practical training for welders in artistic welding and metal sculpter with emphasis on oxy-ace welding, arc welding, and metal inert gas (MIG) welding.	Prerequisites: None.	L+L 3.0 6.0 6.0
WLD103	Basic Blacksmithing and Metal Shaping	Selection and safe use of blacksmithing and metal shaping tools and equipment. Material selection and conditioning, practical forging techniques, metal	Prerequisites: None.	L+L 3.0 8.0 8.0
WLD106	Arc Welding	Electric welding with emphasis on metallic arc welding in out-of-position practice and procedures	Prerequisites: None.	L+L 5.0 8.0 8.0
WLD106AA	Introduction to SMAW	Introduction to arc welding with emphasis in Shielded Metal Arc Welding (SMAW). Designed to provide the knowledge and skills needed to cut and prepare weld joints utilizing current technology. Develops hands-on	Prerequisites: None.	L+L 5.0 8.0 8.0
WLD106AB	SMAW 6010 Plate	Continued training in shielded metal arc welding (SMAW) with emphasis on using E6010 (fast-freeze) electrodes in all joint positions. Focus is on fillet welds for structural steel and open root groove weld joints.	Prerequisites: A grade of C or better in WLD106AA or permission of Instructor.	L+L 5.0 8.0 8.0
WLD106AC	SMAW 7018 Plate	Continued training in shielded metal arc welding (SMAW) with emphasis on using E7018 (low hydrogen) electrodes in all joint positions. Focus is on fillet welds and groove weld joints with backing to prepare students	Prerequisites: A grade of C or better in WLD106AA or permission of Instructor.	L+L 5.0 8.0 8.0

WLD106AD	SMAW Introduction to Pipe	Advanced training in shielded metal arc welding (SMAW) with emphasis on pipe welding using E6010 and E7018 electrodes in various pipe joint positions (1G, 2G, 5G, 6G). Focus is on the open root groove	Prerequisites: A grade of C or better in WLD106AA or permission of Instructor.	L+L 5.0 8.0 8.0
WLD131	Ferrous Metals	Use of ferrous metals, specification of ferrous metals, use of identification and study of welding industry	Prerequisites: None.	LEC 3.0 3.0 3.0
WLD150	Welding Blueprint Reading	Analysis and interpretation of technical drawings common to the metal fabrication and construction	Prerequisites: None.	LEC 3.0 3.0 3.0
WLD201	Advanced Welding Concepts	Further study of electric arc and oxyacetylene welding with emphasis on GTAW (heliarc) and GMAW (mig) processes to weld both ferrous and nonferrous metal.	Prerequisites: A grade of C or better in WLD101.	L+L 3.0 6.0 6.0
WLD202	Construction Welding III	Metal arc welding processes, blueprint and weld symbol reading, joint layout preparation and welding procedures, gas-tungsten arc welding with related	Prerequisites: Permission of Instructor.	L+L 3.0 5.0 5.0
WLD203	Welding Certification Preparation	Emphasis on the weld certification process including the Welding Procedure Qualification Record (WPQR), Welder Performance Qualification Test Record (WPQTR), and the Weld Procedure Specification (WPS) in Shielded Metal Arc Welding (SMAW), Gas Tungsten Arc Welding (GTAW), or Gas Metal Arc Welding (GMAW)	Prerequisites: Registered apprentice status or permission of the Apprenticeship Coordinator.	L+L 6.0 6.0 6.0
WLD206	Advanced Welding - Heliarc and Wire Feed	Instruction in theory and practice on tungsten inert gas and wire feed welding. Welding procedures on ferrous and nonferrous metals. Set up and operation of all	Prerequisites: A grade of C or better in WLD106 or permission of Department or Division.	L+L 5.0 8.0 8.0
WLD206AA	Introduction to GMAW/FCAW and GTAW	Instruction in theory and practice of gas metal arc welding (GMAW, commonly referred to as MIG), flux cored arc welding (FCAW), and gas tungsten arc welding (GTAW, commonly referred to as TIG). Basic welding procedures on ferrous and nonferrous metals. Setup and operation of welding process equipment.	A grade of C or better required in all Prerequisites. Prerequisites: WLD101 or permission of Instructor. Prerequisites or Corequisites: WLD106AA or permission of Instructor.	L+L 5.0 8.0 8.0
WLD206AB	Advanced GMAW and FCAW	Instruction and practice of gas metal arc welding (GMAW) and flux cored arc welding (FCAW) in the horizontal, vertical, and overhead positions. Prepare for industry code performance qualification plate tests with	Prerequisites: A grade of C or better in WLD206AA or permission of Instructor.	L+L 5.0 8.0 8.0
WLD206AC	Advanced GTAW Non-Ferrous	Instruction and practice of gas tungsten arc welding (GTAW) aluminum sheet in the flat, horizontal, and vertical positions. Prepare for industry code	Prerequisites: A grade of C or better in WLD206AA or permission of Instructor.	L+L 5.0 8.0 8.0

WLD206AD	Advanced GTAW Ferrous	Instruction and practice of gas tungsten arc welding (GTAW) carbon and stainless-steel in any position. Prepare for industry code performance qualification	Prerequisites: A grade of C or better in WLD206AA or permission of Instructor.	L+L 5.0 8.0 8.0
WLD208	Advanced Arc Welding - Certification	Advanced metallic arc welding emphasizing out-of-position welding in preparation for certification. Includes various test methods. Provides training on machine flame cutting and gouging and arc air cutting and	Prerequisites: A grade of C or better in WLD106 or permission of Instructor.	L+L 5.0 8.0 8.0
WLD208AA	SMAW Code Welding	Advanced training in shielded metal arc welding (SMAW) to achieve successful welder performance qualification testing in any position. Focus is on single v-groove weld joints per industry codes and specification	Prerequisites: A grade of C or better in (WLD101 and WLD106AA), or permission of Instructor.	L+L 5.0 8.0 8.0
WLD208AB	GMAW Code Welding	Advanced training in gas metal arc welding (GMAW) with emphasis on achieving successful welder performance qualification testing in any position. Focus	Prerequisites: A grade of C or better in WLD206AA or permission of Instructor.	L+L 5.0 8.0 8.0
WLD208AC	FCAW Code Welding	Advanced training in flux cored arc welding (FCAW) with emphasis on achieving successful welder performance qualification testing in any position. Focus is on groove	Prerequisites: A grade of C or better in WLD206AA or permission of Instructor.	L+L 5.0 8.0 8.0
WLD208AD	SMAW Code Welding Pipe	Advanced training in pipe welding using either shielded metal arc welding (SMAW), gas metal arc welding (GMAW), or flux cored arc welding (FCAW) with emphasis on achieving successful welder performance qualification testing in any position. Focus is on groove	Prerequisites: A grade of C or better in WLD106AD or WLD208AA, or permission of Instructor.	L+L 5.0 8.0 8.0
WLD214	American Welding Society Certification Preparation	Principles and techniques of electric arc welding and American Welding Society (AWS) certification requirements, certification pretest and preparation. Technical theory and skill training in all position welding	Prerequisites: A grade of C or better in (WLD101 and registered apprenticeship status) or permission of the Apprenticeship Coordinator.	L+L 2.0 2.0 2.0
WLD215	Welding Fabrication	Introduction to layout, basic welding, and fabrication. Introduction to the basic skills of measuring, equipment setup and cutting, shaping, grinding, welding, filing, and heating and bending of metal parts.	Prerequisites: A grade of C or better in WLD101 or WLD106++ or WLD206++ or Apprentice status or permission of the Apprenticeship	L+L 3.0 6.0 6.0
WLD215AA	Weld Fabrication I for Millwrighting	Layout, fabrication and basic skills of measuring, cutting, shaping, grinding, drilling and tapping, welding, filing, shimming, heating and bending of metal parts. Safe and proper use of all necessary hand and power	Prerequisites: Permission of the Apprenticeship Coordinator.	L+L 2.0 2.0 2.0
WLD215AB	Weld Fabrication II for Millwrighting	Welding layout and fabrication. Advanced skills in measuring, cutting, shaping, grinding, drilling and tapping, welding, filing, shimming, heating and bending of metal parts. Safe and proper use of all necessary	Prerequisites: A grade of C or better in (WLD215AA and registered apprenticeship status) or permission of the Apprenticeship Coordinator.	L+L 2.0 2.0 2.0

WLD225	Welding Inspection and Quality Control	Welding inspection and quality control standards and practices in the construction and fabrication industries. Welding inspector certification requirements and	Prerequisites: A grade of C or better in WLD106++ or permission of Instructor.	LEC 3.0 3.0 3.0
WLD296WA	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 1.0 5.0 0.0
WLD296WB	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 2.0 10.0 0.0
WLD296WC	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 3.0 15.0 0.0

WLD296WD	Cooperative Education	Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. COMMON COMPETENCY COURSE	Prerequisites: Completion of at least twelve (12) college credits minimum 2.6 grade point average and be able to obtain a position related to students academic or career goals (students present job may qualify or permission of instructor Corequisites: Must be concurrently enrolled in at least one class which is related to students major or career interest or	LAB 4.0 20.0 0.0
WLD298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
WLD298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0
WLD298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
WRT100	Introduction to Water Resources	Fundamental principles of water resources. Basic concepts and strategies in the study of water, the current focus on water pollution and water purification. Topics include ground water, surface water, water quality, water purification, and water pollution. Presentation of ongoing studies related to work of earth scientists.	Prerequisites: Admission to the Water Resources Technology program and placement into MAT120, MAT121, MAT122, MAT150, MAT151, MAT152, or higher-level mathematics course for which College Algebra is a	LEC 3.0 3.0 3.0

WRT102	Water Resources Computations and Data Analysis	Fundamentals of water resources technology formulas for real-world problems. Discussion of best practices in water resources given the results of the calculations.	Prerequisites: Math assessment score on District placement exam placing students into MAT090 or MAT091 or MAT092 or higher level	LEC 3.0 3.0 3.0
WRT108	Fundamentals of Environmental Science Technology	This course provides fundamental concepts and problem-solving methods that address environmental conditions, pollution monitoring and prevention, and approaches for protecting air, land and water using	Prerequisites: Admission into the Water Resources Technology program. Corequisites: WRT100 or permission of Program Director.	LEC 3.0 3.0 3.0
WRT110	Principles of Water Treatment Plant Operations	Principles in the safe and effective operation and maintenance of drinking water treatment plants, reservoir management and intake structuring. The source of water, basic water laboratory test procedures and calculations also covered.	A grade of C or better required in all Prerequisites. Prerequisites: Admission to the Water Resources Technology program. Prerequisites or Corequisites: WRT100 or	LEC 3.0 3.0 3.0
WRT115	Water Technology Calculations	Application of water technology formulas for operation and maintenance of water/wastewater plants and distribution and collections systems. Includes operator examination preparation and discussion of best practices in water technologies given the results of the	A grade of C or better required in all Prerequisites. Prerequisites: Admission to the Water Resources Technology program. Prerequisites or Corequisites: WRT100 or	LEC 3.0 3.0 3.0
WRT117	Geographic Information Systems (GIS)	Purpose and applications of desktop Geographic Information Systems (GIS) technology applied to water resources and planning. ArcView software program applications and data management. Includes data query and spatial data functions. Analysis of spatial	Prerequisites: Admission into the Water Resources Technology program and (a grade of C or better in BPC110, or CIS105, or permission of Program Director).	LEC 3.0 3.0 3.0
WRT121	Operation of Wastewater Treatment Plants	Safe and effective operation and maintenance of wastewater treatment plants. Overview of treatment processes and laboratory testing used in wastewater treatment plants. Principles and processes involved in waste treatment ponds, disinfection and chlorination	A grade of C or better required in all Prerequisites. Prerequisites: Admission to the Water Resources Technology program. Prerequisites or Corequisites: WRT100 or	LEC 3.0 3.0 3.0
WRT125	Surveying for Water Resources	Fundamental surveying principles utilized in water field studies. Level and transit, horizontal measurement by tape or stadia. Benchmark and profile leveling traverse surveys and computations and establishment of line	Prerequisites: Admission into the Water Resources Technology program and (a grade of C or better in WRT100 or permission of Program	LEC 2.0 2.0 2.0
WRT130	Groundwater Hydrology	Fundamentals of groundwater resources. Includes basic flow equations, well hydraulics, groundwater fluctuations, artificial recharge and basic-data collection techniques. Emphasis on the use of data in analysis of	Prerequisites: Admission into the Water Resources Technology program and (a grade of C or better in WRT100 or permission of Program	LEC 3.0 3.0 3.0

WRT130LL	Groundwater Field Techniques	Field exercises to acquire groundwater data and service data-gathering equipment. Safety procedures stressed.	Prerequisites: A grade of C or better in WRT130 or Corequisites: WRT130 or permission of Department or	LAB 1.0 3.0 3.0
WRT131	Wastewater Collection Systems Operation and Maintenance	Overview of wastewater collection systems with an emphasis on inspection and cleaning of sewer systems. Safety considerations, maintenance and underground repair procedures also covered.	Prerequisites: Admission into the Water Resources Technology program and (a grade of C or better in WRT100 and WRT115, or permission of Program Director).	LEC 3.0 3.0 3.0
WRT134	Water Distribution System Operation and Maintenance	Safe and effective operation and maintenance of water distribution systems. Water contaminants, disinfection and chlorination in addition to development of a plant safety plan.	Prerequisites: Admission into the Water Resources Technology program and (a grade of C or better in WRT100 and WRT115, or permission of Program Director).	LEC 3.0 3.0 3.0
WRT140	Water Quality for Treatment Industry	Introduction to water quality including common parameters in the treatment industry, regulations, and types and methods of monitoring. Laboratory safety, sampling and reporting, wet analytical methods, sample analyses, and process chemistry.	Prerequisites: Admission to the Water Resources Technology program. Prerequisites: A grade of C or better in WRT100 or Corequisites: WRT100 or permission of the	LEC 5.0 3.0 3.0 LAB 0.0 6.0 6.0
WRT140LL	Water Quality for Treatment Industry Laboratory	Laboratory safety, sampling and reporting; wet analytical methods; sample analyses; process chemistry.	Prerequisites: A grade of C or better in WRT140 or Corequisites: WRT140 or permission of Department or	LAB 1.0 3.0 3.0
WRT150	Introduction to Surface Water Data Collection	Fundamentals of surface water data collection while stressing safe practices. Map reading and navigation, field inspections, accessing, collecting, recording and retrieving surface water data.	Prerequisites: Admission into the Water Resources Technology program and (a grade of C or better in WRT100 or permission of Program	LEC 3.0 3.0 3.0
WRT150LL	Introduction to Surface Water Data Collection Field Techniques	Hands-on experience in surface water data collection while stressing safe practices. Map reading and navigation, field inspections, accessing, collecting, and	Prerequisites: A grade of C or better in WRT150 or Corequisites: WRT150 or permission of Department or	L+L 2.0 3.0 3.0
WRT152	Water Resources Field Investigations I: Groundwater and Surface Water	Hands-on experience and field exercises to acquire surface water and groundwater data and service data-gathering equipment. Hands-on experience in surface water data collection while stressing safe practices. Map reading and navigation, field inspections, accessing, collecting, and recording surface water and	A grade of C or better required in all Prerequisites. Prerequisites: Admission to the Water Resources Technology program. Prerequisites or Corequisites: WRT130 and WRT150, or permission of Program	L+L 3.0 6.0 6.0

WRT153	Environmental Law and Regulations	Introduction to various environmental laws and fundamentals of environmental laws relating to federal, state, and local levels. Overview and application of the permitting processes related to drinking and wastewater designed to provide a better sense of real-world issues	Prerequisites: Admission into the Water Resources Technology program and (a grade of C or better in WRT108 or permission of Program Director).	LEC 3.0 3.0 3.0
WRT180	Environmental Sampling and Analysis	Introduction to the theory and methodology of sampling and analysis of environmentally significant parameters in water, wastewater, hazardous waste, soil, sediment, and air.	Prerequisites: Admission into the Water Resources Technology program and (a grade of C or better in WRT100 and WRT108, or permission of Program Director).	LEC 5.0 3.0 3.0 LAB 0.0 6.0 6.0
WRT190AA	Water Resources Technologies Seminar	Interaction with other students and professionals in the water resources technologies industry. Stress placed on sharing knowledge and demonstrating understanding through discussion of current issues in the industry,	Prerequisites: None.	LEC 1.0 1.0 1.0
WRT200	Industrial Pretreatment	Principles of industrial pretreatment programs. Overview of industrial facilities inspections and pollution prevention strategies. Sampling techniques of industrial wastewaters. Field exercises to acquire industrial wastewater quality data and industrial discharge flow measurements. Quality Assurance/Quality Control	A grade of C or better required in all Prerequisites. Prerequisites: Admission to the Water Resources Technology program. Prerequisites or Corequisites: WRT100 or permission of Program Director.	LEC 3.0 3.0 3.0
WRT204	Water/Wastewater Mechanical Systems, Power, and Instrumentation	Maintenance of facilities and equipment in both water and wastewater systems. Principles of basic electricity, electrical circuits, motors, transformers, and process control instrumentation.	Prerequisites: Admission to the Water Resources Technology program and permission of the Program Director.	LEC 3.0 3.0 3.0
WRT205	Power and Instrumentation	Principles of basic electricity, electrical circuits, motors, transformers, and process control instrumentation.	Prerequisites: A grade of C or better in WRT110 or WRT121 or WRT131 or WRT134.	LEC 3.0 3.0 3.0
WRT207	Groundwater Production and Management	Basic hydrology and hydrogeology; construction of water wells from site selection and specifications through drilling, design, development, testing, and equipping; rehabilitation of existing wells, Arizona Groundwater Management Law of 1980; water quality; common operational problems of well fields; types and	Prerequisites: A grade of C or better in WRT100 or permission of Program Director.	LEC 3.0 3.0 3.0
WRT221	Water and Wastewater Treatment Plants Administration	Administration safety and maintenance of a water and wastewater treatment plants. Handling and disposal of process wastes and instrumentation use. Emphasis on reporting data in reports, graphs, and record keeping.	A grade of C or better required in all Prerequisites. Prerequisites: Admission to the Water Resources Technology program. Prerequisites or Corequisites: WRT110 or WRT121	LEC 3.0 3.0 3.0

WRT240	Water Quality	Fundamental chemical and physical factors involved in evaluating water quality. Water quality deterioration from land fills, underground storage tanks, and hazardous waste. Sampling techniques of groundwater, soil, and surface water. Quality assurance, quality control, and	Prerequisites: A grade of C or better in WRT140, or permission of Department or Division.	LEC 3.0 3.0 3.0
WRT240LL	Water Quality Field Techniques	Field exercises to acquire water quality data and service data gathering equipment. Safety procedures stressed.	Prerequisites: A grade of C or better in WRT240 or Corequisites: WRT240 or permission of Department or	LAB 1.0 3.0 3.0
WRT252	Water Resources Field Investigations II: Surveying and Surface Water	Field reconnaissance of water resources. Lab experiences in surveying techniques and procedures. Field exercises to acquire surface water data and develop hydrologic models. Safety procedures stressed.	Prerequisites: Admission into the Water Resources Technology program and (a grade of C or better in WRT152 or permission of Program	L+L 3.0 6.0 6.0
WRT270AA	Water Resources Internship	Water resources work experience in business, industry, or government. Eighty (80) hours of designated work	Prerequisites: Permission of Department or Division.	LAB 1.0 6.0 0.0
WRT270AB	Water Resources Internship	Water resources work experience in business, industry, or government. Eighty (80) hours of designated work per credit [total of one hundred sixty (160) hours].	Prerequisites: Permission of Department or Division.	LAB 2.0 12.0 0.0
WRT270AC	Water Resources Internship	Water resources work experience in business, industry, or government. Eighty (80) hours of designated work per credit [total of two hundred forty (240) hours].	Prerequisites: Permission of Department or Division.	LAB 3.0 18.0 0.0
WRT298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0
WRT298AB	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 2.0 2.0 0.0

WRT298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
WST100	Introduction to Women's and Gender	Introduction to critical issues in women's studies.	Prerequisites: None.	LEC 3.0 3.0 3.0
WST105	Women of Color in the Americas	Interdisciplinary, multi-perspective, and comparative study of the experiences of Women of Color in the Americas and their impact on the arts, literature, social structures and political movements. Examines how the intersection of race, class, gender, and sexuality has	Prerequisites: None.	LEC 3.0 3.0 3.0
WST120	Gender, Class and Race	A feminist discussion of gender, class and race as basic and central social categories that determine how we see ourselves and others and how they circumscribe our opportunities and privileges in American society.	Prerequisites: None.	LEC 3.0 3.0 3.0
WST160	Women and the Early American Experience	Introduction to American women's history, from the colonial period to suffrage in 1920, based on a feminist	Prerequisites: None.	LEC 3.0 3.0 3.0
WST161	American Women Since 1920	Continuation of the history of women in America from 1920 to the present, based on a feminist perspective. Includes discussion of the roles and status of immigrant	Prerequisites: None.	LEC 3.0 3.0 3.0
WST200	Essential Feminist Writing	Literary tracing of feminism from 18th century to present. Explores major issues related to women in the	Prerequisites: A grade of C or better in ENG101 or permission of	LEC 3.0 3.0 3.0
WST206	La Mujer	Analysis and discussion of critical issues for Latinas in	Prerequisites: None.	LEC 3.0 3.0 3.0
WST207	Black Women	Analysis and discussion of critical issues for Black women in America today	Prerequisites: None.	LEC 3.0 3.0 3.0
WST209	Women and Films	Analysis of images of women in films from both historical and contemporary perspectives	Prerequisites: None.	LEC 3.0 3.0 3.0
WST261	Indigenous Women's Literature of the Americas	Explores contemporary voices of Indigenous women authors and artists in the Americas as expressed in poetry, fiction, nonfiction, drama, and oral traditions. Focuses on themes relevant to Indigenous women and examines the trends and movements within Indigenous peoples and women's literary history. Examines themes relevant to Indigenous women such as racial and	Prerequisites: A grade of C or better in ENG101 or ENG107.	LEC 3.0 3.0 3.0

WST282AA	Volunteerism for Women's Studies: A Service Learning Experience	Service learning field experience within private/public agencies and citizen volunteer groups. Students will develop writing skills, analysis, and synthesis in an on-site volunteer experience.	Prerequisites: A grade of C or better in WST100 and permission of Instructor.	LAB 1.0 1.0 0.0
WST284	19th Century Women Writers	Investigates major themes in literature by women writing in the 19th century including the nature of women's lives in the family, in work situations, and in society. Poetry, prose, essays and drama are examined with an	Prerequisites: None.	LEC 3.0 3.0 3.0
WST285	Contemporary Women Writers	Explores twentieth century literature (short stories, essays, plays, and poetry) written by women and about women. Focus on themes relevant to women's lives	Prerequisites: None.	LEC 3.0 3.0 3.0
WST286	Women and Health: Body/Mind/Spirit/Connection	Economic, sociopolitical, and demographic factors affecting women's health. Methods for optimizing physical, emotional, and spiritual health. Specific health concerns of women throughout the lifespan. Activism for	Prerequisites: None.	LEC 3.0 3.0 3.0
WST290	Women and World Religions	Focus on the role of women in several organized religions and/or religious sects. Study of myth and symbols as they are used to establish, maintain, and enforce sex-roles within specific cultural contexts around	Prerequisites: None.	LEC 3.0 3.0 3.0
WST295	Women's Studies Seminar	Special topics in women, gender, and sexuality studies with an emphasis on current issues not covered in other Women's Studies (WST) courses.	Prerequisites: None.	LEC 1.0 1.0 1.0
WST298AC	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 3.0 3.0 0.0
WTO106AA	Introduction to SMAW	Introduction to arc welding with emphasis in Shielded Metal Arc Welding (SMAW). Designed to provide the knowledge and skills needed to cut and prepare weld joints utilizing current technology. Develops hands-on	Prerequisites: None.	180
WTO106AB	SMAW 6010 Plate	Continued training in shielded metal arc welding with emphasis on using E6010 (fast-freeze) electrodes in all joint positions. Focus is on fillet welds for structural steel	Prerequisites: A grade of C or better in WTO106AA or permission of Instructor.	180

WTO106AC	SMAW 7018 Plate	Continued training in shielded metal arc welding with emphasis on using E7018 (low hydrogen) electrodes in all joint positions. Focus is on fillet welds and groove weld joints with backing to prepare students for welding	Prerequisites: A grade of C or better in WTO106AA or permission of Instructor.	180
WTO106AD	SMAW Introduction to Pipe	Advanced training in shielded metal arc welding with emphasis on pipe welding using E6010 and E7018 electrodes in various pipe joint positions (1G, 2G, 5G, 6G). Focus is on the open root groove pipe weld joints	Prerequisites: A grade of C or better in WTO106AA or permission of Instructor.	180
WTO206AA	Introduction to GMAW/FCAW and GTAW	Instruction in theory and practice of gas metal arc welding (GMAW) and gas tungsten arc welding (GTAW), commonly referred to as MIG and TIG. Basic welding procedures on ferrous and nonferrous metals. Setup and operation of welding process equipment. Covers	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: WTO106AA or permission of Instructor.	141
WTO206AB	Advanced GMAW and FCAW	Instruction and practice of gas metal arc welding (GMAW) and flux cored arc welding (FCAW) in the horizontal, vertical, and overhead positions. Prepare for industry code performance qualification plate tests with	Prerequisites: A grade of C or better in WTO206AA or permission of Instructor.	165
WTO206AC	Advanced GTAW Non-Ferrous	Instruction and practice of gas tungsten arc welding (GTAW) aluminum sheet in the flat, horizontal, and vertical positions. Prepare for industry code	Prerequisites: A grade of C or better in WTO206AA or WTO206DA or permission of Instructor.	180
WTO206AD	Advanced GTAW Ferrous	Instruction and practice of gas tungsten arc welding (GTAW) carbon and stainless-steel in any position. Prepare for industry code performance qualification	Prerequisites: A grade of C or better in WTO206AA or WTO206DA or permission of Instructor.	180
WTO206DA	Introduction to GMAW/FCAW and GTAW	Instruction in theory and practice of gas metal arc welding (GMAW) and gas tungsten arc welding (GTAW), commonly referred to as MIG and TIG. Basic welding procedures on ferrous and nonferrous metals. Setup and operation of welding process equipment. Covers	A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: WTO106AA or permission of Instructor.	180
WTO206DB	Advanced GMAW and FCAW	Instruction and practice of gas metal arc welding (GMAW) and flux cored arc welding (FCAW) in the horizontal, vertical, and overhead positions. Prepare for industry code performance qualification plate tests with	Prerequisites: A grade of C or better in WTO206AA or WTO206DA or permission of Instructor.	180
WTO208AA	SMAW Code Welding	Advanced training in shielded metal arc welding (SMAW) to achieve successful welder performance qualification testing in any position. Focus is on single v-groove weld joints per industry codes and specification	Prerequisites: A grade of C or better in WTO106AA or permission of Instructor.	180

WTO208AB	GMAW Code Welding	Advanced training in gas metal arc welding (GMAW) with emphasis on achieving successful welder performance qualification testing in any position. Focus	Prerequisites: A grade of C or better in WTO206AA or permission of Instructor.	165
WTO208AD	SMAW Code Welding Pipe	Advanced training in pipe welding using either shielded metal arc welding (SMAW), gas metal arc welding (GMAW), or flux cored arc welding (FCAW) with emphasis on achieving successful welder performance qualification testing in any position. Focus is on groove	Prerequisites: A grade of C or better in WTO106AD or WTO208AA or permission of Instructor.	180
WTO208AE	GTAW Code Welding	Advanced training in welding using gas tungsten arc welding (GTAW) with emphasis on achieving successful welder performance qualification testing in any position. Focus is on groove weld joints per industry codes.	Prerequisites: None.	180
WTO208DB	GMAW Code Welding	Advanced training in gas metal arc welding (GMAW) with emphasis on achieving successful welder performance qualification testing in any position. Focus	Prerequisites: A grade of C or better in WTO206AA or WTO206DA or permission of Instructor.	180
YAQ100	Yaqui Indian History and Culture	Surveys Yaqui Indian history and culture from pre-contact to the present. Explores themes of resistance, dispersion, survival, tradition, family, community, belief systems, and identity. Places Yaqui history within the context of Arizona, American Indian, Mexican, and Mexican-American History. Examines historical writing and analysis, life histories, poetry, language, and	Prerequisites: None.	LEC 3.0 3.0 3.0
YAQ110	Yaqui Language and Culture	Introduction to the Yaqui language and overview of the traditional culture as a background for language use. Instruction in the grammar and writing system to assist student in speaking, reading, and writing Yaqui	Prerequisites: None.	LEC 3.0 3.0 3.0
YOG101	Beginning Yoga	Yoga practice at the beginning level, including poses (asanas), breathing, meditation and relaxation	Prerequisites: None.	L+L 1.0 3.0 3.0
YOG101PA	Beginning Yoga	Yoga practice at the beginning level, including poses (asanas), breathing, meditation and relaxation	Prerequisites: None.	L+L 0.5 1.5 1.5
YOG102	Intermediate Yoga	Yoga practice at the intermediate level, including poses (asanas), breathing, meditation and relaxation	Prerequisites: None. Prior experience recommended.	L+L 1.0 3.0 3.0
YOG102PA	Intermediate Yoga	Yoga practice at the intermediate level, including poses (asanas), breathing, meditation and relaxation	Prerequisites: None. Prior experience recommended.	L+L 0.5 1.5 1.5
YOG130	Yoga and the Body	In-depth study of how the human body functions during yoga both theoretically and practically. Attention given to correct body alignment and mechanics while performing yoga, exploring essential areas of the body	Prerequisites: None. YOG101, or YOG102, or YOG201 recommended.	L+L 2.0 3.0 3.0

YOG150	Tradition and Practice of Yoga I	Introduction to the art and science of yoga, including terminology, concepts, issues, trends and health benefits. Explores the history and philosophy of yoga	Prerequisites: None.	LEC 2.0 2.0 2.0
YOG170	Teaching Yoga: Level I	Methods of teaching yoga. Studies assessment techniques, establishing course goals, and organizing the classroom. Reviews yoga instruction techniques and how these differ from other movement-based activities; application of anatomical knowledge and practice	Prerequisites: None. Corequisites: YOG101, or YOG102, or YOG201, or permission of Instructor.	L+L 2.0 2.0 2.0
YOG171	Teaching Yoga: Level II	Emphasizes practice teaching experiences. Reviews instructional methods and techniques for assessing student skill levels, organizing the classroom and writing lesson plans. Application of anatomical knowledge to build movement skills, improvement of observational	Prerequisites: A grade of C or better in YOG170 or permission of instructor. Corequisites: YOG101, or YOG102, or YOG201, or permission of Instructor.	L+L 2.0 2.0 2.0
YOG172	Teaching Yoga: Level III	Instructional methods for teaching more advanced asanas. Principles of alignment of back bending, inversion, forward bending and arm balancing asanas and techniques for identifying and correcting misalignments. Emphasis on instructional techniques that safely build yoga movement skills while	Prerequisites: A grade of C or better in YOG171 or permission of Instructor. Corequisites: YOG101, or YOG102, or YOG201, or permission of Instructor.	L+L 2.0 2.0 2.0
YOG174	Teaching Yoga: Level I	Emphasizes practice teaching experiences. Reviews instructional methods and techniques for assessing student skill levels, organizing the classroom and writing lesson plans. Application of anatomical knowledge to build movement skills, improvement of observational	Prerequisites: None.	L+L 4.0 6.0 6.0
YOG175	Teaching Yoga: Level II	Instructional methods for teaching more advanced asanas. Principles of alignment of back bending, inversion, forward bending and arm balancing asanas and techniques for identifying and correcting misalignments. Emphasis on instructional techniques that safely build yoga movement skills while	Prerequisites: A grade of C or better in YOG174 or permission of Instructor.	L+L 4.0 6.0 6.0
YOG201	Advanced Yoga	Yoga practice at the advanced level, including poses (asanas), breathing, meditation and relaxation techniques.	Prerequisites: A grade of C or better in PED102YO, or PED103YO, or YOG102, or YOG102PA, or	L+L 1.0 3.0 3.0
YOG201PA	Advanced Yoga	Yoga practice at the advanced level, including poses (asanas), breathing, meditation and relaxation techniques.	Prerequisites: A grade of C or better in PED102YO, or PED103YO, or YOG102, or YOG102PA, or	L+L 0.5 1.5 1.5

YOG250	Tradition and Practice of Yoga II	Examination of the art and science of yoga. Explores the history and philosophy of yoga. In-depth review of significant literature associated with the yoga tradition. Examines cultural aspects of yoga, relevance of yoga to	Prerequisites: A grade of C or better in YOG150.	LEC 2.0 2.0 2.0
YOG274	Teaching Yoga: Practicum Level I	Guided, practical experience in teaching yoga students. Requires implementation of lesson plans, application of individual teaching techniques and analysis of teaching	Prerequisites: A grade of C or better in YOG174 or permission of Instructor.	L+L 4.0 6.0 6.0
YOG275	Teaching Yoga: Practicum Level II	Guided, practical experience in teaching intermediate level yoga students. Requires implementation of lesson plans, application of individual teaching techniques and	Prerequisites: A grade of C or better in YOG274 or permission of Instructor.	L+L 4.0 6.0 6.0
YOG298AA	Special Projects	Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to	Prerequisites: Permission of Program Director or Instructor.	LAB 1.0 1.0 0.0

Starting Term: 2023 Fall
Final Term: 9999

ASSOCIATE IN APPLIED SCIENCE (AAS) IN ACCOUNTING

Total Credits: 62-73
Major Code: 3149

Description

The Associate in Applied Science (AAS) in Accounting program is designed to provide fundamental skills for individuals planning to enter the field of accounting. Possible entry-level jobs for this program include accounting clerk, accounts payable/receivable clerk, claims clerk, payroll clerk, credit clerk, bookkeeper, accounting intern, tax preparation or comparable positions. This program may prepare students for certification in Certified Bookkeeper (CB), Enrolled Agent (EA), and Certified Payroll Professional (CPP). Certificates of Completion (CCL) in Accounting and Enrolled Agent are available.

Program Notes

Students must earn a grade of C or better in all courses within the program. Consultation with an Academic Advisor is recommended for course selection.

Admission Criteria

None

Required Courses

Required Courses	Course #	Course Title	Credits
Credits: 34-39			
ACC111	Accounting Principles I (3) AND		
ACC230	Uses of Accounting Information I (3) AND		
ACC240	Uses of Accounting Information II (3)		
OR			
ACC111	Accounting Principles I (3) AND		
ACC112	Accounting Principles II (3) AND		
ACC212	Managerial Accounting (3)		
OR			
ACC211	Financial Accounting (3) AND		
ACC212	Managerial Accounting (3)	6-9	
ACC105	Payroll, Sales and Property Taxes (3) OR		
ACC222	Payroll Accounting (3)	3	
ACC115	Computerized Accounting	3	
ACC121	Individual Tax Preparation (3) OR		
ACC221	Tax Accounting (3)	3	
ACC219	Intermediate Accounting I	3	
CIS114DE	Excel Spreadsheet	3	
CIS105	Survey of Computer Information Systems	3	
FYE101	Introduction to College, Career and Personal Success (1) OR		
FYE103	Exploration of College, Career and Personal Success (3)	1-3	
GBS151	Introduction to Business	3	
GBS205	Legal, Ethical, and Regulatory Issues in Business	3	
GBS120	Workplace Communication Skills (3) OR		
GBS233	Business Communication (3)	3	

Restricted Electives

Restricted Electives	Course #	Course Title	Credits
Credits: 6			
Students must select six (6) credits from the list below:			
ACC+++	Any additional ACC Accounting course(s) except ACC111, ACC112, ACC211, ACC212, ACC230, ACC240		0-6
GBS131	Business Calculations	3	
GBS220	Quantitative Methods in Business	3	
GBS221	Business Statistics	3	
GBS261	Investments I	3	
MGT101	Techniques of Supervision (3) OR		
MGT175	Business Organization and Management (3)	OR	
MGT229	Management and Leadership I (3)	3	

ASSOCIATE IN APPLIED SCIENCE (AAS) IN ADMINISTRATION OF JUSTICE STUDIES

Total Credits: 61-65

Major Code: 3181

Description

The Associate in Applied Science (AAS) in Administration of Justice Studies provides in-depth preparation for students desiring to be practitioners or pursue continued education and advancement in several fields including local and federal law enforcement, the courts, corrections, security, and investigations. The program also provides criminal justice practitioners with the opportunity to complete the Certificate of Completion (CCL) in Administration of Justice as well as one of five Certificates of Completion (CCLs) in Corrections, Homeland Security, Law Enforcement, Legal Studies, and Victimology. A transfer pathway in Criminal Justice is also available (Associate Arts (AA), Emphasis in Criminal Justice) as well as an Associate in Applied Science (AAS) in Forensics and related Certificates of Completion. Additionally, a transfer pathway is also available for the Bachelor of Applied Science (BAS) Public Safety Administration.

Program Notes

Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses Course # Course Title Credits

Credits: 28-30

AJS101 Introduction to Criminal Justice 3

AJS109 Substantive Criminal Law 3

AJS123 Ethics and the Administration of Justice 3

AJS200 Current Issues in Criminal Justice (3) OR

AJS/EMT/FSC258 Victimology and Crisis Management in Public Safety (3) 3

AJS212 Juvenile Justice Procedures 3

AJS225 Criminology 3

AJS230 The Police Function 3

AJS240 The Correction Function 3

AJS260 Procedural Criminal Law 3

FYE101 Introduction to College, Career and Personal Success (1) OR

FYE103 Exploration of College, Career and Personal Success (3) 1-3

Restricted Electives

Restricted Electives Course # Course Title Credits

Credits: 12-13

Complete twelve to thirteen (12-13) credits from the course options below. Some of these options fulfill requirements for one or more related

AJS113 Criminal Justice Crime Control Policies and Practices 3

AJS119 Computer Applications in Justice Studies 3

AJS270 Community Relations 3

The following courses fulfill the requirements for the Corrections certificate (5776N):

AJS205 Effective Communication and Report Writing in Criminal Justice 3

AJS255 The Criminal Justice System Handling of the Mentally Ill 3

AJS275 Criminal Investigation I 3

The following course fulfills the requirements for the Crime Scene Investigation (5964) and Fingerprint Identification and Photography (5010N)

AJS290BN Courtroom Testimony Seminar 1

The following courses fulfill the requirements for the Homeland Security (5322N):

AJS/FSC139 Emergency Response to Terrorism 3

AJS/FSC147 Emergency Preparedness 3

AJS/FSC148 Fundamentals of Emergency Management 3

AJS/FSC149 Hazard Mitigation 3

AJS195 International and Domestic Terrorism 3

The following courses fulfill the requirements for the Law Enforcement certificate (5987N):

AJS205 Effective Communication and Report Writing in Criminal Justice 3

AJS275 Criminal Investigation I 3

The following courses fulfill the requirements for the Legal Studies certificate (5966N):

AJS201 Rules of Evidence 3

AJS205 Effective Communication and Report Writing in Criminal Justice 3

AJS210 Constitutional Law 3

The following courses fulfill the requirements for the Victimology certificate (5392N):

AJS162 Domestic Violence 3

AJS255 The Criminal Justice System Handling of the Mentally Ill 3

AJS++++ Any AJS Administration of Justice Studies course not listed under the Required Courses area 3

Free Electives

Free Electives Course # Course Title Credits

Credits: 0-6

Select additional courses 100-level or higher to complete the minimum total program credits required for this degree.

Select courses not already listed in Required Courses, Restrictive Electives, or General Education requirements. Consult with an AJS faculty

Starting Term: 2025 Fall
Final Term: 9999

ASSOCIATE IN APPLIED SCIENCE (AAS) IN ANIMATION AND TIME-BASED MEDIA

Total Credits: 69-77
Major Code: 3199

Description

The Associate in Applied Science (AAS) in Animation and Time-Based Media is designed for the student who wishes to develop marketable skills in the area of digital animation and time-based media development. The program provides the student with an understanding of the equipment, operations, and knowledge of the terminology related to still image, video, and animation production. It allows for the exploration of personal interest in this area, prepares students for employment, and upgrades skills of those already employed in this field. Employment opportunities are included in video and multimedia fields, such as digital animator, media production, marketing, publishing, motion graphics, photography, storyboard artist, freelance artist designer, web and interactivity design, and multimedia artist/designer. A Certificate of Completion (CCL) in Animation and in Time-Based Media are also available.

Program Notes

Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits: 17-19			
AVC169	2D Media Design (3) OR		
AVC178	Digital Arts Studies (3)		3
AVC177	Digital Photographic Imaging I		3
AVC/MMT184	Digital Animation I		3
AVC100	Introduction to Digital Arts		1
AVC248	Design Self Promotion (3) OR		
ART255	Art Marketing (3)		3
AVC280AC	Digital Media Arts and Design Capstone (3) OR		
AVC297AC	Commercial Art Internship (3)		3
FYE101	Introduction to College, Career and Personal Success (1) OR		
FYE103	Exploration of College, Career and Personal Success (3)		1-3

Restricted Electives

Restricted Electives	Course #	Course Title	Credits
Credits: 30			
Specialization 1: Digital Animation			
ART111	Drawing I		3
ART116	Life Drawing I		3
AVC150	Multimedia Storytelling (3) OR		
AVC191	Storyboarding and Layout (3) OR		
CRW150	Introduction to Creative Writing (3) OR		
CRW172	Introduction to Comic Book Writing (3) OR		
CRW176	Writing Narrative for Video Games (3) OR		
FMT121	Story Theory for Film, Television and Media (3)		3
AVC170	3D Computer Design (3) OR		
AVC/TH0246	Digital Fabrication (3)		3
AVC/MMT185	3D Modeling and Animation I		3
AVC200	Animation and Interactivity		3
AVC240	Cinematography and Directing for 2D/3D Animation		3
AVC284	Digital Animation II		3
AVC/MMT285	3D Modeling and Animation II		3
AVC287	3D Character Animation		3
Specialization 2: Time-Based Media			
ART111	Drawing I (3) OR		
ART116	Life Drawing I (3)		3
AVC142	Introduction to Digital Photography		3
AVC150	Multimedia Storytelling (3) OR		
AVC191	Storyboarding and Layout (3) OR		
FMT121	Story Theory for Film, Television and Media (3) OR		
JRN213	Writing for Online (3)		3
AVC202	Media Productions I (3) OR		
FMP108	Video Production (3)		3
AVC279	Media Productions II (3) OR		
FMP215	Digital Video Effects (3)		3
MUC122	Sound Design I (3) OR		
MUC191	Electronic Music I (3)		3

Complete twelve (12) credits from courses not already selected in the Required Courses area. Students may choose from one emphasis or from an

Photography Emphasis
ART131 Photography I 3

AVC138	Commercial Photography I	3	
AVC140	Portrait Photography	3	
AVC143	Intermediate Digital Photography	3	
AVC270	Digital Photographic Imaging II	3	
Audio Emphasis			
FMP114	Audio Production	3	
MUC122	Sound Design I	3	
MUC191	Electronic Music I	3	
MUC192	Electronic Music II	3	
MUC195	Studio Music Recording I	3	
MUC222	Sound Design II	3	
Media Production Emphasis			
AVC/MMT190	Art of Web Site Design	3	
AVC192	Advanced Web Presentation Design	3	
AVC/TH0246	Digital Fabrication	3	
CIS133DA	Internet/Web Development Level I	3	
COM145	Digital Storybook	1	
FMP/FMT151	TV and New Media Production	3	
FMP204	Advanced Video Production	3	
FMP215	Digital Video Effects	3	
Motion Graphics Emphasis			
ART116	Life Drawing I	3	
AVC174	Electronic Color Principles	1	
AVC/MMT185	3D Modeling and Animation I	3	
AVC200	Animation and Interactivity	3	
AVC240	Cinematography and Directing for 2D/3D Animation	3	
AVC273AC	Special Topics: Multimedia Arts	3	
AVC287	3D Character Animation	3	
FMP215	Digital Video Effects	3	

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Starting Term: 2025 Fall

Final Term: 9999

ASSOCIATE IN APPLIED SCIENCE (AAS) IN AUDIO PRODUCTION TECHNOLOGIES

Total Credits: 63-71

Major Code: 3024

Description

The Associate in Applied Science (AAS) in Music Industry Studies: Audio Production Technologies offers students hands-on study of audio engineering and related media fields. Students learn and apply the concepts and theories associated with music recording, live sound reinforcement, and sound design. The program is designed to give students foundational knowledge and experience essential in the field of audio production. An embedded Certificate of Completion (CCL) in Music Industry Studies: Audio Production Technologies is also available.

Program Notes

Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses Course # Course Title Credits

Credits: 32-34

In addition to the required course work, students must consult with a program advisor to select nine credits within the Restricted Electives

FYE101 Introduction to College, Career and Personal Success (1) OR

FYE103 Exploration of College, Career and Personal Success (3) 1-3

MTC101 Introduction to Music Theory 3

MUC109 Music Business: Content Creation and Copyright 3

MUC110 Music Business: Marketing and Monetization (3) OR

MUC145 Recording Studio Business Operations (3) 3

MUC111 Digital Audio Workstation I (DAW I) 3

MUC122 Sound Design I 3

MUC191 Electronic Music I 3

MUC218 Audio Mixing Techniques 3

MUC195 Studio Music Recording I (3) OR

MUC195AA Studio Music Recording I (3) 3

MUC196 Studio Music Recording II (3) OR

MUC196AA Studio Music Recording II (3) 3

MUC197 Live Sound Reinforcement I 3

MUC297AA Audio Production Internship (1) OR

MUC296WA Cooperative Education (1) OR

MUC298AA Special Projects (1) 1

Restricted Electives

Restricted ElectivesCourse #Course TitleCredits

Credits: 9

Students must select a total of nine (9) credits from the list below in consultation with an academic advisor.

NOTE: at least one (1) of the following courses must be completed: MUC281, MUC289, MUC292, or MUC295.

MUC112	Digital Audio Workstation II (DAW II)	3
MUC192	Electronic Music II	3
MUC193	Computer-Based Sound Synthesis	3
MUC198	Live Sound Reinforcement II	3
MUC222	Sound Design II	3
MUC281	Electronic Music III	3
MUC289	Live Sound Reinforcement III	3
MUC292	Sound Design III	3
MUC295	Studio Music Recording III	3

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Starting Term: 2025 Fall

Final Term: 2025 Fall

ASSOCIATE IN APPLIED SCIENCE (AAS) IN AUTOMATED INDUSTRIAL TECHNOLOGY

Total Credits: 64-76

Major Code: 3177

Description

The Associate in Applied Science (AAS) in Automated Industrial Technology (AIT) prepares students to troubleshoot, maintain and repair a variety of automated electro-mechanical, product assembly, process control, and product distribution systems that use programmable controls and other methodologies to accomplish system management. These systems include robotic, mechanical, hydraulic, pneumatic, electrical and electronic devices. Through this degree, graduates will gain the skills to define, integrate, install, program, and maintain complex control systems. Additionally, students will gain the communication, problem solving and professional skills needed to be successful in this field. The Automated Industrial Technology courses are designed to prepare students for industry recognized certifications. Certificates of Completion (CCLs) in Automated Industrial Technology I and II and additional AIT CCLs are also available at select colleges. Please check with your local college for program availability.

Program Notes

Students must earn a grade of C or better in all courses within the program. This program may require students to be able to lift objects as heavy as 50 pounds.

Required Courses

Required CoursesCourse #Course TitleCredits

Credits: 36-38

AIT100	Industrial Safety	1
AIT105	Modern Maintenance Operations	3
AIT110	Mechanical Power Transmission Systems	3
AIT115	Hydraulic Systems	3
AIT120	Pneumatic Systems	3
AIT125	DC and AC Components and Circuits	3
AIT205	Power Electronics and Variable Frequency Drives	3
AIT210	Programmable Logic Controller Programming and Troubleshooting	3
AIT215	Process Control Systems	4
AIT225	Industrial Motors and Motor Control	3

AIT250 Automated Industrial Technology Capstone (3) OR

AIT291 Automated Industrial Technology Internship (3) 3

AIT270 Robotics I 3

FYE101 Introduction to College, Career and Personal Success (1) OR

FYE103 Exploration of College, Career and Personal Success (3) 1-3

Restricted Electives

Restricted ElectivesCourse #Course TitleCredits

Credits: 6-10

Students should work with their program advisor to select six to ten (6-10) credits from courses that align with the academic/career goals and

Any AIT, ELC, MIT, or PPT courses except courses used to satisfy Required Courses area. Students may also choose courses from the following list

Controls Focus Area

AIT275	Robotics II	3
CIS105	Survey of Computer Information Systems	3
CIS156	Python Programming: Level I	3
CNT140AB	Introduction to Networks	4

Mechanical Tech Focus Area

DFT105AA	Computer Aided Drafting I: AutoCAD	3
DFT255	3D Printing/Additive Manufacturing	4
HVA++++	Any Heating, Ventilating and Air Conditioning	1-4
MPT101	Technical Documentation (3) OR	
MPT101MP	Technical Documentation (3)	
MPT111	Geometric Dimensioning and Tolerance (GDT) (3) OR	
MPT111MP	Geometric Dimensioning and Tolerance (GDT) (3)	3
MPT120	Introduction to Manual Machining (4) OR	
MPT120MP	Introduction to Manual Machining (4)	4
MPT150	Introduction to SolidWorks	3
WLD106++	Arc Welding (any suffixed course)	5

Electrical/Electronic Focus Area
 AIT128 A-620 Cable and Wire Harness Assembly Certification 3
 AIT227 Power Distribution Systems 3
 DFT254AA Computer Aided Drafting II: AutoCAD 3
 ELE131 Digital Logic and Circuits 3

 ELE173 Fabrication Techniques (3) OR
 AIT123 J-STD Soldering Certification (3) OR
 ELE161 Custom Electric Guitar Fabrication (3)

 ELE241 Microprocessor Concepts 4

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Starting Term: 2023 Fall
 Final Term: 9999

ASSOCIATE IN APPLIED SCIENCE (AAS) IN AUTOMOTIVE SERVICE

Total Credits: 64-77
 Major Code: 3180

Description

The Associate in Applied Science (AAS) in Automotive Service prepares individuals to apply technical knowledge and skills to repair, service, and maintain automobiles. Instruction is in both the theoretical and practical aspects of automotive repair, service and maintenance, and includes brake systems, electrical systems, engine performance, engine repair, suspension and steering, automatic and manual transmissions and drivetrains, and heating and air conditioning systems. The curriculum within this certificate aligns with the Automotive Service Excellence (ASE) Automobile Certification Tests (A1 - A8).

See program advisor for additional certificate offerings.

Program Notes

Students must earn a grade of C or better for each course listed in the Required Courses area.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	43-45		
ASE100		Introduction to Automotive Service	2
ASE110		Engine Fundamentals (4) OR	
ASE110AU		Engine Fundamentals (4)	4
ASE120		Automatic Transmission and Transaxle (4) OR	
ASE120AU		Automatic Transmission and Transaxle (4)	4
ASE130		Manual Drive Trains and Axles (4) OR	
ASE130AU		Manual Drive Trains and Axles (4)	4
ASE140		Automotive Steering, Suspension and Alignment (4) OR	
ASE140AU		Automotive Steering, Suspension and Alignment (4)	4
ASE150		Automotive Brake Systems (4) OR	
ASE150AU		Automotive Brake Systems (4)	4
ASE160		Introduction to Automotive Electrical (4) OR	
ASE160AU		Introduction to Automotive Electrical (4)	4
ASE170		Automotive Heating, Ventilation and Air Conditioning Systems (4) OR	
ASE170AU		Automotive Heating, Ventilation and Air Conditioning Systems (4)	4
ASE180		Introduction to Engine Management (4) OR	
ASE180AU		Introduction to Engine Management OR (4)	4
ASE260		Advanced Automotive Electrical (4) OR	
ASE260AU		Advanced Automotive Electrical (4)	4
ASE280		Engine Management (4) OR	
ASE280AU		Engine Management (4)	4
FYE101		Introduction to College, Career and Personal Success (1) OR	
FYE103		Exploration of College, Career and Personal Success (3)	1-3

Restricted Electives

Restricted Electives	Course #	Course Title	Credits
Credits:	3-8		
ASE240		Advanced Driver Assistance Systems	2
ASE265		Introduction to Electric and Hybrid Vehicles	2
ASE290++		Automotive Service Internship (any suffixed courses)	1-4
ASE296++		Cooperative Education (any suffixed courses)	1-4
ASE298++		Special Projects (any suffixed courses)	1-3

Starting Term: 2025 Fall
Final Term: 9999

ASSOCIATE IN APPLIED SCIENCE (AAS) IN BEAUTY AND WELLNESS

Total Credits: 61-70
Major Code: 3209

Description

The Associate in Applied Science (AAS) in Beauty and Wellness promotes progressive thinking, skills, and experiences to enhance personal growth and professional success. This interdisciplinary AAS is designed to provide students with business and financial acumen, effective and collaborative communication skills, critical thinking techniques, and leadership qualities to be empowered professionals. Students who complete this AAS have fundamental strategies to effectively and successfully implement innovative principles in the beauty industry to serve consumers. The Associate in Applied Science (AAS) in Beauty and Wellness may transfer to a Bachelor of Applied Science (BAS) program for students who want to pursue a bachelor's degree.

Program Notes

Students must earn a grade of C or better in all courses within the program.

Admission Criteria

Entry into this program requires either a current, active license in one of the program prerequisite areas or actively participating in a tra

Program Prerequisites

Program PrerequisitesCourse #Course TitleCredits

Credits: 12-30

Entry into this program requires a current, active Aesthetician or Aesthetician Instructor; or Cosmetology or Cosmetology Instructor; or Hair

Aesthetician License/Aesthetician Instructor License Credits: 12

BAW102 Aesthetics Essentials 4
BAW110 Advanced Aesthetics 4
BAW115 Aesthetics Mastery 4

OR

Cosmetology License/Instructor Cosmetology License Credits: 30

BAW104 Hair Essentials I 4
BAW106 Hair Essentials II 4
BAW114 Student Salon I 4
BAW116 Student Salon II 4
BAW119 Nail Essentials 4
BAW212 Skin Essentials 4
BAW214 Student Salon III 4
BAW218 Cosmetology State Licensure 2

OR

Hairstylist License/Instructor Hairstylist License Credits: 20

BAW104 Hair Essentials I 4
BAW106 Hair Essentials II 4
BAW114 Student Salon I 4
BAW116 Student Salon II 4
BAW118 Hair Stylist State Licensure 4

OR

Nail Technician/Nail Technician Instructor License Credits: 12

BAW100 Nail Technology I 4
BAW105 Nail Technology II 4
BAW111 Nail Technology III 4

OR

Massage Therapist/Massage Therapist Instructor License Credits: 14

BAW120 Massage Therapy Basics 3.5
BAW121 Massage Therapy Advanced 3.5
BAW220 Massage Therapy Mastery I 3.5
BAW221 Massage Therapy Mastery II 3.5

Required Courses

Required CoursesCourse #Course TitleCredits

Credits: 10-12

FYE101 Introduction to College, Career and Personal Success (1) OR
FYE103 Exploration of College, Career and Personal Success (3) 1-3

Select courses to complete a total of nine (9) credits:

BAW298++ Special Projects 1-3
GBS132 Personal and Family Financial Security 3
MGT253 Owning and Operating a Small Business 3
MKT110 Marketing and Social Networking 3

Free Electives

Free ElectivesCourse #Course TitleCredits

Credits: 0-17

Select additional courses, 100-level or higher, to complete the minimum credits required for this degree. Consult with the Program Director o

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Starting Term: 2022 Fall

Final Term: 9999

ASSOCIATE IN APPLIED SCIENCE (AAS) IN CATERPILLAR TECHNICIAN TRAINING

Total Credits: 74-82

Major Code: 3005

Description

The Associate in Applied Science (AAS) in Caterpillar Technician Training degree prepares students with the skills required to service and repair Caterpillar machines. The program combines general education curriculum, specialized Caterpillar machine coursework, and practical experience through internships to prepare students to work in authorized Caterpillar service facilities. Students receive training in diesel engines, electrical principles and electronic controls, sophisticated computer-based diagnosis, state-of-the-art hydraulics and powertrains, HVAC certification, as well as other high demand skills.

Program Notes

Students must earn a grade of C or better in all courses within the program. Students are encouraged to complete General Education requirements prior to Caterpillar coursework. Consult with your faculty mentor or academic advisor to determine educational requirements, including possible university transfer options, for your chosen career field.

Required Courses

Required CoursesCourse #Course TitleCredits

Credits: 59-64

CTT110 Introduction to Caterpillar Service Industry 3

CTT111 Caterpillar Engine Fundamentals 4

CTT112 Hydraulic Fundamentals 3

CTT113 Fuel Systems 3

CTT114 Basic Electrical Fundamentals 3

CTT115 Air Conditioning Fundamentals 3

CTT116 Power Trains I 3

CTT117 Machine Hydraulic Systems 3

CTT118 Caterpillar Dealer Internship I 3

CTT119 Caterpillar Dealer Internship II 3

CTT200 Power Train II 3

CTT201 Machine Electronics 3

CTT202 Engine Diagnostics and Repair 3

CTT203 Machine Diagnostics 3

CTT204 Machine Specific Systems 3

CTT205 Caterpillar Dealer Internship III 3

CTT206 Caterpillar Dealer Internship IV 3

FYE101 Introduction to College, Career and Personal Success (1) OR

FYE103 Exploration of College, Career and Personal Success (3) 1-3

WLD101 Introduction to Welding 3

GTC107 Technical Mathematics I (3) OR

MAT150 College Algebra/Functions (5) OR

MAT151 College Algebra/Functions (4) OR

MAT152 College Algebra/Functions (3) OR

MAT155 College Algebra/Functions with Review (5)

MAT156 College Algebra/Functions with Review (6) 3-6

MAT15+ is recommended for students interested in transferring to Pittsburgh State University.

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Starting Term: 2022 Fall

Final Term: 9999

ASSOCIATE IN APPLIED SCIENCE (AAS) IN CONSTRUCTION MANAGEMENT

Total Credits: 60-85

Major Code: 3502

Description

The Associate in Applied Science (AAS) in Construction Management provides instruction in management skills, construction industry specific technical and occupational subjects, such as construction planning, design, and OSHA 30 safety. This degree helps prepare graduates for a productive career in the construction industry as an owner, foreman, project engineer, manager, project manager, or property manager. Provides knowledge in construction ethics, estimating, and contracts and prepares graduates for the Leadership in Energy and Environmental Design (LEED) Green Associates exam in order to become LEED Certified. This curriculum also provides good preparation for transfer to a four-year bachelor program in Construction and satisfies much of the requirements for the AGEC-A and Associate in Arts Degrees.

Program Notes

Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses Course # Course Title Credits
Credits: 42-44

CON100 Introduction to Construction 2
CON101 Construction and Culture 3

CON220 Statics Application for Construction (3) OR
CON221 Applied Statics (3) 3

Note: Students intending to transfer to ASU to pursue a Bachelor of Science in Construction Management and Technology should select CON221

CON223 Strength of Materials 3

CIS224 Project Management Microsoft Project for Windows (3) OR

CON241 Surveying (3) OR

MGT229 Management and Leadership I (3) OR

MGT253 Owning and Operating a Small Business (3) 3

Note: Students intending to transfer to ASU to pursue a Bachelor of Science in Construction Management and Technology should select CON241

CON243 Heavy Construction Equipment, Methods, and Materials 3

CON244 Working Drawing Analysis: Blueprint Reading 3

CON251 Microcomputers for Constructors 3

CON252 Building Construction Methods, Materials, and Equipment 3

CON262 Introduction International Residential Code (IRC) 3

CON263 Building Codes 3

CON271 Construction Safety 3

CON273 Electrical Construction Fundamentals 3

ECN211 Macroeconomic Principles (3) OR

ECN212 Microeconomic Principles (3) 3

Note: Both ECN211 and ECN212 are required for ASU's Bachelor of Science in Construction Management and Technology

FYE101 Introduction to College, Career and Personal Success (1) OR

FYE103 Exploration of College, Career and Personal Success (3) 1-3

Restricted Electives

Restricted Electives Course # Course Title Credits
Credits: 6-16

Students must choose 1 of the following Specializations

Specialization I: Construction Management

CON181 Cost Estimating 3

GTC107 Technical Mathematics I (3) AND

GTC108 Technical Mathematics II (3) 3 OR

Equivalent or any approved course in the Mathematics area (3-6) 3-6

Specialization II: Construction Management Arizona State University Transfer

MAT150 College Algebra/Functions (5) AND

MAT182 Plane Trigonometry (3)

OR

MAT151 College Algebra/Functions (4) AND

MAT182 Plane Trigonometry (3)

OR

MAT152 College Algebra/Functions (3) AND

MAT182 Plane Trigonometry (3)

OR

MAT155 College Algebra/Functions with Review (5) AND

MAT182 Plane Trigonometry (3)

OR

MAT156 College Algebra/Functions with Review (6) AND

MAT182 Plane Trigonometry (3)

OR

MAT187 Precalculus (5) 5-9

PHY111 General Physics I 4

An additional course with the the Humanities, Arts and Design [HU] and Cultural Diversity in the US [C] general studies designations 3

Free Electives

Free Electives Course # Course Title Credits
Credits: 0-9

For students intending to transfer to Arizona State University to pursue a Bachelor of Science in Construction Management and Technology, the

ECN211 Macroeconomic Principles (3) OR

ECN212 Microeconomic Principles (3) 3

MAT206 Elements of Statistics 3

A course with the the Humanities, Arts and Design [HU] and Cultural Diversity in the US [C] general studies designations 3

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Starting Term: 2024 Fall

Final Term: 9999

ASSOCIATE IN APPLIED SCIENCE (AAS) IN CONSTRUCTION TECHNOLOGY

Total Credits: 61
Major Code: 3193

Description

The Associate in Applied Science (AAS) in Construction Technology prepares individuals to apply technical knowledge and skills in carpentry or plumbing or electrical systems in residential and commercial settings. Instruction is in both the theoretical and practical aspects of the construction trade, and includes course work in safety, tools and equipment, construction calculations, blueprint reading, and trade-specific codes, material characteristics, and installation techniques. Certificates of Completion (CCL) and Certificates of Competency (CCT) in Carpentry, Electrical, and Plumbing are also available and are embedded in this AAS.

Program Notes

Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits
			8-12
CON102		Foundations of Construction Trades (6) OR	
CON102AA		Foundations of Construction Trades: Tools, Equipment, and Workspace (2) AND	
CON102AB		Foundations of Construction Trades: Construction Calculations (2) AND	
CON102AC		Foundations of Construction Trades: Construction Drawings and Materials (2)	6
CON103		Foundation of Construction Safety (1) OR	
CON271		Construction Safety (3)	1-3
FYE101		Introduction to College, Career and Personal Success (1) OR	
FYE103		Exploration of College, Career and Personal Success (3)	1-3

Restricted Electives

Restricted Electives	Course #	Course Title	Credits
			18
Specialization 1: Carpentry			
CON110		Construction: Carpentry (9) OR	
CON110AA		Construction: Carpentry/Floor Systems (3) AND	
CON110AB		Construction: Carpentry/Wall Systems (3) AND	
CON110AC		Construction: Carpentry/Ceiling and Roof Systems (3)	9
CON210		Carpentry: Commercial and Residential	9
Specialization 2: Electrical			
CON132		Construction: Electrical Systems (9) OR	
CON132AA		Construction: Electrical Systems/Introduction to Electrical (3) AND	
CON132AB		Construction: Electrical Systems/Electrical Power Generation (3) AND	
CON132AC		Construction: Electrical Systems/Raceways and Wireways (3)	9
CON232		Construction: Advanced Electrical	9
Specialization 3: Plumbing			
CON122		Construction: Plumbing (9) OR	
CON122AA		Construction: Plumbing/Pipes and Fittings (3) AND	
CON122AB		Construction: Plumbing/Drain, Waste and Vent (3) AND	
CON122AC		Construction: Plumbing/Fixtures, Faucets and Water Distribution Systems (3)	9
CON222		Construction: Advanced Plumbing	9

Free Electives

Free Electives	Course #	Course Title	Credits
			3-13
Select additional courses 100-level or higher to complete the minimum 61 credits required for this degree. Consult with the Program Director			
The following courses are recommended:			
CON244		Working Drawing Analysis: Blueprint Reading	3
CON271		Construction Safety	3

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Starting Term: 2024 Fall
Final Term: 9999

ASSOCIATE IN APPLIED SCIENCE (AAS) IN CYBERSECURITY

Total Credits: 62-77
Major Code: 3197

Description

The Associate in Applied Science (AAS) in Cybersecurity is designed to focus on the necessary skills required to secure, protect and identify vulnerabilities in a network, including various operating systems and network devices. Emphasis is placed on developing the theoretical, legal, ethical and practical skills needed to maintain security on mission-critical networking and server systems. The program is designed to meet the training needs of government and industry employees. The program covers a

variety of information security technologies and structured languages. The Cybersecurity program also focuses on the skills needed for internationally recognized IT certifications and high demands in business, industry, and government. Certificates of Completion (CCLs) are also available in the following areas: Cybersecurity Fundamentals, Cyber Operations, Linux System Administration, Microsoft, Cisco Networking CCNA Security, Cyber Engineering, and Critical Infrastructure. Some of these programs are available at select colleges. Please check with your local college for program availability.

Program Notes

Students must earn a grade of C or better in all courses within the program. Courses within any of the following prefixes must be taken within five (5) years prior to completion of the program to be applied toward this award: AIM, BPC, CIS, CLD, CNT, CSC, ITS, and MST.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	25-28		
BPC270	A+ Exam Prep: Operating System Configuration and Support	(3)	OR
MST150++	Any Microsoft Windows course	(3)	3
(MST150++	required for Cloud System Administration specialization and Critical Infrastructure specialization)		
CIS105	Survey of Computer Information Systems	3	
CIS111	Ethics in Information Technology	(3)	OR
ITS120	Legal, Ethical and Regulatory Issues	(3)	3
CIS126DL	Linux Operating System	(3)	OR
CIS126RH	Red Hat System Administration I	(3)	3
CIS156	Python Programming: Level I	3	
CIS190	Introduction to Networking	(3)	OR
CNT140AB	Introduction to Networks	(4)	3-4
(CNT140AB	required for Cisco Network Administration and Security specialization and Critical Infrastructure specialization)		
CIS270	Essentials of Network and Information Security	(3)	OR
ITS110	Information Security Fundamentals	(3)	3
(ITS110	required for Cyber Operations specialization; CIS270 required for Critical Infrastructure specialization)		
FYE101	Introduction to College, Career and Personal Success	(1)	OR
FYE103	Exploration of College, Career and Personal Success	(3)	1-3
ITS240	Ethical Hacking and Network Defense	3	

Restricted Electives

Restricted Electives	Course #	Course Title	Credits
Credits:	12-18		
Students must complete 12-18 credits from the following list of courses. Courses that are required for a specialization in Cyber Operations,			
Specialization I: Cyber Operations			
BPC170	A+ Exam Prep: Computer Hardware Configuration and Support	3	
CIS238DL	Linux System Administration	(3)	OR
CIS238RH	Red Hat System Administration II	(3)	3
CIS290AC	Computer Information Systems Internship	(3)	OR
CIS298AC	Special Projects	(3)	3
ITS291	Computer Forensics Foundations	4	
ITS292	Advanced Computer Forensics	4	
Specialization II: Linux System Administration			
CIS238DL	Linux System Administration	(3)	OR
CIS238RH	Red Hat System Administration II	(3)	3
CIS239DL	Linux Shell Scripting	3	
CIS240DL	Linux Network Administration	(3)	OR
CIS240RH	Red Hat System Administration III	(3)	3
CIS271DL	Linux Security	(3)	OR
CIS271RH	Red Hat System Administration IV	(3)	3
CIS275DL	Linux Capstone	3	
Specialization III: Cloud System Administration			
BPC274	Advanced Server Computer Maintenance: Server+ Prep	3	
CIS121AH	Microsoft PowerShell/Command Line Operations	3	
CIS239DL	Linux Shell Scripting	3	
MST160	Azure Administrator	(4), OR	
CLD110	Amazon Web Services Cloud Foundations	(3)	3-4
MST260	Microsoft Azure Cloud Development and Operations	(3), OR	
CLD120	Amazon Web Services Cloud Architect Associate	(3)	3
Specialization IV: Cisco Network Administration and Security			
CNT150AB	Switching, Routing, and Wireless Essentials	4	
CNT160AB	Enterprise Networking, Security, and Automation	4	
CNT202	Cisco Secure Firewall Appliance Configuration	(4)	OR
CNT205	Cisco Certified Network Associate Security	(4)	4
Specialization V: Cyber Engineering			
CIS119D0	Introduction to Oracle: SQL	(3)	OR
CIS276++	Any SQL Database course	(3)	3

CIS162++ Any C Programming: Level I course 3
(Students intending to transfer to U of A South should take CIS162 C Programming)

CIS227 Assembler Language 3

CIS238DL Linux System Administration (3) OR
CIS238RH Red Hat System Administration II (3) 3

CIS250 Management of Information Systems 3
CIS262++ Any C Programming: Level II course 3

Specialization VI: Critical Infrastructure
CIS143 Introduction to Critical Infrastructure Protection 3
CIS201 Introduction to Operational Technology 3
CIS202 Introduction to Smart Grid Security 3
CIS203 Principles of the Risk Management Framework 3
CNT150AB Switching, Routing, and Wireless Essentials 4

Free Electives

Free ElectivesCourse #Course TitleCredits

Credits: 0-3

Select additional courses 100-level or higher to complete the minimum total program credits required for this degree. It is recommended to se

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Starting Term: 2024 Fall

Final Term: 9999

ASSOCIATE IN APPLIED SCIENCE (AAS) IN DATA ANALYTICS

Total Credits: 62-70

Major Code: 3212

Description

The Associate in Applied Science (AAS) in Data Analytics is designed to prepare students to apply principles and concepts in data analytics and model, synthesize, analyze, and present large data sets for business decision making. Courses will focus on the software development techniques and computer applications used in industry to extract data from various data sources, model and integrate that data, and then visualize this data for business decision making and intelligence gathering. This program prepares students for industry recognized certifications such as the Microsoft Power BI Data Analyst, Tableau Certified Analyst, and Microsoft Office Specialist for Excel and Access. Graduates may pursue employment in a variety of information technology environments.

Program Notes

Students must earn a grade of C or better in all courses within the program. Courses within any of the following prefixes must be taken within five (5) years prior to completion of the program to be applied toward this award: AIM, BPC, CIS, CLD, CNT, CSC, ITS, and MST. Students who have completed GBS221 can use this course in lieu of GBS220.

Required Courses

Required CoursesCourse #Course TitleCredits

Credits: 49-51

CIS105 Survey of Computer Information Systems 3
CIS111 Ethics in Information Technology 3
CIS114DE Excel Spreadsheet 3
CIS117DM Microsoft Access: Database Management 3

CIS156 Python Programming: Level I 3
CIS215 Foundations of Data Analytics and Programming 3
CIS214DA Advanced Excel for Data Analytics 3

CIS276DA MySQL Database (3) OR
CIS276DB SQL Server Database (3) 3

CIS224 Project Management Microsoft Project for Windows 3
CIS256DA Python for Data Analysis 3

CIS260BI Data Visualization: Power Business Intelligence (BI) (3) OR
CIS260TB Data Visualization: Tableau (3) 3

COM225 Public Speaking 3

FYE101 Introduction to College, Career and Personal Success (1) OR
FYE103 Exploration of College, Career and Personal Success (3) 1-3

GBS151 Introduction to Business 3

GBS220 Quantitative Methods in Business (3) OR
GBS221 Business Statistics (3) 3

PHI103 Introduction to Logic 3
SBU200 Society and Business 3

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ASSOCIATE IN APPLIED SCIENCE (AAS) IN DENTAL HYGIENE

Total Credits: 96-111.5
Major Code: 3831

Description

The Associate in Applied Science (AAS) in Dental Hygiene degree prepares students to become primary care oral health professionals. A licensed dental hygienist may provide education, assessment, diagnostic, preventive and therapeutic services, research, and administrative services that support overall health through the promotion of optimal oral health. Hygienists may be employed in general or specialty dental practice in private or public healthcare settings. The program also prepares students for university transfer.

The dental hygiene program offers a rigorous, intensive, science-based curriculum. Students will provide services in clinical settings and will develop a commitment to the community through offsite educational and enrichment experiences serving diverse populations. Successful students will develop and demonstrate critical thinking, as well as ethical and professional behaviors required by the field.

Applicants should possess hand-eye coordination, manual dexterity, attention to detail, and the ability to persevere through a rigorous academic and clinical full-time program workload. Students in an MCCCD Dental Hygiene program will be exposed to bloodborne pathogens and infectious diseases. The program strictly adheres to established policies and procedures regarding infection control as recommended by the Centers for Disease Control and Prevention, American Dental Association, the Organization for Safety and Asepsis Procedures, and the Occupational Safety and Health Administration.

The Commission on Dental Accreditation of the American Dental Association (211 E. Chicago Ave., Suite 1900, Chicago, IL 60611-2637; (312) 440-4653) grants accreditation to the Phoenix College, Rio Salado College, and Mesa Community College programs. The Commission is a specialized accrediting body recognized by the United States Department of Education.

This program is designed to meet education requirements for licensure or certification in the State of Arizona. Granting licensure and certification is the sole responsibility of the state board or approval agency. This program is only offered and available to students located in the State of Arizona. The Maricopa County Community College District and colleges define student location within Administrative Regulation 2.2.3(7).

Program Notes

Students must earn a grade of C or better in all courses within the program. Students must complete the Basic Science courses with a GPA of 3.5 or better and General Education courses with a GPA of 3.25. Basic Science courses must have been completed within the last five years upon application submission or as determined by the Dental Health Professions Instructional Council. Students must earn a grade of 75% or better in the Required Courses area within the core program. Students should consult with an advisor prior to applying to the program. For students planning to pursue a Bachelor's completion pathway or to complete an AGECA: MHL155 and PHI213 are recommended for the Humanities, Arts and Design area for a total of 6 credits in this area. COM225 with the [L] designation is recommended for the Oral Communication area. PSY101 and SOC101 are recommended for the Social Behavioral area. An additional course(s) may be required to meet NAU Degree completion requirements.

Admission Criteria

High school diploma or GED equivalency is required. Program applications will not be accepted without a copy of an Arizona Department of Public Safety

Program Prerequisites

Program Prerequisites Course # Course Title Credits
Credits: None.
Acceptance into the program.

Required Courses

Required Courses Course # Course Title Credits
Credits: 59-61.5
HCC/RES109 CPR for Health Care Provider (0.5) OR
Current CPR certification at the health care provider Professional rescuer level 0-0.5

DHE110	Pharmacology	3	
DHE112	Oral Pathology	3	
DHE115	Emergency Medicine	2	
DHE117	Dental Radiography	2	
DHE119	Head and Neck Anatomy	3	
DHE120	Pre-Clinical Dental Hygiene	6	
DHE121	Dental Anatomy, Embryology and Histology	2	
DHE125	Dental Radiography Laboratory	1	
DHE127	Prevention of Dental Disease	3	
DHE132	Dental Hygiene Theory I	3	
DHE133	Dental Hygiene Clinic I	3	
DHE201	Dental Materials	2	
DHE202	Dental Materials Laboratory	1	
DHE212	Dental Hygiene Theory II	2	
DHE213	Dental Hygiene Clinic II	5	
DHE219	Practice Management	2	
DHE225	Periodontics	3	
DHE227	Dental Anesthesia	2	
DHE229	Community Oral Health	3	
DHE232	Dental Hygiene Theory III	2	
DHE233	Dental Hygiene Clinic III	5	

FYE101 Introduction to College, Career and Personal Success (1) OR
FYE103 Exploration of College, Career and Personal Success (3) 1-3

Starting Term: 2023 Fall
Final Term: 9999

ASSOCIATE IN APPLIED SCIENCE (AAS) IN DISC JOCKEY TECHNIQUES

Total Credits: 61-65
Major Code: 3159

Description

The Associate in Applied Science (AAS) in Disc Jockey Techniques program is designed to prepare students for employment as a live-performance disc jockey (DJ). This program is designed to provide the student with the technical skills required for a successful performance or production and to demonstrate an understanding of common business practices in a highly competitive and rapidly changing entertainment industry. There are Certificates of Completion (CCL) in Disk Jockey Techniques I and Disc Jockey Techniques II available.

Program Notes

Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits: 36-38			
MHL204		Hip-Hop Music and Culture	3
MUC109		Music Business: Content Creation and Copyright	3
MUC110		Music Business: Marketing and Monetization	3
MUC135		Introduction to Disc Jockey Techniques	3
MUC136		Turntablism: The Art of the Scratch DJ	3
MUC137		Digital DJ Performance Techniques	3
MUC138		Disc Jockey Laboratory	1
MUC139		Introduction to Emcee-Rapping Techniques	3
MUC191		Electronic Music I	3
MUC197		Live Sound Reinforcement I	3
MUC293		Self-Promotion for Music	1
COM225 Public Speaking (3) OR			
COM110 Interpersonal Communication (3) OR			
COM230 Small Group Communication (3) 3			
FYE101 Introduction to College, Career and Personal Success (1) OR			
FYE103 Exploration of College, Career and Personal Success (3) 1-3			
MKT101 Introduction to Public Relations (3) OR			
HRM145 Events Management (3) OR			
GBS151 Introduction to Business (3) 3			

Restricted Electives

Restricted Electives	Course #	Course Title	Credits
Credits: 6-9			
Students should choose six (6) to nine (9) credits from the following list of courses to complete the minimum total program credits required			
MTC101		Introduction to Music Theory	3
MUC192		Electronic Music II	3
MUC195 Studio Music Recording I (3) OR			
MUC195AA		Studio Music Recording I (3)	3
MUC198 Live Sound Reinforcement II 3			
MUC237		Electronic Dance Music Production	3

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Starting Term: 2022 Fall
Final Term: 9999

ASSOCIATE IN APPLIED SCIENCE (AAS) IN DRAFTING AND DESIGN TECHNOLOGY

Total Credits: 61-69
Major Code: 3504

Description

The Associate in Applied Science (AAS) in Drafting and Design Technology program is designed to prepare students as drafting technicians. Students will learn Computer Aided Design, Computer Numerical Control (CNC) programming, and basic manufacturing processes. Students develop skills in completing orthographic layouts, dimensioning, exploded/assembled and working drawings, 2D and 3D computer aided drafting and design, 3D printing, geometric dimensioning and tolerance (GD&T), and a general understanding of manufacturing in industry, all using American standards (ANSI). Students can also apply for the Certificate of Completion (CCL) in Computer Aided Drafting (5547) while pursuing the AAS.

Program Notes

Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	42-47		
DFT105AA		Computer Aided Drafting I: AutoCAD	3
DFT110		Introduction to Drafting	3
DFT111		Intermediate Drafting	3
DFT112		Advanced Drafting	3
DFT115		Geometric Dimensioning and Tolerancing	3
DFT254AA		Computer Aided Drafting II: AutoCAD	3
DFT255		3D Printing/Additive Manufacturing	3
FYE101		Introduction to College, Career and Personal Success (1) OR	
FYE103		Exploration of College, Career and Personal Success (3) 1-3	
GTC/MIT/OSH106		Industrial Safety	2
GTC107		Technical Mathematics I (3) OR	
Equivalent		as indicated by assessment (0)	0-3
GTC108		Technical Mathematics II	3
GTC216		Properties of Materials	3
MPT130MP		CNC Machining Level I	6
MPT150		Introduction to SolidWorks	3
MPT260MP		Computer Aided Manufacturing (CAM) I	3

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Starting Term: 2023 Fall
Final Term: 9999

ASSOCIATE IN APPLIED SCIENCE (AAS) IN EARLY CHILDHOOD EDUCATION

Total Credits: 60-74
Major Code: 3186

Description

The Associate in Applied Science (AAS) in Early Childhood Education (ECE) is designed to prepare individuals for employment as early childhood professionals in a variety of educational settings. The AAS program includes courses based on current ECE theory and practice as well as general education classes to broaden a student's base of knowledge. Certificates of Completion are also available. Some of these programs are available at select colleges. Please check with your local college for program availability.

Program Notes

Students must earn a grade of C or better in all courses within the program. For some employment and field experiences (including internship courses), students will be required to have a current Identity Verified Print (IVP) Fingerprint Clearance Card and a current TB test.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	30-37		
CFS101AH		Visual Art Experiences for Young Children(1) AND	
ECH281		Movement/Music for the Young Child (1) OR	
ECH128		Early Learning: Play and the Arts (3) OR	
EED210		Creative and Cognitive Play (3) 2-3	
CFS123		Health and Nutrition In Early Childhood Settings (1) AND	
CFS125		Safety in Early Childhood Settings (1) AND	
ECH280		Food Experiences With Young Children (1) OR	
EED215		Early Learning: Health, Safety, Nutrition and Physical Fitness (3)	3
CFS/ECH176		Child Development (3) OR	
CFS235		Developing Child: Theory into Practice, Prenatal to Age Eight (3) OR	
EED205		The Developing Child: Prenatal to Age Eight (3) 3	
CFS/ECH269		Early Childhood Education Seminar (1) AND	
CFS/ECH287		Professional Development in Early Childhood Education (1) OR	
EED255		Independent Study Portfolio Development and Writing for the Early Childhood Profession (3)	2-3
CFS/ECH271		Arranging the Environment (1) AND	
CFS282		Mainstreaming The Young Child with A Disability (1) AND	
ECH282		Discipline/Guidance of Child Groups (1) OR	
EED212		Guidance, Effective Interactions and the Environment (3)	3
CFS/ECH284AB		Early Childhood Teaching Internship (3) OR	
EED260		Early Childhood Infant/Toddler Internship (1) AND	
EED261		Early Childhood Preschool Internship (1) OR	
CFS/ECH284AA		Early Childhood Teaching Internship (1) 2-3	
ECH140		Learning Made Visible Through Documentation (1) AND	
ECH270		Observing Young Children (1) OR	
EED280		Standards, Observation and Assessment of Typical/Atypical Behaviors of Young Children Birth Age Eight (3)	2-3
CFS/ECH273		Math for the Young Child (1) AND	
CFS/ECH275		Literacy Development and the Young Child (1) AND	
ECH272		Science for the Young Child (1) AND	

ECH279	Early Childhood Curriculum Development (1) OR	
EED278	Early Learning Curriculum and Instruction – Birth to Age Eight (3)	3–4
EED200	Foundations of Early Childhood Education	3
EED222	Introduction to the Exceptional Young Child: Birth to Age Eight	3
EED225	Language and Literacy in the Context of Culture and Relationships	3
FYE101	Introduction to College, Career and Personal Success (1) or	
FYE103	Exploration of College, Career and Personal Success (3)	1–3

Restricted Electives

Restricted ElectivesCourse #Course TitleCredits

Credits: 9–12

Students must select nine (9) to twelve (12) credits from the following to complete the minimum total program credits required for this degree

CFS+++ Any CFS Child/Family Studies course(s)
 ECH+++ Any ECH Early Childhood Education course(s)
 EDU+++ Any EDU Education course(s)
 EED+++ Any EED Early Education course(s)
 FCS+++ Any FCS Family and Consumer Science course(s)
 ITD+++ Any ITD Infant/Toddler Development course(s)

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Starting Term: 2022 Fall

Final Term: 9999

ASSOCIATE IN APPLIED SCIENCE (AAS) IN ELECTRONICS ENGINEERING TECHNOLOGY

Total Credits: 62-68

Major Code: 3224

Description

The Associate in Applied Science (AAS) in Electronics Engineering Technology is designed to give students a foundation of experience important in engineering assistants, field engineers, prototype designers, specification writers, technical representatives, and in other positions in organizations that specialize in electronic design, manufacturing, service, and development. Students with this degree may work in industries that include, but are not limited to, aerospace, biotechnology, communications, entertainment, industrial, medical, power, semiconductor, and transportation. The Electronics Engineering Technology program is designed to enable industry employment while still providing transfer credits to a four year engineering program.

Program Notes

Students must earn a grade of C or better in all courses within the program.

Required Courses

Required CoursesCourse #Course TitleCredits

Credits: 39–41

ECE102	Engineering Analysis tools and Techniques	2
ECE103	Engineering Program Solving and Design	2
ELE111	Circuit Analysis I	4
ELE112	Circuit Analysis II	4
ELE121	Solid State Devices and Circuits I	4
ELE131	Digital Logic and Circuits	3
ELE181	Computer Programming for Technology	3
ELE222	Solid-State Devices and Circuits II	4
ELE241	Microprocessor Concepts	4

FYE101 Introduction to College, Career and Personal Success (1) OR

FYE103 Exploration of College, Career and Personal Success (3) 1–3

PHY111 General Physics I 4

PHY112 General Physics II (4) OR

CHM130 Fundamental Chemistry (3) AND

CHM130LL Fundamental Chemistry Laboratory (1) 4

Restricted Electives

Restricted ElectivesCourse #Course TitleCredits

Credits: 0–3

Students should work with Program Director to select courses 100–level or higher in the ECE, EEE, ELE or MAT prefix that are not listed in th

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm13?id=16453885>

Starting Term: 2025 Fall

Final Term: 9999

ASSOCIATE IN APPLIED SCIENCE (AAS) IN ELECTRONICS TECHNOLOGY

Total Credits: 60-68
Major Code: 3220

Description

The Associate in Applied Science (AAS) in Electronics Technology program is designed to give students a foundation of experience important in electronics technicians, manufacturing supervisors, test equipment specialists, prototype fabricators, and in other positions in organizations that specialize in electronic design, manufacturing, service, and development. Students with this degree may work in industries that include, but are not limited to, aerospace, biotechnology, communications, entertainment, industrial, medical, power, semiconductor, and transportation.

Program Notes

Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses Course # Course Title Credits

Credits: 38-40

ELE111	Circuit Analysis I	4
ELE112	Circuit Analysis II	4
ELE121	Solid-State Devices and Circuits I	4
ELE131	Digital Logic and Circuits	3

ELE173	Fabrication Techniques (3) OR	
AIT123	J-STD Soldering Certification (3) OR	
ELE161	Custom Electric Guitar Fabrication (3)	3

ELE181	Computer Programming for Technology	3
ELE222	Solid State Devices and Circuits II	4
ELE241	Microprocessor Concepts	4
ELE/ELT243	Microprocessor Applications	3
ELE251	Electronic Measurements	3

FYE101	Introduction to College, Career and Personal Success (1) OR	
FYE103	Exploration of College, Career and Personal Success (3)	1-3

GTC/OSH/MIT106	Industrial Safety	2

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm13?id=15993301>

Starting Term: 2025 Fall
Final Term: 9999

ASSOCIATE IN APPLIED SCIENCE (AAS) IN EXERCISE SCIENCE: HEALTH, FITNESS, AND SPORTS

Total Credits: 62-74.5
Major Code: 3059

Description

The Associate in Applied Science (AAS) in Exercise Science: Health, Fitness, and Sports Performance prepares students for the American College of Sports Medicine (ACSM), National Strength and Conditioning Association (NSCA), National Academy of Sports Medicine (NASM) and the American Council on Exercise (ACE) personal trainer certifications. The curriculum is designed to prepare students for employment in positions such as personal training within health and fitness clubs, wellness centers, and public and private recreation facilities. The curriculum includes the foundational courses required for the Certificate of Completion (CCL) in Personal Training coupled with advanced hands-on courses required for the CCL in Personal Training: Advanced that foster the development of critical thinking, leadership, and communication skills important for developing, implementing and leading exercise programs. This curriculum also provides a good foundation for transfer to a four-year bachelor program. Students who complete this AAS also qualify for the CCL in Personal Training and Personal Training: Advanced. An Associate in Arts (AA), Emphasis in Exercise Science is also available for students interested in continuing their studies in this field.

Program Notes

Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses Course # Course Title Credits

Credits: 46-52.5

BI0181++	General Biology (Majors) I (4) OR	
One (1) year of high school biology (0) 0-4		

BI0160	Introduction to Human Anatomy and Physiology (4) OR	
BI0201++	Human Anatomy and Physiology I (4)	4

EMT101	Basic Life Support/Cardiopulmonary Resuscitation (CPR) for Health Care Providers (0.5) OR	
WED106	Cardiopulmonary Resuscitation (CPR)/Automated External Defibrillator (AED) (0.5) OR	
Current	CPR/AED certification (0) 0-0.5	

EXS101	Introduction to Exercise Science	3
EXS125	Introduction to Exercise Physiology	3
EXS146	Introduction to Exercise Testing	1
EXS215	Resistance Training and Recovery Techniques	3
EXS217	Cardiorespiratory and Flexibility Training	3

EXS246	Advanced Exercise Testing	2
EXS255	Program Design: Muscular Fitness and Performance	3
EXS257	Program Design: Cardiorespiratory Fitness	3

Student must complete three (3) credits from the following EXS internship course options:

EXS270	Exercise Science Internship (3) OR
EXS270AA	Exercise Science Internship (1) AND
EXS270AB	Exercise Science Internship (2) 3

EXS290	Introduction to Evidence Based Practice	3

FON100	Introductory Nutrition (3) OR	
FON241	Principles of Human Nutrition (3)	3

FYE101	Introduction to College, Career and Personal Success (1) OR
FYE103	Exploration of College, Career and Personal Success (3) 1-3

HES100	Healthful Living	3
HES210	Cultural Aspects of Health and Illness	3

PED101RT	Resistance Training for Improved Sports Performance (1) OR	
PED101ST	Strength Training (1)	1

PED101BC	Boot Camp (1) OR	
PED101BS	Body Sculpting (1) OR	
PED101CY	Cycling – Indoor (1) OR	
PED101GF	Group Fitness/Aerobics (1) OR	
PED101KB	Kickboxing (1) OR	
PED101LD	Latin Dancing (1) OR	
PED101PC	Physical Conditioning (1) OR	
PED101PS	Pilates (1) OR	
PED101SR	Stretch and Relaxation (1) OR	
PED101TC	Tai Chi (1) OR	
PED101TX	Suspension Training (1) OR	
PED101YG	Gentle Yoga (1) OR	
PED101YH	Hatha Yoga (1) OR	
PED101Y0	Yoga (1) OR	
PED101YP	Power Yoga (1) OR	
PED101YR	Restorative Yoga (1) OR	
PED101ZU	Zumba Fitness (1)	1

PSY101	Introduction to Psychology	3

Restricted Electives

Restricted Electives Course # Course Title Credits

Credits: 1

Complete one (1) credit from one of the following course options not already selected in the Required Courses area. Choose a course that best

EXS++++	Any EXS Exercise Science course	1
FON++++	Any FON Food and Nutrition course	1
HES++++	Any HES Health Science course	1
PED++++	Any PED Physical Education course	1
IFS110	Critical Research for College Success	1

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm13?id=175465>

Starting Term: 2023 Fall

Final Term: 9999

ASSOCIATE IN APPLIED SCIENCE (AAS) IN FASHION DESIGN

Total Credits: 63-74

Major Code: 3355

Description

The Associate in Applied Science (AAS) in Fashion Design guides students in developing technical and creative design skills for employment opportunities in the fashion industry or self-employment in fashion design. The program includes training in multiple levels of apparel construction, design, fashion illustration, patternmaking, and draping, and supports students in building inspirational sources through analysis of cultural, historical, and contemporary works of fashion and design.

Program Notes

Students must earn a grade of C or better in all courses within the program. This program replaces: AAS/3260 Fashion Merchandising and Design

Required Courses

Required Courses Course # Course Title Credits

Credits: 38-43

FYE101	Introduction to College, Career and Personal Success (1) OR
FYE103	Exploration of College, Career and Personal Success (3) 1-3

TEC105	Cultural Aspects of Clothing	3
TEC106	History of Fashion	3

TEC110	Beginning Apparel Construction (3) OR
Permission of Program Director (0)	0-3

TEC111	Intermediate Apparel Construction	3
TEC122	Sewing with Knits	3
TEC125	Fashion Design	3
TEC134	Fashion Illustration I	3
TEC212	Advanced Apparel Construction	3
TEC221	Computer-Assisted Fashion Design	3
TEC222	Textiles	3
TEC223	Tailoring (3) OR	
TEC227	Couture Sewing (3) OR	
TEC234	Vintage Fashion Design (3) OR	
TEC270	Design Studio (3)	3
TEC225	Pattern Design I	3
TEC226	Draping for Fashion Design	3
TEC236	Portfolio Development (1) OR	
TEC271AA	Fashion Design Internship (1) OR	
TEC277AA	Alteration Internship (1) OR	
TEC278AA	Costume Design and Production Internship (1) OR	
TEC298AA	Special Projects (1)	1

Restricted Electives

Restricted Electives Course # Course Title Credits

Credits: 4-6

In consultation with the program director, select four to six (4-6) credits from the following except courses used in the Required Courses area

ART113	Color	3
TEC++++	Any TEC Textiles and Clothing course	1-6

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm13?id=187823>

Starting Term: 2023 Fall

Final Term: 9999

ASSOCIATE IN APPLIED SCIENCE (AAS) IN FASHION MERCHANDISING

Total Credits: 62-72

Major Code: 3266

Description

The Associate in Applied Science (AAS) in Fashion Merchandising program places students at the intersection of fashion, business and marketing. Our curriculum stresses the importance of leadership, teamwork, creativity, and effective communication throughout the product life cycle process. Students will leave this program equipped with knowledge of fashion theory; the societal and technological aspects of the textile and apparel industry; and the creation, promotion, distribution, and retailing of consumer goods in a global environment. This program provides a foundation for students to pursue a wide range of careers in the fashion industry. A Certificate of Completion (CCL) in Fashion Merchandising program is also available.

Program Notes

Students must earn a grade of C or better in all courses within the program.

Admission Criteria

None

Required Courses

Required Courses Course # Course Title Credits

Credits: 28-30

BPC110	Computer Usage and Applications (3) OR	
CIS105	Survey of Computer Information Systems (3)	3

FYE101 Introduction to College, Career and Personal Success (1) OR

FYE103 Exploration of College, Career and Personal Success (3) 1-3

MGT251	Human Relations in Business	3
MKT/TEC109	Introduction to Fashion Merchandising	3
MKT/TEC151	Display and Visual Merchandising	3
MKT/TEC200	Retail Buying	3
MKT263	Advertising Principles	3
MKT268	Merchandising	3
MKT271	Principles of Marketing	3
TEC222	Textiles	3

Restricted Electives

Restricted Electives Course # Course Title Credits

Credits: 6-12

Students should select a total of 6-12 credits from the following courses in consultation with a Department Advisor.

GBS151	Introduction to Business	3
IBS101	Introduction to International Business	3
MGT++++	Any MGT Management course except courses used to satisfy Required Courses area	

MKT+++++ Any MKT Marketing course except courses used to satisfy Required Courses area
TEC+++++ Any TEC Textiles and Clothing course except courses used to satisfy Required Courses area

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Starting Term: 2025 Fall
Final Term: 9999

ASSOCIATE IN APPLIED SCIENCE (AAS) IN FIRE SCIENCE

Total Credits: 82-92
Major Code: 3205

Description

The Associate in Applied Science (AAS) in Fire Science provides the opportunity for individuals seeking careers in the fire service to acquire standard firefighting skills and prepare for state and/or national certifications, including the Firefighter I and II Certification. Students will gain broad knowledge and skills necessary to work effectively in the fire service as firefighters. A Certificate of Completion (CCL) in Firefighter Operations is also available.

Program Notes

Students must earn a grade of C or better in all courses within the program. Consult with your faculty mentor or academic advisor to determine educational requirements, including possible university transfer options, for your chosen career field. Prior Learning Assessment Credit (PLA) is available for the following: Current Employment as a Firefighter, BLSEMT Fire I and II, Hazmat Wildland Redcard

Admission Criteria

See Program Director for details.

Required Courses

Required Courses Course # Course Title Credits
Credits: 59-61

EMT101 Basic Life Support/Cardiopulmonary Resuscitation (CPR) for Health Care Providers (0.5)
OR

Current validation in Basic Life Support (BLS) Health Care Provider/Professional Rescuer (0) AND
Credit By Evaluation or Prior Learning Assessment credit (0.5) 0.5

EMT104 Emergency Medical Technology (10) AND

EMT104AB Applied Practical Studies for Emergency Medical Technology (0.5) AND

EMT104LL Emergency Medical Technology Practicum (2)

OR

Prior Learning Assessment for Arizona State EMT Certification or Arizona State Paramedic Certification or equivalent (12.5) 12.5

FSC101 Introduction to Fire Service Selection and Entry (4) OR

Prior Learning Assessment for Current employment as a firefighter (4) 4

FSC102 Fire Department Operations (11) OR

Prior Learning Assessment for Firefighter I and II certifications or completion of a Regional Fire Academy (11) 11

FSC105 Hazardous Materials Awareness and Operations (3) OR

Prior Learning Assessment (3) for Hazardous Materials Awareness and Operations certification 3

FSC108 Fundamentals of Fire Prevention (3) OR

FSC110 Wildland Firefighter (3)

OR

Prior Learning Assessment for Wildland Red Card OR S-130 and S-190 Course Completion Certificate (3)
(FSC110 is recommended)

FSC113 Introduction to Fire Suppression 3

FSC117 Fire Apparatus 3

FSC118 Fire Hydraulics 3

FSC119 Introduction Fire Service Ethics 3

FSC130 Fitness for Firefighters/CPAT (1) OR

Prior Learning Assessment for CPAT completion or completion of a Regional Fire Academy (1) 1

FSC134 Fitness and Conditioning for Firefighters (3) OR

FSC234 Fitness and Wellness for Firefighter Candidates (3) OR

Prior Learning Assessment for completion of Regional Fire Academy (3) 3

(FSC234 is recommended for students who have already completed the Fire Academy equivalent of FSC102)

FSC174 Functions of Command 2

FSC208 Firefighter Safety and Building Construction 3

FSC215 Customer Service in the Public Sector 3

FYE101 Introduction to College, Career and Personal Success (1) OR

FYE103 Exploration of College, Career and Personal Success (3) 1-3

Restricted Electives

Restricted Electives Course # Course Title Credits

Credits: 1-3

FSC+++++ Any Fire Science Technology course.

Recommend the following:

FSC202 Supervisory Training for Firefighters 3

FSC204	Firefighting Tactics and Strategy	3
FSC282AC	Service-Learning Experience in Fire Science	3
FSC296WC	Cooperative Education	3

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Starting Term: 2024 Fall

Final Term: 9999

ASSOCIATE IN APPLIED SCIENCE (AAS) IN FORENSIC SCIENCE

Total Credits: 60-64

Major Code: 3183

Description

The Associate in Applied Science (AAS) in Forensic Science provides the student with a specialization in forensic investigation as it relates to crime. The curriculum presents a specialized scope of knowledge about photography, collection and preservation of evidence, and investigative strategies. The program provides students with an important knowledge base for investigative specialization in a wide range of disciplines and careers. This degree pathway also provides students with the opportunity to complete two Certificates of Completion (CCL) in Crime Scene Investigation, and Fingerprint Identification and Photography.

Program Notes

Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	32-44		
AJS101	Introduction to Criminal Justice	3	
AJS123	Ethics and the Administration of Justice	3	
AJS275	Criminal Investigation I	3	
AJS290BN	Courtroom Testimony Seminar	1	
AJS215	Criminalistics: Physical Evidence (3) OR		
AJS219	Crime Scene Technology: Physical Evidence (3) OR		
FOR105	Forensic Science: Physical Evidence (4) 3-4		
AJS216	Criminalistics: Biological Evidence (3) OR		
FOR106	Forensic Science: Biological Evidence (4) 3-4		
FYE101	Introduction to College, Career and Personal Success (1) OR		
FYE103	Exploration of College, Career and Personal Success (3) 1-3		

Students should select courses from one of the following specializations based on career goals.

Specialization 1: Crime Scene (15 credits)

AJS109	Substantive Criminal Law	3
AJS210	Constitutional Law	3
AJS213	Evidence Technology: Fingerprints	3
AJS214	Evidence Technology/Photography	3
AJS260	Procedural Criminal Law	3

Specialization 2: Lab Science (23 credits)

BI0181	General Biology (Majors) I	4
BI0182	General Biology (Majors) II	4
CHM151	General Chemistry I	3
CHM151LL	General Chemistry I Laboratory	1
CHM152	General Chemistry II	3
CHM152LL	General Chemistry II Laboratory	1
FOR286	Principles of Forensic Science	4

Any course or combination of courses that include HU, C, and either G or H General Education designations. 3

Restricted Electives

Restricted Electives	Course #	Course Title	Credits
Credits:	3		

Students must complete three (3) credits of restricted electives.

Students interested in Specialization 1: Crime Scene

CIS105	Survey of Computer Information Systems (3) OR		
BPC110	Computer Usage and Applications (3) OR		
AJS++++	Any AJS Administration of Justice Studies course not listed in the required courses area. (3)	3	

Students interested in Specialization 2: Lab Science

CIS105	Survey of Computer Information Systems (3) OR		
BPC110	Computer Usage and Applications (3)	3	

Free Electives

Free Electives	Course #	Course Title	Credits
Credits:	0-13		

Students must choose zero to thirteen (0-13) additional credits of General Elective courses. Total number of General Electives required will

Starting Term: 2023 Fall
Final Term: 9999

ASSOCIATE IN APPLIED SCIENCE (AAS) IN GENERAL BUSINESS

Total Credits: 62-69
Major Code: 3148

Description

The Associate in Applied Science (AAS) in General Business program is designed to meet the needs of students who wish a broad overview of business and desire not to enroll in a specialized curriculum in business. The program is designed to acquaint students with major subject areas of business, to improve the student's business vocabulary, and to provide students with an understanding of influencing factors in business decision making and activities. In addition, this program may aid a student in recognizing a specific business field to be pursued in future studies. A Certificate of Completion (CCL) in General Business is available.

Program Notes

Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits: 22-24			
ACC111		Accounting Principles I	3
CI5105		Survey of Computer Information Systems	3
FYE101		Introduction to College, Career and Personal Success	(1) OR
FYE103		Exploration of College, Career and Personal Success	(3) 1-3
GBS120		Workplace Communication Skills	(3) OR
GBS233		Business Communication	(3) 3
GBS151		Introduction to Business	3
GBS205		Legal, Ethical and Regulatory Issues in Business	3
MGT175		Business Organization and Management	(3) OR
MGT251		Human Relations in Business	(3) 3
MKT271		Principles of Marketing	3

Restricted Electives

Restricted Electives	Course #	Course Title	Credits
Credits: 18			
Students should select 18 credits from the following courses/subjects. Any 100/200 level courses in the following subjects can be used, except			
ACC+++ Any ACC		Accounting course(s)	
CIS114DE		Excel Spreadsheet	3
CIS117DM		Microsoft Access: Database Management	3
CIS133DA		Internet/Web Development Level I	3
EPS+++ Any EPS		Entrepreneurial Studies course(s)	
GBS+++ Any GBS		General Business course(s)	
IBS+++ Any IBS		International Business course(s)	
MGT+++ Any MGT		Management course(s)	
MKT+++ Any MKT		Marketing course(s)	
REA+++ Any REA		Real Estate course(s)	
SBS+++ Any SBS		Small Business Management course(s)	
TQM+++ Any TQM		Total Quality Management course(s)	

Starting Term: 2024 Fall
Final Term: 9999

ASSOCIATE IN APPLIED SCIENCE (AAS) IN GRAPHIC DESIGN

Total Credits: 61-68
Major Code: 3201

Description

The Associate in Applied Science (AAS) in Graphic Design develops the knowledge and skills required in the areas of photography, digital imaging, and graphic design. The coursework includes creating graphic designs, including images, layouts, typography, packaging, motion and interactive graphics, and branding in various print and digital media. This degree prepares students for employment and upgrades the skills of persons employed in occupations such as production artists, graphic designers, freelance artist-designers, and art directors. A Certificate of Completion (CCL) in Graphic Design is also available.

Program Notes

Students must earn a grade of C or better in all courses within the program.

Required Courses

Required CoursesCourse #Course TitleCredits

Credits: 33-37

AVC169 2D Media Design 3

AVC177 Digital Photographic Imaging I 3

AVC183 Digital Graphic Arts I 3

AVC248 Design Self Promotion (3) OR

ART255 Art Marketing (3) 3

AVC283 Digital Graphic Arts II 3

AVC100 Introduction to Digital Arts 1

ART111 Drawing I (3) OR

ART116 Life Drawing I (3) 3

ART113 Color (3) OR

AVC114 Digital Color (3) 3

AVC142 Introduction to Digital Photography 3

AVC178 Digital Arts Studies 3

AVC/MMT190 Art of Web Site Design 3

Capstone/Internship Course:

AVC280++ Digital Media Arts and Design Capstone (1-3) OR

AVC297++ Computer Graphic Design Internship (1-3) 1-3

FYE101 Introduction to College, Career and Personal Success (1) OR

FYE103 Exploration of College, Career and Personal Success (3) 1-3

Restricted Electives

Restricted ElectivesCourse #Course TitleCredits

Credits: 3

Students must select three (3) credits from the following list of courses:

ART103 Typography in the Digital Age 3

AVC150 Multimedia Storytelling 3

AVC175 Electronic Publishing Design I 3

AVC192 Advanced Web Presentation Design 3

AVC200 Animation and Interactivity 3

AVC210 Design Tools for Imagery, Production, and Publishing 3

AVC/TH0246 Digital Fabrication 3

AVC289 Computer Illustration 3

Free Electives

Free ElectivesCourse #Course TitleCredits

Credits: 0-3

Select additional courses 100-level or higher to complete the minimum credits required for this degree. Consult with the Program Director or

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm13?id=182854>

Starting Term: 2024 Fall

Final Term: 9999

ASSOCIATE IN APPLIED SCIENCE (AAS) IN ILLUSTRATION AND SEQUENTIAL ART

Total Credits: 61-74

Major Code: 3203

Description

The Associate in Applied Science (AAS) in Illustration and Sequential Art is designed for the student who wishes to develop an area of specialization in illustration and comics and sequential art. Students will develop narratives through traditional and digital media. The program emphasizes art principles, knowledge, and skills needed to solve design and compositional problems. Areas of emphasis include comic book and sequential art, illustration for publications, and storyboarding. It allows for the development of an individual's personal interest in this area, prepares students for employment, and upgrades skills of those already employed in this field. Employment opportunities are available in a variety of fields including, but not limited to, freelance artist-designer, concept artist, comics/sequential art, visual development artist for gaming/film, and storyboarder. A Certificate of Completion (CCL) in Illustration and in Sequential Art is also available.

Program Notes

Students must earn a grade of C or better in all courses within the program.

Required Courses

Required CoursesCourse #Course TitleCredits

Credits: 24-28

ART111 Drawing I 3

AVC100 Introduction to Digital Arts 1

AVC169 2D Media Design 3

AVC177 Digital Photographic Imaging I 3

AVC289 Computer Illustration 3

ART113 Color (3) OR

AVC114 Digital Color (3) 3

ART116 Life Drawing I 3

AVC178 Digital Arts Studies 3

Capstone/Internship Course:

AVC280++ Digital Media Arts and Design Capstone (1-3) OR

AVC297++ Computer Graphic Design Internship (1-3) 1-3

FYE101 Introduction to College, Career and Personal Success (1) OR

FYE103 Exploration of College, Career and Personal Success (3) 1-3

Restricted Electives

Restricted Electives Course # Course Title Credits

Credits: 9-18

Specialization 1: Sequential Art

AVC119 Penciling for Sequential Art 3

AVC120 Inking for Sequential Art 3

AVC219 Coloring, Toning and Lettering for Sequential Art 3

AVC220 Publishing for the Comic Industry 3

AVC221 Comics Creation 3

CRW172 Introduction to Comic Book Writing (3) OR

CRW176 Writing Narrative for Video Games (3) OR

CRW190 Introduction to Screenwriting (3) 3

Specialization 2: Illustration

AVC248 Design Self Promotion (3) OR

ART255 Art Marketing (3) 3

Students must select six (6) credits from the following list of courses. Students may select from one emphasis or may select from different e

Animation Emphasis

AVC/MMT184 Digital Animation I 3

AVC/MMT185 3D Modeling for Animation I 3

Drawing Emphasis

ART117 Life Drawing II 3

ART118 Art Anatomy 3

ART122 Drawing and Composition II 3

Painting Emphasis

ART165 Watercolor Painting I 3

ART166 Watercolor Painting II 3

ART167 Painting I 3

ART168 Painting II 3

ART263 Figure Painting 3

Free Electives

Free Electives Course # Course Title Credits

Credits: 0-6

Select additional courses 100-level or higher to complete the minimum credits required for this degree. Consult with the Program Director or

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm13?id=183073>

Starting Term: 2024 Fall

Final Term: 9999

ASSOCIATE IN APPLIED SCIENCE (AAS) IN INFORMATION TECHNOLOGY

Total Credits: 60-69

Major Code: 3196

Description

The Associate in Applied Science (AAS) in Information Technology (IT) program is designed to provide students with skills to meet information technology needs across industries. This program includes instruction in the principles of computer hardware components and business software, programming, databases, networking, customer service, web development, and information systems and project management. Coursework helps prepare students for a variety of industry-recognized examinations and certifications. This degree also provides students with the opportunity to earn one of the following Certificate of Completion (CCL): Cybersecurity Fundamentals, Database Development, Desktop Support, Foundations of Mobile App Development, Microsoft Office Professional, Microsoft System Administration, Programming and Systems Analysis Level I, Oracle Database Operations, Red Hat Linux Engineer, and Web Foundations.

Program Notes

Students must earn a grade of C or better in all courses within the program. Courses within any of the following prefixes must be taken within five (5) years prior to completion of the program to be applied toward this award: AIM, BPC, CIS, CLD, CNT, CSC, ITS, and MST.

Required Courses

Required Courses Course # Course Title Credits

Credits: 33-41

FYE101 Introduction to College, Career and Personal Success (1) OR

FYE103 Exploration of College, Career and Personal Success (3) 1-3

Complete all courses in the specialization below that best aligns with your academic and professional goals. Consult with an academic, faculty

Specialization 1: Cybersecurity Fundamentals Credits: 33-34
 Information Technology Core Credits: 24-25
 BPC270 A+ Exam Prep: Operating System Configuration and Support (3) OR
 MST150++ Any Microsoft Windows course (3) 3

CIS105 Survey of Computer Information Systems 3

CIS117DM Microsoft Access: Database Management (3) OR
 CIS119D0 Introduction to Oracle: SQL (3) OR
 CIS276DA MySQL Database (3) OR
 CIS276DB SQL Server Database (3) 3

CIS126DL Linux Operating System (3) OR
 CIS126RH Red Hat System Administration I (3) 3

CIS133DA Internet/Web Development Level I 3
 CIS156 Python Programming: Level I 3

CIS190 Introduction to Networking (3) OR
 CNT140AB Introduction to Networks (4) 3-4

CIS224 Project Management Microsoft Project for Windows (3) OR
 CIS250 Management of Information Systems (3) 3

Cybersecurity Fundamentals Credits: 9
 CIS111 Ethics in Information Technology (3) OR
 ITS120 Legal, Ethical and Regulatory Issues (3) 3

CIS270 Essentials of Network and Information Security (3) OR
 ITS110 Information Security Fundamentals (3) 3

ITS240 Ethical Hacking and Network Defense 3

Related Area Credits: 0-5

Select courses with one of the following prefixes to complete the minimum total program credits required for this degree:

BPC++++ Any BPC Business-Personal Computers courses
 CIS++++ Any CIS Computer Information Systems courses
 CLD++++ Any CLD Cloud Computing courses
 CNT++++ Any CNT Cisco Network Technology courses
 ITS++++ Any ITS Information Technology Security courses
 MST++++ Any MST Microsoft Technology courses

Specialization 2: Database Development 36-38
 Information Technology Core Credits: 21-22
 BPC270 A+ Exam Prep: Operating System Configuration and Support (3) OR
 CIS126DL Linux Operating System (3) OR
 CIS126RH Red Hat System Administration I (3) OR
 MST150++ Microsoft Windows (3) 3

CIS105 Survey of Computer Information Systems 3
 CIS119D0 Introduction to Oracle: SQL 3
 CIS133DA Internet/Web Development Level I 3

CIS156 Python Programming: Level I (3) OR
 CIS162++ Any C Programming: Level I course (3) OR
 CIS163AA Java Programming: Level I (3) 3

CIS190 Introduction to Networking (3) OR
 CNT140AB Introduction to Networks (4) 3-4

CIS224 Project Management Microsoft Project for Windows (3) OR
 CIS250 Management of Information Systems (3) 3

Database Development Credits: 15
 CIS117DM Microsoft Access: Database Management (3) OR
 CIS154 Database Modeling and Design (3) 3

CIS150++ Programming Fundamentals 3

CIS164AB Oracle: PL/SQL Programming (3) OR
 CIS276DA MySQL Database (3) OR
 CIS276DB SQL Server Database (3) 3

CIS217AM Advanced Microsoft Access: Database Management (3) OR
 CIS276DB SQL Server Database (3) 3

CIS225AB Object-Oriented Analysis and Design 3

Related Area Credits : 0-2

Select courses with one of the following prefixes to complete the minimum total program credits required for this degree:

BPC++++ Any BPC Business-Personal Computers courses
 CIS++++ Any CIS Computer Information Systems courses
 CLD++++ Any CLD Cloud Computing courses
 CNT++++ Any CNT Cisco Network Technology courses
 ITS++++ Any ITS Information Technology Security courses
 MST++++ Any MST Microsoft Technology courses

Specialization 3: Desktop Support Credits: 32-38
 Information Technology Core Credits: 24-25
 BPC270 A+ Exam Prep: Operating System Configuration and Support 3
 CIS105 Survey of Computer Information Systems 3

CIS117DM Microsoft Access: Database Management (3) OR
 CIS119D0 Introduction to Oracle: SQL (3) OR
 CIS276DA MySQL Database (3) OR
 CIS276DB SQL Server Database (3) 3

CIS126DL Linux Operating System (3) OR
 CIS126RH Red Hat System Administration I (3) 3

 CIS133DA Internet/Web Development Level I 3

 CIS150AB Object-Oriented Programming Fundamentals (3) OR
 CIS156 Python Programming: Level I (3) OR
 CIS162++ Any C Programming: Level I course (3) OR
 CIS163AA Java Programming: Level I (3) 3

 CIS190 Introduction to Networking (3) OR
 CNT140AB Introduction to Networks (4) 3-4

 CIS224 Project Management Microsoft Project for Windows (3) OR
 CIS250 Management of Information Systems (3) 3

 Desktop Support Credits: 6
 BPC170 A+ Exam Prep: Computer Hardware Configuration and Support 3
 CIS102DA Customer User Support 3

 Related Area Credits: 2-8
 Select courses with one of the following prefixes to complete the minimum total program credits required for this degree:
 BPC++++ Any BPC Business-Personal Computers courses
 CIS++++ Any CIS Computer Information Systems courses
 CLD++++ Any CLD Cloud Computing courses
 CNT++++ Any CNT Cisco Network Technology courses
 ITS++++ Any ITS Information Technology Security courses
 MST++++ Any MST Microsoft Technology courses

 Specialization 4: Foundations of Mobile App Development Credits: 33-38
 Information Technology Core Credits: 21-22
 CIS105 Survey of Computer Information Systems 3

 BPC270 A+ Exam Prep: Operating System Configuration and Support (3) OR
 CIS126DL Linux Operating System (3) OR
 CIS126RH Red Hat System Administration I (3) OR
 MST150++ Microsoft Windows (3) 3

 CIS117DM Microsoft Access: Database Management (3) OR
 CIS119D0 Introduction to Oracle: SQL (3) OR
 CIS276DA MySQL Database (3) OR
 CIS276DB SQL Server Database (3) 3

 CIS133DA Internet/Web Development Level I 3
 CIS162++ Any C Programming: Level I course 3

 CIS190 Introduction to Networking (3) OR
 CNT140AB Introduction to Networks (4) 3-4

 CIS224 Project Management Microsoft Project for Windows (3) OR
 CIS250 Management of Information Systems (3) 3

 Foundations of Mobile App Development Credits: 12
 CIS120DF Introduction to Adobe Photoshop 3
 CIS165 Introduction to iOS Application Development 3
 CIS165DA Introduction to Android Application Development 3

 CIS165DB C#/VB.NET: Windows 8 App Development (3) OR
 CIS165DC Xamarin/C# Cross Platform Development (3) 3

 Related Area Credits: 0-5
 Select courses with one of the following prefixes to complete the minimum total program credits required for this degree:
 BPC++++ Any BPC Business-Personal Computers courses
 CIS++++ Any CIS Computer Information Systems courses
 CLD++++ Any CLD Cloud Computing courses
 CNT++++ Any CNT Cisco Network Technology courses
 ITS++++ Any ITS Information Technology Security courses
 MST++++ Any MST Microsoft Technology courses

 Specialization 5: Microsoft Office Professional Credits: 31-38
 Information Technology Core Credits: 18-19
 CIS105 Survey of Computer Information Systems 3
 CIS117DM Microsoft Access: Database Management 3
 CIS133DA Internet/Web Development Level I 3

 CIS150AB Object-Oriented Programming Fundamentals (3) OR
 CIS156 Python Programming: Level I (3) OR
 CIS162++ Any C Programming: Level I course (3) OR
 CIS163AA Java Programming: Level I (3) 3

 CIS190 Introduction to Networking (3) OR
 CNT140AB Introduction to Networks (4) 3-4

 MST150++ Microsoft Windows (3) OR
 BPC270 A+ Exam Prep: Operating System Configuration and Support (3) 3

 Microsoft Office Professional Credits: 11-13
 BPC/OAS111AA Computer Keyboarding (1) OR
 Permission of Program Director (0) 0-1

 CIS113DE Microsoft Word: Word Processing 3
 CIS114DE Excel Spreadsheet 3
 CIS118DB Desktop Presentation: PowerPoint 3

 CIS124AA Project Management Software: Level I (1) AND
 CIS124BA Project Management Software: Level II (1) OR
 CIS224 Project Management Microsoft Project for Windows (3) 2-3

Related Area Credits: 0-8

Select courses with one of the following prefixes to complete the minimum total program credits required for this degree:

BPC+++++ Any BPC Business-Personal Computers courses
CIS+++++ Any CIS Computer Information Systems courses
CLD+++++ Any CLD Cloud Computing courses
CNT+++++ Any CNT Cisco Network Technology courses
ITS+++++ Any ITS Information Technology Security courses
MST+++++ Any MST Microsoft Technology courses

Specialization 6: Microsoft Server 36-38

Information Technology Core: 21-22

CIS105 Survey of Computer Information Systems 3

CIS117DM Microsoft Access: Database Management (3) OR
CIS119D0 Introduction to Oracle: SQL (3) OR
CIS276DA MySQL Database (3) OR
CIS276DB SQL Server Database (3) 3

CIS133DA Internet/Web Development Level I 3

CIS150AB Object-Oriented Programming Fundamentals (3) OR
CIS156 Python Programming: Level I (3) OR
CIS162++ Any C Programming: Level I course (3) OR
CIS163AA Java Programming: Level I (3) 3

CIS190 Introduction to Networking (3) OR
CNT140AB Introduction to Networks (4) 3-4

CIS224 Project Management Microsoft Project for Windows (3) OR
CIS250 Management of Information Systems (3) 3

MST150++ Microsoft Windows 3

Microsoft Server Credits: 15

CIS121AH Microsoft PowerShell/Command Line Operations 3
MST155DC Installation, Storage, and Compute with Windows Server 4
MST157DC Networking with Windows Server 4
MST158DC Identity Management with Windows Server 2016 4

Related Area Credits: 0-2

Select courses with one of the following prefixes to complete the minimum total program credits required for this degree:

BPC+++++ Any BPC Business-Personal Computers courses
CIS+++++ Any CIS Computer Information Systems courses
CLD+++++ Any CLD Cloud Computing courses
CNT+++++ Any CNT Cisco Network Technology courses
ITS+++++ Any ITS Information Technology Security courses
MST+++++ Any MST Microsoft Technology courses

Specialization 7: Oracle Database Operations 32-38

Information Technology Core Credits: 21-22

BPC270 A+ Exam Prep: Operating System Configuration and Support (3) OR
CIS126DL Linux Operating System (3) OR
CIS126RH Red Hat System Administration I (3) OR
MST150++ Microsoft Windows (3) 3

CIS105 Survey of Computer Information Systems 3
CIS119D0 Introduction to Oracle: SQL 3
CIS133DA Internet/Web Development Level I 3

CIS150AB Object-Oriented Programming Fundamentals (3) OR
CIS156 Python Programming: Level I (3) OR
CIS162++ Any C Programming: Level I course (3) OR
CIS163AA Java Programming: Level I (3) 3

CIS190 Introduction to Networking (3) OR
CNT140AB Introduction to Networks (4) 3-4

CIS224 Project Management Microsoft Project for Windows (3) OR
CIS250 Management of Information Systems (3) 3

Oracle Database Operations Credits: 9

CIS119DP Oracle: Database Administration 3
CIS154 Database Modeling and Design 3
CIS164AB Oracle: PL/SQL Programming 3

Related Area Credits : 2-8

Select courses with one of the following prefixes to complete the minimum total program credits required for this degree:

BPC+++++ Any BPC Business-Personal Computers courses
CIS+++++ Any CIS Computer Information Systems courses
CLD+++++ Any CLD Cloud Computing courses
CNT+++++ Any CNT Cisco Network Technology courses
ITS+++++ Any ITS Information Technology Security courses
MST+++++ Any MST Microsoft Technology courses

Specialization 8: Programming and Systems Analysis Level 1 Courses: 32-38

Information Technology Core Credits: 21-22

CIS105 Survey of Computer Information Systems 3

CIS119D0 Introduction to Oracle: SQL (3) OR
CIS276DA MySQL Database (3) OR
CIS276DB SQL Server Database (3) 3

CIS126DL Linux Operating System (3) OR
CIS126RH Red Hat System Administration I (3) OR
MST150++ Microsoft Windows (3) 3

CIS133DA Internet/Web Development Level I 3

CIS150AB Object-Oriented Programming Fundamentals 3

CIS190 Introduction to Networking (3) OR
CNT140AB Introduction to Networks (4) 3-4

CIS224 Project Management Microsoft Project for Windows (3) OR
CIS250 Management of Information Systems (3) 3

Programming and Systems Analysis Credits: 9
CIS159 Visual Basic Programming I (3) OR
CIS162++ Any C Programming: Level I course (3) OR
CIS163AA Java Programming: Level I (3) OR
CIS165++ Any Mobile Application Development course (3) 3

CIS166++ Any Web Scripting course 3
GBS151 Introduction to Business 3

Related Area Credits: 1-8
Select courses with one of the following prefixes to complete the minimum total program credits required for this degree:
BPC++++ Any BPC Business-Personal Computers courses
CIS++++ Any CIS Computer Information Systems courses
CLD++++ Any CLD Cloud Computing courses
CNT++++ Any CNT Cisco Network Technology courses
ITS++++ Any ITS Information Technology Security courses
MST++++ Any MST Microsoft Technology courses

Specialization 9: Redhat Linux Engineer 32-38
Information Technology Core Credits: 21-22
CIS105 Survey of Computer Information Systems 3

CIS117DM Microsoft Access: Database Management (3) OR
CIS119D0 Introduction to Oracle: SQL (3) OR
CIS276DA MySQL Database (3) OR
CIS276DB SQL Server Database (3) 3

CIS126RH Red Hat System Administration I 3
CIS133DA Internet/Web Development Level I 3

CIS150AB Object-Oriented Programming Fundamentals (3) OR
CIS156 Python Programming: Level I (3) OR
CIS162++ Any C Programming: Level I course (3) OR
CIS163AA Java Programming: Level I (3) 3

CIS190 Introduction to Networking (3) OR
CNT140AB Introduction to Networks (4) 3-4

CIS224 Project Management Microsoft Project for Windows (3) OR
CIS250 Management of Information Systems (3) 3

Redhat Linux Engineer Credits: 6
CIS238RH Red Hat System Administration II 3
CIS240RH Red Hat System Administration III 3

Related Area Credits: 5-11
Select courses with one of the following prefixes to complete the minimum total program credits required for this degree:
BPC++++ Any BPC Business-Personal Computers courses
CIS++++ Any CIS Computer Information Systems courses
CLD++++ Any CLD Cloud Computing courses
CNT++++ Any CNT Cisco Network Technology courses
ITS++++ Any ITS Information Technology Security courses
MST++++ Any MST Microsoft Technology courses

Specialization 10: Web Foundations Credits: 36-38

Information Technology Core Credits: 21-22
BPC270 A+ Exam Prep: Operating System Configuration and Support (3) OR
CIS126DL Linux Operating System (3) OR
CIS126RH Red Hat System Administration I (3) OR
MST150++ Microsoft Windows (3) 3

CIS105 Survey of Computer Information Systems 3

CIS117DM Microsoft Access: Database Management (3) OR
CIS119D0 Introduction to Oracle: SQL (3) OR
CIS276DA MySQL Database (3) OR
CIS276DB SQL Server Database (3) 3

CIS133DA Internet/Web Development Level I 3

CIS150AB Object-Oriented Programming Fundamentals (3) OR
CIS156 Python Programming: Level I (3) OR
CIS162++ Any C Programming: Level I course (3) OR
CIS163AA Java Programming: Level I (3) 3

CIS190 Introduction to Networking (3) OR
CNT140AB Introduction to Networks (4) 3-4

CIS224 Project Management Microsoft Project for Windows (3) OR
CIS250 Management of Information Systems (3) 3

Web Foundation Credits: 15
CIS120DF Introduction to Adobe Photoshop 3
CIS136 Content Management Systems: WordPress 3
CIS166AA Introduction to Javascript 3
CIS233DA Internet/Web Development Level II 3
CIS235 e-Commerce 3

Related Area Credits: 0-2

Select courses with one of the following prefixes to complete the minimum total program credits required for this degree:

BPC++++ Any BPC Business–Personal Computers courses
CIS++++ Any CIS Computer Information Systems courses
CLD++++ Any CLD Cloud Computing courses
CNT++++ Any CNT Cisco Network Technology courses
ITS++++ Any ITS Information Technology Security courses
MST++++ Any MST Microsoft Technology courses

Specialization 11: A related Certificate of Completion (CCL) at the discretion of the Program Director (minimum of 11 credits) AND the follow Information Technology Core Credits: 21–22

CIS105 Survey of Computer Information Systems 3

CIS117DM Microsoft Access: Database Management (3) OR
CIS119D0 Introduction to Oracle: SQL (3) OR
CIS276DA MySQL Database (3) OR
CIS276DB SQL Server Database (3) 3

BPC270 A+ Exam Prep: Operating System Configuration and Support (3) OR
CIS126DL Linux Operating System (3) OR
CIS126RH Red Hat System Administration I (3) OR
MST150++ Microsoft Windows (3) 3

CIS150AB Object–Oriented Programming Fundamentals (3) OR
CIS156 Python Programming: Level I (3) OR
CIS162++ Any C Programming: Level I course (3) OR
CIS163AA Java Programming: Level I (3) 3

CIS190 Introduction to Networking (3) OR
CNT140AB Introduction to Networks (4) 3–4

CIS133DA Internet/Web Development Level I 3

CIS224 Project Management Microsoft Project for Windows (3) OR
CIS250 Management of Information Systems (3) 3

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Starting Term: 2023 Fall

Final Term: 2025 Summer

ASSOCIATE IN APPLIED SCIENCE (AAS) IN INSTRUCTIONAL ASSISTANCE

Total Credits: 60–63

Major Code: 3119

Description

The Associate in Applied Science (AAS) in Instructional Assistance program is designed to prepare students for employment as an assistant to the classroom teacher in grades K through 12. The program emphasizes the philosophical, cultural, and linguistic processes involved in teaching children through required coursework in foundations of education combined with practical application within practicum experiences.

Program Notes

Students must earn a grade of C or better for all courses required within the program.

Required Courses

Required Courses Course # Course Title Credits

Credits: 19–21
CFS/ECH176 Child Development 3
EDU220 Introduction to Serving English Language Learners (ELL) 3
EDU221 Introduction to Education 3
EDU222 Introduction to the Exceptional Learner 3
EDU230 Cultural Diversity in Education 3

FYE101 Introduction to College, Career and Personal Success (1) OR
FYE103 Exploration of College, Career and Personal Success (3) 1–3

Students must select one of the following technology/computer usage courses

BPC110 Computer Usage and Applications (3) OR
CIS105 Survey of Computer Information Systems (3) 3

Restricted Electives

Restricted Electives Course # Course Title Credits

Credits: 17–22
CFS101AH Art Activities for the Young Child 1
CFS101AJ Music Activities for the Young Child 1
CFS101AR Learning with Toys 1
CFS160 Using Music, Speech and Movement with Children's Literature 1
ECH128 Early Learning Play and the Arts 3
CFS/ECH273 Math for the Young Child 1
ECH274 Books and Verse for the Young Child 1
CFS/ECH275 Literacy Development of the Young Child 1
ECH279 Early Childhood Curriculum Development 1
EDU101++ Tutor Training and Practicum (any suffixed course) 1–3
EDU236 Classroom Relationships 3
EDU270 Learning and the Brain 3

EDU272 Educational Psychology 3
 EED282++ Service-Learning Experience in Early Childhood Education (any suffixed course) 1-3
 EDU282++ Service-Learning Experience in Education (any suffixed course) 1-3
 EDU/HUM/ST0292 The Art of Storytelling 3
 EDU298++ Special Projects (any suffixed course) 1-3
 EED212 Guidance, Effective Interactions and the Environment 3
 EED215 Early Learning: Health, Safety, Nutrition and Physical Fitness 3
 EED245 Early Learning: Language Acquisition and Literacy Development 3
 EED272 Early Childhood Educational Psychology 3
 EED278 Early Learning Curriculum and Instruction – Birth to Age Eight 3
 EED280 Standards, Observation & Assessment of Typical/Atypical Behaviors of Young Children Birth to Age Eight 3
 ENG213 Introduction to the Study of Language 3
 POS221 Arizona Constitution 1
 PSY101 Introduction to Psychology 3
 SLC201 Introduction to Linguistics 3
 SOC101 Introduction to Sociology 3
 SOC241 Racial and Ethnic Minorities 3
 SWU171 Introduction to Social Work 3
 THP211 Creative Drama 3

BPC110 Computer Usage and Applications (3) OR
 CIS105 Survey of Computer Information Systems (3) 3

Choose 6-8 credits from the following Foreign Language courses:

ARB+++ Any ARB/Arabic course (6-8) OR
 FRE+++ Any FRE/French course (6-8) OR
 GER+++ Any GER/German course (6-8) OR
 ITA+++ Any ITA/Italian course (6-8) OR
 JPN+++ Any JPN/Japanese course (6-8) OR
 SPA+++ Any SPA/Spanish course (6-8) OR
 ASL+++ Any ASL American Sign Language course(s) (6-8) 6-8

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Starting Term: 2025 Fall

Final Term: 2026 Summer

ASSOCIATE IN APPLIED SCIENCE (AAS) IN JOURNALISM AND NEW MEDIA STUDIES

Total Credits: 60-68

Major Code: 3120

Description

The Associate in Applied Science (AAS) in Journalism and New Media Studies program is designed to provide students with general, practical and marketable skills that will enable them to seek entry-level employment in various media outlets, including: newspapers, magazines, community journals, online websites, radio and television. The program includes development of a portfolio that will exhibit students' abilities to write both news and feature stories. News judgment is also integrated as a critical component of the program. An awareness of global and cultural differences also forms a key element of this degree for the successful graduate. The curriculum combines coursework in journalism with a General Education component.

Program Notes

Students must earn a grade of C or better in all courses within the program. There are additional university transfer options within this pathway. Students should speak with the Program Director or an academic advisor to identify the best option to meet their academic and career goals.

Required Courses

Required Courses Course # Course Title Credits

Credits: 38-40

BPC110 Computer Usage and Applications (3) OR
 CIS105 Survey of Computer Information Systems (3) 3

ENG235 Magazine Article Writing (3) OR

JRN212 Writing for Broadcasts (3) OR

JRN234 Feature Writing (3) 3

FYE101 Introduction to College, Career and Personal Success (1) OR

FYE103 Exploration of College, Career and Personal Success (3) 1-3

JRN101 Grammar and Style for Journalists 1

JRN105 Introduction to Journalism 3

JRN201 News Writing 3

JRN213 Writing for Online 3

JRN205 Copyediting 3

JRN210 News and Media Production 3

JRN225 Photojournalism 3

MC0120 Media and Society 3

MC0220 Cultural Diversity and the Media 3

Any combination of the following courses must be taken for a total of six (6) credits:

JRN240AC Journalism Internship 3

JRN298AA Special Projects 1

JRN298AB Special Projects 2

JRN298AC Special Projects 3

Free Electives

Free ElectivesCourse #Course TitleCredits

Credits: 0-2

Select additional courses 100-level or higher to complete the minimum total program credits required for this degree. Consult with the Progra

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Starting Term: 2025 Fall

Final Term: 9999

ASSOCIATE IN APPLIED SCIENCE (AAS) IN MANUFACTURING PRODUCTION TECHNOLOGY

Total Credits: 66-76

Major Code: 3192

Description

The Associate in Applied Science (AAS) in Manufacturing Production Technology program prepares students for employment as operators, technicians, and managers in the manufacturing industry. The program provides applied skills in process design, quality control, Computer Numeric Control (CNC), and Computer-Aided Design/Computer-Aided Manufacturing (CAD/CAM) programming for current and future needs of the manufacturing industry. Embedded Certificates of Completion (CCLs) in CNC Machine Operator, CNC Machining I, and CNC Machining II are also available.

Program Notes

Students must earn a grade of C or better in all courses within the program.

Required Courses

Required CoursesCourse #Course TitleCredits

Credits: 38-40

FYE101 Introduction to College, Career and Personal Success (1) OR

FYE103 Exploration of College, Career and Personal Success (3) 1-3

The following courses are required in CCL CNC Machining I

MPT101 Technical Documentation (3) OR

MPT101MP Technical Documentation (3) 3

MPT110 Inspection Techniques (3) OR

MPT110MP Inspection Techniques (3) 3

MPT111 Geometric Dimensioning and Tolerance (GDT) (3) OR

MPT111MP Geometric Dimensioning and Tolerance (GDT) (3)

MPT113 Coordinate Measuring Machines I (CMM) (3) OR

MPT140 Manual CNC Programming (3) 3

MPT120 Introduction to Manual Machining (4) OR

MPT120MP Introduction to Manual Machining (4) 4

MPT130 CNC Machine Operator (6) OR

MPT130MP CNC Machine Operator (6) OR

MPT131 CNC Machining Level I (6) OR

MPT131MP CNC Machining Level I (6) 6

MPT132 CNC Machining Level II (3) OR

MPT132MP CNC Machining Level II (3) OR 3

The following courses are required in CCL CNC Machining II

Students interested in taking MPT250 are advised to take MPT151

MPT150 Introduction to SolidWorks (3) OR

MPT151 Solid Design I: SolidWorks (3) 3

MPT260 Computer Aided Manufacturing (CAM) I (3) OR

MPT260MP Computer Aided Manufacturing (CAM) I (3) 3

MPT262 Computer Aided Manufacturing (CAM) II (3) OR

MPT262MP Computer Aided Manufacturing (CAM) II (3) 3

MPT270 Tooling, Fixtures, and Gauges 3

Restricted Electives

Restricted ElectivesCourse #Course TitleCredits

Credits: 6-7

Students should complete 6-7 credits from the category below that best aligns with their academic and professional goals.

Quality and Inspection:

MPT215 Workplace Quality Systems 3

MPT216 Applied Statistical Process Control Methods 3

MPT217 Lean and Six Sigma Applied Concepts 3

Industrial Design:

MPT152 Solid Design: Certified SolidWorks Associate/Certified SolidWorks Professional Test Preparation 1

MPT250 Solid Design II: Advanced Part Modeling: SolidWorks 3

MPT255 Solid Design 3D Printing 4

MPT261 Mastercam Certified Programmer Mill Level I: Test Preparation: CPgM1 1

Manual Machining:
MPT220 Manual Machining: NIMS Level I Certification 3
MPT221 Manual Machining: NIMS Level II Certification 3

Related Experience:
AIT100 Industrial Safety 1
AIT105 Modern Maintenance Operations 3
MPT282++ Volunteerism for Manufacturing: A Service Learning Experience 1-3
MPT290++ Manufacturing Production Internship 1-3
MPT296++ Cooperative Education 1-4
WLD101 Welding I 3

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Starting Term: 2023 Fall
Final Term: 9999

ASSOCIATE IN APPLIED SCIENCE (AAS) IN MARKETING AND SALES

Total Credits: 62-69
Major Code: 3094

Description

The Associate in Applied Science (AAS) in Marketing and Sales program is designed to develop competencies essential for success in marketing and personal selling. By completing this program, students will be better equipped for successful performance in a variety of marketing/management occupations, including wholesaling, retailing, professional sales, and entrepreneurship. Certificates of Completion (CCL) in Marketing and Social Media Marketing are available.

Program Notes

Students must earn a grade of C or better in all courses within the program.

Admission Criteria

None

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	25-27		
ACC111		Accounting Principles I	3
BPC110		Computer Usage and Applications (3) OR	
CIS105		Survey of Computer Information Systems (3)	3
FYE101		Introduction to College, Career and Personal Success (1) OR	
FYE103		Exploration of College, Career and Personal Success (3)	1-3
GBS151		Introduction to Business	3
GBS120		Workplace Communication Skills (3) OR	
GBS233		Business Communication (3)	3
MKT110		Marketing and Social Networking	3
MKT263		Advertising Principles	3
MKT267		Principles of Sales	3
MKT271		Principles of Marketing	3

Restricted Electives

Restricted Electives	Course #	Course Title	Credits
Credits:	15		
Students should select 15 credits from the following courses in consultation with a Department Advisor.			
CIS103		Introduction to Social Media	3
GBS205		Legal, Ethical, and Regulatory Issues in Business	3
IBS101		Introduction to International Business	3
MGT126		Customer Service Skills and Strategies	3
MGT251		Human Relations in Business	3
MKT+++		Any MKT Marketing courses except courses used to satisfy the Required Courses area.	3-15

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Starting Term: 2025 Fall
Final Term: 9999

ASSOCIATE IN APPLIED SCIENCE (AAS) IN MUSIC INDUSTRIES: MUSIC BUSINESS

Total Credits: 61-70
Major Code: 3017

Description

The Associate in Applied Science (AAS) in Music Industry Studies: Music Business is designed to provide aspiring music industry professionals with a broad background in music management, production, and entrepreneurship activities. The program combines theoretical and applied learning experiences to help students gain a strategic understanding of commercial music as both an art and profession. Students will choose a focus area among business and marketing, commercial performance, and music production. They will employ analytical and communication skills and explore aesthetic, cultural, and historical perspectives relevant to the music industry.

Program Notes

Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits: 26-29			
FYE101	Introduction to College, Career and Personal Success (1) OR		
FYE103	Exploration of College, Career and Personal Success (3)	1-3	
MGT253	Owning and Operating a Small Business	3	
MKT110	Marketing and Social Networking	3	
MKT271	Principles of Marketing	3	
MUC109	Music Business: Content Creation and Copyright	3	
MUC110	Music Business: Marketing and Monetization	3	
MTC180	Computer Literacy for Musicians (3) OR		
MUC180	Computer Literacy for the Music Business (3)	3	
Note: Students who have not already completed MTC180 must take MUC180			
MUC209	Music Industry Entrepreneurship	3	
MUC293	Self-Promotion for Music	1	
Music Industry Capstone Experience			
MUC290AA	Music Business Internship (1) OR		
MUC296WA	Cooperative Education (1) OR		
MUC298AA	Special Projects (1)	1	
Overview of Music Genres			
MHL155	Survey of American Music (3) OR		
MUC242	Music Genres and Styles (2)	2-3	

Restricted Electives

Restricted Electives	Course #	Course Title	Credits
Credits: 12-13			
Students should work with their program advisor to select 12-13 credits from courses that align with the academic/career goals and further th			
Business and Marketing			
GBS+++	Any GBS General Business course(s)		
MKT+++	Any MKT Marketing course(s)		
MUC+++	Any MUC Music: Commercial/Business course(s)		
Music Production			
MTC+++	Any MTC Music: Theory/Composition course(s)		
MUC+++	Any MUC Music: Commercial/Business course(s)		
Commercial Performance			
MTC+++	Any MTC Music: Theory/Composition course(s)		
MUP+++	Any MUP Music: Performance course(s)		

Free Electives

Free Electives	Course #	Course Title	Credits
Credits: 0-1			
Select courses 100-level or higher to complete the minimum credits required for this degree. Consult with an Academic and/or Program Advisor.			

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Starting Term: 2025 Fall
Final Term: 9999

ASSOCIATE IN APPLIED SCIENCE (AAS) IN NETWORK AND SYSTEMS ADMINISTRATION

Total Credits: 61-74
Major Code: 3189

Description

The Associate in Applied Science (AAS) in Network and Systems Administration program provides students with a solid, hands-on skill set of computer, networking, and internetworking systems technology principles and desktop support. Students gain an understanding of the interaction between microcomputer software and hardware, network and internetworking operating systems software and hardware, local area network administration and management, the use of troubleshooting techniques, troubleshooting hardware and software tools, as well as interpersonal/customer service skills. Students have the opportunity to specialize in specific information technology areas based on their interests and professional goals and leading to industry recognized certifications through an embedded Certificate of Completion (CCL) including, but not limited to, Desktop (Desktop Support, Computer System Configuration and Support, Computer System Configuration and Support, Network, Computer System Configuration and Support, Security, Computer System Configuration and Support, Linux), Cisco (Cisco Network CCNA, Cisco Network CCNP, Cisco Network CCNA Security), Linux (Red Hat Linux Engineer, Linux Associate, Red Hat Linux Administrator, Linux System Administration), Microsoft (Microsoft System

Administration, Microsoft Desktop Associate), and VMware (VMware Network Administrator, VMware Foundations, VMware System Administrator). Graduates may pursue employment in a variety of information technology environments and/or transfer to a university.

Program Notes

Students must earn a grade of C or better in all courses within the program. Courses within any of the following prefixes must be taken within five (5) years prior to completion of the program to be applied toward this award: BPC, CIS, CLD, CNT, ITS, and MST. Students may receive credit for courses within the program based on current industry certifications. This program replaces: AAS/3013 Linux Networking Administration, AAS/3095 Information Technology: Cisco Networking, AAS/3096 Information Technology: Network Server, AAS/3208 Networking System Administration, AAS/3312 Computer and Networking Technology, AAS/3778 Microsoft Networking Technology, AAS/3794 Network Administration, AAS/3816 Networking Technology: Cisco.

Required Courses

Required Courses Course # Course Title Credits

Credits: 31-46

BPC170 A+ Exam Prep: Computer Hardware Configuration and Support 3

BPC270 A+ Exam Prep: Operating System Configuration and Support 3

CIS102DA Customer User Support 3

CIS105 Survey of Computer Information Systems 3

CIS126DL Linux Operating System (3) OR

CIS126RH Red Hat System Administration I (3) 3

CIS190 Introduction to Networking (3) OR

CNT140AB Introduction to Networks (4) 3-4

(CNT140AB is required for students on the Cisco specialization)

FYE101 Introduction to College, Career and Personal Success (1) OR

FYE103 Exploration of College, Career and Personal Success (3) 1-3

Students must also select from one of the following specializations based on their career goals.

Specialization 1: Cisco System Administration (CCNA) and Security

CNT150AB Switching, Routing, and Wireless Essentials 4

CNT160AB Enterprise Networking, Security, and Automation 4

CNT202 Cisco Secure Firewall Appliance Configuration (4) OR

CNT205 Cisco Certified Network Associate Security (4) 4

Specialization 2: Cisco System Administration (CCNP)

CNT150AB Switching, Routing, and Wireless Essentials 4

CNT160AB Enterprise Networking, Security, and Automation 4

CNT240 Cisco Certified Network Professional: Enterprise Core (8) OR

CNT240AA Cisco Certified Network Professional: Enterprise Core I (4) AND

CNT240AB Cisco Certified Network Professional: Enterprise Core II (4) 8

CNT250 Cisco Certified Network Professional: Enterprise Advanced Routing and Services (8) OR

CNT250AA Cisco Certified Network Professional: Enterprise Advanced Routing and Services I (4) AND

CNT250AB Cisco Certified Network Professional: Enterprise Advanced Routing and Services II (4) 8

Specialization 3: Linux System Administration

CIS238DL Linux System Administration 3

CIS239DL Linux Shell Scripting 3

CIS240DL Linux Network Administration 3

CIS271DL Linux Security 3

CIS275DL Linux Capstone 3

Specialization 4: Red Hat Enterprise Linux Administration

CIS238RH Red Hat System Administration II 3

CIS239DL Linux Shell Scripting 3

CIS240RH Red Hat System Administration III 3

CIS271RH Red Hat System Administration IV 3

CIS275DL Linux Capstone 3

Specialization 5: Cloud System Administration

BPC274 Advanced Server Computer Maintenance: Server+ Prep 3

CIS121AH Microsoft PowerShell/Command Line Operations 3

CIS239DL Linux Shell Scripting 3

MST160 Azure Administrator (4) OR

CLD110 Amazon Web Services Cloud Foundations (3) 3-4

MST260 Microsoft Azure Cloud Development and Operations (3) OR

CLD120 Amazon Web Services Cloud Architect Associate (3) 3

Specialization 6: VMware Network Administrator

CIS293 VMware ESXI Server Enterprise 4

CIS294 VMware vSphere Operate, Scale and Secure 4

CIS295 VMware NSX: Install, Configure, Manage 4

Restricted Electives

Restricted Electives Course # Course Title Credits

Credits: 0-8

Students must select enough Restricted Elective credits to meet the minimum total program credits. Students may not select the same courses u

Cisco Electives

CNT140AB Introduction to Networks 4

CNT150AB Switching, Routing, and Wireless Essentials 4

CNT160AB Enterprise Networking, Security, and Automation 4

CNT171 CCNA Exam Prep 1

CNT202	Cisco Secure Firewall Appliance Configuration (4) OR	
CNT205	Cisco Certified Network Associate Security (4)	4
CNT206	Cisco Certified Network Associate Wireless	4
Linux Electives		
CIS238DL	Linux System Administration (3) OR	
CIS238RH	Red Hat System Administration II (3)	3
CIS239DL	Linux Shell Scripting	3
CIS240DL	Linux Network Administration (3) OR	
CIS240RH	Red Hat System Administration III (3)	3
CIS275DL	Linux Capstone	3
Microsoft Electives		
MST++++	Any MST Microsoft Technology course	
CIS121AB	Microsoft Command Line Operations	1
CIS121AH	Microsoft PowerShell/Command Line Operations	3
Security Electives		
CIS270	Essentials of Network and Information Security	3
ITS110	Information Security Fundamentals	3
VMware Electives		
CIS293	VMware ESXI Server Enterprise	4
CIS294	VMware vSphere Operate, Scale and Secure	4
CIS295	VMware NSX: Install, Configure, Manage	4
Other Information Technology Electives		
BPC171	Recycling Used Computer Technology	1-3
CIS111	Ethics in Information Technology	3
CIS124AA	Project Management Software: Level I	1
CIS124BA	Project Management Software: Level II	1
CIS156	Python Programming: Level I	3
CIS190	Introduction to Networking	3
CIS224	Project Management Microsoft Project for Windows	3
CIS250	Management of Information Systems	3
CIS266	Network Integration Capstone	4
CIS290++	Computer Information Systems Internship	1-3
CIS296++	Cooperative Education	2-3
CIS298++	Special Projects	1-3
ITS120	Legal, Ethical, and Regulatory Issues	3

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Starting Term: 2025 Fall
Final Term: 9999

ASSOCIATE IN APPLIED SCIENCE (AAS) IN NURSING

Total Credits: 62-75
Major Code: 3812

Description

The Associate in Applied Science (AAS) in Nursing Program is available at eight of the Maricopa Community Colleges. Clinical experiences are provided in a variety of healthcare settings. Nursing Program graduates are eligible to apply for the national exam for the registered nurse license. Licensing requirements are the exclusive responsibility of the State Board of Nursing.

The Associate in Applied Science (AAS) Nursing Program is approved by the Arizona State Board of Nursing and accredited by the Accreditation Commission for Education in Nursing (ACEN), 3390 Peachtree Road NE, Suite 1400, Atlanta, GA 30326; (404-975-5000); email: info@acennursing.org.

Program offerings:

This program is offered at the following sites:
Chandler-Gilbert Community College
Estrella Mountain Community College
GateWay Community College
Glendale Community College
Mesa Community College
Paradise Valley Community College
Phoenix College
Scottsdale Community College

Waiver of Licensure/Certification Guarantee:

Admission or graduation from the Nursing Program does not guarantee obtaining a license to practice nursing. Licensure requirements and the subsequent procedures are the exclusive right and responsibility of the Arizona State Board of Nursing. Students must satisfy the requirements of the Nurse Practice Act: Statutes, Rules and Regulations, independently of any college or school requirements for graduation.

Pursuant to A.R.S. 32-1606(B)(17), an applicant for professional or practical nurse license by examination is not eligible for licensure if the applicant has any felony convictions and has not received an absolute discharge from the sentences for all felony convictions. The absolute discharge must be received five or more years before submitting this application. If you cannot prove that the absolute discharge date is five or more years, the Board cannot process your application.

Level One Fingerprint Clearance is required for admission into the program. Applicants must present a Level One Fingerprint Clearance Card to be copied by the advisor or designee. For a Department of Public Safety Fingerprint Clearance Card application, contact MCCC HealthCare/Nursing Advisor. If there is any question about eligibility for licensure or certification, contact the nursing education consultant at the Arizona State Board of Nursing (602-771-7800).

Health Declaration:

It is essential that nursing students be able to perform a number of physical activities in the clinical portion of the program. At a minimum, students will be required to lift patients, stand for several hours at a time and perform bending activities. Students who have a chronic illness or condition must be maintained on current treatment and be able to implement direct patient care. The clinical nursing experience also places students under considerable mental and emotional stress as they undertake responsibilities and duties impacting patients' lives. Students must be able to demonstrate rational and appropriate behavior under stressful conditions. Individuals should give careful consideration to the mental and physical demands of the program prior to making application. All must provide documentation of compliance with all health and safety requirements required to protect patient safety. Only students in compliance are permitted to enroll in nursing courses. Students will meet these requirements by providing the required documentation for the Health/Safety Requirements Documentation Checklist and the signed Health Declaration Form.

Health and Safety Requirements for the MaricopaNursing Program:

1. Students must submit a Health and Safety Documentation Checklist verifying completion of all requirements and maintain current status throughout the program.
2. Students must submit the Health Declaration Form signed by a licensed health care provider.
3. Students must test negative on a timed urine drug screen.
4. Admission to an Allied Health program requires that students be in compliance with the Maricopa County Community College District Supplemental Background Check policy. Program applications will not be accepted without a copy of an Arizona Department of Public Safety Level One Fingerprint Clearance Card. Upon conditional program admission, the student must comply with all requirements of the current MCCCDC background check policy.

University Transfer Students:

Students who are planning to earn the Bachelor of Science in Nursing may obtain their prerequisite courses at the Maricopa Community Colleges. For information on courses that meet requirements for admission into a baccalaureate program, please contact a program advisor.

REGISTERED NURSE PATHWAY

Associate in Applied Science Degree in Nursing Program

The Associate in Applied Science (AAS) degree in Nursing graduate is eligible to apply for licensure as a Registered Nurse (RN). The RN is educated as a generalist who delivers health care to clients and family groups and has competencies related to the art and science of nursing. The RN may be employed in a variety of acute, long term, and community-based healthcare settings. The AAS degree in Nursing provides the graduate with an educational foundation for articulation into the university setting.

This program is designed to meet education requirements for licensure or certification in the State of Arizona. Granting licensure and certification is the sole responsibility of the state board or approval agency. This program is only offered and available to students located in the State of Arizona. The Maricopa County Community College District and colleges define student location within Administrative Regulation 2.2.3(7).

Program Notes

Students must earn a grade of C or better in all courses within the program. Students must complete the following general education and introductory courses with a 2.0 GPA to be added to the queue of those waiting for an available cohort space to begin the core curriculum. BIO156 or BIO181, BIO201, CHM130 and CHM130LL, CHM130AA, ENG101 or ENG107, MAT140 or MAT141 or MAT142. Course Fee Information: Please see class schedule for information regarding course fees. MaricopaNursing is aligned with Nurse of the Future Competencies: Person-Centered Care, Professionalism, Leadership, Systems-Based Practice, Informatics and Technology, Communication, Teamwork and Collaboration, Safety, Quality Improvement, and Evidence-Based Practice. These competencies focus on key stakeholders of healthcare clients, colleagues and communities. Demonstration of the competencies will signify preparation for successful transition into nursing practice and further professional development.

Admission Criteria

High school diploma or GED is required for the Associate in Applied Science degree in Nursing. Applicants must signify that they meet this re

Required Courses

Required Courses Course # Course Title Credits
Credits: 40-48

BIO156 Introductory Biology for Allied Health (4) OR

BIO181 General Biology (Majors) I (4) OR

One year of high school biology (0) 0-4

BIO201 Human Anatomy and Physiology I 4

CHM130 Fundamental Chemistry (3) AND

CHM130LL Fundamental Chemistry Laboratory (1) OR

CHM130AA Fundamental Chemistry with Lab (4) OR

Satisfactory completion of higher level college-level chemistry course and corresponding lab OR

One year of high school chemistry (0) 0-4

NUR152 Nursing Theory and Science I 9

NUR172 Nursing Theory and Science II 9

NUR252 Nursing Theory and Science III 9

NUR283 Nursing Theory and Science IV 9

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Starting Term: 2023 Fall

Final Term: 9999

ASSOCIATE IN APPLIED SCIENCE (AAS) IN ORGANIZATIONAL MANAGEMENT

Total Credits: 61-68

Major Code: 3727

Description

The Associate in Applied Science (AAS) in Organizational Management program is designed with a customized curriculum specific to the student's individual needs in addition to the knowledge and skills needed in today's changing workplace. The program provides leadership and communication skills and techniques for planning, organizing, leading and controlling business situations. This program also emphasizes procedures for effective resource allocation. A Certificate of Completion (CCL) in Organizational Leadership is fully embedded in this AAS.

Program Notes

Students must earn a grade of C or better in all courses within the program.

Required Courses

Required CoursesCourse #Course TitleCredits
Credits: 19–22
FYE101 Introduction to College, Career and Personal Success (1) OR
FYE103 Exploration of College, Career and Personal Success (3) 1–3

Certificate of Completion in Organizational Leadership (5731) – Requirements listed below

BPC110 Computer Usage and Applications (3) OR
CIS105 Survey of Computer Information Systems (3) 3

GBS110 Human Relations in Business and Industry (3) OR
MGT251 Human Relations in Business (3) 3

GBS120 Workplace Communication Skills 3
GBS151 Introduction to Business 3

MGT175 Business Organization and Management (3) OR
TQM240 Project Management in Quality Organizations (3) 3

MGT101 Techniques of Supervision (3) OR
MGT229 Management and Leadership I (3) 3

Restricted Electives

Restricted ElectivesCourse #Course TitleCredits
Credits: 20
Students must choose 20 industry/job related course credits from any MCCCDC occupational program and/or Academic Certificate.

Industry/job related course credits must include a minimum of 9 credits with a common subject or theme. Program of study must be approved by

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCDC.woa/wa/freeForm13?id=187586>

Starting Term: 2024 Fall
Final Term: 9999

ASSOCIATE IN APPLIED SCIENCE (AAS) IN PARAMEDICINE

Total Credits: 63.5-75.5
Major Code: 3889

Description

The Associate in Applied Sciences (AAS) in Paramedicine is a nationally accredited program designed to prepare students to become Paramedics. This program is a formal education in such paramedicine topics as anatomy and physiology, pathophysiology, cardiology, pulmonary, pharmacology, pediatrics, geriatrics hematology, toxicology. Paramedicine builds upon EMT education and includes paramedic scope of practice. Paramedicine is integrated with fire service, law enforcement, ground transport services, flight transport services, search and rescue, hospitals, clinical setting, community paramedicine, and EMS education. There is a Certificate of Completion (CCL) in Paramedicine available.

This program is designed to meet education requirements for licensure or certification in the State of Arizona. Granting licensure and certification is the sole responsibility of the state board or approval agency. This program is only offered and available to students located in the State of Arizona. The Maricopa County Community College District and colleges define student location within Administrative Regulation 2.2.3(7).

Program Notes

Students must earn a grade of C or better in all courses within the program.

Admission Criteria

Students must be current and in good standing with the Arizona Department of Health Services Bureau of Emergency Medical Services–Certified a

Required Courses

Required CoursesCourse #Course TitleCredits
Credits: 45.5–51.5
BI0160 Introduction to Human Anatomy and Physiology 4
EMT101 Basic Life Support/Cardiopulmonary Resuscitation (CPR) for Health Care Providers 0.5
PME190 Introduction to ECG Rhythm Analysis and Interpretation for EMS Professionals (3) OR
Permission of Program Director (0) 0–3
PME191 Introduction to Pharmacology for EMS Professionals (3) OR
Permission of Program Director (0) 0–3
PME201 Advanced Cardiac Life Support (ACLS) Initial Provider in Paramedicine 1
PME202 Pediatric Advanced Life Support (PALS) Initial Provider in Paramedicine 1
PME203 Pediatric Emergencies for Prehospital Professionals (PEPP) Initial Provider in Paramedicine 1
PME204 Neonatal Resuscitation Provider (NRP) in Paramedicine 0.5
PME205 Advanced Medical Life Support (AMLS) Initial Provider in Paramedicine 1

PME206	International Trauma Life Support (ITLS) Provider/Pre-Hospital Trauma Life Support (PHTLS)	1
PME240	Pharmacology in Paramedicine	3
PME245	Airway and Ventilatory Management in Paramedicine	3
PME250	Comprehensive Patient Assessment in Paramedicine	1
PME251	Medical Emergencies in Paramedicine I	4
PME252	Medical Emergencies in Paramedicine II	4
PME253	Medical Emergencies in Paramedicine III	4
PME254	Technical Operations in Paramedicine	2.5
PME260	Trauma Patient Management in Paramedicine	2
PME270	Immersive Total Patient Management Experience (ITPME)	2
PME280	Preparation for Paramedicine Practicum	1
PME281	Paramedicine Clinical Practicum: Comprehensive (2) OR	
PME281AA	Paramedicine Clinical Practicum: Phase I (1) AND	
PME281AB	Paramedicine Clinical Practicum: Phase II (1)	2
PME288	Paramedicine Comprehensive Field Internship Practicum	5
PME289	Preparation for Paramedic National Credentialing	2

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Starting Term: 2024 Fall

Final Term: 9999

ASSOCIATE IN APPLIED SCIENCE (AAS) IN PHOTOGRAPHY

Total Credits: 61-67

Major Code: 3195

Description

The Associate in Applied Science (AAS) in Photography program is designed for the student who wishes to pursue a career in photography, either commercial or fine arts. Students will study digital and traditional film-based (darkroom) media, content and image selection, and the theory and practice of visual communication.

Program Notes

Students must earn a grade of C or better in all courses within the program. There will be costs for supplies and equipment in this program.

Required Courses

Required Courses Course # Course Title Credits

Credits: 27-31

ARH101 Art from Prehistory Through Middle Ages (3) OR

ARH102 Art from Renaissance to Modernism (3) 3

ARH115 History of Photography 3

ART112 Two-Dimensional Design 3

ART113 Color 3

ART131 Photography I 3

ART132 Photography II 3

ART255 Art Marketing (3) OR

ART255AB The Portfolio (1) 1-3

AVC100 Introduction to Digital Arts 1

AVC142 Introduction to Digital Photography 3

AVC143 Intermediate Digital Photography 3

FYE101 Introduction to College, Career and Personal Success (1) OR

FYE103 Exploration of College, Career and Personal Success (3) 1-3

Restricted Electives

Restricted Electives Course # Course Title Credits

Credits: 8-20

Complete all courses in the specialization below that best aligns with your academic and professional goals.

Specialization 1: Commercial Photography

AVC138 Commercial Photography I 3

AVC139 Commercial Photography II 3

AVC140 Portrait Photography (3) OR

AVC237 Fashion Photography (3) 3

MKT110 Marketing and Social Networking (3) OR

MKT263 Advertising Principles (3) OR

MKT271 Principles of Marketing (3) OR

SBS204 Small Business Marketing and Advertising (2) 2-3

SBS200 Small Business Operations 2

In consultation with advisor or program coordinator, choose up to six (6) credits of coursework from the following list to best fulfill goals

ART111 Drawing I 3

ART116 Life Drawing I 3

ART137 Alternative Photographic Processes 3

ART234 Color Photography 3

ART290AC Studio Art 3

ART290EC	Studio Art: Photography 3	
ART295DA	Art Workshop/Seminar: Photography	1
ART295DB	Art Workshop/Seminar: Photography	2
ART295DC	Art Workshop/Seminar: Photography	3
AVC169	2D Media Design 3	
AVC177	Digital Photographic Imaging I 3	
AVC178	Digital Arts Studies 3	
AVC181	Graphic Design I 3	
AVC232	Studio Lighting 3	
AVC270	Digital Photographic Imaging II 3	
AVC290DP	Art Studio: Digital Photography 3	
AVC297AA	Commercial Art Internship (1) OR	
AVC297AB	Commercial Art Internship (2) 1-2	
FMP108	Video Production 3	

Specialization 2: Fine Art Photography

ART133	Photography III 3	
ART137	Alternative Photographic Processes 3	

Select 2-9 credits from the following:

ART111	Drawing I 3	
ART116	Life Drawing I 3	
ART134	Photography IV 3	
ART234	Color Photography 3	
ART250	Introduction to Printmaking 3	
ART290AC	Studio Art 3	
ART290EC	Studio Art: Photography 3	
ART295DA	Art Workshop/Seminar: Photography	1
ART295DB	Art Workshop/Seminar: Photography	2
ART295DC	Art Workshop/Seminar: Photography	3
AVC169	2D Media Design 3	
AVC177	Digital Photographic Imaging I 3	
AVC178	Digital Arts Studies 3	
AVC232	Studio Lighting 3	
AVC270	Digital Photographic Imaging II 3	
AVC274	Digital Photographic Imaging III 3	
AVC290DP	Art Studio: Digital Photography 3	
AVC297AA	Commercial Art Internship 1	
SBS200	Small Business Operations 2	
SBS204	Small Business Marketing and Advertising 2	

Free Electives

Free ElectivesCourse #Course TitleCredits

Credits: 0-7

Select courses 100-level or higher to complete the minimum total program credits required for this degree. Consult with the Program Director

Recommend that students interested in transferring to a four-year institution to earn a bachelor's degree take courses that fulfill any unmet

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Starting Term: 2025 Fall

Final Term: 9999

ASSOCIATE IN APPLIED SCIENCE (AAS) IN PROGRAMMING AND SYSTEMS ANALYSIS

Total Credits: 62-71

Major Code: 3844

Description

The Associate in Applied Science (AAS) in Programming and Systems Analysis program provides an in-depth exploration of different computer language and technical skills. The AAS includes, but is not limited to the following: operating systems, local area networks, business communication, team roles, and dynamics. Certificate of Completions (CCLs) in Programming and Systems Analysis Level I and Level II and iOS App Development are also available.

Program Notes

Students must earn a grade of C or better in all courses within the program. Consultation with an Academic Advisor is recommended for course selection. Courses within any of the following prefixes must be taken within five (5) years prior to completion of the program to be applied toward this award: AIM, BPC, CIS, CLD, CNT, CSC, ITS, and MST.

Required Courses

Required CoursesCourse #Course TitleCredits

Credits: 34-37

CIS105	Survey of Computer Information Systems 3	

GBS151	Introduction to Business 3	

CIS126DL	Linux Operating System (3) OR	

CIS126RH	Red Hat System Administration I (3) OR	

MST150++	Any Microsoft Windows course (3)	3

CIS133DA	Internet/Web Development Level I 3	

Students interested in pursuing an iOS Certificate of Completion (CCL) are recommended to take CIS150AB

CIS150	Programming Fundamentals (3) OR	

CIS150AB	Object-Oriented Programming Fundamentals (3)	3

CIS166++ Any Web Scripting course(s) 3

CIS190 Introduction to Networking (3) OR
 CNT140AB Introduction to Networks (4) OR
 MST140 Microsoft Networking Essentials (3) 3-4

CIS225AB Object-Oriented Analysis and Design (3) OR
 CIS250 Management of Information Systems (3) 3

CIS119D0 Introduction to Oracle: SQL (3) OR
 CIS276DA MySQL Database (3) OR
 CIS276DB SQL Server Database (3) 3

FYE101 Introduction to College, Career and Personal Success (1) OR
 FYE103 Exploration of College, Career and Personal Success (3) 1-3

Select a programming language from below that best aligns with academic and professional goals (2 courses for a total of 6 credits) in one of

CIS156 Python Programming: Level I (3) AND
 CIS256 Python Programming: Level II (3) OR

CIS159 Visual Basic Programming I (3) AND
 CIS259 Visual Basic Programming II (3) OR

CIS162++ Any C Programming: Level I course (3) AND
 CIS262++ Any C Programming: Level II course (3) OR

CIS163AA Java Programming: Level I (3) AND
 CIS263AA Java Programming: Level II (3) OR

CIS165++ Any Mobile Application Development course (3) AND
 CIS265 Advanced iOS Application Development (3) 6

Restricted Electives

Restricted Electives	Course #	Course Title	Credits
Credits:	6		
Students may not use courses from the Required Courses Area.			
CIS224	Project Management	Microsoft Project for Windows	3
CIS151	Computer Game Development-Level I		3
CIS156	Python Programming: Level I		3
CIS159	Visual Basic Programming I		3
CIS162++	Any C Programming: Level I course		3
CIS163AA	Java Programming: Level I		3
CIS165++	Any Mobile Application Development course		3
CIS251	Computer Game Development-Level II		3
CIS256	Python Programming: Level II		3
CIS259	Visual Basic Programming II		3
CIS262++	Any C Programming: Level II course		3
CIS263AA	Java Programming: Level II		3
CIS265	Advanced iOS Application Development		3
GBS211	Legal, Ethical and Regulatory Issues of the Internet Studies		3

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Starting Term: 2022 Fall
 Final Term: 9999

ASSOCIATE IN APPLIED SCIENCE (AAS) IN PUBLIC RELATIONS

Total Credits: 61-70
 Major Code: 3674

Description

The Associate in Applied Science (AAS) in Public Relations combines coursework in the related fields of journalism, mass communication, and business. Provides students with general, practical, and marketable skills that will enable them to seek entry-level employment in public relations, such as media relations, community or consumer relations, marketing research, in-house publications, political campaigns, fundraising and volunteer recruitment.

Program Notes

Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	37-39		
BPC110	Computer Usage and Applications (3) OR		
CIS103	Introduction to Social Media (3) OR		
CIS105	Survey of Computer Information Systems (3)		3
COM100	Introduction to Human Communication		3
FYE101	Introduction to College, Career and Personal Success (1) OR		
FYE103	Exploration of College, Career and Personal Success (3)		1-3
JRN105	Introduction to Journalism		3
JRN201	News Writing		3

JRN210	News and Media Production	3
JRN213	Writing for Online	3
JRN236++	Public Relations Internship	1-3
MC0120	Media and Society	3
MC0220	Cultural Diversity and the Media	3
MKT101	Introduction to Public Relations	3
MKT110	Marketing and Social Networking	3
MKT263	Advertising Principles	3

Restricted Electives

Restricted Electives	Course #	Course Title	Credits
Credits:	6		
COM222	Argumentation	3	
COM225	Public Speaking	3	
JRN205	Copyediting	3	
MKT111	Applied Marketing and Social Networking	3	

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Starting Term: 2025 Fall
Final Term: 9999

ASSOCIATE IN APPLIED SCIENCE (AAS) IN SUSTAINABLE HORTICULTURE

Total Credits: 60-67
Major Code: 3014

Description

The Associate in Applied Science (AAS) in Sustainable Horticulture and Landscape Technology program helps prepare students for careers as gardeners, technicians, supervisors, managers, or business owners in wholesale or retail nurseries, florists, landscape design and construction operations, landscape management companies, and crop production companies. In addition, the program helps prepare students for careers with local, state, and federal government agencies involved with the technical phases of the landscape horticulture and sustainable agriculture industries. Certificates of Completion (CCLs) in Landscape Horticulture, Sustainable Agriculture, Landscape Technology, and Cannabis Cultivation are also available.

Program Notes

Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	25-27		
AGS100	Safety and Standard Operating Procedures for Sustainable Horticulture	1	
AGS164	Plant Growth and Development	4	
AGS182AA	Gardening Practices and Techniques	3	
AGS262	Irrigation Design, Installation, Operation, and Trouble Shooting	3	
AGS268	Integrated Pest Management in the Cultivated Environment	4	
AGS285	Propagation of Horticultural Plants	3	
CIS105	Survey of Computer Information Systems	3	
FYE101	Introduction to College, Career and Personal Success (1) OR		
FYE103	Exploration of College, Career and Personal Success (3)	1-3	
MGT253	Owning and Operating a Small Business	3	

Restricted Electives

Restricted Electives	Course #	Course Title	Credits
Credits:	12-16		
Restricted Electives Detail : Complete all courses in the specialization below that best aligns with your academic and professional goals. Co			
Specialization 1: Sustainable Agriculture			
AGS212	Sustainable Livestock Production	3	
AGS217	Introduction to Hydroponics and Greenhouse Management	4	
AGS260	Soils	4	
AGS265	Sustainable Crop Production	4	
Specialization 2: Landscape Technology			
AGS160	Introduction to Landscape Design	4	
AGS200	Southwest Landscape Plants: Identification and Care	4	
AGS210	Landscape Construction	4	
AGS260	Soils	4	
Specialization 3: Cannabis Cultivation			
AGS217	Introduction to Hydroponics and Greenhouse Management	4	
AGS260	Soils	4	
AGS280	Advanced Cannabis Cultivation	4	

Free Electives

Free Electives	Course #	Course Title	Credits
Credits:	0-5		
Select additional courses 100-level or higher to complete the minimum 60 credits required for this degree. Consult with the Program Director			

Starting Term: 2023 Fall
Final Term: 9999

ASSOCIATE IN APPLIED SCIENCE (AAS) IN VETERINARY TECHNOLOGY

Total Credits: 83-92.5
Major Code: 3015

Description

The Associate in Applied Science (AAS) in Veterinary Technology program prepares students for careers in veterinary technology which require knowledge and skills involving basic medical sciences, animal care and management, veterinary medical care, and client communications and service. Veterinary technicians function as the paraprofessional assistants to veterinarians, biomedical researchers, other scientists, and animal control and humane organizations. Instruction includes practical clinical internship experience in veterinary emergency, large animal, small animal, and specialty practices, as well as in zoos, laboratories, humane societies, and other facilities.

Program Notes

Students must earn a grade of C or better in all courses within the program.

Admission Criteria

High school graduation or G.E.D. equivalency. Formal application and admission to the Veterinary Technology program.

Program Prerequisites

Program Prerequisites Course # Course Title Credits
Credits: 0
None.

Required Courses

Required Courses Course # Course Title Credits
Credits: 74-83.5
BI0181 General Biology (Majors) I 4
BI0205 Microbiology 4
BPC110 Computer Usage and Applications (3) OR
CIS105 Survey of Computer Information Systems (3) 3
CHM130 Fundamental Chemistry (3) AND
CHM130LL Fundamental Chemistry Laboratory (1) 4
CRE101 College Critical Reading and Critical Thinking (3) OR
Equivalent as indicated by assessment (0) 0-3
ENG101 First-Year Composition (3) OR
ENG107 First-Year Composition for ESL (3) 3
ENG102 First-Year Composition (3) OR
ENG108 First-Year Composition for ESL (3) OR
ENG111 Technical and Professional Writing (3) 3
EQS105 Principles of Equine Science 3
EQS162VT Equine Management for the Veterinary Technician (2) OR
VET250AB Veterinary Technician Internship (0.5)-2 0.5
FYE101 Introduction to College, Career and Personal Success (1) OR
FYE103 Exploration of College, Career and Personal Success (3) 1-3
MAT120 Intermediate Algebra (5) OR
MAT121 Intermediate Algebra (4) OR
MAT122 Intermediate Algebra (3) OR
MAT126 Intermediate Algebra with Review (6) OR
MAT150 College Algebra/Functions (5) OR
Equivalent or higher course in the Mathematical Applications [MA] area (3-6) 3-6
Note: MAT14+ is not accepted.
VET101 Introduction to Veterinary Technology 3
VET101LL Animal Care Skills I Laboratory 2
VET112 Animal Nursing I 2
VET132 Veterinary Office Management and Client Communication 3
VET140 Animal Care Skills II (2) 4
Note: VET140 must be repeated for 4 credits
VET150 Veterinary Anatomy and Physiology I 3
VET150LL Veterinary Anatomy and Physiology Laboratory I 1
VET151 Veterinary Anatomy and Physiology II 3
VET200 Veterinary Clinical Pathology Methods 2
VET201 Animal Care Skills III (2) 4
Note: VET201 must be repeated for 4 credits

VET210	Animal Nursing II	3
VET220	Veterinary Pharmacology for the Veterinary Technician	3
VET223	Animal Diseases	3
VET230	Veterinary Radiology and Imaging for the Veterinary Technician	3
VET235	Veterinary Technician Proficiency	2
VET240	Veterinary Anesthesia, Surgery, and Emergency Nursing	3
VET250AA	Veterinary Technician Internship	0.5
VET250AC	Veterinary Technician Internship	0.5
VET250AD	Veterinary Technician Internship	0.5

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Starting Term: 2025 Fall

Final Term: 9999

ASSOCIATE IN APPLIED SCIENCE (AAS) IN VIDEO GAME PRODUCTION

Total Credits: 62-79

Major Code: 3890

Description

The Associate in Applied Science (AAS) in Video Game Production provides students with the essential skill sets needed to plan, design, and produce video games. The program features interdisciplinary coursework and related studies to build a strong foundation bridging the art and science of video game production. The Associate in Applied Science in Video Game Production's curriculum brings together business concepts, game technology, game narrative, music, sound design, and animation to prepare students for entry-level careers as a Level Designer, Environment Artist, Production Artist, Character Modeler, Character Animator, Game Designer, Game Developer, Mobile Game Developer, Commercial Artist, Game Writer, Composer and/or Sound Designer. Embedded Certificates of Completion (CCL) are available in Video Game Production: Game Art, Video Game Production: Audio and Sound and Video Game Production: Narrative and Video Game Production: Scripting and Coding.

Program Notes

Students must earn a grade of C or better in all courses within the program. Students interested in transferring should meet with an Academic, Faculty, or Program Director. GST201 Game Studies is recommended for students who intend to transfer to Arizona State University. Courses within any of the following prefixes must be taken within five (5) years prior to completion of the program to be applied toward this award: AIM, BPC, CIS, CLD, CNT, CSC, ITS, and MST.

Required Courses

Required Courses Course # Course Title Credits

Credits: 31-33

AVC100 Introduction to Digital Arts 1

AVC177 Digital Photographic Imaging I (3) OR

CIS120DF Introduction to Adobe Photoshop (3) 3

AVC/MMT185 3D Modeling for Animation I (3) OR

CIS130DA 3D Studio Max: Modeling (3) 3

Note: AVC/MMT185 is recommended for students interested in the Game Art Emphasis and CIS130DA is recommended for students interested in the C

CIS105 Survey of Computer Information Systems 3

CIS107 The Electronic Game Industry 3

CIS151 Computer Game Development -Level I 3

CIS251 Computer Game Development -Level II 3

CRW176 Writing Narrative for Video Games 3

FYE101 Introduction to College, Career and Personal Success (1) OR

FYE103 Exploration of College, Career and Personal Success (3) 1-3

GST202 Games, Culture and Aesthetics 3

MUC122 Sound Design I 3

VGP298AB Special Projects 2

Restricted Electives

Restricted Electives Course # Course Title Credits

Credits: 12-21

Students must select 1 of the following 4 specializations.

Specialization I Game Art

ART116 Life Drawing I 3

AVC150 Multimedia Storytelling 3

AVC/MMT184 Digital Animation I 3

AVC200 Animation and Interactivity 3

AVC240 Cinematography and Directing for 2D/3D Animation (3) OR

CIS230DB 3D Studio Max: Lighting and Rendering (3) 3

AVC/MMT285 3D Modeling and Animation II (3) OR

CIS130DB 3D Studio Max: Animation (3) 3

AVC247 High Resolution Digital Model Making through 3D Laser Scanning and Photogrammetry (3) OR

AVC287 3D Character Animation (3) 3

Specialization II Game Narrative

AVC150 Multimedia Storytelling 3

CRW160 Introduction to Writing Poetry 3

CRW170 Introduction to Writing Fiction 3

CRW190	Introduction to Screenwriting	3	
CRW270	Intermediate Fiction Writing	3	
Specialization III Coding and Scripting Emphasis			
CIS120DC	Introduction to Adobe Animate	3	
CIS150AB	Object-Oriented Programming Fundamentals	3	
CIS156	Python Programming: Level I	3	
CIS163AA	Java Programming: Level I	3	
Specialization IV Audio and Music			
MUC111	Digital Audio Workstation I (DAW I) (3) OR		
MUC192	Electronic Music II (3)	3	
MUC191	Electronic Music I	3	
MUC195	Studio Music Recording I	3	
MUC222	Sound Design II	3	
MUC292	Sound Design III	3	

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Starting Term: 2023 Fall
Final Term: 9999

ASSOCIATE IN APPLIED SCIENCE (AAS) IN WEB DESIGN/DEVELOPMENT

Total Credits: 61-74
Major Code: 3185

Description

The Associate in Applied Science (AAS) in Web Design/Development prepares students to design, create, and administer interactive and professional web sites. Courses focus on "hands-on" experience with web publishing, web graphics preparation, scripting, content management systems and e-commerce solutions. The program provides students a pathway to either develop advanced skills in Web Design or Web Development. Certificates of Completion (CCLs) in Foundational Web Technologies, Web Design and Web Development are also available. Some of these programs are available at select colleges. Please check with your local college for program availability

Program Notes

Students must earn a grade of C or better in all courses within the program. Courses within any of the following prefixes must be taken within five (5) years prior to completion of the program to be applied toward this award: AIM, BPC, CIS, CLD, CNT, CSC, ITS, and MST.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	22-24		
In addition to the required course work students must consult with a program advisor to select one of the specializations within the Restrict			
CIS105	Survey of Computer Information Systems	3	
CIS120DF	Introduction to Adobe Photoshop	3	
CIS133DA	Internet/Web Development Level I	3	
CIS136	Content Management Systems: WordPress	3	
CIS166AA	Introduction to Javascript	3	
CIS233DA	Internet/Web Development Level II	3	
CIS235	e-Commerce	3	
FYE101	Introduction to College, Career and Personal Success (1) OR		
FYE103	Exploration of College, Career and Personal Success (3)	1-3	

Restricted Electives

Restricted Electives	Course #	Course Title	Credits
Credits:	17-22		
Complete all courses in the specialization below that best aligns with your academic and professional goals. Consult with an academic, facult			

Specialization I: Web Design			
ART112	Two-Dimensional Design (3)		
OR			
AVC100	Introduction to Digital Arts (1) AND		
AVC181	Graphic Design I (3)		
OR			
AVC183	Digital Graphic Arts I (3)	3-4	
CIS120DA	Introduction to Adobe Premiere (3) OR		
CIS120DK	Introduction to Digital Video Editing (3)	3	
CIS120DB	Introduction to Adobe Illustrator	3	
CIS120DC	Introduction to Adobe Animate (3) OR		
CIS220DF	Adobe Photoshop Level II: Advanced Digital Imaging (3)	3	
CIS138DA	Desktop Design and Publishing Using Adobe InDesign	3	

Students must select 2 to 6 credits in consultation with your program advisor to further develop skills in the areas of Adobe, Art, Social Me

Specialization II: Web Development			
CIS119D0	Introduction to Oracle: SQL (3) OR		
CIS276++	Any Database Management Systems course (3)	3	
CIS126DL	Linux Operating System (3) OR		

CIS126RH	Red Hat System Administration I (3)	3
CIS166AE	Web Scripting with PHP: Hypertext Preprocessor (PHP)	3
Programming Language: Select two courses for a total of 6 credits		
CIS150AB	Object-Oriented Programming Fundamentals	3
CIS156	Python Programming: Level I	3
CIS159	Visual Basic Programming I	3
CIS162++	Any C Programming course	3
CIS163AA	Java Programming: Level I	3
CIS165++	Any Mobile Application Development course	3
CIS256	Python Programming: Level II	3
CIS262AD	C# Level II	3
CIS263AA	Java Programming: Level II	3
CIS265++	Any Advanced Application Development	3

Students must select 3 credits of any course with a CIS prefix in consultation with their program advisor to further develop skills in the ar

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Starting Term: 2022 Fall

Final Term: 9999

ASSOCIATE IN APPLIED SCIENCE (AAS) IN WELDING

Total Credits: 61-69

Major Code: 3244

Description

The Associate in Applied Science (AAS) in Welding prepares students to work in industry using Oxy-Fuel welding and cutting (OFW) (OFC) and Shielded Metal Arc welding (SMAW) processes. This degree emphasizes the knowledge and skills required to work with modern industrial welding equipment using advanced welding techniques including Gas Metal Arc Welding (GMAW), Flux Core Arc Welding (FCAW) and Gas Tungsten Arc Welding (GTAW). This degree also provides students with the opportunity to complete at least three of the following certificates: Welding: Gas Metal / Flux Cored Arc Welding (GMAW)/(FCAW), Welding: Gas Tungsten Arc Welding (GTAW) Ferrous, Welding: Gas Tungsten Arc Welding (GTAW) Non-Ferrous, Welding: Shielded Metal Arc welding (SMAW) Plate, and Welding: Shielded Metal Arc Welding (SMAW) Pipe.

Program Notes

Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses Course # Course Title Credits
Credits: 20-25
FYE101 Introduction to College, Career and Personal Success (1) OR
FYE103 Exploration of College, Career and Personal Success (3) 1-3

WLD101 Introduction to Welding (3) OR
Permission of Program Director 0-3

WLD106AA Introduction to SMAW 5

WLD106AB SMAW 6010 Plate (5) OR
WLD106AC SMAW 7018 Plate (5) OR
WLD206AA Introduction to GMAW/FCAW and GTAW (5) 5

Select three (3) courses from the following list:
WLD103 Basic Blacksmithing and Metal Shaping 3
WLD150 Welding Blueprint Reading 3
WLD215 Welding Fabrication 3
WLD225 Welding Inspection and Quality Control 3

Restricted Electives

Restricted Electives Course # Course Title Credits
Credits: 15-16
Select 15 to 16 credits in consultation with a Program and/or Academic Advisor to further develop skills in the focus areas shown below. WLD1

Focus Area: Gas Metal / Flux Cored Arc Welding (GMAW)/(FCAW) and Gas Tungsten Arc Welding (GTAW)
WLD206AA Introduction to GMAW/FCAW and GTAW 5
WLD206AB Advanced GMAW and FCAW 5
WLD206AC Advanced GTAW Non-Ferrous 5
WLD206AD Advanced GTAW Ferrous 5
WLD208AB GMAW Code Welding 5
WLD208AC FCAW Code Welding 5

WLD296WA Cooperative Education (1) OR
WLD296WB Cooperative Education (2) OR
WLD296WC Cooperative Education (3) OR
WLD296WD Cooperative Education (4) (1-4)

Focus Area: Shielded Metal Arc Welding (SMAW) Plate
WLD106AC SMAW 7018 Plate 5
WLD208AA SMAW Code Welding 5

WLD296WA Cooperative Education (1) OR
WLD296WB Cooperative Education (2) OR

WLD296WC Cooperative Education (3) OR
WLD296WD Cooperative Education (4) (1-4)

Focus Area: Shielded Metal Arc Welding (SMAW) Pipe

WLD106AB SMAW 6010 Plate 5
WLD106AD SMAW Introduction to Pipe 5
WLD208AA SMAW Code Welding 5
WLD208AD SMAW Code Welding Pipe 5

WLD296WA Cooperative Education (1) OR
WLD296WB Cooperative Education (2) OR
WLD296WC Cooperative Education (3) OR
WLD296WD Cooperative Education (4) (1-4)

Focus Area: Computer Aided Design
MPT150 Introduction to SolidWorks 3
DFT105AA Computer Aided Drafting I: AutoCAD 3

Free Electives

Free Electives Course # Course Title Credits

Credits: 0-4

Select courses 100-level or higher to complete the minimum total program credits required for this degree. Consult with an Academic Advisor.

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Starting Term: 2022 Fall

Final Term: 9999

ASSOCIATE IN ARTS (AA) IN ASSOCIATE IN ARTS

Total Credits: 60

Major Code: 8400

Description

The Associate in Arts (AA) degree is designed for students planning to transfer to four-year colleges and universities. In general, the components of the degree meet requirements for majors in the Liberal Arts or programs of study other than business or science. Generally, the degree will transfer as a block without loss of credit to Arizona's public universities and other institutions with district-wide articulation agreements.

In most cases, courses used to satisfy the MCCCD Associate in Arts (AA) will apply to general university graduation requirements of the majors that align with the AA degree; however, students need to be aware of any specific requirements of their intended major at the university to be sure they select courses that will meet them. Information regarding the articulation of the AA with majors at the Arizona public universities can be accessed via the following website: www.aztransfer.com

The AA degree requires a minimum of 60 semester credits for the program of study; minimum total credits vary by specific emphasis (for example, Associate in Arts, Emphasis in Psychology). Refer to the Program (Degree) Search at <https://curriculum.maricopa.edu> for credit minimums for individual degree programs by emphasis.

Required Courses

Students must complete FYE101 (1) or FYE103 (3) and select the required courses for the specific Associate in Arts degree emphasis. Refer to

Restricted Electives

Restricted Electives for the Associate in Arts degree vary by specific emphasis and are not required without a specific emphasis selected. Re

General Education Requirements

Arizona General Education Curriculum (AGEC)

AGEC-A Credits: 35*-44

*The AGEC-A requires a minimum of 35 credits (32 if student has transfer credit from ASU, NAU or UAZ for a single course that meets FYC in fu

First-Year Composition [FYC] Credits: 6*
ENG101 First-Year Composition (3) OR
ENG107 First-Year Composition for ESL (3) AND
ENG102 First-Year Composition (3) OR
ENG108 First-Year Composition for ESL (3) 6*

*FYC may be met with fewer than 6 credits if student has transfer credit from ASU, NAU or UAZ for a single course that meets FYC in full.

Literacy and Critical Inquiry [L] Credits: 3
Any approved general education course in the Literacy and Critical Inquiry [L] area.

Mathematics [MA] Credits: 3-6
MAT140 College Mathematics (5) OR
MAT141 College Mathematics (4) OR
MAT142 College Mathematics (3) OR
MAT145 College Mathematics with Review (5) OR
MAT146 College Mathematics with Review (6) OR
Higher approved general education course in the Mathematical Applications [MA] area (3-6) 3-6

Computer/Statistics/Quantitative Applications [CS] Credits: 3
Any approved general education courses in the Computer/Statistics/Quantitative Applications [CS] area.

Humanities, Arts and Design [HU] Credits: 6
Any approved general education courses in the Humanities, Arts and Design [HU] area.

Social-Behavioral Sciences [SB] Credits: 6

Any approved general education courses in the Social-Behavioral Sciences [SB] area.

Natural Sciences [SG]/[SQ] Credits: 8

Any approved general education course in the Science Quantitative [SQ] area (4) AND

Any approved general education course in the Science Quantitative [SQ] area or the Science General [SG] area (4). 8

Awareness Areas Credits: 0-6

These requirements may be shared with other AGECE requirements. See the AGECE matrix on aztransfer.com for course designations.

Cultural Diversity in the US [C] Credits: 0-3

Any approved general education course in the Cultural Diversity in the U.S. [C] area.

Historical/Global Awareness [H]/[G] Credits: 0-3

Any approved general education course in the Historical [H] or Global [G] area.

MCCCD Additional Requirements

MCCCD Additional Requirements Credits: 0-6

Some courses in this area have [SB] and [L] designations and may also be applied to the corresponding AGECE requirements. See the AGECE matrix

Oral Communication Credits: 0-3

COM100 Introduction to Human Communication (3) OR

COM110 Interpersonal Communication (3) OR

COM225 Public Speaking (3) OR

COM230 Small Group Communication (3) 0-3

Critical Reading Credits: 0-3

CRE101 College Critical Reading and Critical Thinking (3) OR

Equivalent as indicated by assessment (0) 0-3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm10?id=16456308>

Starting Term: 2025 Fall

Final Term: 9999

ASSOCIATE IN ARTS - ELEMENTARY EDUCATION (AAEE) IN ASSOCIATE IN ARTS, ELEMENTARY EDUCATION

Total Credits: 60-64

Major Code: 8101

Description

The Associate in Arts, Elementary Education (AAEE) provides the first two years of a four-year curriculum for students who plan to transfer to an Elementary Education or Special Education program at an Arizona public higher education institution. Upon completion of the AAEE, a student may pursue employment as a classroom instructional aide. Upon completing a bachelor's degree, a student may pursue a career as an elementary school teacher or a special education teacher. With further education or certification, students may pursue employment in the field of education in a number of careers, including but not limited to assistant principal, principal, educational administrator, instructional designer, instructional technologist, instructional coordinator, and educational counselor.

Program Notes

Students must earn a grade of C or better in all courses within the program. As a prerequisite to MAT256, students may place into MAT150 or MAT151 or MAT152 and complete MAT140 or MAT141 or MAT142 with a C in lieu of taking both MAT14+ and MAT12+ or taking MAT15+. A student that tests into MAT15+ can take MAT15+ or MAT14+ prior to MAT256. A student that tests into MAT14+ or lower must take MAT12+ and MAT14+ prior to MAT256. Students must petition NAU to accept (HIS103 and POS221) for POS220. State certification requirements include courses on the constitutions of US and Arizona. Taking GCU/POS113 for [SB] fulfills this requirement completely. Students who instead take HIS103 or POS110 for [SB] should consider taking POS221 as a Content Area Elective so they have completed study of both constitutions. POS220 meets state certification requirements for both constitutions but does not meet [SB]. This emphasis is intended to align with the degree requirements for the following programs: ASU (Mary Lou Fulton Teachers College), Elementary Education, BAEGCC, PVCC, RSC, Elementary Education and Special Education (9301), BANAU, Elementary Education, BSEU of A, Elementary Education Bilingual Option, BAEU of A, Elementary Education ESL Option, BAERefers to the MCCCD University Transfer Partner website for more information: ASU, NAU, U of A

Required Courses

Required Courses Course # Course Title Credits

Credits: 14-20

EDU221 Introduction to Education 3

EDU222 Introduction to the Exceptional Learner 3

EDU230 Cultural Diversity in Education 3

FYE101 Introduction to College, Career and Personal Success (1) OR

FYE103 Exploration of College, Career and Personal Success (3) 1-3

MAT256 Investigating Quantity: Number, Operations, and Numeration Systems 4

MAT257 Investigating Geometry, Probability, and Statistics 0-4

Note: MAT257 is required for Maricopa, NAU and U of A bachelor's degree.

MAT257 should only be bypassed if transferring to ASU

Restricted Electives

Restricted Electives Course # Course Title Credits

Credits: 6

A total of six (6) semester credits are required to satisfy the Electives for Arizona Professional Teacher Standards: three (3) credits in an

Courses must transfer to all public Arizona universities as Elective Credit, Departmental Elective, or Equivalent to a university course as i

Select one (1) additional EDU course (other than EDU221, EDU222, EDU230, or EDU250):

Recommended:

EDU220 Introduction to Serving English Language Learners (ELL) (3) OR
EDU236 Classroom Relationships (3) OR
EDU/HUM/STO292 The Art of Storytelling (3) 3

Choose any combination from the following list of courses and prefixes to total three (3) credits of additional coursework. Course(s) selecte

Content Area Electives: Select three (3) credits from the following:

ARH+++ Any ARH Art Humanities course(s) 3
ART+++ Any ART Art course(s) 3
BPC+++ Any BPC Business-Personal Computers course(s) 3
CFS/ECH176 Child Development 3
CFS205 Human Development 3
CIS+++ Any CIS Computer Information Systems course(s) 3
ECN+++ Any ECN Economics course(s) 3
EDU+++ Any EDU Education course(s) 3 (except EDU221, EDU222, EDU230, and EDU250)

EED215 Early Learning: Health, Safety, Nutrition and Physical Fitness (3) OR
CFS123 Health and Nutrition in Early Childhood Settings (1) AND
CFS125 Safety in Early Childhood Settings (1) 2-3

ENG+++ Any ENG English course(s) 3
ENH+++ Any ENH English Humanities course(s) 3
GCU+++ Any GCU Cultural Geography course(s) 3
GPH+++ Any GPH Physical Geography course(s) 3
HIS+++ Any HIS History course(s) 3
MAT+++ Any MAT Mathematics course(s) higher than MAT142 (except MAT256 and MAT257) 3-5
MHL+++ Any MHL Music: History/Literature course(s) 3
MTC+++ Any MTC Music: Theory/Composition course(s) 3
POS+++ Any POS Political Science course(s) 3
THE+++ Any THE Theatre course(s) 3
THF+++ Any THF Theatre and Film course(s) 3
THP+++ Any THP Theatre Performance/Production course(s) 3
Any Foreign Language course 4-5
Any Natural Science course 3-4

General Education Requirements

Arizona General Education Curriculum (AGEC)

AGEC-A Credits: 35-41

A single course with an [L], [HU], [SB], [SG], or [SQ] designation may also be used to satisfy the Oral Communication, Critical Reading, and/

First-Year Composition [FYC] Credits: 6

ENG101 First-Year Composition (3) OR
ENG107 First-Year Composition for ESL (3) AND
ENG102 First-Year Composition (3) OR
ENG108 First-Year Composition for ESL (3) 6

Literacy and Critical Inquiry [L] Credits: 3

COM225 Public Speaking 3

Mathematics [MA] Credits: 3-6

MAT140 College Mathematics (5) OR
MAT141 College Mathematics (4) OR
MAT142 College Mathematics (3) OR
MAT145 College Mathematics with Review (5) OR
MAT146 College Mathematics with Review (6) OR
MAT150 College Algebra/Functions (5) OR
MAT151 College Algebra/Functions (4) OR
MAT152 College Algebra/Functions (3) OR
MAT155 College Algebra/Functions with Review (5) OR
MAT156 College Algebra/Functions with Review (6)
OR
MAT187 Precalculus (5) OR
Higher approved general education course in the Mathematical Applications [MA] area for which MAT15+ is a prerequisite (3-5) 3-6

Note: MAT182, MAT206, MAT256, MAT257 do NOT meet this requirement.

Computer/Statistics/Quantitative Applications [CS] Credits: 3

BPC110 Computer Usage and Applications (3) OR
CIS105 Survey of Computer Information Systems (3) OR
EDU/EED115 Digital Literacy for Teaching and Learning in Education (3) 3

(EDU/EED115 recommended).

Humanities, Arts and Design [HU] Credits: 6

EDU/ENH291 Children's Literature (3) OR
ENH110 Introduction to Literature (3) OR
ENH241 American Literature Before 1860 (3) OR
ENH242 American Literature After 1860 (3) OR
HUM250 Ideas and Values in the Humanities: Early Civilizations to the Renaissance (3) OR
HUM251 Ideas and Values in the Humanities: Renaissance to the Contemporary World (3) 3

(EDU/ENH291 recommended)

AND

ARH100 Introduction to Art (3) OR
ARH101 Art from Prehistory Through Middle Ages (3) OR
ARH102 Art from Renaissance to Modernism (3) OR
DAH100 Introduction to Dance in the United States (3) OR
DAH201 Dance, Culture, and Global Contexts (3) OR
DAH250 Dance in Popular Culture (3) OR
MHL140 Survey of Music History (3) OR
MHL145 American Jazz and Popular Music (3) OR
MHL146 Survey of Broadway Musicals (3) OR
MHL153 Rock Music and Culture (3) OR

THE111 Introduction to Theatre (3) OR
THE220 Modern Drama (3) 3

Social-Behavioral Sciences [SB] Credits: 6

Select one of the following US History/Government courses. These courses satisfy the United States Constitution requirement for state teacher
GCU/POS113 United States and Arizona Social Studies (3) OR
HIS103 United States History to 1865 (3) OR
POS110 American National Government (3) 3

AND

CFS205 Human Development (3) OR
CFS/ECH176 Child Development (3) OR
ECN211 Macroeconomic Principles (3) OR
ECN212 Microeconomic Principles (3) OR
GCU121WG World Geography: People, Places, and Culture (3) OR
HIS104 United States History 1865 to Present (3) OR
PSY101 Introduction to Psychology (3) 3

(CFS/ECH176 recommended)

Natural Sciences [SG]/[SQ] Credits: 8

The lecture course(s) selected for Natural Sciences must include or be accompanied by the corresponding laboratory course for a total of four

Life Sciences: Select four (4) credits of [SQ] or [SG] in Biology (BI0) (4)

AND

Physical Sciences or Earth/Space Sciences: Select four (4) credits of [SQ] or [SG] from one of the following prefixes:

AGS+++ Any AGS Agricultural Science course(s) (4)
ASM+++ Any ASM Anthropology course(s) (4)
AST+++ Any AST Astronomy course(s) (4)
CHM+++ Any CHM Chemistry course(s) (4)
GPH+++ Any GPH Physical Geography course(s) (4)
GLG+++ Any GLG Geology course(s) (4)
PHS+++ Any PHS Physical Science course(s) (4)
PHY+++ Any PHY Physics course(s) (4) 8

Note: Students are advised to check with the university they plan to attend, as specific requirements for lab sciences may vary.

Awareness Areas Credits: 0-3

These requirements may be shared with other AGECE requirements. See the AGECE matrix on aztransfer.com for course designations.

Historical/Global Awareness [H]/[G] Credits: 0-3

Any approved general education course with the Historical [H] or Global [G] awareness area designation.

MCCCD Additional Requirements

MCCCD Additional Requirements Credits: 0-3

Some courses in this area have [SB] and [L] designations and may also be applied to the corresponding AGECE requirements. See the AGECE matrix

Critical Reading Credits: 0-3

CRE101 College Critical Reading and Critical Thinking (3) OR
Equivalent as indicated by assessment (0) 0-3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm10?id=16456257>

Starting Term: 2025 Fall

Final Term: 9999

ASSOCIATE IN ARTS (AA) IN ASSOCIATE IN ARTS, EMPHASIS IN AMERICAN INDIAN STUDIES

Total Credits: 60-64

Major Code: 8126

Description

The Associate in Arts (AA), Emphasis in American Indian Studies provides a multi-disciplinary academic approach to studying Indigenous Peoples, their cultures, struggles, and maintaining sovereignty and self-determination. This degree empowers students to effectively work in urban and rural environments, and government agencies, and help Native Nations. Coursework focuses on historic relations with non-Indian societies, the development of federal Indian law, tribal governments, treaty rights, environmental issues, public policy, economic development, cultural preservation, and contemporary social issues. This degree provides students with the foundational coursework needed to transfer to a four-year institution to earn a Bachelor of Arts (BA) or Bachelor of Science (BS) degree in the field.

Program Notes

Students must earn a grade of C or better in all courses within the program. Federal Indian policy stipulates tribal preference in hiring, which should be considered in seeking employment with tribal nations and selected federal agencies. Seek advice of the tribal agency for available employment opportunities. This emphasis is intended to align with the degree requirements for the following transfer partners: ASU (College of Liberal Arts and Sciences), American Indian Studies, BS. Refer to the MCCCD University Transfer Partner website for more information: ASU.

Required Courses

Required Courses Course # Course Title Credits

Credits: 1-3

FYE101 Introduction to College, Career and Personal Success (1) OR
FYE103 Exploration of College, Career and Personal Success (3) 1-3

General Education Requirements

Arizona General Education Curriculum (AGEC)

AGEC-A Credits: 41-44

A single course with an [L], [HU], [SB], [SG], or [SQ] designation may also be used to satisfy the Oral Communication, Critical Reading, and/

First-Year Composition [FYC] Credits: 6

ENG101 First-Year Composition (3) OR

ENG107 First-Year Composition for ESL (3) AND

ENG102 First-Year Composition (3) OR

ENG108 First-Year Composition for ESL (3) 6

Literacy and Critical Inquiry [L] Credits: 3

Any approved general education course in the Literacy and Critical Inquiry [L] area. 3

Recommended for students intending to earn the Academic Certificate in American Indian Studies:

AIS213/REL203 American Indian Religions 3

Mathematics [MA] Credits: 3-6

MAT140 College Mathematics (5) OR

MAT141 College Mathematics (4) OR

MAT142 College Mathematics (3) OR

MAT145 College Mathematics with Review (5) OR

MAT146 College Mathematics with Review (6) OR

Higher approved general education course in the Mathematical Applications [MA] area (3-6) 3-6

Computer/Statistics/Quantitative Applications [CS] Credits: 3

BPC110 Computer Usage and Applications (3) OR

CIS105 Survey of Computer Information Systems (3) 3

Humanities, Arts and Design [HU] Credits: 6

Any approved general education courses in the Humanities, Arts and Design [HU] area. 6

Recommended for students intending to earn the Academic Certificate in American Indian Studies:

AIS213/REL203 American Indian Religions 3 or ENH259 American Indian Literature 3

Social-Behavioral Sciences [SB] Credits: 6

Any approved general education courses in the Social-Behavioral Sciences [SB] area. 6

Recommended for students intending to earn the Academic Certificate in American Indian Studies:

AIS101 Survey of American Indian Issues 3 or AIS/HIS140 American Indian History 3 or AIS/SOC141 Sovereign Indian Nations 3

Natural Sciences [SG]/[SQ] Credits: 8

Any approved general education course in the Natural Sciences (Quantitative) [SQ] area (4) AND

Any approved general education course in the Natural Sciences (Quantitative) [SQ] area or the Natural Sciences (General) [SG] area (4) 8

Cultural Diversity in the US [C] Credits: 3

AIS/SOC105 Introduction to American Indian Studies 3

Historical/Global Awareness [H]/[G] Credits: 3

AIS/SOC160 American Indian Law 3

MCCCD Additional Requirements

MCCCD Additional Requirements Credits: 0-6

Some courses in this area have [SB] and [L] designations and may also be applied to the corresponding AGEC requirements. See the AGEC matrix

Oral Communication Credits: 0-3

COM100 Introduction to Human Communication (3) OR

COM110 Interpersonal Communication (3) OR

COM225 Public Speaking (3) OR

COM230 Small Group Communication (3) 0-3

Critical Reading Credits: 0-3

CRE101 College Critical Reading and Critical Thinking (3) OR

Equivalent as indicated by assessment (0) 0-3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm10?id=16456306>

Starting Term: 2025 Fall

Final Term: 9999

ASSOCIATE IN ARTS (AA) IN ASSOCIATE IN ARTS, EMPHASIS IN ANTHROPOLOGY

Total Credits: 60-64

Major Code: 8109

Description

The Associate in Arts (AA), Emphasis in Anthropology provides the first two years of a four-year curriculum for students who wish to receive an education in the broad field of anthropology - an examination of the human experience. Depending on their preferred focus, students can pursue either a Bachelor of Arts or a Bachelor of Science degree. Coursework in this program surveys both cultural and biological aspects of what it means to be human, and students will develop critical thinking skills through the analysis of real-world anthropological case studies. As such, students receive a holistic training in their worldview that is valued highly by employers in many fields, including health and human services, media, business, Non-Governmental Organizations (NGOs), and government agencies.

Program Notes

Students must earn a grade of C or better in all courses within the program. This emphasis is intended to align with the degree requirements for the following transfer partners: ASU (College of Liberal Arts and Sciences), Anthropology, BAASU (College of Liberal Arts and Sciences), Anthropology, BSNAU, Anthropology, BAU of A, Anthropology, BAU of A, Anthropology (Archaeological Sciences Emphasis), BSU of A, Anthropology (Human Biology Emphasis), BSRefer to the MCCCD University Transfer Partner website for more information: ASU , NAU , U of A .

Required Courses

Required Courses Course # Course Title Credits

Credits: 1-3

FYE101 Introduction to College, Career and Personal Success (1) OR

FYE103 Exploration of College, Career and Personal Success (3) 1-3

General Education Requirements

Arizona General Education Curriculum (AGEC)

AGEC-A Credits: 35-42

A single course with an [L], [HU], [SB], [SG], or [SQ] designation may also be used to satisfy the Oral Communication, Critical Reading, and/

First-Year Composition [FYC] Credits: 6

ENG101 First-Year Composition (3) OR

ENG107 First-Year Composition for ESL (3) AND

ENG102 First-Year Composition (3) OR

ENG108 First-Year Composition for ESL (3) 6

Literacy and Critical Inquiry [L] Credits: 3

Any approved general education course in the Literacy and Critical Inquiry [L] area. 3

Mathematics [MA] Credits: 3-6

Before enrolling into a math course, speak to your Academic Advisor to ensure you are selecting the correct math for your transfer goals as M

Any approved general education course in the Mathematical Applications [MA] area. 3-6

MAT140 College Mathematics (5) OR

MAT141 College Mathematics (4) OR

MAT142 College Mathematics (3) OR

MAT145 College Mathematics with Review (5) OR

MAT146 College Mathematics with Review (6) OR

MAT150 College Algebra/Functions (5) OR

MAT151 College Algebra/Functions (4) OR

MAT152 College Algebra/Functions (3) OR

MAT155 College Algebra/Functions with Review (5) OR

MAT156 College Algebra/Functions with Review (6) OR

Higher approved general education course in the Mathematical Applications [MA] area (3-5) 3-6

Computer/Statistics/Quantitative Applications [CS] Credits: 3-4

MAT206 Elements of Statistics (3) OR

PSY230 Introduction to Statistics (3) OR

PSY230 Introduction to Statistics (3) AND

PSY231 Laboratory for Statistics (1) OR

PSY230WL Introduction to Statistics with Lab (4) OR

SWU225 Statistics for Social Research/Justice and Government (3) 3-4

Humanities, Arts and Design [HU] Credits: 6

ASB222 Buried Cities and Lost Tribes: Old World (3) OR

ASB223 Buried Cities and Lost Tribes: New World (3)

AND

Any approved general education course in the Humanities, Arts, and Design [HU] area. (3) 6

Social-Behavioral Sciences [SB] Credits: 6

ASB102 Introduction to Cultural Anthropology (3)

AND

Any approved general education course in the Social-Behavioral Sciences [SB] area (3) 6

Natural Sciences [SG]/[SQ] Credits: 8

ASM104 Bones, Stones, and Human Evolution (4)

AND

Any approved general education course in the Natural Sciences (Quantitative) [SQ] area (4) 8

Awareness Areas Credits: 0-3

These requirements may be shared with other AGEC requirements. See the AGEC matrix on aztransfer.com for course designations.

Cultural Diversity in the US [C] Credits: 0-3

Any approved general education course in the Cultural Diversity in the U.S. [C] area.

Recommend ASB202 Ethnic Relations in the United States

MCCCD Additional Requirements

MCCCD Additional Requirements Credits: 0-6

Some courses in this area have [SB] and [L] designations and may also be applied to the corresponding AGEC requirements. See the AGEC matrix

Oral Communication Credits: 0-3

COM100 Introduction to Human Communication (3) OR

COM110 Interpersonal Communication (3) OR

COM225 Public Speaking (3) OR

COM230 Small Group Communication (3) 0-3

Critical Reading Credits: 0-3

CRE101 College Critical Reading and Critical Thinking (3) OR

Equivalent as indicated by assessment (0) 0-3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm10?id=16456325>

Starting Term: 2025 Fall

Final Term: 9999

ASSOCIATE IN ARTS (AA) IN ASSOCIATE IN ARTS, EMPHASIS IN COMMUNICATION

Total Credits: 60-64
Major Code: 8124

Description

The Associate of Arts (AA), Emphasis in Communication includes a dynamic blend of theory and practical experience that provides students with a solid introduction to the wide-ranging field of Communication. With an associate degree in Communication, students will gain proficiency in a variety of communication contexts including interpersonal, small group, intercultural, organizational, public and professional speaking. This degree prepares students for their bachelor's degree transfer pathway and equips them with the communication skill set valued so highly by employers. Coursework provides the foundational conceptual knowledge and tools to understand, analyze, and respond to communication challenges and opportunities in a variety of contexts.

Program Notes

Students must earn a grade of C or better in all courses within the program. This emphasis is intended to align with the degree requirements for the following transfer partners: ASU (College of Integrative Sciences and Arts), Communication, BAASU (College of Liberal Arts and Sciences), Communication, BS, ASU (New College of Interdisciplinary Arts and Sciences), Communication, BSASU (New College of Interdisciplinary Arts and Sciences), Communication Studies, BAGCU, Communication, BANAU, Communication, BANAU, Communication, BSU of A, Communication, BARefer to the MCCC University Transfer Partner website for more information: ASU, GCU, NAU, U of A.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits: 10-12			
COM100	Introduction to Human Communication		3
COM110	Interpersonal Communication		3
COM207	Introduction to Communication Inquiry		3

FYE101	Introduction to College, Career and Personal Success (1) OR	
FYE103	Exploration of College, Career and Personal Success (3) 1-3	

General Education Requirements

Arizona General Education Curriculum (AGEC)

AGEC-A Credits: 29-32

A single course with an [L], [HU], [SB], [SG], or [SQ] designation may also be used to satisfy the Oral Communication, Critical Reading, and/

First-Year Composition [FYC]	Credits: 6
ENG101 First-Year Composition (3) OR	
ENG107 First-Year Composition for ESL (3) AND	
ENG102 First-Year Composition (3) OR	
ENG108 First-Year Composition for ESL (3)	6

Literacy and Critical Inquiry [L]	Credits: 3
COM225 Public Speaking 3	

Mathematics [MA]	Credits: 3-6
MAT140 College Mathematics (5) OR	
MAT141 College Mathematics (4) OR	
MAT142 College Mathematics (3) OR	
MAT145 College Mathematics with Review (5) OR	
MAT146 College Mathematics with Review (6) OR	
Higher approved general education course in the Mathematical Applications [MA] area (3-6)	3-6

Computer/Statistics/Quantitative Applications [CS]	Credits: 3
Any approved general education course in the Computer/Statistics/Quantitative Applications [CS] area.	3

Consult with an academic, faculty, or program advisor to select the option that aligns with your intended transfer program requirements. Refe

Humanities, Arts and Design [HU]	Credits: 6
Any approved general education courses in the Humanities, Arts and Design [HU] area.	6
Recommended: COM/THP241 Oral Interpretation of Literature	3

Social-Behavioral Sciences [SB]	Credits: 6
COM230 Small Group Communication (3)	
AND	
COM263 Elements of Intercultural Communication (3)	6

Natural Sciences [SG]/[SQ]	Credits: 8
Any approved general education course in the Natural Sciences (Quantitative) [SQ] area. (4)	
AND	
Any approved general education course in the Natural Sciences (Quantitative) [SQ] area or the Natural Sciences (General) [SG] area. (4)	8

MCCC Additional Requirements
MCCC Additional Requirements Credits: 0-3
Courses in this area may also be applied to other AGEC Requirements. To minimize total credits required for degree and maximize transferable

Critical Reading	Credits: 0-3
CRE101 College Critical Reading and Critical Thinking (3) OR	
Equivalent as indicated by assessment (0)	0-3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCC.wa/wa/freeForm10?id=16456259>

Starting Term: 2025 Fall
Final Term: 9999

ASSOCIATE IN ARTS (AA) IN ASSOCIATE IN ARTS, EMPHASIS IN COUNSELING AND APPLIED PSYCHOLOGICAL SCIENCE

Total Credits: 60-64

Major Code: 8137

Description

The Associate in Arts (AA), Emphasis in Counseling and Applied Psychological Science provides the first two years of a four-year curriculum for students who wish to specialize in counseling and applied psychological science or are preparing for graduate programs in counseling or related fields. The program provides a foundation in counseling theories, counseling skills, career and lifespan development, ethics and research methods, and multicultural competence. Graduates will not be license-eligible as professional counselors, but will be prepared to enter an undergraduate degree program in counseling and applied psychological science. Graduates of the associate's program may qualify for entry-level employment such as social and human service assistants or psychiatric technicians in community agencies, hospitals, rehabilitation centers and other behavioral healthcare delivery settings to support counselors and other mental health professionals.

Students who complete a bachelor's degree within the field may be prepared to enter a graduate program in counseling or pursue careers including but not limited to: social and community service managers, social science research assistants, probation officers and correctional treatment specialists, and education administrators (postsecondary).

Upon completion of a graduate degree students may pursue a number of careers, including but not limited to: clinical, counseling, and school psychologists; educational, guidance, school, and vocational counselors; substance abuse and behavioral disorder counselors; marriage and family therapists; mental health counselors; rehabilitation counselors; and college/university faculty.

Program Notes

Students must earn a grade of C or better in all courses within the program. This emphasis is intended to align with the degree requirements for the following transfer partners: ASU (College of Integrative Sciences and Arts), Counseling and Applied Psychological Science, BSNAU, Applied Human Behavior 90-30, BS. Refer to the MCCC University Transfer Partner website for more information: ASU, NAU.

Required Courses

Required Courses Course # Course Title Credits
Credits: 7-9

CAP220 The Counselor in a Multicultural Society 3
CAP240 Introduction to Counseling Skills 3

FYE101 Introduction to College, Career and Personal Success (1) OR
FYE103 Exploration of College, Career and Personal Success (3) 1-3

General Education Requirements

Arizona General Education Curriculum (AGEC)

AGEC-A Credits: 35-42

A single course with an [L], [HU], [SB], [SG], or [SQ] designation may also be used to satisfy the Oral Communication, Critical Reading, and/

First-Year Composition [FYC] Credits: 6

ENG101 First-Year Composition (3) OR
ENG107 First-Year Composition for ESL (3) AND
ENG102 First-Year Composition (3) OR
ENG108 First-Year Composition for ESL (3) 6

Literacy and Critical Inquiry [L] Credits: 3

CAP260 Career and Professional Preparation for the Helping Professions 3

Mathematics [MA] Credits: 3-6

MAT140 College Mathematics (5) OR
MAT141 College Mathematics (4) OR
MAT142 College Mathematics (3) OR
MAT145 College Mathematics with Review (5) OR
MAT146 College Mathematics with Review (6) OR
Higher approved general education course in the Mathematical Applications [MA] area (3-6) 3-6

Note: Students planning to transfer to ASU for the BS in Counseling and Applied Psychological Science can take (MAT14X OR MAT15X) AND PSY230+

Computer/Statistics/Quantitative Applications [CS] Credits: 3-4

PSY230 Introduction to Statistics (3) OR
PSY230 Introduction to Statistics (3) AND
PSY231 Laboratory for Statistics (1) OR
PSY230WL Introduction to Statistics with Lab (4) 3-4

Humanities, Arts and Design [HU] Credits: 6

Any approved general education courses in the Humanities, Arts and Design [HU] area. 6

Social-Behavioral Sciences [SB] Credits: 6

CAP120 Introduction to Counseling (3) AND
PSY101 Introduction to Psychology (3) 6

Natural Sciences [SG]/[SQ] Credits: 8

PSY290AB Research Methods (4) OR
PSY290AC Research Methods (4) 4

BI0100 Biology Concepts (4) OR

BI0156++ Introductory Biology for Allied Health (4) OR

BI0181++ General Biology (Majors) I (4) OR

Any approved general education course in the Natural Sciences (Quantitative) [SQ] area (4) 4

Note: BI0181++ recommended for students planning to transfer to ASU for the BS in Counseling and Applied Psychology (Substance Abuse and Addi

Awareness Areas Credits: 0-3

These requirements may be shared with other AGEC requirements. See the AGEC matrix on aztransfer.com for course designations.

Historical/Global Awareness [H]/[G] Credits: 0-3

Any approved general education course with the Historical [H] or Global [G] awareness area designation. 0-3

MCCCD Additional Requirements

MCCCD Additional Requirements Credits: 0-6

Some courses in this area have [SB] and [L] designations and may also be applied to the corresponding AGEC requirements. See the AGEC matrix

Oral Communication Credits: 0-3

COM100 Introduction to Human Communication (3) OR

COM110 Interpersonal Communication (3) OR

COM225 Public Speaking (3) OR

COM230 Small Group Communication (3) 0-3

Recommend COM225 for students transferring to Northern Arizona University.

Critical Reading Credits: 0-3

CRE101 College Critical Reading and Critical Thinking (3) OR

Equivalent as indicated by assessment (0) 0-3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm10?id=16456309>

Starting Term: 2025 Fall

Final Term: 9999

ASSOCIATE IN ARTS (AA) IN ASSOCIATE IN ARTS, EMPHASIS IN CRIMINAL JUSTICE

Total Credits: 60-64

Major Code: 8144

Description

The Associate in Arts (AA), Emphasis in Criminal Justice provides students with the first two years of a four-year curriculum for students who intend to earn a bachelor's degree in Criminal Justice and pursue a graduate degree in a related field. With a bachelor's degree, students may pursue advancement in several fields including local and federal law enforcement, the courts, corrections, security, and investigations. With a graduate degree, students may pursue employment in several areas including criminal justice professors, lawyers, judges, and statisticians. An Associate in Applied Science (AAS) in Administration of Justice Studies as well as six related Certificates of Completion (CCLs) are available.

Program Notes

Students must earn a grade of C or better in all courses within the program. This emphasis is intended to align with the degree requirements for the following transfer partners: ASU (College of Public Service and Community Solutions), Criminology and Criminal Justice, BSASU (College of Public Service and Community Solutions), Public Service and Public Policy (Criminology), BSASU (Watts College of Public Service and Community Solutions), Criminology and Criminal Justice (Policing), BSNAU, Criminology and Criminal Justice, BSPC, Public Safety Administration, BASRSC, Public Safety Administration, BASR refer to the MCCCD University Transfer Partner website for more information: ASU, NAU.

Required Courses

Required Courses Course # Course Title Credits

Credits: 4-15

FYE101 Introduction to College, Career and Personal Success (1) OR

FYE103 Exploration of College, Career and Personal Success (3) 1-3

Consult with an academic, faculty, or program advisor to select 3 to 12 credits of coursework from the following. Refer to the MCCCD University Transfer Partner website for more information: ASU, NAU.

AJS109 Substantive Criminal Law 3

AJS113 Criminal Justice Crime Control Policies and Practices 3

AJS200 Current Issues in Criminal Justice 3

AJS212 Juvenile Justice Procedures 3

AJS225 Criminology 3

AJS230 The Police Function 3

AJS240 The Correction Function 3

AJS270 Community Relations 3

AJS275 Criminal Investigation I 3

General Education Requirements

Arizona General Education Curriculum (AGEC)

AGEC-A Credits: 35-44

A single course with an [HU], [SB], [L], or [SG]/[SQ] designation may also be used to satisfy the Oral Communication, Critical Reading, or Writing

First-Year Composition [FYC] Credits: 6

ENG101 First-Year Composition (3) OR

ENG107 First-Year Composition for ESL (3) AND

ENG102 First-Year Composition (3) OR

ENG108 First-Year Composition for ESL (3) 6

Literacy and Critical Inquiry [L] Credits: 3

Any approved general education course in the Literacy and Critical Inquiry [L] area.

Mathematics [MA] Credits: 3-6

MAT140 College Mathematics (5) OR

MAT141 College Mathematics (4) OR

MAT142 College Mathematics (3) OR

MAT145 College Mathematics with Review (5) OR

MAT146 College Mathematics with Review (6) OR

Higher approved general education course in the Mathematical Applications [MA] area (3-6) 3-6

Computer/Statistics/Quantitative Applications [CS] Credits: 3

Any approved general education course in the Computer/Statistics/Quantitative Applications [CS] area.

Humanities, Arts and Design [HU] Credits: 6
AJS123 Ethics and the Administration of Justice (3)
AND

Any approved general education courses in the Humanities, Arts and Design [HU] area. (3) 6

Recommend selecting a course that satisfies the Global [G] or Historical [H] awareness area.

Social-Behavioral Sciences [SB] Credits: 6
AJS101 Introduction to Criminal Justice (3)
AND

Any approved general education courses in the Social-Behavioral Sciences [SB] area. (3) 6

May be met by AJS200, AJS225, AJS270, or PAD200 in Required Courses.

Recommend AJS/EMT/FSC258 Victimology and Crisis Management in Public Safety

Natural Sciences [SG]/[SQ] Credits: 8

Any approved general education course in the Natural Sciences (Quantitative) [SQ] area (4) AND

Any approved general education course in the Natural Sciences (Quantitative) [SQ] area or the Natural Sciences (General) [SG] area (4). 8

Recommended:

FOR105 Forensic Science: Physical Evidence 4

FOR106 Forensic Science: Biological Evidence 4

Awareness Areas Credits: 0-6

These requirements may be shared with Core Requirements.

Cultural Diversity in the US [C] Credits: 0-3

Any approved general education course with the Cultural Diversity in the U.S. [C] designation.

Recommended:

AJS/EMT/FSC258 Victimology and Crisis Management in Public Safety 3

Historical/Global Awareness [H]/[G] Credits: 0-3

Any approved general education course with the Historical [H] or Global [G] awareness area designation.

MCCCD Additional Requirements

MCCCD Additional Requirements Credits: 0-6

Courses in this area may also be applied to the AGEC Core Requirements. To minimize total credits required for degree and maximize transferab

Oral Communication Credits: 0-3

COM100 Introduction to Human Communication (3) OR

COM110 Interpersonal Communication (3) OR

COM225 Public Speaking (3) OR

COM230 Small Group Communication (3) 3

Critical Reading Credits: 0-3

CRE101 College Critical Reading and Critical Thinking (3) OR

Equivalent as indicated by assessment (0) 0-3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm10?id=16456328>

Starting Term: 2025 Fall

Final Term: 9999

ASSOCIATE IN ARTS (AA) IN ASSOCIATE IN ARTS, EMPHASIS IN EARLY CHILDHOOD EDUCATION

Total Credits: 60-64

Major Code: 8132

Description

The Associate in Arts (AA), Emphasis in Early Childhood Education provides the first two years of a four-year curriculum in early childhood education. Students study child development, curriculum design and development, theory and practice in the education of young children, and the intersections of family, community, and childhood learning and development. Students who earn the AA, Early Childhood Education may work in early childhood settings and programs as early childhood educators and teacher assistants. Upon completion of the Bachelor of Arts in Education, students may work as teachers of children from birth to third grade. The AA, Early Childhood Education provides a pathway for students seeking Arizona Department of Education teacher certification.

Program Notes

Students must earn a grade of C or better in all courses within the program. For some employment and field experiences (including internship courses), students will be required to have a current Identity Verified Print (IVP) Fingerprint Clearance Card and a current TB test. This emphasis is intended to align with the degree requirements for the following transfer partners: ASU, Early Childhood Education, BAEMCC, Early Childhood Education-Dual Language, BANAU, Early Childhood Education and Early Childhood Special Education, BSE. Refer to the MCCCD University Transfer Partner website for more information: ASU, NAU.

Required Courses

Required Courses Course # Course Title Credits

Credits: 18-21

CFS/ECH176 Child Development 3

EDU220 Introduction to Serving English Language Learners (ELL) (3) OR

EDU239 Structured English Immersion Grades K-8 (3) OR

EDU240 Structured English Immersion Grades 6-12 (3) 3

EDU225 Professionalism and Ethics in Education 1

EED200 Foundations of Early Childhood Education 3

1148

FYE101 Introduction to College, Career and Personal Success (1) OR
FYE103 Exploration of College, Career and Personal Success (3) 1-3

Select one of the following US History/Government options. These courses satisfy the United States Constitution requirement for state teacher
GCU/POS113 United States and Arizona Social Studies (3) OR
HIS103 United States History to 1865 (3) AND
POS221 Arizona Constitution (1) 3-4

MAT256 Investigating Quantity: Number, Operations, and Numerations Systems 4

General Education Requirements

Arizona General Education Curriculum (AGEC)

AGEC-A Credits: 29-38

A single course with an [L], [HU], [SB], [SG], or [SQ] designation may also be used to satisfy the Oral Communication, Critical Reading, and/

First-Year Composition [FYC] Credits: 6

ENG101 First-Year Composition (3) OR

ENG107 First-Year Composition for ESL (3) AND

ENG102 First-Year Composition (3) OR

ENG108 First-Year Composition for ESL (3) 6

Literacy and Critical Inquiry [L] Credits: 3

Any approved general education course in the Literacy and Critical Inquiry [L] area. 3

COM225 recommended.

Mathematics [MA] Credits: 3-6

MAT140 College Mathematics (5) OR

MAT141 College Mathematics (4) OR

MAT142 College Mathematics (3) OR

MAT145 College Mathematics with Review (5) OR

MAT146 College Mathematics with Review (6) OR

MAT150 College Algebra/Functions (5) OR

MAT151 College Algebra/Functions (4) OR

MAT152 College Algebra/Functions (3) OR

MAT155 College Algebra/Functions with Review (5) OR

MAT156 College Algebra/Functions with Review (6) OR

MAT187 Precalculus (5) OR

Higher approved general education course in the Mathematical Applications [MA] area for which MAT15+ is a prerequisite (3-5) 3-6

Note: Students must meet one of the following MCCCDC prerequisites to take MAT256: Grade of C or better in (MAT150, MAT151, MAT152, MAT155, or

Computer/Statistics/Quantitative Applications [CS] Credits: 3

Any approved general education course in the Computer/Statistics/Quantitative Applications [CS] area. 3

EDU/EED115 recommended.

Humanities, Arts and Design [HU] Credits: 3-6

EED225 Language and Literacy in the Context of Culture and Relationships (3)

AND

Any approved general education course in the Humanities, Arts and Design [HU] area. (3) 6

May be met by HIS103 in Required Courses if not used to satisfy Social-Behavioral Sciences [SB] area.

EDU/ENH291 recommended.

Social-Behavioral Sciences [SB] Credits: 3-6

EED222 Introduction to the Exceptional Young Child: Birth to Age Eight 3

AND

May be met by HIS103 in Required Courses if not used to satisfy Humanities, Arts and Design [HU] area.

Natural Sciences [SG]/[SQ] Credits: 8

Any approved general education course in the Natural Sciences (Quantitative) [SQ] area (4) AND

Any approved general education course in the Natural Sciences (Quantitative) [SQ] area or the Natural Sciences (General) [SG] area (4). 8

MCCCDC Additional Requirements

MCCCDC Additional Requirements Credits: 0-6

Some courses in this area have [SB] and [L] designations and may also be applied to the corresponding AGEC requirements. See the AGEC matrix

Oral Communication Credits: 0-3

COM100 Introduction to Human Communication (3) OR

COM110 Interpersonal Communication (3) OR

COM225 Public Speaking (3) OR

COM230 Small Group Communication (3) 0-3

COM225 recommended.

Critical Reading Credits: 0-3

CRE101 College Critical Reading and Critical Thinking (3) OR

Equivalent as indicated by assessment (0) 0-3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCDC.woa/wa/freeForm10?id=16456260>

Starting Term: 2025 Fall

Final Term: 9999

ASSOCIATE IN ARTS (AA) IN ASSOCIATE IN ARTS, EMPHASIS IN ECONOMICS

Total Credits: 60-64

Major Code: 8111

Description

The Associate in Arts (AA), Emphasis in Economics provides the first two years of a four-year curriculum for students who wish to pursue a liberal arts degree in Economics from a four-year institution. With a bachelor's degree, students may pursue a number of careers, including but not limited to, budget analysts, market research analysts, and marketing specialists. With a graduate degree, students may pursue a number of careers, including but not limited to economists, environmental economists, treasurers, urban and regional planners, economics teachers, and lawyers.

Program Notes

Students must earn a grade of C or better in all courses within the program. Students who plan to major in economics at a college of business should consider following the Associate in Business-General Requirements (ABUS-GR) pathway instead of this award. Consult with a faculty advisor, program director, and/or academic advisor to identify the associate degree that best aligns with your academic and professional goals. This emphasis is intended to align with the degree requirements for the following transfer partners: ASU (College of Liberal Arts and Sciences), Economics, BSU of A, Economics, BA Refer to the MCCC University Transfer Partner website for more information: ASU, U of A.

Required Courses

Required Courses Course # Course Title Credits
Credits: 1-3
FYE101 Introduction to College, Career and Personal Success (1) OR
FYE103 Exploration of College, Career and Personal Success (3) 1-3

General Education Requirements

Arizona General Education Curriculum (AGEC)
AGEC-A Credits: 35-43
A single course with an [L], [HU], [SB], [SG], or [SQ] designation may also be used to satisfy the Oral Communication, Critical Reading, and/

First-Year Composition [FYC] Credits: 6
ENG101 First-Year Composition (3) OR
ENG107 First-Year Composition for ESL (3) AND
ENG102 First-Year Composition (3) OR
ENG108 First-Year Composition for ESL (3) 6

Literacy and Critical Inquiry [L] Credits: 3
Any approved general education course in the Literacy and Critical Inquiry [L] area. 3

Mathematics [MA] Credits: 3-5
MAT212 Brief Calculus (3) OR
MAT213 Brief Calculus (4) OR
MAT220 Calculus with Analytic Geometry I (5) OR
MAT221 Calculus with Analytic Geometry I (4) 3-5

Computer/Statistics/Quantitative Applications [CS] Credits: 3
GBS221 Business Statistics (3) OR
MAT206 Elements of Statistics (3) OR
SWU225 Statistics for Social Research/Justice and Government (3) 3

Humanities, Arts and Design [HU] Credits: 6
Any approved general education courses in the Humanities, Arts and Design [HU] area. 6

Social-Behavioral Sciences [SB] Credits: 6
ECN211 Macroeconomic Principles (3) AND
ECN212 Microeconomic Principles (3) 6

Natural Sciences [SG]/[SQ] Credits: 8
Any approved general education course in the Natural Sciences (Quantitative) [SQ] area. (4) AND
Any approved general education course in the Natural Sciences (Quantitative) [SQ] area or the Natural Sciences (General) [SG] area. (4) 8

Awareness Areas Credits: 0-6
These requirements may be shared with other AGEC requirements. See the AGEC matrix on aztransfer.com for course designations.

Cultural Diversity in the US [C] Credits: 0-3
Any approved general education course in the Cultural Diversity in the U.S. [C] area.

Historical/Global Awareness [H]/[G] Credits: 0-3
Any approved general education course in the Historical [H] and Global Awareness [G] area.

MCCC Additional Requirements
MCCC Additional Requirements Credits: 0-6
Some courses in this area have [SB] and [L] designations and may also be applied to the corresponding AGEC requirements. See the AGEC matrix

Oral Communication Credits: 0-3
COM100 Introduction to Human Communication (3) OR
COM110 Interpersonal Communication (3) OR
COM225 Public Speaking (3) OR
COM230 Small Group Communication (3) 0-3

Critical Reading Credits: 0-3
CRE101 College Critical Reading and Critical Thinking (3) OR
Equivalent as indicated by assessment (0) 0-3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCC.WOA/wa/freeForm10?id=16456359>

Starting Term: 2025 Fall
Final Term: 9999

ASSOCIATE IN ARTS (AA) IN ASSOCIATE IN ARTS, EMPHASIS IN EDUCATIONAL STUDIES EARLY CHILDHOOD

Total Credits: 60-64

Major Code: 8134

Description

The Associate in Arts (AA), Emphasis in Educational Studies Early Childhood provides the first two years of a four-year curriculum that emphasizes community, early childhood, and youth education. This program of study is designed to provide students with a foundation of knowledge in educational practices for use in the community setting. Upon completion of the Bachelor of Arts in Education, students may work with children and youth outside of traditional public school classroom settings. The AA, Educational Studies Early Childhood does not provide a pathway for students seeking Arizona Department of Education teacher certification.

Program Notes

Students must earn a grade of C or better in all courses within the program. For some employment and field experiences (including internship courses), students will be required to have a current Identity Verified Print (IVP) Fingerprint Clearance Card and a current TB test. This emphasis is intended to align with the degree requirements for the following programs: ASU (Mary Lou Fulton Teachers College), Educational Studies (Early Childhood Studies), BAER. Refer to the MCCC University Transfer Partner website for more information: ASU.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits: 3-6			
EED215	Early Learning: Health, Safety, Nutrition and Physical Fitness (3)	OR	
CFS123	Health and Nutrition in Early Childhood Settings (1)	AND	
CFS125	Safety in Early Childhood Settings (1)		2-3

FYE101	Introduction to College, Career and Personal Success (1)	OR	
FYE103	Exploration of College, Career and Personal Success (3)		1-3

General Education Requirements

Arizona General Education Curriculum (AGEC)

AGEC-A Credits: 35-42

A single course with an [L], [HU], [SB], [SG], or [SQ] designation may also be used to satisfy the Oral Communication, Critical Reading, and/

First-Year Composition [FYC]	Credits: 6
ENG101 First-Year Composition (3)	OR
ENG107 First-Year Composition for ESL (3)	AND
ENG102 First-Year Composition (3)	OR
ENG108 First-Year Composition for ESL (3)	6

Literacy and Critical Inquiry [L]	Credits: 3
Any approved general education courses in the Literacy and Critical Inquiry [L] area. 3	

COM225 recommended.

Mathematics [MA]	Credits: 3-6
MAT140 College Mathematics (5)	OR
MAT141 College Mathematics (4)	OR
MAT142 College Mathematics (3)	OR
MAT145 College Mathematics with Review (5)	OR
MAT146 College Mathematics with Review (6)	OR
Higher approved general education course in the Mathematical Applications [MA] area (3-6)	3-6

Computer/Statistics/Quantitative Applications [CS]	Credits: 3-4
Any approved general education course in the Computer/Statistics/Quantitative Applications [CS] area. 3	

EDU/EED115 recommended.

Humanities, Arts and Design [HU]	Credits: 6
Any approved general education courses in the Humanities, Arts and Design [HU] area. 6	

EED225 and EDU/ENH291 recommended.

Social-Behavioral Sciences [SB]	Credits: 6
Any approved courses in the Social-Behavioral Sciences [SB] area. 6	

CFS/ECH176, CFS205, or EED222 recommended.

Natural Sciences [SG]/[SQ]	Credits: 8
Any approved general education course in the Natural Sciences (Quantitative) [SQ] area (4) AND	
Any approved general education course in the Natural Sciences (Quantitative) [SQ] area or the Natural Sciences (General) [SG] area. (4) 8	

Awareness Areas Credits: 0-3
These requirements may be shared with other AGEC requirements. See the AGEC matrix on aztransfer.com for course designations.

Cultural Diversity in the US [C]	Credits: 0-3
Any approved general education course with the Cultural Diversity in the US [C] awareness area designation. 0-3	

EED225 recommended.

Historical/Global Awareness [H]/[G]	Credits: 0-3
Any approved general education course with the Historical [H] or Global [G] awareness area designation. 0-3	

MCCC Additional Requirements

MCCC Additional Requirements Credits: 0-6

Some courses in this area have [SB] and [L] designations and may also be applied to the corresponding AGEC requirements. See the AGEC matrix

Oral Communication Credits: 0-3
COM100 Introduction to Human Communication (3) OR
COM110 Interpersonal Communication (3) OR
COM225 Public Speaking (3) OR
COM230 Small Group Communication (3) 0-3

Critical Reading Credits: 0-3
CRE101 College Critical Reading and Critical Thinking (3) OR
Equivalent as indicated by assessment (0) 0-3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm10?id=16456299>

Starting Term: 2025 Fall
Final Term: 9999

ASSOCIATE IN ARTS (AA) IN ASSOCIATE IN ARTS, EMPHASIS IN ENGLISH (CREATIVE WRITING)

Total Credits: 60-64
Major Code: 8118

Description

The Associate in Arts (AA), Emphasis in English (Creative Writing) program is designed to prepare students for transfer to a university bachelor's degree program. It also provides them with access to a community of writers and creative writing activities, instruction and guidance from established authors, and ongoing support in improving their writing skills and marketing their work. The program offers classes, workshops, and other activities such as readings and contests, which are accessible to writers of all levels regardless of academic or professional standing. The program aims to serve a diverse community who may be underrepresented in traditional creative writing programs.

Program Notes

Students must earn a grade of C or better in all courses within the program. This program is intended to align with the following university requirements: Arizona State University (College of Liberal Arts and Sciences), English (Creative Writing), Bachelor of Arts Northern Arizona University, English (Creative Writing Emphasis), Bachelor of Arts. Refer to the MCCCD University Transfer Partner website for more information: ASU, NAU.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	7-9		
CRW160		Introduction to Writing Poetry	3
CRW170		Introduction to Writing Fiction	3

FYE101		Introduction to College, Career and Personal Success	(1) OR
FYE103		Exploration of College, Career and Personal Success	(3) 1-3

General Education Requirements

Arizona General Education Curriculum (AGEC)

AGEC-A Credits: 26-44

A single course with an [L], [HU], [SB], [SG], or [SQ] designation may also be used to satisfy the Oral Communication, Critical Reading, and/

First-Year Composition [FYC]	Credits: 6
ENG101 First-Year Composition (3) OR	
ENG107 First-Year Composition for ESL (3) AND	
ENG102 First-Year Composition (3) OR	
ENG108 First-Year Composition for ESL (3)	6

Literacy and Critical Inquiry [L]	Credits: 3
Any approved general education course in the Literacy and Critical Inquiry [L] area.	3

Mathematics [MA]	Credits: 3-6
MAT140 College Mathematics (5) OR	
MAT141 College Mathematics (4) OR	
MAT142 College Mathematics (3) OR	
MAT145 College Mathematics with Review (5) OR	
MAT146 College Mathematics with Review (6) OR	
Higher approved general education course in the Mathematical Applications [MA] area (3-6)	3-6

Computer/Statistics/Quantitative Applications [CS]	Credits: 3
Any approved general education course in the Computer/Statistics/Quantitative Applications [CS] area.	3

Humanities, Arts and Design [HU]	Credits: 6
Any approved general education courses in the Humanities, Arts and Design [HU] area.	6

Social-Behavioral Sciences [SB]	Credits: 6
Any approved general education courses in the Social-Behavioral Sciences [SB] area.	6

Natural Sciences [SG]/[SQ]	Credits: 8
Any approved general education course in the Natural Sciences (Quantitative) [SQ] area (4) AND	
Any approved general education course in the Natural Sciences (Quantitative) [SQ] area or the Natural Sciences (General) [SG] area (4).	8

Awareness Areas Credits: 0-6
These requirements may be shared with other AGEC requirements. See the AGEC matrix on aztransfer.com for course designations.

Cultural Diversity in the US [C]	Credits: 0-3
Any approved general education course with the Cultural Diversity in the U.S. [C] awareness area designation.	0-3

Historical/Global Awareness [H]/[G] Credits: 0-3
Any approved general education course with the Historical [H] or Global [G] awareness area designation. 0-3

MCCCD Additional Requirements
MCCCD Additional Requirements Credits: 0-6
Some courses in this area have [SB] and [L] designations and may also be applied to the corresponding AGEC requirements. See the AGEC matrix

Oral Communication Credits: 0-3
COM100 Introduction to Human Communication (3) OR
COM110 Interpersonal Communication (3) OR
COM225 Public Speaking (3) OR
COM230 Small Group Communication (3) 3

COM100, COM110, or COM230 recommended.

Critical Reading Credits: 0-3
CRE101 College Critical Reading and Critical Thinking (3) OR
Equivalent as indicated by assessment (0) 0-3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm10?id=16456329>

Starting Term: 2025 Fall
Final Term: 9999

ASSOCIATE IN ARTS (AA) IN ASSOCIATE IN ARTS, EMPHASIS IN ENGLISH (LITERATURE)

Total Credits: 60-64
Major Code: 8110

Description

The Associate in Arts (AA), Emphasis in English (Literature) provides the first two years of a four-year curriculum for students who wish to specialize in literary and cultural studies. With a bachelor's degree, students may pursue a career in education, publishing, writing, other professional fields, or prepare for application to professional graduate programs.

Program Notes

Students must earn a grade of C or better in all courses within the program. This emphasis is intended to align with the degree requirements for the following transfer partners: ASU (College of Liberal Arts and Sciences), English (Literature), BAASU (New College of Interdisciplinary Arts and Sciences), English, BAASU (College of Integrative Sciences and Arts), English, BANAU, English (Literature Emphasis), BARefer to the MCCCD University Transfer Partner website for more information: ASU , NAU .

Required Courses

Required Courses Course # Course Title Credits
Credits: 10-12
Consult with an academic, faculty, or program advisor to select the course options that align with your intended transfer program requirement

ENG110 Approaching Big Problems 3
ENG200 Reading and Writing about Literature (3) OR
ENG206 Introduction to Literary Studies (3) 3
ENH221 Survey of English Literature before 1800 (3) OR
ENH241 American Literature Before 1860 (3) 3
FYE101 Introduction to College, Career and Personal Success (1) OR
FYE103 Exploration of College, Career and Personal Success (3) 1-3

General Education Requirements

Arizona General Education Curriculum (AGEC)
AGEC-A Credits: 29-44
A single course with an [L], [HU], [SB], [SG], or [SQ] designation may also be used to satisfy the Oral Communication, Critical Reading, and/

First-Year Composition [FYC] Credits: 6
ENG101 First-Year Composition (3) OR
ENG107 First-Year Composition for ESL (3) AND
ENG102 First-Year Composition (3) OR
ENG108 First-Year Composition for ESL (3) 6

Literacy and Critical Inquiry [L] Credits: 0-3
Any approved general education course in the Literacy and Critical Inquiry [L] area. 3

May be met by ENG200 or ENH241 in the Required Courses area.

Mathematics [MA] Credits: 3-6
MAT140 College Mathematics (5) OR
MAT141 College Mathematics (4) OR
MAT142 College Mathematics (3) OR
MAT145 College Mathematics with Review (5) OR
MAT146 College Mathematics with Review (6) OR
Higher approved general education course in the Mathematical Applications [MA] area (3-6) 3-6

Computer/Statistics/Quantitative Applications [CS] Credits: 3
Any approved general education course in the Computer/Statistics/Quantitative Applications [CS] area. 3

Humanities, Arts and Design [HU] Credits: 3-6

ENH222 Survey of English Literature After 1800 (3) OR
 ENH242 American Literature After 1860 (3)
 AND
 Any approved general education course in the Humanities, Arts and Design [HU] area. (3) 6

May be met by ENG200, ENH221, or ENH241 in the Required Courses area.

Social-Behavioral Sciences [SB] Credits: 6
 Any approved general education course in the Social-Behavioral Sciences [SB] area. 6

Natural Sciences [SG]/[SQ] Credits: 8
 Any approved general education course in the Natural Sciences (Quantitative) [SQ] area (4) AND
 Any approved general education course in the Natural Sciences (Quantitative) [SQ] area or the Natural Sciences (General) [SG] area (4). 8

Awareness Areas Credits: 0-6
 These requirements may be shared with other AGECE requirements. See the AGECE matrix on aztransfer.com for course designations.

Cultural Diversity in the US [C] Credits: 0-3
 Any approved general education course with the Cultural Diversity in the U.S. [C] designation.

May be met by ENH241 in the Required Courses area.

Historical/Global Awareness [H]/[G] Credits: 0-3
 Any approved general education course with the Historical [H] or Global [G] designation.

May be met by ENH222 in Required Courses.

MCCCD Additional Requirements
 MCCCD Additional Requirements Credits: 0-6
 Some courses in this area have [SB] and [L] designations and may also be applied to the corresponding AGECE requirements. See the AGECE matrix

Oral Communication Credits: 0-3
 COM100 Introduction to Human Communication (3) OR
 COM110 Interpersonal Communication (3) OR
 COM225 Public Speaking (3) OR
 COM230 Small Group Communication (3) 0-3

Critical Reading Credits: 0-3
 CRE101 College Critical Reading and Critical Thinking (3) OR
 Equivalent as indicated by assessment (0) 0-3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm10?id=16455986>

Starting Term: 2025 Fall
 Final Term: 9999

ASSOCIATE IN ARTS (AA) IN ASSOCIATE IN ARTS, EMPHASIS IN EXERCISE SCIENCE

Total Credits: 60-64
 Major Code: 8121

Description

The Associate in Arts (AA), Emphasis in Exercise Science provides the first two years of a four-year curriculum for students who wish to specialize in Exercise Science, Kinesiology, Clinical Exercise Physiology, Sport Science, Healthy Lifestyles Coaching, or Fitness and Wellness. With a bachelor's degree, students may pursue a career as a fitness specialist or director, strength and conditioning specialist, healthy lifestyles coach, or an exercise physiologist. With a graduate degree, students may pursue careers in a number of fields, including but not limited to physical therapy, occupational therapy, athletic training, exercise physiology, medicine, and physician assistant. Certificates of Completion (CCLs) in Personal Trainer and Personal Trainer Advanced as well as an Associate in Applied Science (AAS) in Exercise Science: Health, Fitness, and Sports Performance are also available.

Program Notes

Students must earn a grade of C or better in all courses within the program. This emphasis is intended to align with the degree requirements for the following transfer partners: ASU (College of Health Solutions), Health Sciences (Healthy Lifestyles and Fitness Science), BSASU (College of Health Solutions), Sports Science and Performance Programming, BSASU (College of Health Solutions), Clinical Exercise Science, BSASU (College of Health Solutions), Kinesiology, BSNAU, Exercise Physiology, BSNAU, Fitness and Wellness, BSRefer to the MCCCD University Transfer Partner website for more information: ASU, NAU.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits: 4-6			
EXS101		Introduction to Exercise Science	3
FYE101		Introduction to College, Career and Personal Success (1) OR	
FYE103		Exploration of College, Career and Personal Success (3)	1-3

Restricted Electives

Restricted Electives	Course #	Course Title	Credits
Credits: 21-29			
Complete coursework in the transfer option that best aligns with your academic and professional goals. Consult with an academic, faculty, or			
Transfer Plan 1: Kinesiology			
BI0181++		General Biology (Majors) I	4
BI0182		General Biology (Majors) II	4
BI0201++		Human Anatomy and Physiology I	4
BI0202		Human Anatomy and Physiology II	4

CHM150 General Chemistry I (4) AND
 CHM151LL General Chemistry I Laboratory (1) OR
 CHM150AA General Chemistry I with Lab (5) OR
 CHM151 General Chemistry I (3) AND
 CHM151LL General Chemistry I Laboratory (1) OR
 CHM151AA General Chemistry I with Lab (4) 4-5

CHM152 General Chemistry II (3) AND
 CHM152LL General Chemistry II Laboratory (1) OR
 CHM152AA General Chemistry II with Lab (4) 4

PHY111 General Physics I 4

Transfer Plan 2: Applied Exercise and Sport Sciences

BI0201 Human Anatomy and Physiology I (4) AND
 BI0202 Human Anatomy and Physiology II (4) OR
 BI0160 Introduction to Human Anatomy Physiology 4-8

Recommend BI0201 and BI0202 for students intending to transfer to NAU for Fitness and Wellness or to ASU for Clinical Exercise Science or Spo
 Recommend BI0160 for students intending to transfer to ASU for Healthy Lifestyles and Fitness Science.

CHM130 Fundamental Chemistry (3) AND
 CHM130LL Fundamental Chemistry Laboratory (1) OR
 CHM130AA Fundamental Chemistry with Lab (4) OR
 CHM150 General Chemistry I (4) AND
 CHM151LL General Chemistry I Laboratory (1) OR
 CHM150AA General Chemistry I with Lab (5) OR
 CHM151 General Chemistry I (3) AND
 CHM151LL General Chemistry I Laboratory (1) OR
 CHM151AA General Chemistry I with Lab (4) 4-5

EXS125 Introduction to Exercise Physiology 3

EXS146 Introduction to Exercise Testing 1 OR
 EXS270AA Exercise Science Internship 1

EXS215 Resistance Training and Recovery Techniques 3
 EXS217 Cardiorespiratory and Flexibility Training 3

FON241 Principles of Human Nutrition 3

General Education Requirements

Arizona General Education Curriculum (AGEC)

AGEC-A Credits: 30-37

A single course with an [L], [HU], [SB], [SG], or [SQ] designation may also be used to satisfy the Oral Communication, Critical Reading, and/

First-Year Composition [FYC] Credits: 6

ENG101 First-Year Composition (3) OR
 ENG107 First-Year Composition for ESL (3) AND
 ENG102 First-Year Composition (3) OR
 ENG108 First-Year Composition for ESL (3) 6

Literacy and Critical Inquiry [L] Credits: 3

EXS290 Introduction to Evidence-Based Practice 3

Mathematics [MA] Credits: 3-9

Before enrolling into a math course, speak to your Academic Advisor to ensure you are selecting the correct math for your transfer goals as M

MAT140 College Mathematics (5) OR
 MAT141 College Mathematics (4) OR
 MAT142 College Mathematics (3) OR
 MAT145 College Mathematics with Review (5) OR
 MAT146 College Mathematics with Review (6)
 OR
 MAT150 College Algebra/Functions (5) OR
 MAT151 College Algebra/Functions (4) OR
 MAT152 College Algebra/Functions (3) OR
 MAT155 College Algebra/Functions with Review (5) OR
 MAT156 College Algebra/Functions with Review (6)
 OR
 MAT150 College Algebra/Functions (5) OR
 MAT151 College Algebra/Functions (4) OR
 MAT152 College Algebra/Functions (3) OR
 MAT155 College Algebra/Functions with Review (5) OR
 MAT156 College Algebra/Functions with Review (6) AND
 MAT182 Plane Trigonometry (3)
 OR
 MAT187 Precalculus (5) OR
 MAT188 Precalculus (4)
 Higher approved general education course in the Mathematical Applications [MA] area (3-5) 3-9

MAT187 or MAT188 recommended for Kinesiology students.

MAT14+ recommended for students intending to transfer to NAU for Fitness and Wellness or to ASU for Health Sciences (Healthy Lifestyles and F

MAT15+ recommended for students intending to transfer to ASU for Sports Science and Performance Programming or Clinical Exercise.

Computer/Statistics/Quantitative Applications [CS] Credits: 3-4

Consult with an academic, faculty, or program advisor to select the statistics option below that aligns with your intended transfer program r

MAT206 Elements of Statistics (3) OR
 PSY230 Introduction to Statistics (3) OR
 PSY230 Introduction to Statistics (3) AND
 PSY231 Laboratory for Statistics (1) OR
 PSY230WL Introduction to Statistics with Lab (4) 3-4

PSY230 recommended.

Humanities, Arts and Design [HU] Credits: 6
Any approved general education courses in the Humanities, Arts and Design [HU] area. 6

Social-Behavioral Sciences [SB] Credits: 6
PSY101 Introduction to Psychology 3
HES100 Healthful Living 3

Awareness Areas Credits: 3
These requirements may be shared with other AGECE requirements. See the AGECE matrix on aztransfer.com for course designations.

Cultural Diversity in the US [C] Credits: 3
HES210 Cultural Aspects of Health and Illness 3

MCCCD Additional Requirements
MCCCD Additional Requirements Credits: 3-6
Some courses in this area have [SB] and [L] designations and may also be applied to the corresponding AGECE requirements. See the AGECE matrix

Oral Communication Credits: 3
COM100 Introduction to Human Communication (3) OR
COM110 Interpersonal Communication (3) OR
COM225 Public Speaking (3) OR
COM230 Small Group Communication (3) 3

Critical Reading Credits: 0-3
CRE101 College Critical Reading and Critical Thinking (3) OR
Equivalent as indicated by assessment (0) 0-3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm10?id=16456262>

Starting Term: 2025 Fall
Final Term: 9999

ASSOCIATE IN ARTS (AA) IN ASSOCIATE IN ARTS, EMPHASIS IN FAMILY LIFE EDUCATION

Total Credits: 60-64
Major Code: 8139

Description

The Associate in Arts (AA), Emphasis in Family Life Education provides the first two years of a four-year curriculum for students who wish to study in fields related to family life education, human development, or child and family studies. The program includes study of child and adult development, marriage and family relationships, and the intersections of school, community, and family. Students can pursue careers in public, private, and human service agencies working with children, youth, and families. A Certificate of Completion (CCL) in Child and Family Organizations, Management and Administration is available and can be fully embedded in this AA.

Program Notes

Students must earn a grade of C or better in all courses within the program. For some occupations within this field, students may be required to have a current Identity Verified Print (IVP) Fingerprint Clearance Card and a current TB vaccination. Please consult with your faculty mentor to discuss these and other occupational requirements. This emphasis is intended to align with the degree requirements for the following transfer partners: ASU (College of Liberal Arts and Sciences), Family and Human Development, BSNAU, Applied Human Behavior, BSU of A, Family Studies and Human Development, BS. Refer to the MCCCD University Transfer Partner website for more information: ASU, NAU, U of A.

Required Courses

Required Courses Course # Course Title Credits
Credits: 4-6
CFS210 Family Life Education 3

FYE101 Introduction to College, Career and Personal Success (1) OR
FYE103 Exploration of College, Career and Personal Success (3) 1-3

General Education Requirements

Arizona General Education Curriculum (AGECE)
AGECE-A Credits: 35-45
A single course with an [L], [HU], [SB], [SG], or [SQ] designation may also be used to satisfy the Oral Communication, Critical Reading, and/

First-Year Composition [FYC] Credits: 6
ENG101 First-Year Composition (3) OR
ENG107 First-Year Composition for ESL (3) AND
ENG102 First-Year Composition (3) OR
ENG108 First-Year Composition for ESL (3) 6

Literacy and Critical Inquiry [L] Credits: 3
Any approved general education course in the Literacy and Critical Inquiry [L] area. 3

Recommend PSY290AB OR PSY290AC for students intending to transfer to University of Arizona.

Mathematics [MA] Credits: 3-6
MAT140 College Mathematics (5) OR
MAT141 College Mathematics (4) OR
MAT142 College Mathematics (3) OR
MAT145 College Mathematics with Review (5) OR
MAT146 College Mathematics with Review (6) OR
MAT150 College Algebra/Functions (5) OR

MAT151 College Algebra/Functions (4) OR
 MAT152 College Algebra/Functions (3) OR
 MAT155 College Algebra/Functions with Review (5) OR
 MAT156 College Algebra/Functions with Review (6) OR
 Higher approved general education course in the Mathematical Applications [MA] area. (3-5) 3-6

Recommend MAT150, MAT151, MAT152, MAT155, or MAT156 for students transferring to University of Arizona.

Computer/Statistics/Quantitative Applications [CS] Credits: 3-4

GBS221 Business Statistics (3) OR
 MAT206 Elements of Statistics (3) OR
 PSY230 Introduction to Statistics (3) OR
 PSY230WL Introduction to Statistics with Lab (4) OR
 PSY230 Introduction to Statistics (3) AND
 PSY231 Laboratory for Statistics (1) OR
 SWU225 Statistics for Social Research/Justice and Government (3) 3-4

Students should consult with an academic, faculty, or program advisor to select the Statistics option that aligns with their intended univers

Humanities, Arts and Design [HU] Credits: 6

Any approved general education courses in the Humanities, Arts and Design [HU] area. 6

Social-Behavioral Sciences [SB] Credits: 6

CFS112 Personal Growth and Family Relations (3) AND
 CFS205 Human Development (3) 6

Natural Sciences [SG]/[SQ] Credits: 8

Any approved general education course in the Natural Sciences (Quantitative) [SQ] area. (4) AND

Any approved general education course in the Natural Sciences (Quantitative) [SQ] area or the Natural Sciences (General) [SG] area. (4) 8

Awareness Areas Credits: 0-6

These requirements may be shared with other AGEC requirements. See the AGEC matrix on aztransfer.com for course designations.

Cultural Diversity in the US [C] Credits: 0-3

Any approved general education course with the Cultural Diversity in the U.S. [C] designation. 0-3

Historical/Global Awareness [H]/[G] Credits: 0-3

Any approved general education course with the Historical [H] or Global [G] awareness area designation. 0-3

MCCCD Additional Requirements

MCCCD Additional Requirements Credits: 0-6

Some courses in this area have [SB] and [L] designations and may also be applied to the corresponding AGEC requirements. See the AGEC matrix

Oral Communication Credits: 0-3

COM100 Introduction to Human Communication (3) OR
 COM110 Interpersonal Communication (3) OR
 COM225 Public Speaking (3) OR
 COM230 Small Group Communication (3) 0-3

Critical Reading Credits: 0-3

CRE101 College Critical Reading and Critical Thinking (3) OR
 Equivalent as indicated by assessment (0) 0-3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm10?id=16456330>

Starting Term: 2025 Fall

Final Term: 9999

ASSOCIATE IN ARTS (AA) IN ASSOCIATE IN ARTS, EMPHASIS IN GEOGRAPHY

Total Credits: 60-64

Major Code: 8113

Description

The Associate in Arts (AA), Emphasis in Geography provides the first two years of a four-year curriculum for students who wish to specialize in human and/or physical geography. Graduates of this associate degree program can work as cartographers, land surveyors, GIS analysts, and forest and conservation workers. With a bachelor's degree, students can pursue a number of careers, including geographers, hydrologists, GIS technicians and technologists, and forest fire inspectors and prevention specialists. Upon completion of a graduate degree, students can pursue careers as atmospheric and space scientists, environmental scientists, geoscientists, climate change analysts, urban planners, and geography professors.

Program Notes

Students must earn a grade of C or better in all courses within the program. This program is intended to align with the following university requirements: ASU (College of Liberal Arts and Sciences), Geography, BSASU (College of Liberal Arts and Sciences), Geography, BANAU, Geography, Environment, and Society, BSU of A, Geography, BAU of A, Geography, BSU of A, Urban and Regional Development, BSRefer to the MCCCD University Transfer Partner website for more information: ASU , NAU , U of A .

Required Courses

Required Courses Course # Course Title Credits

Credits: 1-3

FYE101 Introduction to College, Career and Personal Success (1) OR
 FYE103 Exploration of College, Career and Personal Success (3) 1-3

General Education Requirements

Arizona General Education Curriculum (AGEC)

AGEC-A Credits: 35-41

A single course with an [L], [HU], [SB], [SG], or [SQ] designation may also be used to satisfy the Oral Communication, Critical Reading, and/

First-Year Composition [FYC] Credits: 6

ENG101 First-Year Composition (3) OR

ENG107 First-Year Composition for ESL (3) AND

ENG102 First-Year Composition (3) OR

ENG108 First-Year Composition for ESL (3) 6

Literacy and Critical Inquiry [L] Credits: 3

Any approved general education course in the Literacy and Critical Inquiry [L] area. 3

Mathematics [MA] Credits: 3-6

MAT140 College Mathematics (5) OR

MAT141 College Mathematics (4) OR

MAT142 College Mathematics (3) OR

MAT145 College Mathematics with Review (5) OR

MAT146 College Mathematics with Review (6) OR

Higher approved general education course in the Mathematical Applications [MA] area (3-6) 3-6

Computer/Statistics/Quantitative Applications [CS] Credits: 3

GIS205 Geographic Information Technologies 3

Humanities, Arts and Design [HU] Credits: 6

Any approved general education courses in Humanities, Arts and Design [HU] area. 6

Social-Behavioral Sciences [SB] Credits: 6

GCU102 Human Geography: Spatial Relationships Between Humans and Culture with Their Environment (3)

AND

GCU121WG World Geography: People, Places, and Culture (3) 6

Natural Sciences [SG]/[SQ] Credits: 8

GPH111 Physical Geography: Atmosphere, Lithosphere, Water And Hazards Lecture (3) AND

GPH112 Physical Geography: Climate, Landforms, Water and Hazards Laboratory (1) OR

GPH113 Physical Geography: Atmosphere, Lithosphere, Water, and Hazards (4)

AND

GPH211 Landform Processes (4) OR

GPH212 Introduction to Meteorology I (3) AND

GPH214 Introduction to Meteorology Laboratory I (1) OR

GPH213 Climate and Weather (3) AND

GPH215 Climate and Weather Laboratory (1) 8

Awareness Areas Credits: 0-3

These requirements may be shared with other AGEC requirements. See the AGEC matrix on aztransfer.com for course designations.

Cultural Diversity in the US [C] Credits: 0-3

Any approved general education course in the Cultural Diversity in the U.S. [C] area.

MCCCD Additional Requirements

MCCCD Additional Requirements Credits: 0-6

Some courses in this area have [SB] and [L] designations and may also be applied to the corresponding AGEC requirements. See the AGEC matrix

Oral Communication Credits: 0-3

COM100 Introduction to Human Communication (3) OR

COM110 Interpersonal Communication (3) OR

COM225 Public Speaking (3) OR

COM230 Small Group Communication (3) 0-3

Critical Reading Credits: 0-3

CRE101 College Critical Reading and Critical Thinking (3) OR

Equivalent as indicated by assessment (0) 0-3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm10?id=16456267>

Starting Term: 2025 Fall

Final Term: 9999

ASSOCIATE IN ARTS (AA) IN ASSOCIATE IN ARTS, EMPHASIS IN HISTORY

Total Credits: 60-64

Major Code: 8114

Description

The Associate in Arts (AA), Emphasis in History provides the first two years of a four-year curriculum for students who wish to specialize in History. With a bachelor's degree, students may pursue a career in a wide range of fields including education, governmental and nongovernmental organizations; intelligence analysis; international trade; community development; foreign services; and many others. A bachelor's degree in History prepares students for application to professional graduate and post-baccalaureate programs in a variety of disciplines including post-secondary teaching, law, library and archival studies, and museum studies.

Program Notes

Students must earn a grade of C or better in all courses within the program. This emphasis is intended to align with the degree requirements for the following transfer partners: ASU (College of Integrative Sciences and Arts), History, BAASU (College of Liberal Arts and Sciences), History, BAASU (New College of Interdisciplinary Arts and Sciences), History, BANAU, History, BANAU, History, BSU of A, History, BAR. Refer to the MCCCD University Transfer Partner website for more information: ASU, NAU, U of A

Required Courses

Required Courses Course # Course Title Credits
Credits: 7-9
FYE101 Introduction to College, Career and Personal Success (1) OR
FYE103 Exploration of College, Career and Personal Success (3) 1-3

Select two (2) courses from the list below for a total of six (6) credits:

HIS100 History of Western Civilization to Middle Ages 3
HIS101 History of Western Civilization Middle Ages to 1789 3
HIS102 History of Western Civilization 1789 to Present 3
HIS103 United States History to 1865 3
HIS104 United States History 1865 to Present 3
HIS110 World History to 1500 3
HIS111 World History 1500 to the Present 3

Consult with an academic, faculty, or program advisor to select the option that aligns with your intended transfer program requirements. Refer

General Education Requirements

Arizona General Education Curriculum (AGEC)

AGEC-A Credits: 23-41

A single course with an [L], [HU], [SB], [SG], or [SQ] designation may also be used to satisfy the Oral Communication, Critical Reading, and/

First-Year Composition [FYC] Credits: 6

ENG101 First-Year Composition (3) OR
ENG107 First-Year Composition for ESL (3) AND
ENG102 First-Year Composition (3) OR
ENG108 First-Year Composition for ESL (3) 6

Literacy and Critical Inquiry [L] Credits: 3

Any approved general education course in the Literacy and Critical Inquiry [L] area. 3

Mathematics [MA] Credits: 3-6

MAT140 College Mathematics (5) OR
MAT141 College Mathematics (4) OR
MAT142 College Mathematics (3) OR
MAT145 College Mathematics with Review (5) OR
MAT146 College Mathematics with Review (6) OR
Higher approved general education course in the Mathematical Applications [MA] area (3-6) 3-6

Computer/Statistics/Quantitative Applications [CS] Credits: 3

Any approved general education course in the Computer/Statistics/Quantitative Applications [CS] area. 3

Humanities, Arts and Design [HU] Credits: 0-6

Any approved general education courses from the Humanities, Arts and Design [HU] area. 6

May be met by HIS101, HIS102, HIS103, HIS110, and/or HIS111 in the Required Courses area.

Social-Behavioral Sciences [SB] Credits: 0-6

Any approved general education courses from the Social-Behavioral Sciences [SB] area. 6

May be met by HIS101, HIS102, HIS103, and/or HIS104 in the Required Courses area.

Natural Sciences [SG]/[SQ] Credits: 8

Any approved general education course in the Natural Sciences (Quantitative) [SQ] area (4) AND
Any approved general education course in the Natural Sciences (Quantitative) [SQ] area or the Natural Sciences (General) [SG] area (4). 8

Awareness Areas Credits: 0-3

These requirements may be shared with other AGEC requirements. See the AGEC matrix on aztransfer.com for course designations.

Cultural Diversity in the US [C] Credits: 0-3

Any approved general education course with the Cultural Diversity in the U.S. [C] designation. 0-3

MCCCD Additional Requirements

MCCCD Additional Requirements Credits: 0-6

Some courses in this area have [SB] and [L] designations and may also be applied to the corresponding AGEC requirements. See the AGEC matrix

Oral Communication Credits: 0-3

COM100 Introduction to Human Communication (3) OR
COM110 Interpersonal Communication (3) OR
COM225 Public Speaking (3) OR
COM230 Small Group Communication (3) 0-3

Critical Reading Credits: 0-3

CRE101 College Critical Reading and Critical Thinking (3) OR
Equivalent as indicated by assessment (0) 0-3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm10?id=16456310>

Starting Term: 2025 Fall

Final Term: 9999

ASSOCIATE IN ARTS (AA) IN ASSOCIATE IN ARTS, EMPHASIS IN HUMANITIES

Total Credits: 60-64

Major Code: 8143

Description

The Associate in Arts (AA), Emphasis in Humanities degree provides the first two years of a four-year curriculum for students who wish to receive an education in the diverse field of humanities, including language, philosophy, religion, art, music, performance, and literature. Coursework in this program supports students in their development of a rigorous and interdisciplinary lens to investigate the artifacts of human experience including intellectual and creative expressions, as well as cultural

ideas and values of the ancient and modern worlds. As such, students develop habits of mind, such as creative and critical thinking skills and intellectual curiosity, that position them well for careers in a diverse array of fields and support lifelong learning. Graduates from humanities programs may pursue careers in education, law, creative and professional writing, marketing and international business, social media production and management, government, the nonprofit sector, arts administration, and the helping professions.

Program Notes

Students must earn a grade of C or better in all courses within the program. This emphasis is intended to align with the degree requirements for the following transfer partners: ASU (College of Integrative Sciences and Arts) General Studies, BAASU (College of Integrative Sciences and Arts), Interdisciplinary Studies, BAASU (College of Liberal Arts and Sciences), International Letters and Cultures, BARefer to the MCCC University Transfer Partner website for more information: ASU .

Required Courses

Required Courses Course # Course Title Credits
Credits: 1-3
FYE101 Introduction to College, Career and Personal Success (1) OR
FYE103 Exploration of College, Career and Personal Success (3) 1-3

General Education Requirements

Arizona General Education Curriculum (AGEC)
AGEC-A Credits: 35-41
A single course with an [HU], [SB], [L], or [SG/SQ] designation may also be used to satisfy the Oral Communication, Critical Reading, or Awareness Areas.

First-Year Composition [FYC] Credits: 6
ENG101 First-Year Composition (3) OR
ENG107 First-Year Composition for ESL (3) AND
ENG102 First-Year Composition (3) OR
ENG108 First-Year Composition for ESL (3) 6

Literacy and Critical Inquiry [L] Credits: 3
HUM250 Ideas and Values in the Humanities: Early Civilizations to the Renaissance 3

Mathematics [MA] Credits: 3-6
MAT140 College Mathematics (5) OR
MAT141 College Mathematics (4) OR
MAT142 College Mathematics (3) OR
MAT145 College Mathematics with Review (5) OR
MAT146 College Mathematics with Review (6) OR
Higher level course in the Mathematical Applications [MA] area (3-6) 3-6

Computer/Statistics/Quantitative Applications [CS] Credits: 3
Any approved general education course in the Computer/Statistics/Quantitative Applications [CS] area. 3

Humanities, Arts and Design [HU] Credits: 6
HUM107 Humanities Through the Arts (3) OR
HUM108 Contemporary Humanities (3)
AND
HUM251 Ideas and Values in the Humanities: Renaissance to the Contemporary World (3) 6

Social-Behavioral Sciences [SB] Credits: 6
Any approved general education courses in the Social-Behavioral Sciences [SB] area. 6

Natural Sciences [SG]/[SQ] Credits: 8
Any approved general education course in the Natural Sciences (Quantitative) [SQ] area (4) AND
Any approved general education course in the Natural Sciences (Quantitative) [SQ] area or the Natural Sciences (General) [SG] area (4) 8

Awareness Areas Credits: 0-3
These requirements may be shared with other AGEC requirements. See the AGEC matrix on aztransfer.com for course designations.

Cultural Diversity in the US [C] Credits: 0-3
Any approved general education course with the Cultural Diversity in the U.S. [C] designation. 0-3

MCCC Additional Requirements
MCCC Additional Requirements Credits: 0-6
Some courses in this area have [SB] and [L] designations and may also be applied to the corresponding AGEC requirements. See the AGEC matrix

Oral Communication Credits: 0-3
COM100 Introduction to Human Communication (3) OR
COM110 Interpersonal Communication (3) OR
COM225 Public Speaking (3) OR
COM230 Small Group Communication (3) 3

Critical Reading Credits: 0-3
CRE101 College Critical Reading and Critical Thinking (3) OR
Equivalent as indicated by assessment (0) 0-3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCC.WOA/wa/freeForm10?id=16456331>

Starting Term: 2025 Fall
Final Term: 9999

ASSOCIATE IN ARTS (AA) IN ASSOCIATE IN ARTS, EMPHASIS IN INFORMATION STUDIES AND SOCIETY

Total Credits: 60-64
Major Code: 8131

Description

The Associate in Arts (AA), Emphasis in Information Studies and eSociety is an interdisciplinary program designed to prepare students for work in: marketing, social media, libraries, editing, copywriting, public relations, online content creation, and communication. Students will examine their roles as content creators and consumers in a global society, critically engage with information, and communicate and collaborate across diverse populations and platforms. This program also provides university transfer options in addition to workforce preparedness.

Program Notes

Students must earn a grade of C or better in all courses within the program. This emphasis is intended to align with the degree requirements for the following transfer partners: U of A, Information Sciences and eSociety, BAU of A Global Campus, Liberal Arts, BAU of A Global Campus, Organizational Management, BAU of A Global Campus, Information Technology, BS. Refer to the MCCC University Transfer Partner website for more information: U of A.

Required Courses

Required Courses Course # Course Title Credits
Credits: 4-6
FYE101 Introduction to College, Career and Personal Success (1) OR
FYE103 Exploration of College, Career and Personal Success (3) 1-3

IFS150 Social Media, Society, and Ourselves 3

General Education Requirements

Arizona General Education Curriculum (AGEC)
AGEC-A Credits: 35-41
A single course with an [L], [HU], [SB], [SG], or [SQ] designation may also be used to satisfy the Oral Communication, Critical Reading, and/

First-Year Composition [FYC] Credits: 6
ENG101 First-Year Composition (3) OR
ENG107 First-Year Composition for ESL (3) AND
ENG102 First-Year Composition (3) OR
ENG108 First-Year Composition for ESL (3) 6

Literacy and Critical Inquiry [L] Credits: 3
IFS201 Information in a Post-Truth World 3

Mathematics [MA] Credits: 3-6
MAT140 College Mathematics (5) OR
MAT141 College Mathematics (4) OR
MAT142 College Mathematics (3) OR
MAT145 College Mathematics with Review (5) OR
MAT146 College Mathematics with Review (6) OR
Higher approved general education course in the Mathematical Applications [MA] area (3-6) 3-6

Computer/Statistics/Quantitative Applications [CS] Credits: 3
Any approved general education course from the Computer/Statistics/Quantitative Applications [CS] area. 3

Recommended PSY230 Introduction to Statistics for the University of Arizona, Information Studies and eSociety Bachelor of Arts

Humanities, Arts and Design [HU] Credits: 6
Any approved general education courses from the Humanities, Arts and Design [HU] area. 6

Social-Behavioral Sciences [SB] Credits: 6
IFS210 Digital Information and Access in a Global Society (3)
AND
IFS213 Hacking and Open Source Culture (3) 6

Natural Sciences [SG]/[SQ] Credits: 8
Any approved general education course in the Natural Sciences (Quantitative) [SQ] area (4) AND
Any approved general education course in the Natural Sciences (Quantitative) [SQ] area or the Natural Sciences (General) [SG] area (4). 8

Awareness Areas Credits: 0-3
These requirements may be shared with other AGEC requirements. See the AGEC matrix on aztransfer.com for course designations.

Cultural Diversity in the US [C] Credits: 0-3
Any approved general education course in the Cultural Diversity in the U.S. [C] area.

Recommend EDU/HUM/ST0292, ENH295, PSY132, or SOC241.

MCCCD Additional Requirements
MCCCD Additional Requirements Credits: 0-6
Some courses in this area have [SB] and [L] designations and may also be applied to the corresponding AGEC requirements. See the AGEC matrix

Oral Communication Credits: 0-3
COM100 Introduction to Human Communication (3) OR
COM110 Interpersonal Communication (3) OR
COM225 Public Speaking (3) OR
COM230 Small Group Communication (3) 0-3

Critical Reading Credits: 0-3
CRE101 College Critical Reading and Critical Thinking (3) OR
Equivalent as indicated by assessment (0) 0-3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm10?id=16456298>

Starting Term: 2025 Fall
Final Term: 9999

ASSOCIATE IN ARTS (AA) IN ASSOCIATE IN ARTS, EMPHASIS IN JAPANESE

Total Credits: 60-64

Major Code: 8130

Description

The Associate in Arts (AA), Emphasis in Japanese provides the first two years of a four year curriculum for the student who plans to transfer to earn a Bachelor of Arts in Japanese. An Academic Certificate (AC) in Language Studies is also available.

Program Notes

Students must earn a grade of C or better in all courses within the program. Students intending to complete the Academic Certificate in Language Studies (Major Code 6237N) should consider the recommendation notes listed below. Students may qualify to enter higher level Japanese courses by placement or may qualify to exempt out of taking any Japanese courses by assessment. This emphasis is intended to align with the degree requirements for the following transfer partners: ASU (College of Liberal Arts and Sciences), Asian Languages (Japanese), BARefer to the MCCC University Transfer Partner website for more information: ASU .

Required Courses

Required Courses Course # Course Title Credits
Credits: 1-23

FYE101 Introduction to College, Career and Personal Success (1) OR

FYE103 Exploration of College, Career and Personal Success (3) 1-3

JPN101 Elementary Japanese I (5) OR
Equivalent as indicated by assessment (0) 0-5

JPN102 Elementary Japanese II (5) OR
Equivalent as indicated by assessment (0) 0-5

JPN201 Intermediate Japanese I (5) OR
Equivalent as indicated by assessment (0) 0-5

JPN202 Intermediate Japanese II (5) OR
Equivalent as indicated by assessment (0) 0-5

General Education Requirements

Arizona General Education Curriculum (AGEC)

AGEC-A Credits: 35-44

A single course with an [L], [HU], [SB], [SG], or [SQ] designation may also be used to satisfy the Oral Communication, Critical Reading, and/

First-Year Composition [FYC] Credits: 6

ENG101 First-Year Composition (3) OR

ENG107 First-Year Composition for ESL (3) AND

ENG102 First-Year Composition (3) OR

ENG108 First-Year Composition for ESL (3) 6

Literacy and Critical Inquiry [L] Credits: 3

Any approved general education course in the Literacy and Critical Inquiry [L] area. 3

Mathematics [MA] Credits: 3-6

MAT140 College Mathematics (5) OR

MAT141 College Mathematics (4) OR

MAT142 College Mathematics (3) OR

MAT145 College Mathematics with Review (5) OR

MAT146 College Mathematics with Review (6) OR

Higher approved general education course in the Mathematical Applications [MA] area (3-6) 3-6

Computer/Statistics/Quantitative Applications [CS] Credits: 3

Any approved general education course in the Computer/Statistics/Quantitative Applications [CS] area 3

Humanities, Arts and Design [HU] Credits: 6

JPH245 Traditional and Modern Japanese Culture (3)

AND

Any approved general education courses in the Humanities, Arts and Design [HU] area (3) 6

Social-Behavioral Sciences [SB] Credits: 6

ENG213 Introduction to the Study of Language (3) OR

SLC201 Introduction to Linguistics (3) 3

AND

Any approved general education courses in the Social-Behavioral Sciences [SB] area. 6

PSY132 recommended.

Natural Sciences [SG]/[SQ] Credits: 8

Any approved general education course in the Natural Sciences (Quantitative) [SQ] area (4) AND

Any approved general education course in the Natural Sciences (Quantitative) [SQ] area or the Natural Sciences (General) [SG] area (4) 8

Awareness Areas Credits: 0-6

These requirements may be shared with other AGEC requirements. See the AGEC matrix on aztransfer.com for course designations.

Cultural Diversity in the US [C] Credits: 0-3

Any approved general education course with the Cultural Diversity in the US [C] awareness area designation.

PSY132 recommended.

Historical/Global Awareness [H]/[G] Credits: 0-3

Any approved general education course with the Historical [H] or Global [G] awareness area designation

May be met by JPN101, JPN102, JPN201, or JPN202 in Required Courses 1162

PSY132 recommended if not met by JPN101, JPN102, JPN201, or JPN202 Required Courses

MCCCD Additional Requirements

MCCCD Additional Requirements Credits: 0-6

Some courses in this area have [SB] and [L] designations and may also be applied to the corresponding AGEC requirements. See the AGEC matrix

Oral Communication Credits: 0-3

COM100 Introduction to Human Communication (3) OR

COM110 Interpersonal Communication (3) OR

COM225 Public Speaking (3) OR

COM230 Small Group Communication (3) 0-3

Critical Reading Credits: 0-3

CRE101 College Critical Reading and Critical Thinking (3) OR

Equivalent as indicated by assessment (0) 0-3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm10?id=16456283>

Starting Term: 2025 Fall

Final Term: 2026 Summer

ASSOCIATE IN ARTS (AA) IN ASSOCIATE IN ARTS, EMPHASIS IN JOURNALISM AND NEW MEDIA STUDIES

Total Credits: 60-64

Major Code: 8146

Description

The Associate in Arts (AA), Emphasis in Journalism and New Media Studies provides the first two years of a four-year curriculum for students interested in broadcast, print, and new media journalism transfer and is also designed to provide students with general, practical and marketable skills that will enable them to seek entry-level employment in various media outlets, including: newspapers, magazines, community journals, online websites, radio and television. News judgment is integrated as a critical component of the coursework along with an awareness of global and cultural differences. Students will develop a portfolio of work that will exhibit students' abilities to write both news and feature stories.

Program Notes

Students must earn a grade of C or better in all courses within the program. This emphasis is intended to align with the degree requirements for the following transfer partners: ASU (Walter Cronkite School of Journalism and Mass Communication), Journalism and Mass Communication, BANAU, Journalism, BAU of A, Journalism, BAR. Refer to the MCCCD University Transfer Partner website for more information: ASU, NAU, U of A.

Required Courses

Required Courses Course # Course Title Credits

Credits: 2-6

FYE101 Introduction to College, Career and Personal Success (1) OR

FYE103 Exploration of College, Career and Personal Success (3) 1-3

JRN101 Grammar and Style for Journalists (1) OR

JRN105 Introduction to Journalism (3) 1-3

General Education Requirements

Arizona General Education Curriculum (AGEC)

AGEC-A Credits: 38-44

A single course with an [HU], [SB], [L], or [SG/SQ] designation may also be used to satisfy the Oral Communication, Critical Reading, or Awareness

First-Year Composition [FYC] Credits: 6

ENG101 First-Year Composition (3) OR

ENG107 First-Year Composition for ESL (3) AND

ENG102 First-Year Composition (3) OR

ENG108 First-Year Composition for ESL (3) 6

Literacy and Critical Inquiry [L] Credits: 3

JRN201 News Writing 3

Mathematics [MA] Credits: 3-6

MAT140 College Mathematics (5) OR

MAT141 College Mathematics (4) OR

MAT142 College Mathematics (3) OR

MAT145 College Mathematics with Review (5) OR

MAT146 College Mathematics with Review (6) OR

Any approved general education course in the Mathematical Applications [MA] area 3-6

Computer/Statistics/Quantitative Applications [CS] Credits: 3

Any approved general education course in the Computer/Statistics/Quantitative Applications [CS] area. 3

Humanities, Arts and Design [HU] Credits: 6

Any approved general education courses in the Humanities, Arts and Design [HU] area. 6

Social-Behavioral Sciences [SB] Credits: 6

MC0120 Media and Society 3

Any approved general education courses in the Social-Behavioral Sciences [SB] area. 3

Natural Sciences [SG]/[SQ] Credits: 8

Any approved general education course in the Natural Sciences (Quantitative) [SQ] area (4) AND

Any approved general education course in the Natural Sciences (Quantitative) [SQ] area or the Natural Sciences (General) [SG] area (4). 8

Awareness Areas Credits: 3-6

These requirements may be shared with other AGECE requirements. See the AGECE matrix on aztransfer.com for course designations.

Cultural Diversity in the US [C] Credits: 3
MC0220 Cultural Diversity and the Media 3

Historical/Global Awareness [H]/[G] Credits: 0-3
Any approved general education course with the Historical [H] or Global [G] awareness area designation. 0-3

MCCCD Additional Requirements

MCCCD Additional Requirements Credits: 0-6

Courses in this area may also be applied to the AGECE Core Requirements. To minimize total credits required for degree and maximize transferability

Oral Communication Credits: 3
COM100 Introduction to Human Communication (3) OR
COM110 Interpersonal Communication (3) OR
COM225 Public Speaking (3) OR
COM230 Small Group Communication (3) 3

Critical Reading Credits: 0-3
CRE101 College Critical Reading and Critical Thinking (3) OR
Equivalent as indicated by assessment (0) 0-3

<https://aztransfer2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm10?id=16456311>

Starting Term: 2025 Fall

Final Term: 9999

ASSOCIATE IN ARTS (AA) IN ASSOCIATE IN ARTS, EMPHASIS IN LAW AND POLICY

Total Credits: 60-64

Major Code: 8141

Description

The Associate in Arts (AA), Emphasis in Law and Policy degree provides the first two years of a four-year curriculum for students who wish to specialize in law and policy or are preparing for graduate programs in law or other related fields. With a bachelor's degree, students may work in areas where a license to practice law is not required. These areas include, but are not limited to compliance, contracts, risk management, human resources, public policy, probation, insurance, finance, real estate, city planning and administration.

Program Notes

Students must earn a grade of C or better in all courses within the program. This emphasis is intended to align with the degree requirements for the following transfer partners: U of A, Law, BAR. Refer to the MCCCD University Transfer Partner website for more information: U of A.

Required Courses

Required Courses Course # Course Title Credits
Credits: 10-12
FYE101 Introduction to College, Career and Personal Success (1) OR
FYE103 Exploration of College, Career and Personal Success (3) 1-3

Policy Focus
Select two (2) courses for a total of six (6) credits from the following:
PAD100 21st Century Public Policy and Service 3
POS120 International Relations 3
POS210 Political Ideologies 3

Law Focus
Select one (1) course for a total of three (3) credits from the following:
AJS101 Introduction to Criminal Justice 3
AJS109 Substantive Criminal Law 3
AJS201 Rules of Evidence 3
AJS210 Constitutional Law 3
AJS212 Juvenile Justice Procedures 3
AJS230 The Police Function 3
AJS260 Procedural Criminal Law 3
LAS109 Civil Procedures I 3
PAR101 Introduction to the Paralegal Profession 3
PAR102 Paralegal Research, Analysis, and Writing I 3
PAR112 Civil Litigation I 3
POS223 Civil Rights and Liberties 3

Note: LAS109 is available at Phoenix College as part of their Paralegal Studies program. Students accepted into this program may use this course

Restricted Electives

Restricted Electives Course # Course Title Credits
Credits: 3-6
Students should complete 3-6 credits from one or more of the categories below that best align with their academic and professional goals.

Constitutional Foundations:
AJS210 Constitutional Law 3
LAS101 Introduction to Law 3
PAR101 Introduction to the Paralegal Profession 3
PAR106 Legal Foundations for Paralegals 3

POS223 Civil Rights and Liberties 3

Criminal Law:

AJS101 Introduction to Criminal Justice 3
AJS109 Substantive Criminal Law 3
AJS201 Rules of Evidence 3
AJS212 Juvenile Justice Procedures 3
AJS260 Procedural Criminal Law 3

Civil Law:

LAS109 Civil Procedures I 3
LAS110 Civil Procedures II 3
LAS204 Contract Law 3
LAS211 Legal Research 3
LAS212 Tort Law 3
LAS214 Business Organizations 3
PAR112 Civil Litigation I 3
PAR114 Civil Litigation II 3

Note: LAS109 is available at Phoenix College as part of their Paralegal Studies program. Students accepted into this program may use this cou

Applications of Law:

AJS225 Criminology 3
AJS230 The Police Function 3
AJS240 The Correction Function 3
AJS/EMT/FSC258 Victimology and Crisis Management in Public Safety 3
SWU258 Victimology and Crisis, a Social Services Perspective 3
GBS205 Legal, Ethical, and Regulatory Issues in Business 3
PAR102 Paralegal Research, Analysis, and Writing I 3
PAR103 Paralegal Research, Analysis, and Writing II 3

General Education Requirements

Arizona General Education Curriculum (AGEC)

AGEC-A Credits: 35-44

A single course with an [L], [HU], [SB], [SG], or [SQ] designation may also be used to satisfy the Oral Communication, Critical Reading, and/

First-Year Composition [FYC] Credits: 6

ENG101 First-Year Composition (3) OR
ENG107 First-Year Composition for ESL (3) AND
ENG102 First-Year Composition (3) OR
ENG108 First-Year Composition for ESL (3) 6

Literacy and Critical Inquiry [L] Credits: 3

Any approved general education course in the Literacy and Critical Inquiry [L] area 3

Mathematics [MA] Credits: 3-6

MAT150 College Algebra/Functions (5) OR
MAT151 College Algebra/Functions (4) OR
MAT152 College Algebra/Functions (3) OR
MAT155 College Algebra/Functions with Review (5) OR
MAT156 College Algebra/Functions with Review (6) OR
Higher course in the Mathematical Applications [MA] area 3-6

Computer/Statistics/Quantitative Applications [CS] Credits: 3

Any approved general education course in the Computer/Statistics/Quantitative Applications [CS] area 3

BPC110 or CIS105 required for students taking certain LAS and PAR course options.

Humanities, Arts and Design [HU] Credits: 6

Any approved general education courses in the Humanities, Arts and Design [HU] area 6

Recommend AJS123.

Social-Behavioral Sciences [SB] Credits: 6

POS110 American National Government (3)

AND

Any approved general education course in the Social-Behavioral Sciences [SB] area. (3) 6

May be met by POS120 OR POS210 in the Required Courses area.

Natural Sciences [SG]/[SQ] Credits: 8

Any approved general education course in the Natural Sciences (Quantitative) [SQ] area (4) AND

Any approved general education course in the Natural Sciences (Quantitative) [SQ] area or the Natural Sciences (General) [SG] area (4) 8

Recommend FOR105 and FOR106.

Awareness Areas Credits: 0-6

These requirements may be shared with other AGEC requirements. See the AGEC matrix on aztransfer.com for course designations.

Cultural Diversity in the US [C] Credits: 0-3

Any approved general education course with the Cultural Diversity in the U.S. [C] designation 0-3

May be met by SWU258 or POS223 in Required Courses or Restricted Electives.

Historical/Global Awareness [H]/[G] Credits: 0-3

Any approved general education course with the Historical [H] or Global [G] awareness area designation 0-3

May be met by POS120 in Required Courses.

MCCCD Additional Requirements

MCCCD Additional Requirements Credits: 0-6

Some courses in this area have [SB] and [L] designations and may also be applied to the corresponding AGEC requirements. See the AGEC matrix

Oral Communication Credits: 0-3

COM100 Introduction to Human Communication (3) OR
COM110 Interpersonal Communication (3) OR
COM225 Public Speaking (3) OR

Recommend COM225.

Critical Reading Credits: 0-3

CRE101 College Critical Reading and Critical Thinking (3) OR

Equivalent as indicated by assessment (0) 0-3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm10?id=16454777>

Starting Term: 2025 Fall

Final Term: 9999

ASSOCIATE IN ARTS (AA) IN ASSOCIATE IN ARTS, EMPHASIS IN MATHEMATICS

Total Credits: 60-64

Major Code: 8125

Description

The Associate in Arts (AA), Emphasis in Mathematics provides the first two years of a four-year curriculum for students who intend to transfer to a four-year institution and earn a bachelor's degree in mathematics, actuarial science, statistics, computational mathematical science, or related fields. With a bachelor's degree, students may pursue a number of careers including actuary, statistical assistant, and business intelligence analyst. With a graduate degree, students may pursue employment as a mathematician or statistician, which may include teaching at institutions of higher education, or as an analyst in a number of fields including finance, data science, cryptography, and scientific computing.

Program Notes

Students must earn a grade of C or better in all courses within the program. This emphasis is intended to align with the degree requirements for the following transfer partners: ASU (College of Liberal Arts and Sciences), Mathematics, BSASU (College of Liberal Arts and Sciences), Mathematics (Statistics), BSASU (College of Liberal Arts and Sciences), Computational Mathematical Sciences, BSASU (College of Liberal Arts and Sciences), Mathematics, BAASU (College of Integrative Sciences and Arts), Applied Mathematics, BSASU (New College of Interdisciplinary Arts and Sciences), Applied Mathematics, BSNAU, Mathematics, BSU of A, Mathematics (Any Emphasis), BAU of A, Mathematics (Any Emphasis), BSRefer to the MCCCD University Transfer Partner website for more information: ASU, NAU, U of A.

Required Courses

Required Courses Course # Course Title Credits

Credits: 9-13

FYE101 Introduction to College, Career and Personal Success (1) OR

FYE103 Exploration of College, Career and Personal Success (3) 1-3

MAT230 Calculus with Analytic Geometry II (5) OR

MAT231 Calculus with Analytic Geometry II (4) 4-5

MAT240 Calculus with Analytic Geometry III (5) OR

MAT241 Calculus with Analytic Geometry III (4) 4-5

General Education Requirements

Arizona General Education Curriculum (AGEC)

AGEC-A Credits: 36-44

A single course with an [L], [HU], [SB], [SG], or [SQ] designation may also be used to satisfy the Oral Communication, Critical Reading, and/

First-Year Composition [FYC] Credits: 6

ENG101 First-Year Composition (3) OR

ENG107 First-Year Composition for ESL (3) AND

ENG102 First-Year Composition (3) OR

ENG108 First-Year Composition for ESL (3) 6

Literacy and Critical Inquiry [L] Credits: 3

Any approved general education course in the Literacy and Critical Inquiry [L] area. 3

Mathematics [MA] Credits: 4-5

MAT220 Calculus with Analytic Geometry I (5) OR

MAT221 Calculus with Analytic Geometry I (4) OR

Higher approved general education course in the Mathematical Applications [MA] area for which MAT22+ is a prerequisite. (4-5) 4-5

Computer/Statistics/Quantitative Applications [CS] Credits: 3-4

CSC110 Introduction to Computer Science (Java) (3) OR

CSC110AA Introduction to Computer Science (Java) (3) OR

CSC110AB Introduction to Computer Science (Java) (4) 3-4

Humanities, Arts and Design [HU] Credits: 6

Any approved general education courses in the Humanities, Arts and Design [HU] area. 6

Social-Behavioral Sciences [SB] Credits: 6

Any approved general education courses in the Social-Behavioral Sciences [SB] area. 6

Natural Sciences [SG]/[SQ] Credits: 8

Any approved general education course in the Natural Sciences (Quantitative) [SQ] area (4) AND

Any approved general education course in the Natural Sciences (Quantitative) [SQ] area or the Natural Sciences (General) [SG] area (4). 8

Please check with an Advisor as some transfer university requirements include specific natural science course selections

Awareness Areas Credits: 0-6

These requirements may be shared with other AGEC requirements. See the AGEC matrix on aztransfer.com for course designations.

Cultural Diversity in the US [C] Credits: 0-3
Any approved general education course with the Cultural Diversity in the U.S. [C] designation.

Historical/Global Awareness [H]/[G] Credits: 0-3
Any approved general education course with the Historical [H] or Global [G] awareness area designation.

MCCCD Additional Requirements
MCCCD Additional Requirements Credits: 0-6
Some courses in this area have [SB] and [L] designations and may also be applied to the corresponding AGEC requirements. See the AGEC matrix

Oral Communication Credits: 0-3
COM100 Introduction to Human Communication (3) OR
COM110 Interpersonal Communication (3) OR
COM225 Public Speaking (3) OR
COM230 Small Group Communication (3) 0-3

Critical Reading Credits: 0-3
CRE101 College Critical Reading and Critical Thinking (3) OR
Equivalent as indicated by assessment (0) 0-3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm10?id=16456300>

Starting Term: 2025 Fall
Final Term: 9999

ASSOCIATE IN ARTS (AA) IN ASSOCIATE IN ARTS, EMPHASIS IN NUTRITIONAL SCIENCE

Total Credits: 60-64
Major Code: 8115

Description

The Associate in Arts (AA), Emphasis in Nutritional Science provides the first two years of a four-year curriculum for students who wish to specialize in Nutrition. Students desiring a career in nutrition as a Registered Dietitian Nutritionist (RDN) should pursue the Dietetics transfer plan. Following the completion of an accredited Bachelor of Science program at a university and an accredited internship, students may pursue a career in nutrition related healthcare, wellness and prevention, sports nutrition, food and nutrition management, etc. Application for the accredited internship is a highly competitive process.

The Nutritional Sciences transfer plan provides foundational nutrition principles that can be applied to other careers in healthcare. Students may choose to major in Nutritional Sciences, earn a bachelor degree, and then seek graduate educational programs in Physician Assistant, Medical Doctor or Physical Therapist.

Program Notes

Students must earn a grade of C or better in all courses within the program. This emphasis is intended to align with the degree requirements for the following transfer partners: (list alphabetically) ASU, College of Health Solutions, Dietetics, BSASU, College of Health Solutions, Nutritional Science, BS. Refer to the MCCCD University Transfer Partner website for more information: ASU.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	18-24		
BI0156++		Introductory Biology for Allied Health (4) OR	
BI0181++		General Biology (Majors) I (4) OR	
One year of high school biology (0)			0-4
(needed as prerequisite for BI0201++, BI0202, BI0205)			
BI0202		Human Anatomy and Physiology II	4
BI0205		Microbiology	4
FON100		Introductory Nutrition	3
FON241		Principles of Human Nutrition	3
FON142AB		Science of Food	3
FYE101		Introduction to College, Career and Personal Success (1) OR	
FYE103		Exploration of College, Career and Personal Success (3)	1-3

General Education Requirements

Arizona General Education Curriculum (AGEC)
AGEC-A Credits: 35-40
A single course with an [L], [HU], [SB], [SG], or [SQ] designation may also be used to satisfy the Oral Communication, Critical Reading, and/

First-Year Composition [FYC] Credits: 6
ENG101 First-Year Composition (3) OR
ENG107 First-Year Composition for ESL (3) AND
ENG102 First-Year Composition (3) OR
ENG108 First-Year Composition for ESL (3) 6

Literacy and Critical Inquiry [L] Credits: 3
EXS290 Introduction to Evidence Based Practice (3) OR
FON225 Research in Complementary and Alternative Nutrition Therapies (3) 3

Mathematics [MA] Credits: 3-6
MAT150 College Algebra/Functions (5) OR
MAT151 College Algebra/Functions (4) OR
MAT152 College Algebra/Functions (3) OR
MAT155 College Algebra/Functions with Review (5) OR
MAT156 College Algebra/Functions with Review (6) OR

Higher approved general education course in the Mathematical Applications [MA] area (3-5) 3-6

Computer/Statistics/Quantitative Applications [CS] Credits: 3-4

MAT206 Elements of Statistics (3) OR

PSY230 Introduction to Statistics (3) OR

PSY230 Introduction to Statistics (3) AND

PSY231 Laboratory for Statistics (1) OR

PSY230WL Introduction to Statistics with Lab (4) 3-4

Humanities, Arts and Design [HU] Credits: 6

Any approved general education course in the Humanities, Arts and Design [HU] area with a Cultural Diversity in the US [C] designation. (3) AND

Any approved general education course in the Humanities, Arts and Design [HU] area. (3) 6

Social-Behavioral Sciences [SB] Credits: 6

COM100 Introduction to Human Communication (3) OR

COM110 Interpersonal Communication (3) OR

COM230 Small Group Communication (3)

AND

Any approved general education course in the Social-Behavioral Sciences [SB] area with the Global [G] or Historical [H] designation. (3) 6

Natural Sciences [SG]/[SQ] Credits: 8-9

BI0201++ Human Anatomy and Physiology I (4)

AND

CHM130 Fundamental Chemistry (3) AND

CHM130LL Fundamental Chemistry Laboratory (1)

OR

CHM130AA Fundamental Chemistry with Lab (4)

OR

CHM150 General Chemistry I (4) OR

CHM151 General Chemistry I (3) AND

CHM151LL General Chemistry I Laboratory (1)

OR

CHM150AA General Chemistry I with Lab (5)

OR

CHM151AA General Chemistry I with Lab (4) 8-9

MCCCD Additional Requirements

MCCCD Additional Requirements Credits: 0-3

Some courses in this area have [SB] and [L] designations and may also be applied to the corresponding AGECE requirements. See the AGECE matrix

Critical Reading Credits: 0-3

CRE101 College Critical Reading and Critical Thinking (3) OR

Equivalent as indicated by assessment (0) 0-3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm10?id=16456332>

Starting Term: 2025 Fall

Final Term: 9999

ASSOCIATE IN ARTS (AA) IN ASSOCIATE IN ARTS, EMPHASIS IN PHILOSOPHY

Total Credits: 60-64

Major Code: 8135

Description

The Associate in Arts (AA), Emphasis in Philosophy provides focused training in critical thinking, critical reading, writing, reasoning, communication, and civic dialogue, all while developing an understanding of diverse world views. Students gain proficiency in foundational skills for future studies and work in Law, Social Sciences, the Humanities, and Public Policy. This degree prepares students for their bachelor degree transfer pathway and equips them with analytical skills highly valued by employers.

Program Notes

Students must earn a grade of C or better in all courses within the program. This emphasis is intended to align with the degree requirements for the following transfer partners: ASU (College of Liberal Arts and Sciences), Philosophy (Morality, Politics and Law), BAASU (College of Liberal Arts and Sciences), Philosophy (no emphasis), BAASU (New College of Interdisciplinary Arts and Sciences), Philosophy, Religion and Society, BANAU, Philosophy (no emphasis), BANAU, Philosophy, Politics and Law, BAU of A, Philosophy (General Emphasis and Ethics Emphasis), BAR Refer to the MCCCD University Transfer Partner website for more information: ASU , NAU , U of A .

Required Courses

Required Courses Course # Course Title Credits

Credits: 4-6

FYE101 Introduction to College, Career and Personal Success (1) OR

FYE103 Exploration of College, Career and Personal Success (3) 1-3

PHI103 Introduction to Logic 3

General Education Requirements

Arizona General Education Curriculum (AGECE)

AGECE-A Credits: 29-41

A single course with an [L], [HU], [SB], [SG], or [SQ] designation may also be used to satisfy the Oral Communication, Critical Reading, and/

First-Year Composition [FYC] Credits: 6

ENG101 First-Year Composition (3) OR

ENG107 First-Year Composition for ESL (3) AND
ENG102 First-Year Composition (3) OR
ENG108 First-Year Composition for ESL (3) 6

Literacy and Critical Inquiry [L] Credits: 0-3
Any approved general education course in the Literacy and Critical Inquiry [L] area 3

May be met by PHI103 in Required Courses if not used to meet Humanities, Arts and Design [HU].

Mathematics [MA] Credits: 3-6
MAT140 College Mathematics (5) OR
MAT141 College Mathematics (4) OR
MAT142 College Mathematics (3) OR
MAT145 College Mathematics with Review (5) OR
MAT146 College Mathematics with Review (6) OR
Higher approved general education course in the Mathematical Applications [MA] area (3-6) 3-6

Computer/Statistics/Quantitative Applications [CS] Credits: 3
Any approved general education course in the Computer/Statistics/Quantitative Applications [CS] area. 3

Humanities, Arts and Design [HU] Credits: 3-6
PHI101 Introduction to Philosophy (3)
AND
Any approved general education courses in the Humanities, Arts and Design [HU] area (3) 6

May be met by PHI103 in Required Courses if not used to meet Literacy and Critical Inquiry [L].

Social-Behavioral Sciences [SB] Credits: 6
Any approved general education courses in the Social-Behavioral Sciences [SB] area. 6

Natural Sciences [SG]/[SQ] Credits: 8
Any approved general education course in the Natural Sciences (Quantitative) [SQ] area (4) AND
Any approved general education course in the Natural Sciences (Quantitative) [SQ] area or the Natural Sciences (General) [SG] area (4). 8

Awareness Areas Credits: 0-6
These requirements may be shared with other AGECE requirements. See the AGECE matrix on aztransfer.com for course designations.

Cultural Diversity in the US [C] Credits: 0-3
Any approved general education course with the Cultural Diversity in the U.S. [C] designation.

Historical/Global Awareness [H]/[G] Credits: 0-3
Any approved general education course with the Historical [H] or Global [G] awareness area designation.

MCCCD Additional Requirements
MCCCD Additional Requirements Credits: 0-6
Some courses in this area have [SB] and [L] designations and may also be applied to the corresponding AGECE requirements. See the AGECE matrix

Oral Communication Credits: 0-3
COM100 Introduction to Human Communication (3) OR
COM110 Interpersonal Communication (3) OR
COM225 Public Speaking (3) OR
COM230 Small Group Communication (3) 0-3

Critical Reading Credits: 0-3
CRE101 College Critical Reading and Critical Thinking (3) OR
Equivalent as indicated by assessment (0) 0-3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm10?id=16456312>

Starting Term: 2025 Fall
Final Term: 9999

ASSOCIATE IN ARTS (AA) IN ASSOCIATE IN ARTS, EMPHASIS IN POLITICAL SCIENCE

Total Credits: 60-64
Major Code: 8120

Description

The Associate in Arts (AA), Emphasis in Political Science degree provides the first two years of a four-year curriculum for students who wish to specialize in political science. With a bachelor's degree, students may pursue a career as social science research assistants, city and regional planning aides, public relations specialists and managers, reporters, and social and community service managers. With a graduate degree, students may pursue employment opportunities in several careers, including political scientists, political science professors, and lawyers.

Program Notes

Students must earn a grade of C or better in all courses within the program. This emphasis is intended to align with the degree requirements for the following transfer partners: ASU (College of Integrative Sciences and Arts), Political Science, BSASU (College of Liberal Arts and Sciences), Political Science, BAASU (College of Liberal Arts and Sciences), Political Science, BSASU (New College of Interdisciplinary Arts and Sciences), Political Science, BAASU (New College of Interdisciplinary Arts and Sciences), Political Science, BSGCU, Government (Legal Studies Emphasis), BAGCU, Government (State and Local Public Policy Emphasis), BANAU, Political Science, BANAU, Political Science, BSU of A, Political Science (any emphasis), BAREfer to the MCCCD University Transfer Partner website for more information: ASU, GCU, NAU, U of A.

Required Courses

Required Courses	Course #	Course Title	Credits
			4-6
FYE101		Introduction to College, Career and Personal Success (1) OR	1169

FYE103 Exploration of College, Career and Personal Success (3) 1-3

POS110 American National Government 3

General Education Requirements

Arizona General Education Curriculum (AGEC)

AGEC-A Credits: 35-41

A single course with an [L], [HU], [SB], [SG], or [SQ] designation may also be used to satisfy the Oral Communication, Critical Reading, and/

First-Year Composition [FYC] Credits: 6

ENG101 First-Year Composition (3) OR

ENG107 First-Year Composition for ESL (3) AND

ENG102 First-Year Composition (3) OR

ENG108 First-Year Composition for ESL (3) 6

Literacy and Critical Inquiry [L] Credits: 3

COM225 Public Speaking 3

Mathematics [MA] Credits: 3-6

MAT140 College Mathematics (5) OR

MAT141 College Mathematics (4) OR

MAT142 College Mathematics (3) OR

MAT145 College Mathematics with Review (5) OR

MAT146 College Mathematics with Review (6) OR

Higher approved general education course in the Mathematical Applications [MA] area (3-6) 3-6

Computer/Statistics/Quantitative Applications [CS] Credits: 3

Any approved general education courses in the Computer/Statistics/Quantitative Applications [CS] area. 3

Humanities, Arts and Design [HU] Credits: 6

Any approved general education courses in the Humanities, Arts and Design [HU] area. 6

Social-Behavioral Sciences [SB] Credits: 6

POS120 International Relations (3) OR

POS140 Comparative Government (3)

AND

POS210 Political Ideologies (3) 6

Natural Sciences [SG]/[SQ] Credits: 8

Any approved general education course in the Natural Sciences (Quantitative) [SQ] area (4) AND

Any approved general education course in the Natural Sciences (Quantitative) [SQ] area or the Natural Sciences (General) [SG] area (4). 8

Awareness Areas Credits: 0-3

These requirements may be shared with other AGEC requirements. See the AGEC matrix on aztransfer.com for course designations.

Cultural Diversity in the US [C] Credits: 0-3

Any approved general education course in the Cultural Diversity in the U.S. [C] area.

MCCCD Additional Requirements

MCCCD Additional Requirements Credits: 0-3

Some courses in this area have [SB] and [L] designations and may also be applied to the corresponding AGEC requirements. See the AGEC matrix

Critical Reading Credits: 0-3

CRE101 College Critical Reading and Critical Thinking (3) OR

Equivalent as indicated by assessment (0) 0-3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm10?id=16456252>

Starting Term: 2025 Fall

Final Term: 9999

ASSOCIATE IN ARTS (AA) IN ASSOCIATE IN ARTS, EMPHASIS IN PSYCHOLOGY

Total Credits: 60-64

Major Code: 8122

Description

The Associate in Arts (AA), Emphasis in Psychology provides the first two years of a four-year curriculum for students who wish to specialize in psychological sciences or are preparing for graduate programs in psychology or related fields. With a bachelor's degree, students may pursue numerous careers such as mid and top-level managers, market research analysts/specialists, human resources specialists/managers, social and human service assistants, psychiatric technicians, survey researchers, and probation officers/correctional treatment specialists. Most careers in psychology require graduate work. With a graduate degree, students may pursue a number of careers, including but not limited to: psychologists (industrial-organizational, clinical, counseling, and school), research scientists, psychiatrists, neuropsychologists, statisticians, teachers, and human factors engineers.

Program Notes

Students must earn a grade of C or better in all courses within the program. This emphasis is intended to align with the degree requirements for the following transfer partners: ASU (College of Integrative Sciences and Arts), Psychology, BAASU (College of Integrative Sciences and Arts), Psychology, BSASU (College of Liberal Arts and Sciences), Psychology, BAASU (College of Liberal Arts and Sciences), Psychology, BSASU (College of Liberal Arts and Sciences), Psychology (Psychological Science), BSASU (New College of Interdisciplinary Arts and Sciences), Psychology, BAASU (New College of Interdisciplinary Arts and Sciences), Psychology, BSASU (New College of Interdisciplinary Arts and Sciences), Psychology (Forensic Psychology), BAASU (New College of Interdisciplinary Arts and Sciences), Psychology (Forensic Psychology), BSASU, Psychological Sciences, BSU of A, Psychological Sciences, BSU of A, Psychology, BAR. Refer to the MCCCD University Transfer Partner website for more information: ASU, NAU, U of A.

Required Courses

Required Courses Course # Course Title Credits
Credits: 1-3
FYE101 Introduction to College, Career and Personal Success (1) OR
FYE103 Exploration of College, Career and Personal Success (3) 1-3

General Education Requirements

Arizona General Education Curriculum (AGEC)

AGEC-A Credits: 35-48

A single course with an [L], [HU], [SB], [SG], or [SQ] designation may also be used to satisfy the Oral Communication, Critical Reading, and/

First-Year Composition [FYC] Credits: 6
ENG101 First-Year Composition (3) OR
ENG107 First-Year Composition for ESL (3) AND
ENG102 First-Year Composition (3) OR
ENG108 First-Year Composition for ESL (3) 6

Literacy and Critical Inquiry [L] Credits: 3
Any approved general education course in the Literacy and Critical Inquiry [L] area. 3

Mathematics [MA] Credits: 3-9
Before enrolling into a math course, speak to your Academic Advisor to ensure you are selecting the correct math for your transfer goals as M

MAT140 College Mathematics (5) OR
MAT141 College Mathematics (4) OR
MAT142 College Mathematics (3) OR
MAT145 College Mathematics with Review (5) OR
MAT146 College Mathematics with Review (6)
OR
MAT150 College Algebra/Functions (5) OR
MAT151 College Algebra/Functions (4) OR
MAT152 College Algebra/Functions (3) OR
MAT155 College Algebra/Functions with Review (5) OR
MAT156 College Algebra/Functions with Review (6)
OR
MAT150 College Algebra/Functions (5) OR
MAT151 College Algebra/Functions (4) OR
MAT152 College Algebra/Functions (3) OR
MAT155 College Algebra/Functions with Review (5) OR
MAT156 College Algebra/Functions with Review (6) AND
MAT182 Plane Trigonometry (3)
OR
MAT187 Precalculus (5) OR
MAT188 Precalculus (4)
OR
MAT212 Brief Calculus (3) OR
MAT213 Brief Calculus (4)
OR

Higher approved general education course in the Mathematical Applications [MA] area (3-5) 3-9

MAT14+ OR MAT15+ recommended for students intending to transfer to NAU, Psychological Sciences, BS or U of A, Psychology, BA.

(MAT15+ and MAT182) OR MAT187 OR MAT188 recommended for students intending to transfer to ASU.

MAT212 OR MAT213 recommended for students intending to transfer to U of A, Psychological Science, BS.

Computer/Statistics/Quantitative Applications [CS] Credits: 3-4
PSY230 Introduction to Statistics (3) OR
PSY230 Introduction to Statistics (3) AND
PSY231 Laboratory for Statistics (1) OR
PSY230WL Introduction to Statistics with Lab (4) 3-4

Humanities, Arts and Design [HU] Credits: 6
Any approved general education courses in the Humanities, Arts and Design [HU] area. 6

Social-Behavioral Sciences [SB] Credits: 6
PSY101 Introduction to Psychology (3)
AND
Any approved general education courses in the Social-Behavioral Sciences [SB] area. (3) 6

Natural Sciences [SG]/[SQ] Credits: 8
PSY290AB Research Methods (4) OR
PSY290AC Research Methods (4)
AND
Any approved general education course in the Natural Sciences (Quantitative) [SQ] area. (4) 8

Awareness Areas Credits: 0-6
These requirements may be shared with other AGEC requirements. See the AGEC matrix on aztransfer.com for course designations.

Cultural Diversity in the US [C] Credits: 0-3
Any approved general education course in the Cultural Diversity in the US [C] area.

Historical/Global Awareness [H]/[G] Credits: 0-3
Any approved general education course in the Historical [H] or Global [G] area.

MCCCD Additional Requirements
MCCCD Additional Requirements Credits: 0-6
Some courses in this area have [SB] and [L] designations and may also be applied to the corresponding AGEC requirements. See the AGEC matrix

Oral Communication Credits: 0-3
COM100 Introduction to Human Communication (3) OR
COM110 Interpersonal Communication (3) OR
COM225 Public Speaking (3) OR
COM230 Small Group Communication (3) 0-3

Critical Reading Credits: 0-3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm10?id=16456334>

Starting Term: 2025 Fall
Final Term: 9999

ASSOCIATE IN ARTS (AA) IN ASSOCIATE IN ARTS, EMPHASIS IN RELIGIOUS STUDIES

Total Credits: 60-64
Major Code: 8138

Description

The Associate in Arts (AA), Emphasis in Religious Studies contains the first two years of a four-year curriculum for students who wish to specialize in religious studies. Students will learn about theology and world religions, as well as the historical significance and sociocultural contexts of people's faiths. With a bachelor's degree, students may pursue positions including human and social services assistant, director of religious or educational programs, museum technician, funeral attendant, tour guide, or clergy. With a graduate degree, students may pursue positions such as reporter, correspondent, social and community service manager, teacher, or college professors in areas such as religious studies or cultural studies.

Program Notes

Students must earn a grade of C or better in all courses within the program. This emphasis is intended to align with the degree requirements for the following transfer partners: ASU (College of Liberal Arts and Sciences), Religious Studies (Religion, Culture, and Public Life), BAASU (College of Liberal Arts and Sciences), Religious Studies (Religion, Politics, and Global Affairs), BANAU, Comparative Cultural Studies, BAU of A, Religious Studies, BARefer to the MCCCD University Transfer Partner website for more information: ASU, NAU, U of A.

Required Courses

Required Courses Course # Course Title Credits
Credits: 4-6

FYE101 Introduction to College, Career and Personal Success (1) OR
FYE103 Exploration of College, Career and Personal Success (3) 1-3

AIS213/REL203 American Indian Religions (3) OR
HUM245 Introduction to Holocaust Studies (3) OR
PHI/REL244 Philosophy of Religion (3) OR
REL151 Religion in the Hispanic World (3) OR
REL205 Religion and the Modern World (3) OR
REL206 Religion in America (3) OR
REL207 Ritual, Symbol, and Myth (3) OR
REL270 Introduction to Christianity (3) 3

Consult with an academic, faculty, or program advisor to select the option that aligns with your intended transfer program requirements. Refer

General Education Requirements

Arizona General Education Curriculum (AGEC)

AGEC-A Credits: 29-38

A single course with an [L], [HU], [SB], [SG], or [SQ] designation may also be used to satisfy the Oral Communication, Critical Reading, and/

First-Year Composition [FYC] Credits: 6

ENG101 First-Year Composition (3) OR
ENG107 First-Year Composition for ESL (3) AND
ENG102 First-Year Composition (3) OR
ENG108 First-Year Composition for ESL (3) 6

Literacy and Critical Inquiry [L] Credits: 0-3

Any approved general education course in the Literacy and Critical Inquiry [L] area 3

May be met by AIS213/REL203, REL205, or REL207 in the Required Courses area.

Mathematics [MA] Credits: 3-6

MAT140 College Mathematics (5) OR
MAT141 College Mathematics (4) OR
MAT142 College Mathematics (3) OR
MAT145 College Mathematics with Review (5) OR
MAT146 College Mathematics with Review (6) OR
Higher approved general education course in the Mathematical Applications [MA] area (3-6) 3-6

Computer/Statistics/Quantitative Applications [CS] Credits: 3

Any approved general education course in the Computer/Statistics/Quantitative Applications [CS] area 3

Humanities, Arts and Design [HU] Credits: 3-6

REL100 World Religions (3)
AND
Any approved general education courses in the Humanities, Arts and Design [HU] area. (3) 6

May be met by AIS213/REL203, HUM245, PHI/REL244, REL151, REL205, REL206, REL207, or REL270 in the Required Courses area.

Social-Behavioral Sciences [SB] Credits: 6

Any approved general education course in the Social-Behavioral Sciences [SB] area 6

Natural Sciences [SG]/[SQ] Credits: 8

Any approved general education course in the Natural Sciences (Quantitative) [SQ] area (4) AND
Any approved general education course in the Natural Sciences (Quantitative) [SQ] area or the Natural Sciences (General) [SG] area (4) 8

These requirements may be shared with other AGEC requirements. See the AGEC matrix on aztransfer.com for course designations.

Any approved general education course with the Cultural Diversity in the U.S. [C] designation 0-3

MCCCD Additional Requirements

Some courses in this area have [SB] and [L] designations and may also be applied to the corresponding AGEC requirements. See the AGEC matrix

COM100 Introduction to Human Communication (3) OR

COM225 Public Speaking (3) OR

COM230 Small Group Communication (3) 0-3

CRE101 College Critical Reading and Critical Thinking (3) OR

Equivalent as indicated by assessment (0) 0-3

Starting Term: 2025 Fall

Final Term: 9999

Total Credits: 60-64

Major Code: 8140

The Associate in Arts (AA), Emphasis in Secondary Education provides the first two years of a four-year curriculum for students who wish to transfer to a four-year institution and earn a bachelor's degree in secondary education leading to teacher certification for grades 6-12 in Biology, Earth and Space Science, English, History/Social Studies, Mathematics, Physical Education, or Spanish. Education and discipline specific courses provide future teachers with the knowledge and skills related to educational philosophies, policies, attitudes, behaviors, and instruction in order to effectively perform the duties associated with the position of a classroom teacher. Students will participate in classroom field experiences to connect theory with practice.

Students must earn a grade of C or better in all courses within the program. Special GPA requirements may apply to concentration area courses within a specific emphasis as noted: English ASU Emphases - 2.5 GPA in English concentration area courses beyond First Year Composition. State certification requirements include demonstration of proficiency in the constitutions of the United States and Arizona. Proficiency can be demonstrated via the Arizona Educator Proficiency Assessments (AEPa) Constitutions of the United States and Arizona test or by taking appropriate coursework: GCU/POS113, HIS103 and POS221, or POS220. Identity Verified Prints (IVP) Fingerprint Clearance Card is required for participation in field experiences and for admission to a university teacher education program. Applicants must present an IVP Fingerprint Clearance Card to be copied by the advisor or designee. Please contact your advisor for information about obtaining the IVP Fingerprint Clearance Card. This emphasis is intended to align with the degree requirements for the following transfer partners: ASU (College of Integrative Sciences and Arts), Applied Biological Sciences (Secondary Education in Biology), BSASU (College of Liberal Arts and Sciences), English (Secondary Education), BAASU (College of Liberal Arts and Sciences), History (Secondary Education), BAASU (Mary Lou Fulton Teachers College), Physical Education, BA in Education ASU (Mary Lou Fulton Teachers College), Secondary Education (Biological Sciences), BA in Education ASU (Mary Lou Fulton Teachers College), Secondary Education (English), BA in Education ASU (Mary Lou Fulton Teachers College), Secondary Education (History), BA in Education ASU (Mary Lou Fulton Teachers College), Secondary Education (Mathematics), BA in Education ASU (New College of Interdisciplinary Arts and Sciences), English (Secondary Education), BAASU (New College of Interdisciplinary Arts and Sciences), History (Secondary Education), BAASU (New College of Interdisciplinary Arts and Sciences), History (Secondary Education), BA Northern Arizona University, Secondary Education - Biology, BS in Education NAU, Secondary Education - Earth Science, BS in Education NAU, Secondary Education - English, BS in Education NAU, Secondary Education - History and Social Studies, BS in Education NAU, Secondary Education - Mathematics, BS in Education. Refer to the MCCC D University Transfer Partner website for more information: ASU, NAU.

Required Courses	Course #	Course Title	Credits

Credits: 4-7

FYE101 Introduction to College, Career and Personal Success (1) OR

FYE103	Exploration of College, Career and Personal Success (3) 1-3

GCU/POS113 United States and Arizona Social Studies (3) OR

HIS103 United States History to 1865 (3) AND

P05221 Arizona Constitution (1) OR

P05220 U.S. and Arizona Constitution (3) 3-4

Students should consult with an academic, faculty, or program advisor to select the option that aligns with their intended university transfer.

Restricted Electives	Course #	Course Title	Credits

Credits: 3-29

In consultation with an academic, faculty, or program advisor, select the secondary education discipline below that best aligns with your academic interests.

Biology

BI0181++	General Biology (Majors) I	4

BI0181+	General Biology (Majors) I	4
BI0182++	General Biology (Majors) II	4

CHM150 General Chemistry I (4) AND

CHM151LL General Chemistry I Laboratory (1) OR

CHM151EL General Chemistry I Laboratory (1) OR
CHM150AA General Chemistry I with Lab (5) OR

CHM151 General Chemistry I (3) AND
 CHM151LL General Chemistry I Laboratory (1) OR
 CHM151AA General Chemistry I with Lab (4) 4-5

CHM152 General Chemistry II (3) AND
 CHM152LL General Chemistry II Laboratory (1) OR
 CHM152AA General Chemistry II with Lab (4) 4

BI0181++ and BI0182++ are intended to meet the AGEC Natural Sciences [SG]/[SQ] area.

Earth Science
 BI0181++ General Biology (Majors) I 4
 BI0182++ General Biology (Majors) II 4

CHM130 Fundamental Chemistry (3) AND
 CHM130LL Fundamental Chemistry Laboratory (1)
 OR
 CHM130AA Fundamental Chemistry with Lab (4)
 OR
 CHM150 General Chemistry I (4) AND
 CHM151LL General Chemistry I Laboratory (1)
 OR
 CHM150AA General Chemistry I with Lab (5)
 OR
 CHM151 General Chemistry I (3) AND
 CHM151LL General Chemistry I Laboratory (1)
 OR
 CHM151AA General Chemistry I with Lab (4) 4-5

GLG101 Physical Geology: Dynamic Earth Lecture (3) AND
 GLG103 Physical Geology: Dynamic Earth Lab (1) OR
 GLG101IN Physical Geology: Dynamic Earth (4) 4

PHY111 General Physics I 4

BI0181++ and BI0182++ are intended to meet the AGEC Natural Sciences [SG]/[SQ] area.

English
 EDU221 Introduction to Education (3) OR
 EDU222 Introduction to the Exceptional Learner (3) 3

ENG200 Reading and Writing about Literature (3) OR
 ENG213 Introduction to the Study of Language (3) OR
 SLC201 Introduction to Linguistics (3) OR
 SLC202 Introduction to Literary and Cultural Theory (3) 3

Students should consult with an academic, faculty, or program advisor to select the option that aligns with their intended university transfere

Select two (2) courses from the following list for a total of six (6) credits:

ENH190 Introduction to US Ethnic Literature 3
 ENH221 Survey of English Literature Before 1800 3
 ENH222 Survey of English Literature After 1800 3
 ENH241 American Literature Before 1860 3
 ENH242 American Literature After 1860 3

Students should consult with an academic, faculty, or program advisor to select the option that aligns with their intended university transfere

History/Social Studies
 EDU221 Introduction to Education (3) OR
 EDU222 Introduction to the Exceptional Learner (3) 3

HIS104 United States History 1865 to Present 3
 HIS110 World History to 1500 3
 HIS111 World History 1500 to the Present 3

Math
 CSC100 Introduction to Computer Science (C++) (3) OR
 CSC100AA Introduction to Computer Science (C++) (4) OR
 CSC110 Introduction to Computer Science (Java) (3) OR
 CSC110AA Introduction to Computer Science (Java) (3) OR
 CSC110AB Introduction to Computer Science (Java) (4) OR
 CSC180 Computer Literacy (3) OR
 CSC180AA Computer Literacy (3) OR
 CSC180AB Computer Literacy (4) OR
 EDU/EED115 Digital Literacy for Teaching and Learning in Education (3) 3-4

Students should consult with an academic, faculty, or program advisor to select the option that aligns with their intended university transfere

EDU221 Introduction to Education 3

MAT227 Discrete Mathematical Structures 3

MAT220 Calculus with Analytic Geometry I (5) OR
 MAT221 Calculus with Analytic Geometry I (4) 4-5

MAT230 Calculus with Analytic Geometry II (5) OR
 MAT231 Calculus with Analytic Geometry II (4) 4-5

MAT240 Calculus with Analytic Geometry III (5) OR
 MAT241 Calculus with Analytic Geometry III (4) 4-5

MAT276 Modern Differential Equations (4) OR
 MAT277 Modern Differential Equations (3) 3-4

CSC100++, CSC110++, CSC180++, or EDU/EED115 is intended to meet the AGEC Computer/Statistics/Quantitative Applications [CS] area.

EDU221 is intended to meet the AGEC Social-Behavioral Sciences [SB] area.

MAT220 or MAT221 is intended to meet the AGEC Mathematics [MA] area.

Physical Education
 BI0201 Human Anatomy and Physiology I (4) OR
 BI0201XT Human Anatomy and Physiology I (4) 4

BI0202 Human Anatomy and Physiology II 4

CFS/ECH176 Child Development 3

EDU221 Introduction to Education 3
EDU222 Introduction to the Exceptional Learner 3
EDU225 Professionalism and Ethics in Education 1
EDU230 Cultural Diversity in Education 3

BI0201 or BI0201XT intended to meet the AGEC Natural Sciences [SG] area.
EDU221 is intended to meet the AGEC Social-Behavioral Sciences [SB] area.
EDU222 is intended to meet the AGEC Social-Behavioral Sciences [SB] and Cultural Diversity in the US [C] areas.
EDU230 is intended to meet the AGEC Humanities, Arts and Design [HU] area.

Spanish
EDU221 Introduction to Education 3

Complete Spanish (SPA) at the intermediate level (202 or equivalent) OR demonstrate proficiency through this level as indicated by assessment

EDU221 is intended to meet the AGEC Social-Behavioral Sciences [SB] area.

General Education Requirements

Arizona General Education Curriculum (AGEC)

AGEC-A Credits: 9-44

A single course with an [L], [HU], [SB], [SG], or [SQ] designation may also be used to satisfy the Oral Communication, Critical Reading, and/

First-Year Composition [FYC] Credits: 6
ENG101 First-Year Composition (3) OR
ENG107 First-Year Composition for ESL (3) AND
ENG102 First-Year Composition (3) OR
ENG108 First-Year Composition for ESL (3) 6

Literacy and Critical Inquiry [L] Credits: 0-3
Any approved general education course in the Literacy and Critical Inquiry [L] area. 3

May be met by courses taken in the Restricted Electives area.

Mathematics [MA] Credits: 3-6
The minimum math requirement for graduation defaults to the base-level math of MAT140, MAT141, MAT142, MAT145, or MAT146 unless your selected

English, History/Social Studies, Physical Education, or Spanish
MAT140 College Mathematics (5) OR
MAT141 College Mathematics (4) OR
MAT142 College Mathematics (3) OR
MAT145 College Mathematics with Review (5) OR
MAT146 College Mathematics with Review (6) OR
Higher approved general education course in the Mathematical Applications [MA] area (3-6) 3-6

OR
Biology
MAT150 College Algebra/Functions (5) OR
MAT151 College Algebra/Functions (4) OR
MAT152 College Algebra/Functions (3) OR
MAT155 College Algebra/Functions with Review (5) OR
MAT156 College Algebra/Functions with Review (6)
AND
MAT182 Plane Trigonometry (3)

OR
MAT187 Precalculus (5) OR
MAT188 Precalculus (4) OR
Higher approved general education course in the Mathematical Applications [MA] area for which MAT187 or MAT188 is a prerequisite. (4-5) 4-9

OR
MAT212 Brief Calculus (3) OR
MAT213 Brief Calculus (4) 3-4

OR
MAT220 Calculus with Analytic Geometry I (5) OR
MAT221 Calculus with Analytic Geometry I (4) OR
Higher approved general education course in the Mathematical Applications [MA] area for which MAT22+ is a prerequisite. (4-5) 4-5

OR
Earth Science
MAT150 College Algebra/Functions (5) OR
MAT151 College Algebra/Functions (4) OR
MAT152 College Algebra/Functions (3) OR
MAT155 College Algebra/Functions with Review (5) OR
MAT156 College Algebra/Functions with Review (6)
AND
MAT182 Plane Trigonometry (3)

OR
MAT187 Precalculus (5) OR
MAT188 Precalculus (4) OR
Higher approved general education course in the Mathematical Applications [MA] area for which MAT187 or MAT188 is a prerequisite. (4-5) 4-9

OR
Math
MAT220 Calculus with Analytic Geometry I (5) OR
MAT221 Calculus with Analytic Geometry I (4) OR
Higher approved general education course in the Mathematical Applications [MA] area for which MAT22+ is a prerequisite. (4-5) 4-5

Computer/Statistics/Quantitative Applications [CS] Credits: 0-3 1175

Any approved general education course in the Computer/Statistics/Quantitative Applications [CS] area. 3

May be met by courses taken in the Restricted Electives area.

Humanities, Arts and Design [HU] Credits: 0-6

Any approved general education courses in the Humanities, Arts and Design [HU] area. 6

May be met by specific Transfer Plan option selections.

Social-Behavioral Sciences [SB] Credits: 0-6

Any approved general education courses in the Social-Behavioral Sciences [SB] area. 6

May be met by courses taken in the Restricted Electives area.

Natural Sciences [SG]/[SQ] Credits: 0-8

Any approved general education course in the Natural Sciences (Quantitative) [SQ] area (4) AND

Any approved general education course in the Natural Sciences (Quantitative) [SQ] area or the Natural Sciences (General) [SG] area (4). 8

May be met by courses taken in the Restricted Electives area.

Awareness Areas Credits: 0-6

These requirements may be shared with other AGECE requirements. See the AGECE matrix on aztransfer.com for course designations.

Cultural Diversity in the US [C] Credits: 0-3

Any approved general education course with the Cultural Diversity in the U.S. [C] designation. 0-3

Historical/Global Awareness [H]/[G] Credits: 0-3

Any approved general education course with the Historical [H] or Global [G] awareness area designation. 0-3

MCCCD Additional Requirements

MCCCD Additional Requirements Credits: 0-6

Some courses in this area have [SB] and [L] designations and may also be applied to the corresponding AGECE requirements. See the AGECE matrix

Oral Communication Credits: 0-3

COM100 Introduction to Human Communication (3) OR

COM110 Interpersonal Communication (3) OR

COM225 Public Speaking (3) OR

COM230 Small Group Communication (3) 0-3

Critical Reading Credits: 0-3

CRE101 College Critical Reading and Critical Thinking (3) OR

Equivalent as indicated by assessment (0) 0-3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm10?id=16455941>

Starting Term: 2025 Fall

Final Term: 9999

ASSOCIATE IN ARTS (AA) IN ASSOCIATE IN ARTS, EMPHASIS IN SOCIAL WORK

Total Credits: 60-64

Major Code: 8117

Description

The Associate in Arts (AA), Emphasis in Social Work provides the first two years of a four year curriculum for students intending to transfer into a baccalaureate program to earn a Bachelor of Social Work. With a Bachelor of Social Work, students can receive their Master Social Work in one year (advanced standing) which is the required minimum education for the following career fields: Clinical/Psychotherapy and Policy Administration and Community Practice.

Program Notes

Students must earn a grade of C or better in all courses within the program. This program is intended to align with the Social Work, BSW program requirements at Arizona State University. Consult with a faculty advisor, program director, and/or academic advisor for additional information. Refer to the MCCCD University Transfer Partner website for more information: ASU .

Required Courses

Required Courses Course # Course Title Credits

Credits: 13-15

ECN211 Macroeconomic Principles (3) OR

SWU181 Economics: A Social Issues Perspective (3) 3

FYE101 Introduction to College, Career and Personal Success (1) OR

FYE103 Exploration of College, Career and Personal Success (3) 1-3

SWU171 Introduction to Social Work 3

SWU291 Social Service Delivery Systems 3

SWU295 Foundations of Social Work Practice 3

Restricted Electives

Restricted Electives Course # Course Title Credits

Credits: 6

Complete two (2) classes from at least two (2) of the three (3) options below:

Option One (1):

HRM110 Introduction to Hospitality and Tourism Management (3) OR

HRM145 Events Management (3) OR

HRM150 Hospitality and Tourism Information Systems I (3) OR

HRM160 Tourism Principles and Practices (3) OR
 HRM170 Hospitality in Healthcare and Life Care Management (3) OR
 HRM260 Hospitality Human Resource Management (3) OR
 HRM265 Financial Management for Hospitality and Tourism (3) OR
 REC120 Leisure and the Quality of Life (3) OR
 REC210 Leisure Delivery Systems (3) OR
 REC230 Programming of Recreation Services (3) OR
 REC250 Recreation Leadership (3) OR
 RPM150AB Outdoor Adventure Skills (3) OR
 RPM240 Wilderness First Responder (3) OR
 SUS100 Introduction to Sustainability (3) 3

Option Two (2):

AJS101 Introduction to Criminal Justice (3) OR
 AJS109 Substantive Criminal Law (3) OR
 AJS113 Criminal Justice Crime Control Policies and Practices (3) OR
 AJS123 Ethics and the Administration of Justice (3) OR
 AJS124 Correctional Institutions (3) OR
 AJS131 Police Management Techniques I (3) OR
 AJS162 Domestic Violence (3) OR
 AJS170 Fire and Arson Investigation for Law Enforcement (3) OR
 AJS192 Serial Killers and Mass Murderers (3) OR
 AJS195 International and Domestic Terrorism (3) OR
 AJS200 Current Issues in Criminal Justice (3) OR
 AJS201 Rules of Evidence (3) OR
 AJS205 Effective Communication and Report Writing in Criminal Justice (3) OR
 AJS211 Police Planning (3) OR
 AJS212 Juvenile Justice Procedures (3) OR
 AJS219 Crime Scene Technology: Physical Evidence (3) OR
 AJS220 Transnational Organized Crime (3) OR
 AJS240 The Correction Function (3) OR
 AJS/EMT/FSC258 Victimology and Crisis Management in Public Safety (3) OR
 AJS260 Procedural Criminal Law (3) OR
 AJS270 Community Relations (3) OR
 AJS275 Criminal Investigation I (3) OR
 SWU258 Victimology and Crisis, a Social Services Perspective (3) 3

Option Three (3):

CIS143 Introduction to Critical Infrastructure Protection (3) OR
 PAD100 21st Century Public Policy and Service (3) OR
 PAD200 Public Affairs Economics (3) 3

General Education Requirements

Arizona General Education Curriculum (AGEC)

AGEC-A Credits: 35-38

A single course with an [L], [HU], [SB], [SG], or [SQ] designation may also be used to satisfy the Oral Communication, Critical Reading, and/

First-Year Composition [FYC] Credits: 6

ENG101 First-Year Composition (3) OR
 ENG107 First-Year Composition for ESL (3) AND
 ENG102 First-Year Composition (3) OR
 ENG108 First-Year Composition for ESL (3) 6

Literacy and Critical Inquiry [L] Credits: 3

Any approved general education course in the Literacy and Critical Inquiry [L] area. 3

Mathematics [MA] Credits: 3-6

MAT140 College Mathematics (5) OR
 MAT141 College Mathematics (4) OR
 MAT142 College Mathematics (3) OR
 MAT145 College Mathematics with Review (5) OR
 MAT146 College Mathematics with Review (6) OR
 Higher approved general education course in the Mathematical Applications [MA] area (3-6) 3-6

Computer/Statistics/Quantitative Applications [CS] Credits: 3

Any approved general education course in the Computer, Statistics, and Quantitative Applications [CS] area. 3

Recommend SWU225 Statistics for Social Research/Justice and Government 3

Humanities, Arts and Design [HU] Credits: 6

PHI101 Introduction to Philosophy (3) OR
 PHI105 Introduction to Ethics (3) OR
 SWU183 Introductory Ethics: A Social Service Perspective (3) 3
 AND

Any approved general education course in the Humanities, Arts, and Design [HU] area. 3

Social-Behavioral Sciences [SB] Credits: 6

POS110 American National Government (3) OR
 SWU182 A Social Services Perspective of Government (3) 3

PSY101 Introduction to Psychology (3) OR

SOC101 Introduction to Sociology (3) 3

Natural Sciences [SG]/[SQ] Credits: 8

Any approved general education course in the Natural Sciences (Quantitative) [SQ] area (4) AND

Any approved general education course in the Natural Sciences (Quantitative) [SQ] area or the Natural Sciences (General) [SG] area (4). 8

MCCCD Additional Requirements

MCCCD Additional Requirements Credits: 0-6

Some courses in this area have [SB] and [L] designations and may also be applied to the corresponding AGEC requirements. See the AGEC matrix

Oral Communication Credits: 0-3

COM100 Introduction to Human Communication (3) OR
 COM110 Interpersonal Communication (3) OR
 COM225 Public Speaking (3) OR
 COM230 Small Group Communication (3) 0-3

Critical Reading Credits: 0-3
CRE101 College Critical Reading and Critical Thinking (3) OR
Equivalent as indicated by assessment (0) 0-3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm10?id=16456313>

Starting Term: 2025 Fall
Final Term: 9999

ASSOCIATE IN ARTS (AA) IN ASSOCIATE IN ARTS, EMPHASIS IN SOCIOLOGY

Total Credits: 60-64
Major Code: 8119

Description

The Associate in Arts (AA), Emphasis in Sociology provides students with the first two years of a four-year curriculum for students who intend to earn a bachelor's degree in Sociology and/or to pursue a graduate degree in Sociology or a related field. With a bachelor's degree, students may pursue a career in several areas including social, human, and community services, public relations, marketing, sustainability, human resources, education, community health, public relations, and social science research. With a graduate degree, students can pursue employment in several careers including sociologists, social scientists, sociology professors, lawyers, and statisticians.

Program Notes

Students must earn a grade of C or better in all courses within the program. This emphasis is intended to align with the degree requirements for the following transfer partners: ASU (College of Liberal Arts and Sciences), Sociology, BSASU (New College of Interdisciplinary Arts and Sciences), Sociology, BSASU (New College of Interdisciplinary Arts and Sciences), Sociology, BANAU, Sociology, BSRefer to the MCCC University Transfer Partner website for more information: ASU, NAU.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	4-6		
FYE101		Introduction to College, Career and Personal Success (1) OR	
FYE103		Exploration of College, Career and Personal Success (3) 1-3	
SOC101		Introduction to Sociology	3

General Education Requirements

Arizona General Education Curriculum (AGEC)
AGEC-A Credits: 35-41
A single course with an [L], [HU], [SB], [SG], or [SQ] designation may also be used to satisfy the Oral Communication, Critical Reading, and/

First-Year Composition [FYC]	Credits: 6
ENG101 First-Year Composition (3) OR	
ENG107 First-Year Composition for ESL (3) AND	
ENG102 First-Year Composition (3) OR	
ENG108 First-Year Composition for ESL (3)	6

Literacy and Critical Inquiry [L]	Credits: 3
Any approved general education course in the Literacy and Critical Inquiry [L] area.	3

Mathematics [MA]	Credits: 3-6
MAT140 College Mathematics (5) OR	
MAT141 College Mathematics (4) OR	
MAT142 College Mathematics (3) OR	
MAT145 College Mathematics with Review (5) OR	
MAT146 College Mathematics with Review (6) OR	
Higher approved general education course in the Mathematical Applications [MA] area (3-6)	3-6

Computer/Statistics/Quantitative Applications [CS]	Credits: 3
Any approved general education course in the Computer/Statistics/Quantitative Applications [CS] area.	3

Humanities, Arts and Design [HU]	Credits: 6
Any approved general education courses in the Humanities, Arts and Design [HU] area.	6

Social-Behavioral Sciences [SB]	Credits: 6
Complete two (2) courses from the following for a total of six (6) credits:	
SOC212 Gender and Society	3
SOC241 Race and Ethnic Relations	3
SOC251 Social Problems	3

Natural Sciences [SG]/[SQ]	Credits: 8
Any approved general education course in the Natural Sciences (Quantitative) [SQ] area (4) AND	
Any approved general education course in the Natural Sciences (Quantitative) [SQ] or Natural Sciences (General) [SG] area. (4)	8

Awareness Areas Credits: 0-3
These requirements may be shared with other AGECE requirements. See the AGECE matrix on aztransfer.com for course designations.

Historical/Global Awareness [H]/[G]	Credits: 0-3
Any approved general education course in the Historical [H] or Global [G] area.	0-3

MCCCD Additional Requirements
MCCCD Additional Requirements Credits: 0-6
Some courses in this area have [SB] and [L] designations and may also be applied to the corresponding AGECE requirements. See the AGECE matrix

Oral Communication	Credits: 0-3
COM100 Introduction to Human Communication (3) OR	

COM110 Interpersonal Communication (3) OR
COM225 Public Speaking (3) OR
COM230 Small Group Communication (3) 0-3

Critical Reading Credits: 0-3
CRE101 College Critical Reading and Critical Thinking (3) OR
Equivalent as indicated by assessment (0) 0-3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm10?id=16456338>

Starting Term: 2025 Fall
Final Term: 9999

ASSOCIATE IN ARTS (AA) IN ASSOCIATE IN ARTS, EMPHASIS IN SPANISH

Total Credits: 60-64
Major Code: 8129

Description

The Associate in Arts (AA), Emphasis in Spanish provides the first two years of a four year curriculum for the student who plans to transfer to earn a Bachelor of Arts in Spanish. Academic Certificates (AC) in Language Studies and in Spanish Language and Culture are also available.

Program Notes

Students must earn a grade of C or better in all courses within the program. This program is intended to align with the following university requirements: ASU (College of Liberal Arts and Sciences), Spanish, BAASU (New College of Interdisciplinary Arts and Sciences), Spanish, BANAU, Spanish, BAU of A, Spanish, BAR. Refer to the MCCCD University Transfer Partner website for more information: ASU. Students may qualify to enter higher level Spanish courses by placement or may qualify to exempt out of taking any Spanish courses by assessment. Students wishing to earn credit for any course of which they are exempt by assessment should take the CLEP examination.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits: 4-22			
ENG213		Introduction to the Study of Language (3) OR	
SLC201		Introduction to Linguistics (3)	3
FYE101		Introduction to College, Career and Personal Success (1) OR	
FYE103		Exploration of College, Career and Personal Success (3)	1-3
SPA101		Elementary Spanish I (4) OR	
SPA103		Elementary Spanish for Spanish Speakers I (4)	
AND			
SPA102		Elementary Spanish II (4) OR	
SPA104		Elementary Spanish for Spanish Speakers II (4)	
OR			
SPA111		Fundamentals of Spanish (4)	
OR			
Proficiency through SPA102 level as indicated by assessment (0) 0-8			
SPA201		Intermediate Spanish I (4) OR	
Proficiency as indicated by assessment (0)			0-4
SPA202		Intermediate Spanish II (4) OR	
Proficiency as indicated by assessment (0)			0-4

Restricted Electives

Restricted Electives	Course #	Course Title	Credits
Credits: 6-10			
Complete requirements in the subplan that best aligns with academic and professional goals. If academic and professional goals do not align w			
Subplan 1: Academic Certificate in Spanish Language and Culture (6243N) *Note: This certificate may/may not be offered at each college.			
Select a minimum of three (3) credits taught in English			
FLA240		Foreign Language Teaching Methods	3
HIS145		History of Mexico	3
MHL156		Music in Latin America and the Caribbean	3
SLC201		Introduction to Linguistics	3
SPH245		Hispanic Heritage in the Southwest	3
Select a minimum of six (6) credits taught in Spanish			
SPA115		Beginning Spanish Conversation I	3
SPA116		Beginning Spanish Conversation II	3
SPA117		Health Care Spanish I	3
SPA118		Health Care Spanish II	3
SPA119		Spanish for Educational Settings I	3
SPA120		Spanish for Educational Settings II	3
SPA205		Spanish for Medical Interpretation I	3
SPA206		Spanish for Medical Interpretation II	3
SPA225		Intermediate Spanish Conversation I	3
SPA226		Intermediate Spanish Conversation II	3
SPA235		Advanced Spanish Conversation I	3
SPA236		Advanced Spanish Conversation II	3
SPA241		Spanish and Spanish-American Film I	3
SPA242		Spanish and Spanish-American Film II	3
SPA251		Spanish Civilization	3
SPA265		Advanced Spanish I	3

SPA266 Advanced Spanish II 3
 SPA282++ Volunteerism for Spanish: A Service Learning Experience (any suffixed course) 1-3
 SPA298++ Special Projects (any suffixed course) 1-3
 SPH298++ Special Projects (any suffixed course) 1-3

Subplan 2: Academic Certificate in Language Studies (6237N) *Note: This certificate may/may not be offered at each college.
 Select six to ten (6-10) additional credits from the lists below
 AFR/ASB/CCS202 Ethnic Relations in the United States (3) OR
 SOC241 Race and Ethnic Relations (3) 3

COM163 Intercultural Communication in Everyday Life 3
 COM263 Elements of Intercultural Communication 3
 JPH245 Traditional and Modern Japanese Culture 3
 PSY132 Psychology and Culture 3

AHU+++ Any AHU Arabic Humanities course(s)
 ARB+++ Any ARB Arabic course(s)
 ASL+++ Any ASL American Sign Language course(s)
 CHI+++ Any CHI Chinese course(s)
 FLA+++ Any FLA Foreign Language Acquisition course(s)
 FRE+++ Any FRE French course(s)
 GER+++ Any GER German course(s)
 GRK+++ Any GRK Greek course(s)
 HBR+++ Any HBR Hebrew course(s)
 HEB+++ Any HEB Hebrew course(s)
 IPP+++ Any IPP Interpreter Preparation Program course(s)
 ITA+++ Any ITA Italian course(s)
 ITH+++ Any ITA Italian Humanities course(s)
 JPN+++ Any JPN Japanese course(s)
 LAT+++ Any LAT Latin course(s)
 NAV+++ Any NAV Navajo course(s)
 NVH+++ Any NVH Navajo Humanities course(s)
 PIM+++ Any PIM Pima course(s)
 POR+++ Any POR Portuguese course(s)
 RUS+++ Any RUS Russian course(s)
 SLC+++ Any SLC Studies in Language and Culture course(s)
 SPA+++ Any SPA Spanish course(s)
 SPH+++ Any SPH Spanish Humanities course(s)
 TRS+++ Any TRS Translation and Interpretation course(s)

General Education Requirements

Arizona General Education Curriculum (AGEC)

AGEC-A Credits: 29-44

A single course with an [L], [HU], [SB], [SG], or [SQ] designation may also be used to satisfy the Oral Communication, Critical Reading, and/

First-Year Composition [FYC] Credits: 6

ENG101 First-Year Composition (3) OR
 ENG107 First-Year Composition for ESL (3) AND
 ENG102 First-Year Composition (3) OR
 ENG108 First-Year Composition for ESL (3) 6

Literacy and Critical Inquiry [L] Credits: 3

Any approved general education course in the Literacy and Critical Inquiry [L] area 3

COM225 recommended for students who are CRE101 exempt

Mathematics [MA] Credits: 3-6

MAT140 College Mathematics (5) OR
 MAT141 College Mathematics (4) OR
 MAT142 College Mathematics (3) OR
 MAT145 College Mathematics with Review (5) OR
 MAT146 College Mathematics with Review (6) OR
 Higher approved general education course in the Mathematical Applications [MA] area (3-6) 3-6

Computer/Statistics/Quantitative Applications [CS] Credits: 3

Any approved general education course in the Computer/Statistics/Quantitative Applications [CS] area 3

Humanities, Arts and Design [HU] Credits: 3-6

Any approved general education courses in the Humanities, Arts and Design [HU] area 6

May be met by ENG213 OR SLC201 in Required Courses if not used to meet [SB]

Recommend SPH241 and SPH245 for students intending to earn the Academic Certificate in Language Studies

Social-Behavioral Sciences [SB] Credits: 3-6

COM100 Introduction to Human Communication (3) OR
 COM110 Interpersonal Communication (3) OR
 COM230 Small Group Communication (3)

AND

Any approved general education course in the Social-Behavioral Sciences [SB] area. (3) 6

May be met by ENG213 OR SLC201 in Required Courses area if not used to meet [HU]

Recommend AFR/ASB/CCS202, COM163, COM263 or SOC241 for students intending to earn the Academic Certificate in Language Studies

Natural Sciences [SG]/[SQ] Credits: 8

Any approved general education course in the Natural Sciences (Quantitative) [SQ] area (4) AND
 Any approved general education course in the Natural Sciences (Quantitative) [SQ] area or the Natural Sciences (General) [SG] area (4) 8

Awareness Areas Credits: 0-6

These requirements may be shared with other AGEC requirements. See the AGEC matrix on aztransfer.com for course designations.

Cultural Diversity in the US [C] Credits: 0-3

Any approved general education course with the Cultural Diversity in the U.S. [C] designation

Recommend AFR/ASB/CCS202, COM163, COM263 or SOC241 for students intending to earn the Academic Certificate in Language Studies

Historical/Global Awareness [H]/[G] Credits: 0-3
Any approved general education course with the Historical [H] or Global [G] awareness area designation

May be met by SPA201 or SPA202 in Required Courses area

MCCCD Additional Requirements

MCCCD Additional Requirements Credits: 0-3

Some courses in this area have [SB] and [L] designations and may also be applied to the corresponding AGEC requirements. See the AGEC matrix

Critical Reading Credits: 0-3

CRE101 College Critical Reading and Critical Thinking (3) OR

Equivalent as indicated by assessment (0) 0-3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm10?id=16456317>

Starting Term: 2025 Fall

Final Term: 9999

ASSOCIATE IN ARTS (AA) IN ASSOCIATE IN ARTS, EMPHASIS IN SUSTAINABILITY AND ENVIRONMENTAL STUDIES

Total Credits: 60-64

Major Code: 8123

Description

The Associate in Arts (AA), Emphasis in Sustainability and Environmental Studies provides the first two years of a four-year curriculum for students who intend to transfer to a four-year institution and specialize in areas of sustainability, environmental science, conservation, or resource management. Upon completion of a bachelor's degree, students may pursue a number of careers including sustainability specialists, chief sustainability officers, compliance managers, environmental scientists, conservation scientists, soil and water conservationists, range managers, and city and regional planning aides. With a graduate degree, students may pursue a career in several areas including hydrology, urban and regional planning, and post-secondary teaching.

Program Notes

Students must earn a grade of C or better in all courses within the program. Courses that can be used to fulfill a requirement of the Academic Certificate in Sustainability (Major Code 6240N), Environmental Science (Major Code 6227N), and CCL in Environmental and Natural Resource Conservation (Major Code 5824) while simultaneously fulfilling a requirement of the Associate in Arts, Emphasis in Sustainability and Environmental Studies are noted. This emphasis is intended to align with the degree requirements for the following transfer partners: ASU (College of Global Futures), Sustainability, BAASU (College of Global Futures), Sustainability, BSASU (College of Liberal Arts and Sciences), Earth and Environmental Sciences, BAASU (College of Liberal Arts and Sciences), Earth and Environmental Sciences, BSASU (New College of Interdisciplinary Arts and Sciences), Environmental Science, BAASU (New College of Interdisciplinary Arts and Sciences), Environmental Science, BSNAU, Environmental Sciences, BSU of A, Natural Resources, BS. Refer to the MCCCD University Transfer Partner website for more information: ASU, NAU, U of A.

Required Courses

Required Courses Course # Course Title Credits

Credits: 4-6

FYE101 Introduction to College, Career and Personal Success (1) OR

FYE103 Exploration of College, Career and Personal Success (3) 1-3

SSH111 Sustainable Cities 3

Restricted Electives

Restricted Electives Course # Course Title Credits

Credits: 6-13

Complete requirements in the transfer option that best aligns with your academic and professional goals. Consult with an academic, faculty, or advisor.

Sustainability Option

SUS110 Sustainable World 3

SUS232 Professional Skills in Sustainability Practice 3

Environmental Science Option

CHM107 Chemistry and Society (3) AND

CHM107LL Chemistry and Society Laboratory (1) OR

CHM130 Fundamental Chemistry (3) AND

CHM130LL Fundamental Chemistry Laboratory (1) OR

CHM130AA Fundamental Chemistry with Lab (4) OR

CHM150 General Chemistry I (4) AND

CHM151LL General Chemistry I Laboratory (1) OR

CHM150AA General Chemistry I with Lab (5) OR

CHM151 General Chemistry I (3) AND

CHM151LL General Chemistry I Laboratory (1) OR

CHM151AA General Chemistry I with Lab (4) 4-5

Consult with an academic, faculty, or program advisor to select up to eight (8) credits of additional science coursework that aligns with your program requirements.

AGS260 Soils 4

BI0181++ General Biology (Majors) I 4

BI0182++ General Biology (Majors) II 4

BI0205 Microbiology 4

CHM152 General Chemistry II (3) AND

CHM152LL General Chemistry II Laboratory (1) OR

CHM152AA General Chemistry II with Lab (4) 4

CHM230 Fundamental Organic Chemistry (3) AND
 CHM230LL Fundamental Organic Chemistry Laboratory (1) OR
 CHM230AA Fundamental Organic Chemistry with Lab (4) OR
 CHM235 General Organic Chemistry I (3) AND
 CHM235LL General Organic Chemistry I Laboratory (1) OR
 CHM235AA General Organic Chemistry I with Lab (4) 4

ENV101 Introduction to Environmental Science 4
 ENV225 Our Changing Planet 3

GLG101 Physical Geology: Dynamic Earth Lecture (3) AND
 GLG103 Physical Geology: Dynamic Earth Lab (1) OR
 GLG101IN Physical Geology: Dynamic Earth (4) 4

GLG102 Historical Geology: Primordial to Present Lecture (3) AND
 GLG104 Historical Geology: Primordial to Present Lab (1) OR
 GLG102IN Historical Geology: Primordial to Present (4) 4

GLG110 Geological Disasters and the Environment (3) AND
 GLG111 Geological Disasters and the Environment Lab (1) OR
 GLG110IN Geological Disasters and the Environment (4) 4

GPH111 Physical Geography: Atmosphere, Lithosphere, Water and Hazards Lecture (3) AND
 GPH112 Physical Geography: Climate, Landforms, Water and Hazards Laboratory (1) OR
 GPH113 Physical Geography: Atmosphere, Lithosphere, Water, and Hazards (4) 4

GPH210 Society and Environment 3

PHY101 Introduction to Physics (4) OR
 PHY111 General Physics I (4) OR
 PHY121 University Physics I: Mechanics (4) 4

PHY131 University Physics II: Electricity and Magnetism 4

General Education Requirements

Arizona General Education Curriculum (AGEC)

AGEC-A Credits: 18-44

A single course with an [L], [HU], [SB], [SG], or [SQ] designation may also be used to satisfy the Oral Communication, Critical Reading, and/

First-Year Composition [FYC] Credits: 6

ENG101 First-Year Composition (3) OR
 ENG107 First-Year Composition for ESL (3) AND
 ENG102 First-Year Composition (3) OR
 ENG108 First-Year Composition for ESL (3) 6

Literacy and Critical Inquiry [L] Credits: 3

Any approved general education course in the Literacy and Critical Inquiry [L] area. 3

Mathematics [MA] Credits: 3-9

Before enrolling into a math course, speak to your Academic Advisor to ensure you are selecting the correct math for your transfer goals as M

MAT140 College Mathematics (5) OR
 MAT141 College Mathematics (4) OR
 MAT142 College Mathematics (3) OR
 MAT145 College Mathematics with Review (5) OR
 MAT146 College Mathematics with Review (6)
 OR
 MAT150 College Algebra/Functions (5) OR
 MAT151 College Algebra/Functions (4) OR
 MAT152 College Algebra/Functions (3) OR
 MAT155 College Algebra/Functions with Review (5) OR
 MAT156 College Algebra/Functions with Review (6)
 OR
 MAT150 College Algebra/Functions (5) OR
 MAT151 College Algebra/Functions (4) OR
 MAT152 College Algebra/Functions (3) OR
 MAT155 College Algebra/Functions with Review (5) OR
 MAT156 College Algebra/Functions with Review (6) AND
 MAT182 Plane Trigonometry (3)
 OR
 MAT187 Precalculus (5) OR
 MAT188 Precalculus (4)
 Higher approved general education course in the Mathematical Applications [MA] area (3-5) 3-9

Computer/Statistics/Quantitative Applications [CS] Credits: 3

Any approved general education course in the Computer/Statistics/Quantitative Applications [CS] area. 3

Consult with an academic, faculty, or program advisor to select the option that aligns with your intended transfer program requirements. Refe

Humanities, Arts and Design [HU] Credits: 3-6

Any approved general education course in the Humanities, Arts, and Design [HU] area. 6

May be met by SSH111 in the Required Courses area if not used to meet Social-Behavioral Sciences [SB].

Recommend PHI216 Environmental Ethics for students intending to complete the Academic Certificate in Sustainability.

Social-Behavioral Sciences [SB] Credits: 0-6

Any approved general education courses in the Social-Behavioral Sciences [SB] area. 6

May be met by SUS110 in the Restricted Electives area and SSH111 in Required Courses if not used to meet Humanities, Arts and Design [HU].

Recommended for students intending to complete the Academic Certificate in Sustainability:

COM263 Elements of Intercultural Communication (3) OR
 ECN212 Microeconomic Principles (3) OR
 PSY132 Psychology and Culture (3) OR
 SBU200 Society and Business (3) 3

Natural Sciences [SG]/[SQ] Credits: 0-8

Any approved general education course in the Natural Sciences (Quantitative) [SQ] area (4) AND

Any approved general education course in the Natural Sciences (Quantitative) [SQ] area or the Natural Sciences (General) [SG] area (4). 8

May be met by BI0181, BI0182, CHM150 and CHM151LL, CHM150AA, CHM151 and CHM151LL, CHM151AA, ENV101, GLG101 and GLG103, or GLG101IN in the Res

Recommended for students intending to complete the Academic Certificate in Sustainability:

BI0105 Environmental Biology (4) OR

CHM107 Chemistry and Society (3) AND

CHM107LL Chemistry and Society Laboratory (1) OR

GPH113 Physical Geography: Atmosphere, Lithosphere, Water, and Hazards (4) 4

ASM104 Bones, Stones, and Human Evolution (4) OR

ENV101 Introduction to Environmental Science (4) OR

GLG110 Geological Disasters and the Environment (3) AND

GLG111 Geological Disasters and the Environment Lab (1) 4

Awareness Areas Credits: 0-3

These requirements may be shared with other AGECE requirements. See the AGECE matrix on aztransfer.com for course designations.

Cultural Diversity in the US [C] Credits: 0-3

Any approved general education course with the Cultural Diversity in the U.S. [C] designation.

MCCCD Additional Requirements

MCCCD Additional Requirements Credits: 0-6

Some courses in this area have [SB] and [L] designations and may also be applied to the corresponding AGECE requirements. See the AGECE matrix

Oral Communication Credits: 0-3

COM100 Introduction to Human Communication (3) OR

COM110 Interpersonal Communication (3) OR

COM225 Public Speaking (3) OR

COM230 Small Group Communication (3) 0-3

Critical Reading Credits: 0-3

CRE101 College Critical Reading and Critical Thinking (3) OR

Equivalent as indicated by assessment (0) 0-3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm10?id=16456314>

Starting Term: 2025 Fall

Final Term: 9999

ASSOCIATE IN ARTS (AA) IN ASSOCIATE IN ARTS, EMPHASIS IN WOMEN AND GENDER STUDIES

Total Credits: 60-64

Major Code: 8128

Description

The Associate in Arts (AA), Emphasis in Women and Gender Studies is an intensive interdisciplinary liberal arts program, which provides students with tools and opportunities to discuss and critique historical and contemporary theories and practices of feminism(s) and gender identities. The curriculum enables students to think critically, analyze problems, and communicate effectively. Using women's experiences and perspectives, students explore cultural and global issues by completing a variety of courses focusing on gender, history, culture, class, race, ethnicity, and sexuality to foster equality and understanding. Students completing this associate of arts degree will be prepared to transfer to a four-year program.

Program Notes

Students must earn a grade of C or better in all courses within the program. This emphasis is intended to align with the degree requirements for the following transfer partners: ASU (College of Liberal Arts and Sciences), Gender, Women and Sexuality Studies, BAASU (New College of Interdisciplinary Arts & Sciences), Social and Cultural Analysis (Women and Gender Studies), BAASU (New College of Interdisciplinary Arts & Sciences), Women and Gender Studies, BSNAU, Women's and Gender Studies, BSU of A, Gender and Women's Studies, BARefer to the MCCCD University Transfer Partner website for more information: ASU, NAU, U of A.

Required Courses

Required Courses Course # Course Title Credits

Credits: 1-3

FYE101 Introduction to College, Career and Personal Success (1) OR

FYE103 Exploration of College, Career and Personal Success (3) 1-3

General Education Requirements

Arizona General Education Curriculum (AGECE)

AGECE-A Credits: 35-41

A single course with an [L], [HU], [SB], [SG], or [SQ] designation may also be used to satisfy the Oral Communication, Critical Reading, and/

First-Year Composition [FYC] Credits: 6

ENG101 First-Year Composition (3) OR

ENG107 First-Year Composition for ESL (3) AND

ENG102 First-Year Composition (3) OR

ENG108 First-Year Composition for ESL (3) 6

Literacy and Critical Inquiry [L] Credits: 3

Any approved general education course in the Literacy and Critical Inquiry [L] area. 3

Mathematics [MA] Credits: 3-6

MAT140 College Mathematics (5) OR
 MAT141 College Mathematics (4) OR
 MAT142 College Mathematics (3) OR
 MAT145 College Mathematics with Review (5) OR
 MAT146 College Mathematics with Review (6) OR
 Higher approved general education course in the Mathematical Applications [MA] area (3-6) 3-6

Computer/Statistics/Quantitative Applications [CS] Credits: 3
 Any approved general education course in the Computer/Statistics/Quantitative Applications [CS] area 3

Humanities, Arts and Design [HU] Credits: 6
 Any approved general education courses in the Humanities, Arts and Design [HU] area. 6

ASB211, ENH/WST284, ENH/WST285, HUM/WST209, or REL/WST290, recommended for students intending to earn an Academic Certificate (AC) in Women a

Social-Behavioral Sciences [SB] Credits: 6

WST100 Introduction to Women's and Gender Studies (3)

AND

Any approved general education courses in the Social-Behavioral Sciences [SB] area (3) 6

ASB211, HIS201, PSY235, SOC212, or WST161 recommended for students intending to earn an Academic Certificate (AC) in Women and Gender Studies

Natural Sciences [SG]/[SQ] Credits: 8

Any approved general education course in the Natural Sciences (Quantitative) [SQ] area (4) AND

Any approved general education course in the Natural Sciences (Quantitative) [SQ] area or the Natural Sciences (General) [SG] area (4). 8

Awareness Areas Credits: 0-3

These requirements may be shared with other AGECE requirements. See the AGECE matrix on aztransfer.com for course designations.

Historical/Global Awareness [H]/[G] Credits: 0-3

Any approved general education course with the Historical [H] or Global [G] awareness area designation.

ASB211, HIS201, REL/WST290, WST160, WST161, or WST200 recommended for students intending to earn an Academic Certificate (AC) in Women and Ge

MCCCD Additional Requirements

MCCCD Additional Requirements Credits: 0-6

Some courses in this area have [SB] and [L] designations and may also be applied to the corresponding AGECE requirements. See the AGECE matrix

Oral Communication Credits: 0-3

COM100 Introduction to Human Communication (3) OR

COM110 Interpersonal Communication (3) OR

COM225 Public Speaking (3) OR

COM230 Small Group Communication (3) 0-3

Critical Reading Credits: 0-3

CRE101 College Critical Reading and Critical Thinking (3) OR

Equivalent as indicated by assessment (0) 0-3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm10?id=16456302>

Starting Term: 2025 Fall

Final Term: 9999

ASSOCIATE IN ARTS, FINE ARTS (AAFA) IN ASSOCIATE IN ARTS, FINE ARTS, EMPHASIS IN ART

Total Credits: 60-64

Major Code: 8311

Description

The Associate in Arts, Fine Arts (AAFA), Emphasis in Art degree provides the first two years of a four-year curriculum for students who wish to specialize in fine arts, including painting, ceramics, textiles, jewelry, sculpture, metals, photography, and drawing. This degree offers an emphasis in creative problem-solving that is required in most career fields. With an associate degree, students may pursue a career as a practicing artist. With a bachelor's or graduate degree in fine arts, students may also pursue a career in museums, galleries, community-based art organizations, or art instruction.

Program Notes

Students must earn a grade of C or better in all courses within the program. Students who wish to transfer to an art school should contact an art faculty member at their institution for more information. This emphasis is intended to align with the degree requirements for the following transfer partners: ASU (Herberger Institute for Design and the Arts), Art (Ceramics), BFAASU (Herberger Institute for Design and the Arts), Art (Painting and Drawing), BFAASU (Herberger Institute for Design and the Arts), Art (Photography), BFAASU (Herberger Institute for Design and the Arts), Art (Printmaking), BFAASU (Herberger Institute for Design and the Arts), Art (Sculpture), BFANAU, Studio Art, BFAU of A, Studio Art (All Emphases), BFARefer to the MCCCD University Transfer Partner website for more information: ASU , NAU , U of A .

Required Courses

Required Courses Course # Course Title Credits

Credits: 14-18

ART111 Drawing I 3

ART112 Two-Dimensional Design 3

ART113 Color 3

ART115 Three-Dimensional Design 3

ART255AB The Portfolio (1) OR

ART255 Art Marketing (3) 1-3

(ART255AB is a direct transfer, ART255 is an elective transfer recommended for marketing and professional development)

FYE101 Introduction to College, Career and Personal Success (1) OR
FYE103 Exploration of College, Career and Personal Success (3) 1-3

Restricted Electives

Restricted Electives Course # Course Title Credits

Credits: 12-13

Consult with an academic, faculty, or program advisor to prevent exceeding your university transfer program's maximum transferable credits (t

Choose an applicable combination from the following list of courses based on your desired transfer plan totaling twelve to thirteen (12-13) c

ART116	Life Drawing I	3
ART122	Drawing and Composition II	3
ART131	Photography I	3
ART132	Photography II	3
ART136	Documentary Photography	3
ART137	Alternative Photographic Process	3
ART151	Sculpture I	3
ART153	Woodworking I	3
ART161	Ceramics I	3
ART162	Ceramics II	3
ART165	Watercolor Painting I	3
ART167	Painting I	3
ART250	Introduction to Printmaking	3
ART277	Textiles I	3
ART290GC	Studio Art: Ceramics	3
AVC100	Introduction to Digital Arts	1
AVC178	Digital Arts Studies	3

General Education Requirements

Arizona General Education Curriculum (AGEC)

AGEC-A Credits: 35-38

A single course with an [HU], [SB], or [L] designation(s) may also be used to satisfy the Oral Communication, Critical Reading, or Awareness .

First-Year Composition [FYC] Credits: 6

ENG101	First-Year Composition (3) OR	
ENG107	First-Year Composition for ESL (3) AND	
ENG102	First-Year Composition (3) OR	
ENG108	First-Year Composition for ESL (3)	6

Literacy and Critical Inquiry [L] Credits: 3

Any approved general education course in the Literacy and Critical Inquiry [L] area. 3

Mathematics [MA] Credits: 3-6

MAT140	College Mathematics (5) OR	
MAT141	College Mathematics (4) OR	
MAT142	College Mathematics (3) OR	
MAT145	College Mathematics with Review (5) OR	
MAT146	College Mathematics with Review (6) OR	
Higher level course in the Mathematical Applications [MA] area (3-6)		3-6

Computer/Statistics/Quantitative Applications [CS] Credits: 3

Any approved general education course in the Computer/Statistics/Quantitative Applications [CS] area. 3

Humanities, Arts and Design [HU] Credits: 6

ARH101	Art from Prehistory Through Middle Ages (3) OR	
ARH102	Art from Renaissance to Modernism (3)	
AND		
ARH201	Art of Asia (3) OR	
ARH202	Art of Africa, Oceania, and Americas (3)	6

Social-Behavioral Sciences [SB] Credits: 6

COM100	Introduction to Human Communication (3) OR	
COM110	Interpersonal Communication (3) OR	
COM230	Small Group Communication (3)	

AND
Any approved general education courses in the Social-Behavioral Sciences [SB] area with the Cultural Diversity in the U.S. [C] designation. (

Natural Sciences [SG]/[SQ] Credits: 8

Any approved general education course in the Natural Sciences (Quantitative) [SQ] area (4) AND

Any approved general education course in the Natural Sciences (Quantitative) [SQ] area or the Natural Sciences (General) [SG] area (4). 8

MCCCD Additional Requirements

MCCCD Additional Requirements Credits: 0-3

Courses in this area may also be applied to AGEC Requirements. To minimize total credits required for degree and maximize transferable credit

Critical Reading Credits: 0-3

CRE101	College Critical Reading and Critical Thinking (3) OR	
Equivalent as indicated by assessment (0)		0-3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm10?id=16456366>

Starting Term: 2025 Fall

Final Term: 9999

ASSOCIATE IN ARTS, FINE ARTS (AAFA) IN ASSOCIATE IN ARTS, FINE ARTS, EMPHASIS IN DANCE

Total Credits: 60-64
Major Code: 8312

Description

The Associate in Arts, Fine Arts (AAFA), Emphasis in Dance provides the first two years of a four-year curriculum for students who intend to specialize in dance. With an associate degree, students may pursue a number of careers, including but not limited to, dance performance, choreography, and dance instruction. Upon completion of a bachelor's degree, students may pursue additional careers including dance education at the secondary level, arts administration, artistic direction, and dance science specialties. Upon completion of a graduate degree, students may pursue additional careers including dance education at the post-secondary level and dance therapy.

Program Notes

Students must earn a grade of C or better in all courses within the program. Students are expected to meet with a residential dance faculty member for advising each semester prior to enrollment for the following semester. Consult with your faculty advisor to determine which specializations are available at your college. Students should enroll in two DAN technique courses each semester. Enrollment in some courses may require an audition and/or permission of instructor. All applicable DAN technique courses may be repeated for credit. Pass/No Credit courses cannot be used to fulfill degree requirements.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits: 7-9			
DAN150	Dance Performance I	1	
DAN264	Choreography I	3	
DAN280	Dance Practicum	2	

FYE101 Introduction to College, Career and Personal Success (1) OR
FYE103 Exploration of College, Career and Personal Success (3) 1-3

Restricted Electives

Restricted Electives	Course #	Course Title	Credits
Credits: 13-23			

Complete requirements in the transfer plan that best aligns with your academic and professional goals. If your intended transfer plan is not

Transfer Plan 1: Contemporary Concert Dance (CGCC)

Dance Theory:

DAH100	Introduction to Dance in the United States	3
DAN265	Choreography II	3

Dance Performance:

Select one to three courses from the following for a total of one (1) to three (3) credits:

DAN150	Dance Performance I	1
DAN155	Dance Performance II	1
DAN250	Dance Performance III	1
DAN255	Dance Performance IV	1

Dance Technique (Core):

Students may come in at any level based on assessment by the lead dance residential faculty.

Select three courses from the following for a total of three (3) credits. Courses may be repeated for credit.

DAN131	Ballet I	1
DAN134	Ballet II	1
DAN231	Ballet III	1
DAN234	Ballet IV	1
DAN237	Ballet Pointe I	1

Select three courses from the following for a total of three (3) credits. Courses may be repeated for credit.

DAN132	Modern Dance I	1
DAN135	Modern Dance II	1
DAN232	Modern Dance III	1
DAN235	Modern Dance IV	1

Select one course to attain a minimum of Level III competency in Ballet.

DAN231	Ballet III (1) OR	
DAN234	Ballet IV (1) OR	
DAN237	Ballet Pointe I (1)	1

Select one course to attain a minimum of Level III competency in Modern.

DAN232	Modern Dance III (1) OR	
DAN235	Modern Dance IV (1)	1

Dance Technique (Additional):

Students may come in at any level based on assessment by the lead dance residential faculty.

Select four courses from the following for a total of four (4) credits.

DAN102	Hip Hop I	1
DAN103	Hip Hop II	1
DAN106AA	Latin I	1
DAN129	Musical Theatre Dance I	1
DAN130	Musical Theatre Dance II	1
DAN131	Ballet I	1
DAN132	Modern Dance I	1
DAN133	Jazz Dance I	1
DAN134	Ballet II	1
DAN135	Modern Dance II	1
DAN136	Jazz Dance II	1
DAN140	Tap Dance I	1
DAN145	Tap Dance II	1
DAN202	Hip Hop III	1
DAN203	Hip Hop IV	1
DAN229	Musical Theatre Dance III	1
DAN230	Musical Theatre Dance IV	1

DAN231	Ballet III	1
DAN232	Modern Dance III	1
DAN233	Jazz Dance III	1
DAN234	Ballet IV	1
DAN235	Modern Dance IV	1
DAN236	Jazz Dance IV	1
DAN237	Ballet Pointe I	1
DAN240	Tap Dance III	1
DAN245	Tap Dance IV	1

Transfer Plan 2: Contemporary Concert Dance (GCC)

Dance Theory:

DAH100	Introduction to Dance in the United States	3

DAH250 Dance in Popular Culture (3) OR

DAH255 Hip Hop: Arts, Aesthetic and Culture (3)

DAN170	Dance Kinesiology	3

Dance Performance:

Select one to three courses from the following for a total of one (1) to three (3) credits:

DAN155	Dance Performance II	1
DAN250	Dance Performance III	1
DAN255	Dance Performance IV	1

Dance Technique (Core):

Students may come in at any level based on assessment by the lead dance residential faculty.

Select three courses from the following for a total of three (3) credits. Courses may be repeated for credit.

DAN131	Ballet I	1
DAN134	Ballet II	1
DAN231	Ballet III	1
DAN234	Ballet IV	1

Select three courses from the following for a total of three (3) credits. Courses may be repeated for credit.

DAN132	Modern Dance I	1
DAN135	Modern Dance II	1
DAN232	Modern Dance III	1
DAN235	Modern Dance IV	1

Select one course to attain a minimum of Level III competency in Ballet.

DAN231	Ballet III (1) OR	
DAN234	Ballet IV (1)	1

Select one course to attain a minimum of Level III competency in Modern.

DAN232	Modern Dance III (1) OR	
DAN235	Modern Dance IV (1)	1

Dance Technique (Additional):

Students may come in at any level based on assessment by the lead dance residential faculty.

Select four courses from the following for a total of four (4) credits.

DAN102	Hip Hop I	1
DAN103	Hip Hop II	1
DAN129	Musical Theatre Dance I	1
DAN130	Musical Theatre Dance II	1
DAN133	Jazz Dance I	1
DAN136	Jazz Dance II	1
DAN140	Tap Dance I	1
DAN145	Tap Dance II	1
DAN202	Hip Hop III	1
DAN203	Hip Hop IV	1
DAN229	Musical Theatre Dance III	1
DAN230	Musical Theatre Dance IV	1
DAN233	Jazz Dance III	1
DAN236	Jazz Dance IV	1
DAN240	Tap Dance III	1
DAN245	Tap Dance IV	1

Transfer Plan 3: Contemporary Concert Dance (MCC)

Dance Theory:

DAH100	Introduction to Dance in the United States	3
DAH250	Dance in Popular Culture	3
DAN170	Dance Kinesiology	3

Dance Performance:

DAN141	Dance Workshop	1
DAN155	Dance Performance II	1

Dance Technique (Core):

DAN131	Ballet I	1
DAN132	Modern Dance I	1
DAN134	Ballet II	1
DAN135	Modern Dance II	1
DAN231	Ballet III	1
DAN232	Modern Dance III	1

Dance Technique (Additional):

Students may come in at any level based on assessment by the lead dance residential faculty.

Select two courses from the following for a total of two (2) credits:

DAN102	Hip Hop I	1
DAN103	Hip Hop II	1
DAN129	Musical Theatre Dance I	1
DAN130	Musical Theatre Dance II	1
DAN133	Jazz Dance I	1
DAN136	Jazz Dance II	1
DAN140	Tap Dance I	1

DAN145	Tap Dance II	1
DAN202	Hip Hop III	1
DAN203	Hip Hop IV	1
DAN229	Musical Theatre Dance III	1
DAN230	Musical Theatre Dance IV	1
DAN233	Jazz Dance III	1
DAN236	Jazz Dance IV	1
DAN240	Tap Dance III	1
DAN245	Tap Dance IV	1

Transfer Plan 4: Contemporary Concert Dance (PVCC)

Dance Theory:

DAH100	Introduction to Dance in the United States	3
DAH255	Hip Hop: Arts, Aesthetic and Culture	3

DAN190	Discovering Dance Careers (1) OR	
DAN298AA	Special Projects (1) OR	
DAN298AB	Special Projects (2) OR	
DAN298AC	Special Projects (3)	1-3

DAN265 Choreography II 3

Dance Performance:

Select one to three courses from the following for a total of one (1) to three (3) credits:

DAN155	Dance Performance II	1
DAN250	Dance Performance III	1
DAN255	Dance Performance IV	1

Dance Technique (Core):

Students may come in at any level based on assessment by the lead dance residential faculty.

Select two courses from the following for a total of two (2) credits. Courses may be repeated for credit.

DAN131	Ballet I	1
DAN134	Ballet II	1
DAN231	Ballet III	1

Select one course to attain a minimum of Level III competency in Ballet.

DAN231	Ballet III (1) OR	
DAN234	Ballet IV (1)	1

Select two courses from the following for a total of two (2) credits. Courses may be repeated for credit.

DAN132	Modern Dance I	1
DAN135	Modern Dance II	1
DAN232	Modern Dance III	1

Select one course to attain a minimum of Level III competency in Modern.

DAN232	Modern Dance III (1) OR	
DAN235	Modern Dance IV (1)	1

Dance Technique (Additional):

DAN133	Jazz Dance I	1
DAN136	Jazz Dance II	1

Select coursework from the following for a total of one (1) to two (2) credits:

DAN233	Jazz Dance III	1
DAN236	Jazz Dance IV	1
DAN290AA	Dance Conservatory I	1
DAN290AB	Dance Conservatory I	2
DAN101AA	Social Dance: Ballroom	1
DAN101AB	Social Dance: Swing	1
DAN101AC	Social Dance: Latin	1
DAN101AE	Social Dance: Tango	1

Transfer Plan 5: Contemporary Concert Dance (SCC)

Dance Theory:

DAH250	Dance in Popular Culture	3
DAN170	Dance Kinesiology	3
DAN190	Discovering Dance Careers	1
DAN221	Rhythmic Awareness I	3

Dance Performance:

Select one course from the following for a total of one (1) credit:

DAN150	Dance Performance I	1
DAN155	Dance Performance II	1
DAN250	Dance Performance III	1
DAN255	Dance Performance IV	1

Dance Technique (Core):

Students may come in at any level based on assessment by the program director(s).

Select three courses from the following for a total of three (3) to six (6) credits. Courses may be repeated for credit.

DAN131	Ballet I	1
DAN134	Ballet II	1
DAN231	Ballet III	1
DAN231AA	Ballet III: Intensive	2
DAN234	Ballet IV	1
DAN234AA	Ballet IV: Intensive	2

Select one course to attain a minimum of Level III competency in Ballet.

DAN231	Ballet III (1) OR	
DAN231AA	Ballet III: Intensive (2) OR	
DAN234	Ballet IV (1) OR	
DAN234AA	Ballet IV: Intensive (2)	1-2

Select three courses from the following for a total of three (3) to six (6) credits. Courses may be repeated for credit.

DAN132	Modern Dance I	1
DAN135	Modern Dance II	1
DAN232	Modern Dance III	1

DAN232AA	Modern Dance III: Intensive	2
DAN235	Modern Dance IV 1	
DAN235AA	Modern Dance IV: Intensive	2

Select one course to attain a minimum of Level III competency in Modern.

DAN232	Modern Dance III (1) OR	
DAN232AA	Modern Dance III: Intensive (2) OR	
DAN235	Modern Dance IV (1) OR	
DAN235AA	Modern Dance IV: Intensive (2)	1-2

Dance Technique (Additional):

Students may come in at any level based on assessment by the program director(s).

Select three courses from the following for a total of three (3) credits.

DAN102	Hip Hop I	1
DAN103	Hip Hop II	1
DAN202	Hip Hop III	1
DAN203	Hip Hop IV	1
DAN133	Jazz Dance I	1
DAN136	Jazz Dance II	1
DAN233	Jazz Dance III	1
DAN236	Jazz Dance IV	1

Transfer Plan 6: Jazz and Related Diasporic Forms (CGCC)

Dance Theory:

DAH100	Introduction to Dance in the United States (3) OR	
DAH201	Dance, Culture, and Global Contexts (3) OR	
DAN221	Rhythmic Awareness I (3)	3
DAN221	recommended	

DAN265 Choreography II 3

Dance Performance:

Select one to three courses from the following for a total of one (1) to three (3) credits:

DAN150	Dance Performance I	1
DAN155	Dance Performance II	1
DAN250	Dance Performance III	1
DAN255	Dance Performance IV	1

Dance Technique (Core):

Students may come in at any level based on assessment by the lead dance residential faculty.

Select eight courses for a total of eight (8) credits from two of the following dance forms: Hip Hop, Musical Theatre, Jazz, or Tap. Students

Hip Hop:

DAN102	Hip Hop I	1
DAN103	Hip Hop II	1
DAN202	Hip Hop III	1
DAN203	Hip Hop IV	1

Musical Theater:

DAN129	Musical Theatre Dance I	1
DAN130	Musical Theatre Dance II	1
DAN229	Musical Theatre Dance III	1
DAN230	Musical Theatre Dance IV	1

Jazz:

DAN133	Jazz Dance I	1
DAN136	Jazz Dance II	1
DAN233	Jazz Dance III	1
DAN236	Jazz Dance IV	1

Tap Dance:

DAN140	Tap Dance I	1
DAN145	Tap Dance II	1
DAN240	Tap Dance III	1
DAN245	Tap Dance IV	1

Dance Technique (Additional):

Students may come in at any level based on assessment by the lead dance residential faculty.

Select four courses from the following for a total of four (4) credits:

DAN102	Hip Hop I	1
DAN103	Hip Hop II	1
DAN129	Musical Theatre Dance I	1
DAN130	Musical Theatre Dance II	1
DAN131	Ballet I	1
DAN132	Modern Dance I	1
DAN133	Jazz Dance I	1
DAN134	Ballet II	1
DAN135	Modern Dance II	1
DAN136	Jazz Dance II	1
DAN140	Tap Dance I	1
DAN145	Tap Dance II	1
DAN202	Hip Hop III	1
DAN203	Hip Hop IV	1
DAN229	Musical Theatre Dance III	1
DAN230	Musical Theatre Dance IV	1
DAN231	Ballet III	1
DAN233	Jazz Dance III	1
DAN232	Modern Dance III	1
DAN234	Ballet IV	1
DAN235	Modern Dance IV	1
DAN236	Jazz Dance IV	1
DAN237	Ballet Pointe I	1
DAN240	Tap Dance III	1
DAN245	Tap Dance IV	1

Transfer Plan 7: Jazz and Related Diasporic Forms (GCC)

Dance Theory:

DAH100 Introduction to Dance in the United States 3

DAH250 Dance in Popular Culture 3

DAH255 Hip Hop: Arts, Aesthetic and Culture 3

DAN170 Dance Kinesiology 3

Dance Performance:

Select one to three courses from the following for a total of one (1) to three (3) credits:

DAN155 Dance Performance II 1

DAN250 Dance Performance III 1

DAN255 Dance Performance IV 1

Dance Technique (Core):

Students may come in at any level based on assessment by the lead dance residential faculty.

Select three courses from the following for a total of (3) to six (6) credits. Courses may be repeated for credit.

DAN133 Jazz Dance I 1

DAN136 Jazz Dance II 1

DAN233 Jazz Dance III 1

DAN236 Jazz Dance IV 1

Select one course to attain a minimum of Level III competency in Jazz.

DAN233 Jazz Dance III (1) OR

DAN236 Jazz Dance IV (1) 1

Select three courses from the following for a total of 3 credits. Courses may be repeated for credit.

DAN102 Hip Hop I 1

DAN103 Hip Hop II 1

DAN129 Musical Theatre Dance I 1

DAN130 Musical Theatre Dance II 1

DAN140 Tap Dance I 1

DAN145 Tap Dance II 1

DAN202 Hip Hop III 1

DAN203 Hip Hop IV 1

DAN229 Musical Theatre Dance III 1

DAN230 Musical Theatre Dance IV 1

DAN240 Tap Dance III 1

DAN245 Tap Dance IV 1

Select one course to attain a minimum of Level III competency in Hip Hop, Musical Theatre, or Tap.

DAN202 Hip Hop III (1) OR

DAN203 Hip Hop IV (1) OR

DAN229 Musical Theatre Dance III (1) OR

DAN230 Musical Theatre Dance IV (1) OR

DAN240 Tap Dance III (1) OR

DAN245 Tap Dance IV (1) 1

Dance Technique (Additional):

Students may come in at any level based on assessment by the lead dance residential faculty.

Select four courses from the following for a total of four (4) credits.

DAN131 Ballet I 1

DAN132 Modern Dance I 1

DAN134 Ballet II 1

DAN135 Modern Dance II 1

DAN231 Ballet III 1

DAN232 Modern Dance III 1

DAN234 Ballet IV 1

DAN235 Modern Dance IV 1

Transfer Plan 8: Jazz and Related Diasporic Forms (MCC)

Dance Theory:

DAH100 Introduction to Dance in the United States 3

DAH201 Dance, Culture, and Global Contexts 3

DAH250 Dance in Popular Culture 3

DAN170 Dance Kinesiology 3

Dance Performance:

DAN141 Dance Workshop 1

DAN155 Dance Performance II 1

Dance Technique (Core):

DAN102 Hip Hop I 1

DAN103 Hip Hop II 1

DAN133 Jazz Dance I 1

DAN136 Jazz Dance II 1

DAN202 Hip Hop III 1

DAN233 Jazz Dance III 1

Dance Technique (Additional):

DAN132 Modern Dance I 1

DAN129 Musical Theatre Dance I (1) OR

DAN130 Musical Theatre Dance II (1) OR

DAN131 Ballet I (1) OR

DAN132 Modern Dance I (1) OR

DAN134 Ballet II (1) OR

DAN135 Modern Dance II (1) OR

DAN140 Tap Dance I (1) OR

DAN145 Tap Dance II (1) OR

DAN229 Musical Theatre Dance III (1) OR

DAN230 Musical Theatre Dance IV (1) OR

DAN231 Ballet III (1) OR

DAN232 Modern Dance III (1) OR

DAN234 Ballet IV (1) OR

DAN235 Modern Dance IV (1) OR
 DAN240 Tap Dance III (1) OR
 DAN245 Tap Dance IV (1) 1

Transfer Plan 9: Jazz and Related Diasporic Forms (SCC)

Dance Theory:

DAN170 Dance Kinesiology 3
 DAN190 Discovering Dance Careers 1
 DAN221 Rhythmic Awareness I 3

Dance Performance:

Select one course from the following for a total of one (1) credit:

DAN150 Dance Performance I (1) OR
 DAN155 Dance Performance II (1) OR
 DAN250 Dance Performance III (1) OR
 DAN255 Dance Performance IV (1) 1

Dance Technique (Core):

Students may come in at any level based on assessment by the program director(s).

Select three courses from the following for a total of three (3) credits. Courses may be repeated for credit.

DAN102 Hip Hop I 1
 DAN103 Hip Hop II 1
 DAN202 Hip Hop III 1
 DAN203 Hip Hop IV 1

Select one course to attain a minimum of Level III competency in Hip Hop.

DAN202 Hip Hop III (1) OR
 DAN203 Hip Hop IV (1) 1

Select three courses from the following for a total of three (3) credits. Courses may be repeated for credit.

DAN133 Jazz Dance I 1
 DAN136 Jazz Dance II 1
 DAN233 Jazz Dance III 1
 DAN236 Jazz Dance IV 1

Select one course to attain a minimum of Level III competency in Jazz.

DAN233 Jazz Dance III (1) OR
 DAN236 Jazz Dance IV (1) 1

Dance Technique (Additional):

Students may come in at any level based on assessment by the program director(s).

Select four courses from the following for a total of four (4) to eight (8) credits:

DAN131 Ballet I 1
 DAN132 Modern Dance I 1
 DAN134 Ballet II 1
 DAN135 Modern Dance II 1
 DAN231 Ballet III 1
 DAN231AA Ballet III: Intensive 2
 DAN232 Modern Dance III 1
 DAN232AA Modern Dance III: Intensive 2
 DAN234 Ballet IV 1
 DAN234AA Ballet IV: Intensive 2
 DAN235 Modern Dance IV 1
 DAN235AA Modern Dance IV: Intensive 2

General Education Requirements

Arizona General Education Curriculum (AGEC)

AGEC-A Credits: 20-44

A single course with an [HU], [SB], or [L] designation may also be used to satisfy the Oral Communication, Critical Reading, or Awareness Area

First-Year Composition [FYC] Credits: 6

ENG101 First-Year Composition (3) OR
 ENG107 First-Year Composition for ESL (3) AND
 ENG102 First-Year Composition (3) OR
 ENG108 First-Year Composition for ESL (3) 6

Literacy and Critical Inquiry [L] Credits: 3

Any approved general education course in the Literacy and Critical Inquiry [L] area. 3

Met by DAH255 in Transfer Plan 4 or Transfer Plan 7 (Transfer Plan 2 has option of DAH255)

Mathematics [MA] Credits: 3-6

MAT140 College Mathematics (5) OR
 MAT141 College Mathematics (4) OR
 MAT142 College Mathematics (3) OR
 MAT145 College Mathematics with Review (5) OR
 MAT146 College Mathematics with Review (6) OR
 Higher approved general education course in the Mathematical Applications [MA] area 3-6

Computer/Statistics/Quantitative Applications [CS] Credits: 3

Any approved general education course in the Computer/Statistics/Quantitative Applications [CS] area. 3

BPC110 or CIS105 recommended for students in Transfer Plan 5 or Transfer Plan 9.

Humanities, Arts and Design [HU] Credits: 6

DAH201 Dance, Culture, and Global Contexts (3)

AND

DAH250 Dance in Popular Culture (3) OR
 DAH255 Hip Hop: Arts, Aesthetic and Culture (3) 6

DAH255 can only be used to meet the Humanities, Arts and Design [HU] area if not used to satisfy the Literacy and Critical Inquiry [L] area.

Social-Behavioral Sciences [SB] Credits: 6
COM100 Introduction to Human Communication (3) OR
COM110 Interpersonal Communication (3) OR
COM230 Small Group Communication (3)

AND

Any approved general education course in the Social Behavior [SB] area (3) 6

Transfer Plan 5: Contemporary Concert Dance (SCC)
COM110 Interpersonal Communication (3)

AND

EDU222 Introduction to the Exceptional Learner (3) 6

Transfer Plan 9: Jazz and Related Diasporic Forms (SCC)
COM110 Interpersonal Communication (3)

AND

EDU222 Introduction to the Exceptional Learner (3) 6

Natural Sciences [SG]/[SQ] Credits: 8
BI0160 Introduction to Human Anatomy and Physiology (4) OR
BI0201 Human Anatomy and Physiology I (4) OR
BI0201XT Human Anatomy and Physiology I (4)

AND

Any approved general education course in the Science Quantitative [SQ] area or the Science General [SG] area (4). 8

At least four (4) credits must be designated as Natural Sciences (Quantitative) [SQ]

Critical Reading Credits: 0-3
CRE101 College Critical Reading and Critical Thinking (3) OR
Equivalent as indicated by assessment (0) 0-3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm10?id=16456363>

Starting Term: 2025 Fall
Final Term: 9999

ASSOCIATE IN ARTS, FINE ARTS (AAFA) IN ASSOCIATE IN ARTS, FINE ARTS, EMPHASIS IN MUSIC

Total Credits: 60-64
Major Code: 8313

Description

The Associate in Arts, Fine Arts (AAFA), Emphasis in Music degree is designed for students planning to transfer to four-year colleges and universities with majors in the Fine/Performing Arts. The degree is designed to prepare students to meet selective admission criteria for programs, such as the Bachelor of Music, which may require an audition. Embedded areas of emphasis include choral, instrumental, guitar and popular music performance.

Program Notes

Students must earn a grade of C or better in all courses within the program. In most cases, courses used to satisfy the AAFA, Emphasis in Music will apply to general university graduation requirements of related majors; however, students need to be aware of any specific lower division requirements of their intended focus at the university to be sure they select courses that will meet those requirements. Some courses may require permission of instructor and/or audition for placement.

Required Courses

Required Courses Course # Course Title Credits
Credits: 9-11
FYE101 Introduction to College, Career and Personal Success (1) OR
FYE103 Exploration of College, Career and Personal Success (3) 1-3

MTC105 Music Theory I 3
MTC106 Aural Perception I 1
MTC155 Music Theory II 3
MTC156 Aural Perception II 1

Restricted Electives

Restricted Electives Course # Course Title Credits
Credits: 23-28
Transfer Plan 1: Classical Music Performance and Music Education
MUP102++ Private Instruction 2
MUP152++ Private Instruction 2
MUP202++ Private Instruction 2
MTC205 Music Theory III 3
MTC206 Aural Perception III 1
MUP252++ Private Instruction 2
MTC255 Music Theory IV 3
MTC256 Aural Perception IV 1

Class Piano Credits: 0-4
MUP131 Class Piano I 1
MUP132 Class Piano II 1
MUP231 Class Piano III 1

MUP232 Class Piano IV 1
(Student's level and number of credits required for degree determined by piano instructor based on audition) 0-4

Large Music Ensembles Credits: 4

Choose any four (4) credits from the following list of Musical Ensemble courses based on area of emphasis. Any substitutions require official

MUP150 Community Chorus 1
MUP153 Concert Choir 1
MUP159 Community Orchestra 1
MUP160 Orchestra 1
MUP161 Community Band 1
MUP162 Band 1
MUP163 Jazz Ensemble 1 (Jazz Big Bands only)
MUP169 Guitar Ensemble 1
MUP181 Chamber Music Ensembles 1 (Piano Ensemble only)
MUP217 Music Theatre: Broadway Solos 1
MUP/THP273 Musical Theater Production 1

MUP153 is recommended for Choral students (or, if unavailable, MUP150), MUP160 for Strings students (or, if unavailable, MUP159), MUP162 for

Related Area Credits: 4

Students should choose four (4) additional credits from the following list of options that best align with their academic and professional go

MHL+++ Any MHL Music: History/Literature course(s)
MTC+++ Any MTC Music: Theory/Composition course(s)
MUC+++ Any MUC Music: Commercial/Business course(s)
MUE+++ Any MUE Music: Education course(s)
MUP+++ Any MUP Music Performance course(s)

Transfer Plan 2: Popular Music

MUC140 Songwriting (3) OR
MUC191 Electronic Music I (3) 3

MUC181 Popular Music Orchestration and Arranging (3) OR
MUC192 Electronic Music II (3) 3

MUC109 Music Business: Content Creation and Copyright (3) OR
MUC110 Music Business: Marketing and Monetization (3) 3

MUP100 Introduction to Digital Musicianship (2) OR
MUC195 Studio Music Recording I (3) OR
MUC195AA Studio Music Recording I (3) OR
MUC197 Live Sound Reinforcement I (3) OR
MUC193 Computer-Based Sound Synthesis (3) OR
MUC281 Electronic Music III (3) 2-3

MUC298AA Special Projects 1

MUP101++ Private Instruction (1) (Must be completed for credit twice) OR
MUP102++ Private Instruction (2) 2

MUP151++ Private Instruction (1) (Must be completed for credit twice) OR
MUP152++ Private Instruction (2) 2

MUP201++ Private Instruction (1) (Must be completed for credit twice) OR
MUP202++ Private Instruction (2) 2

MUP251++ Private Instructions (1) (Must be completed for credit twice) OR
MUP252++ Private Instruction (2) 2

Performance Ensemble Credits: 4

Choose any four (4) credits from the following list of Musical Ensemble courses. Ensemble courses can be taken multiple times for credit. Sel

MUP150 Community Chorus 1
MUP153 Concert Choir 1
MUP154AA Jazz Vocal Ensemble 1
MUP154AB Jazz Vocal Ensemble 2
MUP158 Popular Music Ensemble 1
MUP159 Community Orchestra 1
MUP160 Orchestra 1
MUP161 Community Band 1
MUP162 Band 1
MUP163 Jazz Ensemble 1
MUP169 Guitar Ensemble 1
MUP181 Chamber Music Ensembles 1 (Jazz Combos)
MUP190 Percussion Ensemble 1

Transfer Plan 3: Jazz Music

MTC130 Jazz Theory 2

MUC181 Popular Music Orchestration and Arranging (3) OR
MTC203 Jazz Composition (3) OR
MUP165 Jazz Improvisation II (2) 2-3

MUP100 Introduction to Digital Musicianship (2) OR
MUC195 Studio Music Recording I (3) OR
MUC195AA Studio Music Recording I (3) OR
MUC197 Live Sound Reinforcement I (3) 2-3

MUP164 Jazz Improvisation I 2

MUP101++ Private Instruction (1) (Must be completed for credit twice) OR
MUP102++ Private Instruction (2) 2

MUP151++ Private Instruction (1) (Must be completed for credit twice) OR
MUP152++ Private Instruction (2) 2

MUP201++ Private Instruction (1) (Must be completed for credit twice) OR
MUP202++ Private Instruction (2) 2

MUP251++ Private Instructions (1) (Must be completed for credit twice) OR

MUP252++ Private Instruction (2) 2

MUP298AA Special Projects 1

Performance Ensemble Credits: 6

Choose any six (6) credits from the following list of Performance Ensemble courses. Ensemble courses can be taken multiple times for credit.

MUP163 Jazz Ensemble 1 (May be repeated for credit 4 times)

MUP181 Chamber Music Ensembles 1 (May be repeated for credit 2 times)

MUP183 Jazz Combo 1 (May be repeated for credit 2 times)

Transfer Plan 4: Music Theatre

MUP102++ Private Instruction 2

MUP152++ Private Instruction 2

MUP202++ Private Instruction 2

MTC205 Music Theory III 3

MTC206 Aural Perception III 1

MUP252++ Private Instruction 2

MTC255 Music Theory IV 3

MTC256 Aural Perception IV 1

Class Piano Credits: 0-3

MUP131 Class Piano I 1

MUP132 Class Piano II 1

MUP231 Class Piano III 1

(Student's level and number of credits required for degree determined by piano instructor based on audition)

Large Music Ensembles Credits: 4

Choose any four (4) credits from the following list of Musical Ensemble courses. Ensemble courses can be taken multiple times for credit. Any

MUP150 Community Chorus 1

MUP153 Concert Choir 1

MUP217 Music Theatre: Broadway Solos 1

MUP/THP273 Musical Theater Production 1

MUP270AA Musical Theatre Workshop 1

MUP153 is recommended for Music Theatre students (or, if unavailable, MUP150). Ensemble courses can be taken multiple times for credit.

Related Area Credits: 5

Students should choose five (5) additional credits from the following list of options that best align with their academic and professional goals

MUP218 Audition Techniques: Music Theater 1

MUP270 Musical Theatre Workshop 2

THP+++ Any THP Theatre Performance course(s)

DAN+++ Any DAN Dance Performance course(s)

General Education Requirements

Arizona General Education Curriculum (AGEC)

AGEC-A Credits: 35-38

A single course with an [HU], [SB], or [L] designation may also be used to satisfy the Oral Communication, Critical Reading, or Awareness Areas

First-Year Composition [FYC] Credits: 6

ENG101 First-Year Composition (3) OR

ENG107 First-Year Composition for ESL (3) AND

ENG102 First-Year Composition (3) OR

ENG108 First-Year Composition for ESL (3) 6

Literacy and Critical Inquiry [L] Credits: 3

Any approved general education course in the Literacy and Critical Inquiry [L] area.

Mathematics [MA] Credits: 3-6

MAT140 College Mathematics (5) OR

MAT141 College Mathematics (4) OR

MAT142 College Mathematics (3) OR

MAT145 College Mathematics with Review (5) OR

MAT146 College Mathematics with Review (6) OR

Higher level mathematics [MA] course 3-6

Computer/Statistics/Quantitative Applications [CS] Credits: 3

Transfer Plan 1: Classical Music Performance and Music Education:

Any approved general education course in the Computer/Statistics/Quantitative Applications [CS] area. 3

(Recommend: MTC180 Computer Literacy for Musicians)

Transfer Plan 2: Popular Music

MTC180 Computer Literacy for Musicians 3

Transfer Plan 3: Jazz Music

MTC180 Computer Literacy for Musicians 3

Transfer Plan 4: Music Theatre

Any approved general education course in the Computer/Statistics/Quantitative Applications [CS] area. 3

(Recommended: MTC180 Computer Literacy for Musicians)

Humanities, Arts and Design [HU] Credits: 6

MHL194 Music and Culture (3)

AND

Any additional MHL+++ Music: History/Literature course with [HU] designation. (3) 6

MHL241 recommended for students transferring to Ottawa/NAU.

Social-Behavioral Sciences [SB] Credits: 6

COM100 Introduction to Human Communication (3) OR

COM110 Interpersonal Communication (3) OR

COM230 Small Group Communication (3)

AND

Any approved general education courses in the Social-Behavioral Sciences [SB] area with the Cultural Diversity in the US [C] designation. (3)

Natural Sciences [SG]/[SQ] Credits: 8
 Any approved general education course in the Natural Sciences (Quantitative) [SQ] area (4) AND
 Any approved general education course in the Natural Sciences (Quantitative) [SQ] area or the Natural Sciences (General) [SG] area (4). 8

MCCCD Additional Requirements
 MCCCD Additional Requirements Credits: 0-3
 Courses in this area may also be applied to AGEC Requirements. To minimize total credits required for degree and maximize transferable credit

Critical Reading Credits: 0-3
 CRE101 College Critical Reading and Critical Thinking (3) OR
 Equivalent as indicated by assessment (0) 0-3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm10?id=16456362>

Starting Term: 2025 Fall
 Final Term: 9999

ASSOCIATE IN ARTS, FINE ARTS (AAFA) IN ASSOCIATE IN ARTS, FINE ARTS, EMPHASIS IN MUSICAL THEATRE

Total Credits: 60-64
 Major Code: 8314

Description

The Associate in Arts, Fine Arts (AAFA), Emphasis in Musical Theatre degree provides a foundation in performance and production practices in music, theatre, and dance. The degree is designed to prepare students to meet selective admission criteria for programs, such as the Bachelor of Musical Theatre, which may require an audition.

Program Notes

Students must earn a grade of C or better in all courses within the program. Some courses may require permission of instructor and/or audition for placement. For enrollment in private instruction for voice, consult the college music department. Because transfer requirements vary by program and institution, students intending to transfer are strongly encouraged to meet with an academic and faculty advisor once they have selected their transfer institution to ensure all requirements for achieving junior standing are satisfied.

Required Courses

Required Courses Course # Course Title Credits
 Credits: 26-32
 FYE101 Introduction to College, Career and Personal Success (1) OR
 FYE103 Exploration of College, Career and Personal Success (3) 1-3

Music Theory
 MTC105 Music Theory I (3) AND
 MTC106 Aural Perception I (1)
 OR
 MTC155 Music Theory II (3) AND
 MTC156 Aural Perception II (1)
 OR
 MTC205 Music Theory III (3) AND
 MTC206 Aural Perception III (1)
 OR
 MTC255 Music Theory IV (3) AND
 MTC256 Aural Perception IV (1) 4

Private Voice Instruction
 MUP101AA Private Instruction: Voice (1) OR
 MUP102AA Private Instruction: Voice (2) 1-2

 MUP151AA Private Instruction: Voice (1) OR
 MUP152AA Private Instruction: Voice (2) 1-2

 MUP202AA Private Instruction: Voice 2
 MUP252AA Private Instruction: Voice 2

Class Piano
 MUP131 Class Piano I (1) OR
 MUP132 Class Piano II (1) OR
 MUP231 Class Piano III (1) OR
 MUP232 Class Piano IV (1) 1

Music Theatre Workshop and Production
 Students must complete at least one credit of MUP/THP273.
 MUP/THP273 Musical Theatre Production 1 (may be completed for credit twice)

 MUP/TH0270 Musical Theatre Workshop (2) OR
 MUP/TH0270AA Musical Theatre Workshop (1) (may be completed for credit twice) 1-2

Acting
 THP112 Acting I 3
 THP212 Acting II 3

Movement and Voice
 COM/THP271 Voice and Diction (3) OR
 THP131 Stage Movement (3) 3

Dance

Select a total of four credits from the following list. Up to four courses may be selected from the area of Musical Theatre. No more than two

Musical Theatre

DAN129	Musical Theatre Dance I	1
DAN130	Musical Theatre Dance II	1
DAN229	Musical Theatre Dance III	1
DAN230	Musical Theatre Dance IV	1

Ballroom

DAN104++	Any Ballroom Course	1
DAN106AA	Latin I	1
DAN106AB	Latin II	1

Jazz

DAN133	Jazz Dance I	1
DAN136	Jazz Dance II	1
DAN233	Jazz Dance III	1
DAN233AA	Jazz Dance III: Intensive	2
DAN236	Jazz Dance IV	1
DAN236AA	Jazz Dance IV: Intensive	2

Ballet

DAN131	Ballet I	1
DAN134	Ballet II	1
DAN231	Ballet III	1
DAN231AA	Ballet III: Intensive	2
DAN234	Ballet IV	1
DAN234AA	Ballet IV: Intensive	2

Modern

DAN132	Modern Dance I	1
DAN135	Modern Dance II	1
DAN232	Modern Dance III	1
DAN232AA	Modern Dance III: Intensive	2
DAN235	Modern Dance IV	1
DAN235AA	Modern Dance IV: Intensive	2

Tap

DAN140	Tap Dance I	1
DAN145	Tap Dance II	1
DAN240	Tap Dance III	1
DAN245	Tap Dance IV	1

Hip Hop

DAN102++	Any Hip Hop Course	1
DAN202++	Any Hip Hop Course	1

Restricted Electives

Restricted Electives Course # Course Title Credits

Credits: 1-3

Select an elective course within the area of Dance, Music Performance, and/or Theatre Performance/Production in consultation with a Faculty P

DAN+++ Any DAN Dance course

MUP+++ Any MUP Music: Performance course

THP+++ Any Theatre Performance/Production course

General Education Requirements

Arizona General Education Curriculum (AGEC)

AGEC-A Credits: 35-38

A single course with an [HU], [SB], [L], or [SG/SQ] designation may also be used to satisfy the Oral Communication, Critical Reading, or Awar

First-Year Composition [FYC] Credits: 6

ENG101 First-Year Composition (3) OR

ENG107 First-Year Composition for ESL (3) AND

ENG102 First-Year Composition (3) OR

ENG108 First-Year Composition for ESL (3) 6

Literacy and Critical Inquiry [L] Credits: 3

THE220 Modern Drama 3

Mathematics [MA] Credits: 3-6

MAT140 College Mathematics (5) OR

MAT141 College Mathematics (4) OR

MAT142 College Mathematics (3) OR

MAT145 College Mathematics with Review (5) OR

MAT146 College Mathematics with Review (6) OR

Any higher approved general education course in the Mathematical Applications [MA] area 3-6

Computer/Statistics/Quantitative Applications [CS] Credits: 3

Any approved general education course in the Computer/Statistics/Quantitative Applications [CS] area. 3

Recommended: MTC180 Computer Literacy for Musicians 3

Humanities, Arts and Design [HU] Credits: 6

MHL146 Survey of Broadway Musicals (3)

AND

DAH100 Introduction to Dance in the United States (3) OR

DAH250 Dance in Popular Culture (3) OR

THE111 Introduction to Theatre (3) 6

Social-Behavioral Sciences [SB] Credits: 6

COM100 Introduction to Human Communication 3

Any approved general education courses in the Social-Behavioral Sciences [SB] with the Cultural Diversity in the US [C] designation and the (Natural Sciences [SG])/[SQ] Credits: 8
Any approved general education course in the Natural Sciences (Quantitative) [SQ] area 4
Any approved general education course in the Natural Sciences (Quantitative) [SQ] area or the Natural Sciences (General) [SG] area 4
MCCCD Additional Requirements
MCCCD Additional Requirements Credits: 0-3
Courses in this area may also be applied to AGECE Requirements. To minimize total credits required for degree and maximize transferable credit
Critical Reading Credits: 0-3
CRE101 College Critical Reading and Critical Thinking (3) OR
Equivalent as indicated by assessment (0) 0-3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm10?id=16456173>

Starting Term: 2025 Fall
Final Term: 9999

ASSOCIATE IN ARTS, FINE ARTS (AAFA) IN ASSOCIATE IN ARTS, FINE ARTS, EMPHASIS IN THEATRE

Total Credits: 60-70
Major Code: 8315

Description

The Associate in Arts, Fine Arts (AAFA), Emphasis in Theatre provides a foundation in design, technical, and performance practices for students who wish to specialize in performing arts, including acting, directing, design and technology, stage management, playwriting, and dramaturgy. This degree helps students develop the communication, collaboration, and creative problem-solving skills that are sought after by most career fields. With an associate degree, students will be prepared to enter a career or for transfer to a bachelor's degree program.

Program Notes

Students must earn a grade of C or better in all courses within the program. Because transfer requirements vary by program and institution, students intending to transfer are strongly encouraged to meet with a faculty program advisor and student success analyst once they have selected their transfer institution to ensure all requirements for achieving junior standing are satisfied. This emphasis is intended to align with the degree requirements for the following transfer partners: ASU (Herberger Institute for Design and the Arts), Theatre, BAASU (Herberger Institute for Design and the Arts), Theatre (Design and Production), BANAU, Theatre (Design and Technology Emphasis), BA or BSNAU, Theatre (Performance Emphasis), BA or BSNAU, Theatre (Theatre Studies Emphasis), BA or BSU of A, Theatre Arts, BAU of A, Theatre Production: Professional Actors Training Program Emphasis, BFAR. Refer to the MCCCD University Transfer Partner website for more information: ASU, NAU, U of A.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	15-17		
FYE101		Introduction to College, Career and Personal Success (1) OR	
FYE103		Exploration of College, Career and Personal Success (3) 1-3	
TH0115		Makeup for Stage and Screen	3
THP112		Acting I	3
THP201AA		Theatre Production I (1) OR	
THP202		Theatre Production Projects (1) 1	
Note that students intending to transfer to the University of Arizona should take THP201AA. Students transferring to NAU should take THP202.			
THP213		Introduction to Technical Theatre	4
THP214		Directing Techniques	3

Restricted Electives

Restricted Electives	Course #	Course Title	Credits
Credits:	6		
Meet with an academic advisor to select appropriate courses totaling six (6) credits.			
THE++++		Any Theatre course	
THF++++		Any Theatre and Film course	
THO++++		Any Theatre Occupational course	
THP++++		Any Theatre Performance/Production course	

General Education Requirements

Arizona General Education Curriculum (AGECE)
AGECE-A Credits: 35-44
Some courses with an [HU], [SB], or [L] designation may also be used to satisfy the Oral Communication, Critical Reading, or Awareness Area (First-Year Composition [FYC] Credits: 6
ENG101 First-Year Composition (3) OR
ENG107 First-Year Composition for ESL (3) AND
ENG102 First-Year Composition (3) OR
ENG108 First-Year Composition for ESL (3) 6
Literacy and Critical Inquiry [L] Credits: 3
THE220 Modern Drama 3

Mathematics [MA] Credits: 3-6
MAT140 College Mathematics (5) OR
MAT141 College Mathematics (4) OR
MAT142 College Mathematics (3) OR
MAT145 College Mathematics with Review (5) OR
MAT146 College Mathematics with Review (6) OR
Any approved general education course in the Mathematical Applications [MA] area (3-6) 3-6

Computer/Statistics/Quantitative Applications [CS] Credits: 3
Any approved general education course in the Computer/Statistics/Quantitative Applications [CS] area 3

Humanities, Arts and Design [HU] Credits: 6
THE111 Introduction to Theatre 3
THP217 Introduction to Design Scenography 3

Social-Behavioral Sciences [SB] Credits: 6
COM100 Introduction to Human Communication (3) OR
COM110 Interpersonal Communication (3) OR
COM230 Small Group Communication (3) 3

Any approved general education courses in the Social-Behavioral Sciences [SB] area. 3

Natural Sciences [SG]/[SQ] Credits: 8
Any approved general education course in the Science Quantitative [SQ] area (4) AND
Any approved general education course in the Science Quantitative [SQ] area or the Science General [SG] area (4). 8

Awareness Areas Credits: 0-6
These requirements may be shared with other AGECE Requirements.

Cultural Diversity in the US [C] Credits: 0-3
Any approved general education course with the Cultural Diversity in the U.S. [C] designation. 0-3

Historical/Global Awareness [H]/[G] Credits: 0-3
Any approved general education course with the Historical [H] and/or Global [G] awareness area designation. 0-3

MCCCD Additional Requirements
MCCCD Additional Requirements Credits: 0-3
Courses in this area may also be applied to AGECE Requirements. To minimize total credits required for degree and maximize transferable credit

Critical Reading Credits: 0-3
CRE101 College Critical Reading and Critical Thinking (3) OR
Equivalent as indicated by assessment 0-3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm10?id=16456392>

Starting Term: 2025 Fall
Final Term: 9999

ASSOCIATE IN BUSINESS, GENERAL REQUIREMENTS (ABUS-GR) IN ASSOCIATE IN BUSINESS, GENERAL REQUIREMENTS

Total Credits: 62
Major Code: 8900

Description

The Associate in Business, General Requirements (ABUS-GR) degree provides the first two years of a four-year curriculum for students who wish to specialize in business. For a comprehensive list of bachelor's programs, visit the aztransfer business matrix. With a bachelor's degree, students may pursue a number of careers, including but not limited to accountancy, business administration, business data analytics, economics, entrepreneurship, finance, marketing, management, retail management, and supply chain management.

Program Notes

Students must qualify to enter Brief Calculus by coursework or placement. Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits: 16-22			
ACC111		Accounting Principles I (3) AND	
ACC230		Uses of Accounting Information I (3) AND	
ACC240		Uses of Accounting Information II (3)	
OR			
ACC211		Financial Accounting (3) AND	
ACC212		Managerial Accounting (3)	
OR			
ACC111		Accounting Principles I (3) AND	
ACC112		Accounting Principles II (3) AND	
ACC212		Managerial Accounting (3)	6-9
FYE101		Introduction to College, Career and Personal Success (1) OR	
FYE103		Exploration of College, Career and Personal Success (3)	1-3
GBS205		Legal, Ethical, and Regulatory Issues in Business	3
GBS220		Quantitative Methods in Business (3) OR	
MAT217		Mathematical Analysis for Business (3) OR	

MAT218 Mathematical Analysis for Business (4) 3-4

Note: Students planning to transfer to ASU's W.P. Carey School of Business BS program should take MAT217 or MAT218. Students planning to transfer to the University of Arizona should take GBS220.

GBS221 Business Statistics 3

Restricted Electives

Restricted Electives Course # Course Title Credits

Credits: 6

Complete six (6) credits from the following options. Some courses may be used to satisfy both Restricted Elective and Arizona General Education

Meet with an advisor to select from the following options:

CIS114DE	Excel Spreadsheet	3
CIS133DA	Internet/Web Development Level I	3
CIS162AD	C#: Level I	3

GBS110 Human Relations in Business and Industry (3) OR
MGT251 Human Relations in Business (3) 3

GBS151 Introduction to Business 3 (Recommended)
GBS220 Quantitative Methods in Business 3
GBS233 Business Communication 3
IBS101 Introduction to International Business 3
MGT253 Owning and Operating a Small Business 3
MKT271 Principles of Marketing 3
PAD100 21st Century Public Policy and Service 3
REA179 Real Estate Principles I 3
REA180 Real Estate Principles II 3
REA201 Real Estate Principles I and II 6
SBU200 Society and Business 3

General Education Requirements

Arizona General Education Curriculum (AGEC)

AGEC-B Credits: 32-40

A single course with an [L], [HU], [SB], [SG], or [SQ] designation may also be used to satisfy the Awareness Area ([C], [G] and/or [H]) requirement.

First-Year Composition [FYC] Credits: 6

ENG101 First-Year Composition (3) OR
ENG107 First-Year Composition for ESL (3) AND
ENG102 First-Year Composition (3) OR
ENG108 First-Year Composition for ESL (3) 6

Literacy and Critical Inquiry [L] Credits: 0-3

Any approved general education course in the Literacy and Critical Inquiry [L] area. 3

May be met by GBS233 in the Restricted Electives area.

Mathematics [MA] Credits: 3-5

MAT212 Brief Calculus (3) OR
MAT213 Brief Calculus (4) OR
Higher general education courses in the Mathematical Applications [MA] area (3-5). 3-5

Computer/Statistics/Quantitative Applications [CS] Credits: 3

CIS105 Survey of Computer Information Systems 3

Humanities, Arts and Design [HU] Credits: 6

Any approved general education courses in the Humanities, Arts and Design [HU] area with the Cultural Diversity in the US [C] designation. (3)
AND
Any approved general education courses in the Humanities, Arts and Design [HU] area. (3) 6

Social-Behavioral Sciences [SB] Credits: 6

ECN211 Macroeconomic Principles (3) AND
ECN212 Microeconomic Principles (3) 6

Natural Sciences [SG]/[SQ] Credits: 8

Any approved general education course in the Science Quantitative [SQ] area (4) AND
Any approved general education course in the Science Quantitative [SQ] area or the Science General [SG] area (4). 8

Awareness Areas Credits: 0-3

These requirements may be shared with other AGEC requirements. See the AGEC matrix on aztransfer.com for course designations.

Historical/Global Awareness [H]/[G] Credits: 0-3

Any approved general education course with the Historical [H] or Global [G] awareness area designation. 0-3

May be met by IBS101 or SBU200 in the Restricted Electives area.

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm10?id=16456391>

Starting Term: 2025 Fall

Final Term: 9999

ASSOCIATE IN BUSINESS, SPECIAL REQUIREMENTS (ABUS-SR) IN ASSOCIATE IN BUSINESS, SPECIAL REQUIREMENTS

Total Credits: 62

Major Code: 8800

Description

The Associate in Business, Special Requirements (ABUS-SR) provides the first two years of a four-year curriculum for students who wish to pursue Computer Information Systems majors at Arizona's public universities. For a comprehensive list of bachelor's programs, visit the [aztransfer business matrix](#). With a bachelor's degree, students may pursue a number of careers, including but not limited to accountancy, business administration, business data analytics, computer information systems, economics, entrepreneurship, finance, marketing, management, retail management, and supply chain management.

Program Notes

Students must qualify to enter Brief Calculus by coursework or placement. Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses Course # Course Title Credits

Credits: 22-28

ACC111 Accounting Principles I (3) AND

ACC230 Uses of Accounting Information I (3) AND

ACC240 Uses of Accounting Information II (3)

OR

ACC211 Financial Accounting (3) AND

ACC212 Managerial Accounting (3)

OR

ACC111 Accounting Principles I (3) AND

ACC112 Accounting Principles II (3) AND

ACC212 Managerial Accounting (3) 6-9

CIS162AD C#: Level I 3

CIS250 Management of Information Systems 3

FYE101 Introduction to College, Career and Personal Success (1) OR

FYE103 Exploration of College, Career and Personal Success (3) 1-3

GBS205 Legal, Ethical, and Regulatory Issues in Business 3

GBS221 Business Statistics 3

GBS220 Quantitative Methods in Business (3) OR

MAT217 Mathematical Analysis for Business (3) OR

MAT218 Mathematical Analysis for Business (4) 3-4

Students planning to transfer to ASU's W.P. Carey School of Business BS program should take MAT217 or MAT218.

Students planning to transfer to the University of Arizona should take GBS220.

General Education Requirements

Arizona General Education Curriculum (AGEC)

AGEC-B Credits: 35-40

A single course with an [L], [HU], [SB], [SG], or [SQ] designation may also be used to satisfy the Awareness Area ([C], [G] and/or [H]) requi

First-Year Composition [FYC] Credits: 6

ENG101 First-Year Composition (3) OR

ENG107 First-Year Composition for ESL (3) AND

ENG102 First-Year Composition (3) OR

ENG108 First-Year Composition for ESL (3) 6

Literacy and Critical Inquiry [L] Credits: 3

Any approved general education course in the Literacy and Critical Inquiry [L] area. 3

Mathematics [MA] Credits: 3-5

MAT212 Brief Calculus (3) OR

MAT213 Brief Calculus (4) OR

Higher general education courses in the Mathematical Applications [MA] area. (3-5) 3-5

Computer/Statistics/Quantitative Applications [CS] Credits: 3

CIS105 Survey of Computer Information Systems 3

Humanities, Arts and Design [HU] Credits: 6

Any approved general education courses in the Humanities, Arts and Design [HU] area with the Cultural Diversity in the US [C] designation. (3

AND

Any approved general education courses in the Humanities, Arts and Design [HU] area. (3) 6

Social-Behavioral Sciences [SB] Credits: 6

ECN211 Macroeconomic Principles 3 AND

ECN212 Microeconomic Principles 3 (6)

Natural Sciences [SG]/[SQ] Credits: 8

Any approved general education course in the Science Quantitative [SQ] area. (4) AND

Any approved general education course in the Science Quantitative [SQ] area or the Science General [SG] area. (4) 8

Awareness Areas Credits: 0-3

These requirements may be shared with other AGEC requirements. See the AGEC matrix on [aztransfer.com](#) for course designations.

Historical/Global Awareness [H]/[G] Credits: 0-3

Any approved general education course with the Historical [H] or Global [G] awareness area designation. 0-3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm?id=176727>

Starting Term: 2022 Fall

Final Term: 9999

ASSOCIATE IN GENERAL STUDIES (AGS) IN ASSOCIATE IN GENERAL STUDIES

Total Credits: 60-64
Major Code: 2000

Description

The Associate in General Studies (AGS) degree requires 60-64 semester credits in courses numbered 100 and above. The degree includes the following components:

General Education (minimum of 38* credits):
Core curriculum (requires a grade of C or better)
Distribution courses (require a grade of D or better)

General Electives (enough additional courses numbered 100 or above, passed with a grade of D or better, to bring total credits to at least 60)

The AGS degree is recommended for students whose educational goals require flexibility. The AGS allows students to apply any course numbered 100 or above, including some that are not transferable to a state university, toward the credits required for the degree. Therefore, for students who intend to transfer to another college or university in the future to pursue a bachelor's degree, this degree may be less appropriate than other Associate degrees offered (Associate in Arts; Associate in Arts, Elementary Education; Associate in Arts, Fine Arts; Associate in Business, General Requirements; Associate in Business, Special Requirements; Associate in Science, and all major-specific pathway map versions of these degrees) by the Maricopa Community Colleges.

Required Courses

FYE101 Introduction to College, Career and Personal Success (1) OR FYE103 Exploration of College, Career and Personal Success (3) 1-3 General E

Free Electives

Select additional courses 100-level or higher to complete a minimum of 60 semester credits but no more than a total of 64 semester credits. C

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm10?id=176508>

Starting Term: 2022 Fall
Final Term: 9999

ASSOCIATE IN SCIENCE (AS) IN ASSOCIATE IN SCIENCE

Total Credits: 60
Major Code: 8600

Description

The Associate in Science (AS) degree is designed for students planning to transfer to four-year colleges and universities. In general, the components of the degree meet requirements for majors with more stringent mathematics and mathematics-based science requirements. Generally, the degree will transfer as a block without loss of credit to Arizona's public universities and other institutions with district-wide articulation agreements.

In most cases, courses used to satisfy the MCCCD Associate in Science (AS) will apply to general university graduation requirements of the majors that align with the AS degree; however, students need to be aware of any specific requirements of their intended major at the university to be sure they select courses that will meet them. Information regarding the articulation of the AS with majors at the Arizona public universities can be accessed via the following website: www.aztransfer.com

It is recommended that students select courses that meet more than one general education and/or awareness area requirement. Doing so will maximize the number of math and science electives the student can take as part of his/her Associate in Science degree.

The AS degree requires a minimum of 60 semester credits for the program of study; minimum total credits vary by specific emphasis (for example, Associate in Science, Emphasis in Physics). Refer to the Program (Degree) Search at <https://curriculum.maricopa.edu> for credit minimums for individual degree programs by emphasis.

Program Prerequisites

Program prerequisites for the Associate in Science degree vary by specific emphasis, and are not required without a specific emphasis selected.

Required Courses

Students must complete FYE101 (1) or FYE103 (3) and select the required courses for the specific Associate in Science degree emphasis. Refer

Restricted Electives

Restricted Electives for the Associate in Science degree vary by specific emphasis, and are not required without a specific emphasis selected.

General Education Requirements

Arizona General Education Curriculum (AGEC)
AGEC-S Credits: 36*-52
*The AGEC-S requires a minimum of 36 credits (33 if student has transfer credit from ASU, NAU or UAZ for a single course that meets FYC in full)

First-Year Composition [FYC] Credits: 6*
ENG101 First-Year Composition (3) OR
ENG107 First-Year Composition for ESL (3) AND
ENG102 First-Year Composition (3) OR
ENG108 First-Year Composition for ESL (3) 6*

*FYC may be met with fewer than 6 credits if student has transfer credit from ASU, NAU or UAZ for a single course that meets FYC in full.

Literacy and Critical Inquiry [L] Credits: 0-3**
Recommend selecting a course that satisfies [L] Literacy and Critical Inquiry and [SB] Social-Behavioral Sciences or [L] Literacy and Critical Inquiry

**0 credits only if shared with [HU] or [SB]

Mathematics [MA] Credits: 4-5

MAT220 Calculus with Analytic Geometry I (5) OR

MAT221 Calculus with Analytic Geometry I (4) OR

Higher approved general education course in the Mathematical Applications [MA] area for which MAT22+ is a prerequisite. (4-5) 4-5

Humanities, Arts and Design [HU] Credits: 6

Any approved general education courses in the Humanities, Arts and Design [HU] area. 6

Social-Behavioral Sciences [SB] Credits: 6

Any approved general education courses in the Social-Behavioral Sciences [SB] area. 6

Natural Sciences [SG]/[SQ] Credits: 8-10

Students must complete eight to ten (8-10) credits of General Chemistry, University Physics, General Biology for Majors, or Geology.

CHM150 General Chemistry I (4) OR

CHM151 General Chemistry I (3) AND

CHM151LL General Chemistry I Laboratory (1) OR

CHM150AA General Chemistry I (5) OR

CHM151AA General Chemistry I (4)

AND

CHM152 General Chemistry II (3) AND

CHM152LL General Chemistry II Laboratory (1) OR

CHM152AA General Chemistry II (4) 8-9

OR

PHY115 University Physics I (5) OR

PHY121 University Physics I: Mechanics (4)

AND

PHY116 University Physics II (5) OR

PHY131 University Physics II: Electricity and Magnetism (4) 8-10

OR

BI0181++ General Biology (Majors) I (4) AND

BI0182++ General Biology (Majors) II (4) 8

OR

GLG101 Introduction to Geology I - Physical Lecture (3) AND

GLG103 Introduction to Geology I - Physical Laboratory (1) OR

GLG101IN Introduction to Geology I - Physical (4)

AND

GLG102 Introduction to Geology II - Historical Lecture (3) AND

GLG104 Introduction to Geology II - Historical Laboratory (1) OR

GLG102IN Introduction to Geology II - Historical (4) 8

Subject Options Credits: 6-10

Refer to transfer resources, including academic advisement and transfer guides, to select six to ten (6-10) additional math and/or science cr

Awareness Areas Credits: 0-6

These requirements may be shared with other AGECE requirements. See the AGECE matrix on aztransfer.com for course designations.

Cultural Diversity in the US [C] Credits: 0-3

Any approved general education course in the Cultural Diversity in the U.S. [C] area. 0-3

Historical/Global Awareness [H]/[G] Credits: 0-3

Any approved general education course in the Historical [H] or Global [G] area. 0-3

MCCCD Additional Requirements

MCCCD Additional Requirements Credits: 0-6

Some courses in this area have [SB] and [L] designations and may also be applied to the corresponding AGECE requirements. See the AGECE matrix

Oral Communication Credits: 0-3

COM100 Introduction to Human Communication (3) OR

COM110 Interpersonal Communication (3) OR

COM225 Public Speaking (3) OR

COM230 Small Group Communication (3) 0-3

Critical Reading Credits: 0-3

CRE101 College Critical Reading and Critical Thinking (3) OR

Equivalent as indicated by assessment (0) 0-3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm10?id=16456342>

Starting Term: 2025 Fall

Final Term: 9999

ASSOCIATE IN SCIENCE (AS) IN ASSOCIATE IN SCIENCE, EMPHASIS IN ASTRONOMY

Total Credits: 60-64

Major Code: 8605

Description

The Associate in Science (AS), Emphasis in Astronomy provides the first two years of a four-year curriculum for students who intend to transfer to a four-year institution to specialize in Astronomy or a related field. Upon completion of a graduate degree, students may pursue a number of careers including astronomers, atmospheric and space scientists, physicists, and astronomy professors.

Program Notes

Students must earn a grade of C or better in all courses within the program. This emphasis is intended to align with the degree requirements for the following transfer partners: ASU (College of Liberal Arts and Sciences), Earth and Space Exploration (Astrophysics), BS. Refer to the MCCC University Transfer Partner website for more information: ASU .

Required Courses

Required Courses Course # Course Title Credits
Credits: 12-15
AST111 Introduction to Solar System Astronomy 4
AST112 Introduction to Stars, Galaxies, and Cosmology 4

FYE101 Introduction to College, Career and Personal Success (1) OR
FYE103 Exploration of College, Career and Personal Success (3) 1-3

MAT276 Modern Differential Equations (4) OR
MAT277 Modern Differential Equations (3) 3-4

General Education Requirements

Arizona General Education Curriculum (AGEC)
AGEC-S Credits: 38-44
A single course with an [HU], [SB], or [L] designation may also be used to satisfy the Oral Communication, Critical Reading, or Awareness Area

First-Year Composition [FYC] Credits: 6
ENG101 First-Year Composition (3) OR
ENG107 First-Year Composition for ESL (3) AND
ENG102 First-Year Composition (3) OR
ENG108 First-Year Composition for ESL (3) 6

Mathematics [MA] Credits: 4-5
MAT220 Calculus with Analytic Geometry I (5) OR
MAT221 Calculus with Analytic Geometry I (4) OR
Higher approved general education course in the Mathematical Applications [MA] area for which MAT22+ is a prerequisite. (4-5) 4-5

Humanities, Arts and Design [HU] Credits: 6
Any approved general education courses in the Humanities, Arts and Design [HU] area with the Literacy and Critical Inquiry [L] designation. (3)
Any approved general education courses in the Humanities, Arts and Design [HU] area with the Global [G] or Historical [H] designation. (3)

Social-Behavioral Sciences [SB] Credits: 6
COM100 Introduction to Human Communication (3) OR
COM110 Interpersonal Communication (3) OR
COM230 Small Group Communication (3)
AND
Any approved general education courses in the Social-Behavioral Sciences [SB] area. (3) 6

Natural Sciences [SG]/[SQ] Credits: 8
PHY121 University Physics I: Mechanics (4) AND
PHY131 University Physics II: Electricity and Magnetism (4) 8

Subject Options Credits: 8-10
MAT230 Calculus with Analytic Geometry II (5) OR
MAT231 Calculus with Analytic Geometry II (4)
AND
MAT240 Calculus with Analytic Geometry III (5) OR
MAT241 Calculus with Analytic Geometry III (4) 8-10

Awareness Areas Credits: 0-3
These requirements may be shared with other AGEC requirements. See the AGEC matrix on aztransfer.com for course designations.

Cultural Diversity in the US [C] Credits: 0-3
Any approved general education course with the Cultural Diversity in the U.S. [C] designation. 0-3

MCCC Additional Requirements
MCCC Additional Requirements Credits: 0-3
Some courses in this area have [SB] and [L] designations and may also be applied to the corresponding AGEC requirements. See the AGEC matrix

Critical Reading Credits: 0-3
CRE101 College Critical Reading and Critical Thinking (3) OR
Equivalent as indicated by assessment (0) 0-3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCC.woa/wa/freeForm10?id=16456303>

Starting Term: 2025 Fall
Final Term: 9999

ASSOCIATE IN SCIENCE (AS) IN ASSOCIATE IN SCIENCE, EMPHASIS IN BIOCHEMISTRY

Total Credits: 60-64
Major Code: 8610

Description

The Associate in Science (AS), Emphasis in Biochemistry provides the first two years of a four-year curriculum for students who wish to specialize in biochemistry or are preparing for graduate programs in the area. With an associate's degree, students may qualify as a chemical technician. With a bachelor's degree, students may pursue a career as a biochemist or biochemical engineer. With a graduate degree, students may pursue a career as a medical research scientist.

Program Notes

Students must earn a grade of C or better in all courses within the program. This emphasis is intended to align with the degree requirements for the following transfer partners: ASU (College of Liberal Arts and Sciences), Biochemistry, BAASU (College of Liberal Arts and Sciences), Biochemistry, BS. Refer to the MCCC University Transfer Partner website for more information: ASU.

Required Courses

Required Courses Course # Course Title Credits
Credits: 9-11
CHM235 General Organic Chemistry I (3) AND
CHM235LL General Organic Chemistry I Laboratory (1) OR
CHM235AA General Organic Chemistry I with Lab (4) 4

CHM236 General Organic Chemistry II (3) AND
CHM236LL General Organic Chemistry II Laboratory (1) OR
CHM236AA General Organic Chemistry II with Lab (4) 4

FYE101 Introduction to College, Career and Personal Success (1) OR
FYE103 Exploration of College, Career and Personal Success (3) 1-3

General Education Requirements

Arizona General Education Curriculum (AGEC)
AGEC-5 Credits: 38-49
A single course with an [HU], [SB], or [L] designation may also be used to satisfy the Oral Communication, Critical Reading, or Awareness Area

First-Year Composition [FYC] Credits: 6
ENG101 First-Year Composition (3) OR
ENG107 First-Year Composition for ESL (3) AND
ENG102 First-Year Composition (3) OR
ENG108 First-Year Composition for ESL (3) 6

Literacy and Critical Inquiry [L] Credits: 0-3**
Any approved general education course in the Literacy and Critical Inquiry [L] area. 3

Recommend selecting a course that satisfies ([L] and [SB]) or ([L] and [HU]) or ([L] and COM) or ([L] and CRE101) requirements simultaneously

**0 credits only if shared with [HU] or [SB]

Mathematics [MA] Credits: 4-5
MAT220 Calculus with Analytic Geometry I (5) OR
MAT221 Calculus with Analytic Geometry I (4) OR
Higher approved general education course in the Mathematical Applications [MA] area for which MAT22+ is a prerequisite. (4-5) 4-5

Humanities, Arts and Design [HU] Credits: 6
Any approved general education courses in the Humanities, Arts and Design [HU] area. 6

Social-Behavioral Sciences [SB] Credits: 6
COM100 Introduction to Human Communication (3) OR
COM110 Interpersonal Communication (3) OR
COM230 Small Group Communication (3) OR
AND
Any approved general education courses in the Social-Behavioral Sciences [SB] area. (3) 6

Natural Sciences [SG]/[SQ] Credits: 8
BI0181++ General Biology (Majors) I (4) AND
BI0182++ General Biology (Majors) II (4) 8

Subject Options Credits: 8-9
CHM150 General Chemistry I (4) AND
CHM151LL General Chemistry I Laboratory (1)
OR
CHM150AA General Chemistry I with Lab (5)
OR
CHM151 General Chemistry I (3) AND
CHM151LL General Chemistry I Laboratory (1)
OR
CHM151AA General Chemistry I with Lab (4)

AND

CHM152 General Chemistry II (3) AND
CHM152LL General Chemistry II Laboratory (1) OR
CHM152AA General Chemistry II with Lab (4) 8-9

Awareness Areas Credits: 0-6
These requirements may be shared with other AGEC requirements.

Cultural Diversity in the US [C] Credits: 0-3
Any approved general education course with the Cultural Diversity in the U.S. [C] designation. 0-3

Historical/Global Awareness [H]/[G] Credits: 0-3
Any approved general education course with the Historical [H] or Global [G] awareness area designation. 0-3

MCCC Additional Requirements
MCCC Additional Requirements Credits: 0-3
Some courses in this area have [SB] and [L] designations and may also be applied to the corresponding AGEC requirements. See the AGEC matrix

Critical Reading Credits: 0-3
CRE101 College Critical Reading and Critical Thinking (3) OR
Equivalent as indicated by assessment (0) 0-3

ASSOCIATE IN SCIENCE (AS) IN ASSOCIATE IN SCIENCE, EMPHASIS IN BIOLOGICAL SCIENCES

Total Credits: 60-64
Major Code: 8602

Description

The Associate in Science (AS), Emphasis in Biological Sciences provides the first two years of a four-year curriculum for students who wish to specialize in biology-related fields and/or are preparing for application to professional graduate programs in various medical fields. With a bachelor's degree, students may pursue a career as a biological research lab or field technician. With a graduate degree, students may pursue a number of careers, including but not limited to, bioinformatic scientists, molecular and cellular biologists, ecologists, wildlife conservationists and environmental scientists, marine biologists, secondary school (grades 7-12) teachers and university professors, pharmaceutical developer, food safety investigator, geneticists, physicians, physician assistants, pharmacists, dentists, and optometrists and veterinarians.

Program Notes

Students must earn a grade of C or better in all courses within the program. Admission to graduate/professional programs is competitive. GPA in science courses (as well as cumulative GPA) is often an important selection criterion. Understanding of course content is important in preparation for exams such as MCAT, DAT, PCAT and GRE that are generally weighted in admissions rankings. This emphasis is intended to align with the degree requirements for the following transfer partners: ASU (College of Integrative Sciences and Arts), Applied Biological Sciences (Applied Biological Sciences), BSASU (College of Integrative Sciences and Arts), Applied Biological Sciences (Preveterinary Medicine), BSASU (College of Liberal Arts and Sciences), Biological Sciences, BSASU (College of Liberal Arts and Sciences), Biological Sciences (Biomedical Sciences), BSASU (College of Liberal Arts and Sciences), Biological Sciences (Conservation Biology and Ecology), BSASU (College of Liberal Arts and Sciences), Biological Sciences (Genetics, Cell and Development Biology), BSASU (College of Liberal Arts and Sciences), Biological Sciences (Neurobiology, Physiology and Behavior), BSASU (College of Liberal Arts and Sciences), Microbiology, BSASU (College of Liberal Arts and Sciences), Microbiology (Medical Microbiology), BSASU (College of Liberal Arts and Sciences), Molecular Biosciences and Biotechnology, BSASU (New College of Interdisciplinary Arts and Sciences), Biology, BSASU (New College of Interdisciplinary Arts and Sciences), Biology (Pharmacology/Toxicology), BSASU (New College of Interdisciplinary Arts and Sciences), Biotechnology and Bioenterprise, BSGCU, Biological Sciences, BSNAU, Biology, BSU of A, Biology (Biomedical Sciences), BSU of A, Biology (Organismal Biology), BSRefer to the MCCC University Transfer Partner website for more information: ASU , GCU , NAU , U of A .

Required Courses

Required Courses Course # Course Title Credits
Credits: 5-7
CHM230 Fundamental Organic Chemistry (3) AND
CHM230LL Fundamental Organic Chemistry Laboratory (1)
OR
CHM235 General Organic Chemistry I (3) AND
CHM235LL General Organic Chemistry I Laboratory (1) OR
CHM235AA General Organic Chemistry I with Lab (4) 4
Consult with an academic, faculty, or program advisor to select the option that aligns with your intended transfer program requirements.
FYE101 Introduction to College, Career and Personal Success (1) OR
FYE103 Exploration of College, Career and Personal Success (3) 1-3

General Education Requirements

Arizona General Education Curriculum (AGEC)
AGEC-S Credits: 38-49
A single course with an [HU], [SB], or [L] designation may also be used to satisfy the Oral Communication, Critical Reading, or Awareness Area

First-Year Composition [FYC] Credits: 6
ENG101 First-Year Composition (3) OR
ENG107 First-Year Composition for ESL (3) AND
ENG102 First-Year Composition (3) OR
ENG108 First-Year Composition for ESL (3) 6

Literacy and Critical Inquiry [L] Credits: 0-3
Any approved general education course in the Literacy and Critical Inquiry [L] area. 3

Recommend selecting a course that satisfies [L] and [SB] or [L] and [HU] or [L] and (COM) or [L] and CRE101 requirements simultaneously.

Mathematics [MA] Credits: 4-5
MAT220 Calculus with Analytic Geometry I (5) OR
MAT221 Calculus with Analytic Geometry I (4) OR
Higher approved general education course in the Mathematical Applications [MA] area for which MAT22+ is a prerequisite. (4-5) 4-5

Humanities, Arts and Design [HU] Credits: 6
Any approved general education courses in the Humanities, Arts and Design [HU] area. 6

Social-Behavioral Sciences [SB] Credits: 6
Any approved general education courses in the Social-Behavioral Sciences [SB] area. 6

Natural Sciences [SG]/[SQ] Credits: 8
BI0181++ General Biology (Majors) I (4) AND
BI0182++ General Biology (Majors) II (4) 8

Subject Options Credits: 8-9
CHM150 General Chemistry I (4) AND
CHM151LL General Chemistry I Laboratory (1)
OR
CHM150AA General Chemistry I with Lab (5)
OR
CHM151 General Chemistry I (3) AND

CHM151LL General Chemistry I Laboratory (1)
OR
CHM151AA General Chemistry I with Lab (4)

AND

CHM152 General Chemistry II (3) AND
CHM152LL General Chemistry II Laboratory (1)
OR
CHM152AA General Chemistry II with Lab (4) 8-9

Awareness Areas Credits: 0-6

These requirements may be shared with other AGECE requirements. See the AGECE matrix on aztransfer.com for course designations.

Cultural Diversity in the US [C] Credits: 0-3

Any approved general education course in the Cultural Diversity in the U.S. [C] area.

Historical/Global Awareness [H]/[G] Credits: 0-3

Any approved general education in the Historical [H] or Global [G] area.

MCCCD Additional Requirements

MCCCD Additional Requirements Credits: 0-6

Some courses in this area have [SB] and [L] designations and may also be applied to the corresponding AGECE requirements. See the AGECE matrix

Oral Communication Credits: 0-3

COM100 Introduction to Human Communication (3) OR

COM110 Interpersonal Communication (3) OR

COM225 Public Speaking (3) OR

COM230 Small Group Communication (3) 0-3

Critical Reading Credits: 0-3

CRE101 College Critical Reading and Critical Thinking (3) OR

Equivalent as indicated by assessment (0) 0-3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm10?id=16456041>

Starting Term: 2025 Fall

Final Term: 9999

ASSOCIATE IN SCIENCE (AS) IN ASSOCIATE IN SCIENCE, EMPHASIS IN CHEMISTRY

Total Credits: 60-64

Major Code: 8603

Description

The Associate in Science (AS), Emphasis in Chemistry provides the first two years of a four-year curriculum for students who wish to specialize in chemistry or are preparing for graduate programs in the area. With an associate's degree, students may qualify as a chemical technician or chemical equipment operator and tender. With a bachelor's degree, students may pursue a career as a chemist, chemical engineer, or materials scientist. Upon completion of a graduate degree, students may pursue a career as a chemistry professor.

Program Notes

Students must earn a grade of C or better in all courses within the program. This emphasis is intended to align with the degree requirements for the following transfer partners: ASU (College of Liberal Arts and Sciences), Chemistry, BSGCU, Chemistry, BSNAU, Chemistry (Advanced Chemistry Emphasis), BSRefer to the MCCCD University Transfer Partner website for more information: ASU , GCU , NAU .

Required Courses

Required Courses Course # Course Title Credits

Credits: 17-21

FYE101 Introduction to College, Career and Personal Success (1) OR

FYE103 Exploration of College, Career and Personal Success (3) 1-3

MAT230 Calculus with Analytic Geometry II (5) OR

MAT231 Calculus with Analytic Geometry II (4) 4-5

MAT240 Calculus with Analytic Geometry III (5) OR

MAT241 Calculus with Analytic Geometry III (4) 4-5

PHY121 University Physics I: Mechanics 4

PHY131 University Physics II: Electricity and Magnetism 4

General Education Requirements

Arizona General Education Curriculum (AGECE)

AGECE-S Credits: 38-40

A single course with an [HU], [SB], or [L] designation may also be used to satisfy the Oral Communication, Critical Reading, or Awareness Area

First-Year Composition [FYC] Credits: 6

ENG101 First-Year Composition (3) OR

ENG107 First-Year Composition for ESL (3) AND

ENG102 First-Year Composition (3) OR

ENG108 First-Year Composition for ESL (3) 6

Mathematics [MA] Credits: 4-5

MAT220 Calculus with Analytic Geometry I (4) OR

MAT221 Calculus with Analytic Geometry I (5) OR

Higher approved general education course in the Mathematical Applications [MA] area for which MAT22+ is a prerequisite. (4-5) 4-5

Humanities, Arts and Design [HU] Credits: 6

Any approved general education course in the Humanities, Arts and Design [HU] area with the Literacy and Critical Inquiry [L] designation. (3)
AND

Any approved general education course in the Humanities, Arts and Design [HU] area with the Cultural Diversity in the US [C] designation. (3)

Social-Behavioral Sciences [SB] Credits: 6

COM100 Introduction to Human Communication (3) OR

COM110 Interpersonal Communication (3) OR

COM230 Small Group Communication (3)

AND

Any approved general education courses in the Social-Behavioral Sciences [SB] area with the Historical [H] or Global [G] designation. (3)

Natural Sciences [SG]/[SQ] Credits: 8-9

CHM150 General Chemistry I (4) AND

CHM151LL General Chemistry I Laboratory (1) OR

CHM150AA General Chemistry I with Lab (5) OR

CHM151 General Chemistry I (3) AND

CHM151LL General Chemistry I Laboratory (1) OR

CHM151AA General Chemistry I with Lab (4)

AND

CHM152 General Chemistry II (3) AND

CHM152LL General Chemistry II Laboratory (1) OR

CHM152AA General Chemistry II with Lab (4) 8-9

Subject Options Credits: 8

CHM235 General Organic Chemistry I (3) AND

CHM235LL General Organic Chemistry I Laboratory (1) AND

CHM236 General Organic Chemistry II (3) AND

CHM236LL General Organic Chemistry II Laboratory (1) 8

MCCCD Additional Requirements

MCCCD Additional Requirements Credits: 0-3

Some courses in this area have [SB] and [L] designations and may also be applied to the corresponding AGEC requirements. See the AGEC matrix

Critical Reading Credits: 0-3

CRE101 College Critical Reading and Critical Thinking (3) OR

Equivalent as indicated by assessment (0) 0-3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm10?id=16456158>

Starting Term: 2025 Fall

Final Term: 9999

ASSOCIATE IN SCIENCE (AS) IN ASSOCIATE IN SCIENCE, EMPHASIS IN COMPUTER SCIENCE

Total Credits: 60-64

Major Code: 8601

Description

The Associate in Science (AS), Emphasis in Computer Science degree provides the first two years of a four-year curriculum for students who wish to specialize in computer science. With an associate degree, students may seek employment as a computer user support specialist. With a bachelor's degree, students may pursue employment opportunities in several careers, including computer network architects, computer programmers, computer systems analysts, database administrators, information security analysts, network and computer systems administrators, and/or software developers in a number of sectors including arts, sciences, manufacturing, engineering, medicine, energy, and security.

Program Notes

Students must earn a grade of C or better in all courses within the program. This emphasis is intended to align with the degree requirements for the following transfer partners: ASU (Ira A. Fulton Schools of Engineering), Computer Science (any emphasis), BS. Refer to the MCCCD University Transfer Partner website for more information: ASU .

Required Courses

Required Courses Course # Course Title Credits

Credits: 23-28

CSC/EEE120 Digital Design Fundamentals 4

CSC/EEE230 Computer Organization and Assembly Language 4

CSC240 Introduction to Different Programming Languages (3) OR

CSC240AA Introduction to Different Programming Languages (4) 3-4

FYE101 Introduction to College, Career and Personal Success (1) OR

FYE103 Exploration of College, Career and Personal Success (3) 1-3

MAT227 Discrete Mathematical Structures 3

MAT230 Calculus with Analytic Geometry II (5) OR

MAT231 Calculus with Analytic Geometry II (4) 4-5

MAT240 Calculus with Analytic Geometry III (5) OR

MAT241 Calculus with Analytic Geometry III (4) 4-5

General Education Requirements

Arizona General Education Curriculum (AGEC)

AGEC-S Credits: 36-40

A single course with an [HU], [SB], or [L] designation may also be used to satisfy the Oral Communication, Critical Reading, or Awareness Area

First-Year Composition [FYC] Credits: 6

ENG101 First-Year Composition (3) OR

ENG107 First-Year Composition for ESL (3) AND

ENG102 First-Year Composition (3) OR

ENG108 First-Year Composition for ESL (3) 6

Mathematics [MA] Credits: 4-5

MAT220 Calculus with Analytic Geometry I (5) OR

MAT221 Calculus with Analytic Geometry I (4) 4-5

Humanities, Arts and Design [HU] Credits: 6

Any approved general education course in the Humanities, Arts and Design [HU] area with the Literacy and Critical Inquiry [L] designation. (3)

Any approved general education course in the Humanities, Arts and Design [HU] area with the Cultural Diversity in the US [C] designation. (3)

Social-Behavioral Sciences [SB] Credits: 6

COM100 Introduction to Human Communication (3) OR

COM110 Interpersonal Communication (3) OR

COM230 Small Group Communication (3)

AND

Any approved general education courses in the Social-Behavioral Sciences [SB] area with the Global [G] or Historical [H] designation. (3)

Natural Sciences [SG]/[SQ] Credits: 8-9

Students must complete eight to nine (8-9) credits of General Chemistry, University Physics or General Biology for Majors, or Geology.

CHM150 General Chemistry I (4) OR

CHM151 General Chemistry I (3) AND

CHM151LL General Chemistry I Laboratory (1) OR

CHM150AA General Chemistry I with Lab (5) OR

CHM151AA General Chemistry I with Lab (4)

AND

CHM152 General Chemistry II (3) AND

CHM152LL General Chemistry II Laboratory (1) OR

CHM152AA General Chemistry II with Lab (4) 8-9

OR

PHY121 University Physics I: Mechanics (4) AND

PHY131 University Physics II: Electricity and Magnetism (4) 8

OR

BI0181 General Biology (Majors) I (4) OR

BI0181XT General Biology (Majors) I (4)

AND

BI0182 General Biology (Majors) II (4) OR

BI0182XT General Biology (Majors) II (4) 8

OR

GLG101 Physical Geology: Dynamic Earth Lecture (3) AND

GLG103 Physical Geology: Dynamic Earth Lab (1) OR

GLG101IN Physical Geology: Dynamic Earth (4)

AND

GLG102 Historical Geology: Primordial to Present Lecture (3) AND

GLG104 Historical Geology: Primordial to Present Lab (1) OR

GLG102IN Historical Geology: Primordial to Present (4) 8

Subject Options Credits: 6-8

CSC110 Introduction to Computer Science (Java) (3) OR

CSC110AA Introduction to Computer Science (Java) (3) OR

CSC110AB Introduction to Computer Science (Java) (4)

AND

CSC205 Object Oriented Programming and Data Structures (3) OR

CSC205AA Object Oriented Programming and Data Structures (3) OR

CSC205AB Object Oriented Programming and Data Structures (4) OR

CSC205AC Object Oriented Programming and Data Structures (4) OR

CSC205AD Object Oriented Programming and Data Structures (4) 6-8

MCCCD Additional Requirements

MCCCD Additional Requirements Credits: 0-3

Some courses in this area have [SB] and [L] designations and may also be applied to the corresponding AGEC requirements. See the AGEC matrix

Critical Reading Credits: 0-3

CRE101 College Critical Reading and Critical Thinking (3) OR

Equivalent as indicated by assessment (0) 0-3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm10?id=16456304>

Starting Term: 2025 Fall

Final Term: 9999

ASSOCIATE IN SCIENCE (AS) IN ASSOCIATE IN SCIENCE, EMPHASIS IN ENGINEERING

Total Credits: 60-64

Major Code: 8607

Description

The Associate in Science (AS), Emphasis in Engineering provides the majority of the first two years of a four-year curriculum for students who wish to transfer to a four-year institution to earn a bachelor's degree in an engineering discipline. With a bachelor's degree students may pursue a career as an engineer in a number of areas including but not limited to aerospace engineering, biomedical engineering, chemical engineering, civil engineering, computer systems engineering, electrical engineering, industrial engineering, mechanical engineering, and mining engineering.

Program Notes

Students must earn a grade of C or better in all courses within the program. Students who aim to transfer to a 4-year degree program should be aware that many universities have certain GPA requirements (often a minimum 2.75 or 3.00 GPA). Students should check with the program they would like to transfer to, before initiating pursuit of their intended degree program. This emphasis is intended to align with the degree requirements for the following transfer partners: ASU (Ira A. Fulton Schools of Engineering), Aerospace Engineering (Aeronautics), BSEASU (Ira A. Fulton Schools of Engineering), Aerospace Engineering (Astronautics), BSEASU (Ira A. Fulton Schools of Engineering), Aerospace Engineering (Autonomous Vehicle Systems), BSEASU (Ira A. Fulton Schools of Engineering), Biomedical Engineering, BSEASU (Ira A. Fulton Schools of Engineering), Chemical Engineering, BSEASU (Ira A. Fulton Schools of Engineering), Civil Engineering (Sustainable Engineering), BSEASU (Ira A. Fulton Schools of Engineering), Civil Engineering, BSEASU (Ira A. Fulton Schools of Engineering), Computer Systems Engineering (Cybersecurity), BSEASU (Ira A. Fulton Schools of Engineering), Computer Systems Engineering, BSEASU (Ira A. Fulton Schools of Engineering), Construction Engineering, BSEASU (Ira A. Fulton Schools of Engineering), Electrical Engineering (Electric Power and Energy Systems), BSEASU (Ira A. Fulton Schools of Engineering), Electrical Engineering, BSEASU (Ira A. Fulton Schools of Engineering), Engineering (Automotive Systems), BSEASU (Ira A. Fulton Schools of Engineering), Engineering (Electrical Systems), BSEASU (Ira A. Fulton Schools of Engineering), Engineering (Mechanical Engineering Systems), BSEASU (Ira A. Fulton Schools of Engineering), Engineering (Robotics), BSEASU (Ira A. Fulton Schools of Engineering), Engineering, BSEASU (Ira A. Fulton Schools of Engineering), Industrial Engineering, BSEASU (Ira A. Fulton Schools of Engineering), Manufacturing Engineering, BSEASU (Ira A. Fulton Schools of Engineering), Materials Science and Engineering, BSEASU (Ira A. Fulton Schools of Engineering), Mechanical Engineering (Computational Mechanics), BSEASU (Ira A. Fulton Schools of Engineering), Mechanical Engineering (Energy and Environment), BSEASU (Ira A. Fulton Schools of Engineering), Mechanical Engineering, BSEASU (Ira A. Fulton Schools of Engineering), Mechanical Engineering, BSNAU, Civil Engineering, BSNAU, Computer Engineering, BSNAU, Electrical Engineering, BSNAU, Mechanical Engineering, BSU of A, Aerospace Engineering, BSU of A, Biomedical Engineering, BSU of A, Chemical Engineering, BSU of A, Civil Engineering, BSU of A, Electrical and Computer Engineering, BSU of A, Industrial Engineering, BSU of A, Mechanical Engineering, BSU of A, Mining and Geological Engineering, BSU of A. Refer to the MCCC University Transfer Partner website for more information: ASU, NAU, U of A.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	5-7		
ECE102	Engineering Analysis Tools and Techniques	2	
ECE103	Engineering Problem Solving and Design	2	
FYE101	Introduction to College, Career and Personal Success	(1) OR	
FYE103	Exploration of College, Career and Personal Success	(3) 1-3	

Restricted Electives

Restricted Electives	Course #	Course Title	Credits
Credits:	13-22		

Students may select 13 to 22 credits from any of the areas below. Consult with an academic, faculty, or program advisor to select courses that

General Math and Chemistry Courses (applicable to many engineering areas)

CHM140AA	General Chemistry for Engineers with Lab	(6) OR
CHM150	General Chemistry I	(4) AND
CHM151LL	General Chemistry I Laboratory	(1) OR
CHM150AA	General Chemistry I with Lab	(5) OR
CHM151	General Chemistry I	(3) AND
CHM151LL	General Chemistry I Laboratory	(1) OR
CHM151AA	General Chemistry I with Lab	(4) 4-6

CHM152	General Chemistry II	(3) AND
CHM152LL	General Chemistry II Laboratory	(1) OR
CHM152AA	General Chemistry II with Lab	(4) 4

MAT276	Modern Differential Equations	(4) OR
MAT277	Modern Differential Equations	(3) 3-4

Aerospace or Mechanical Engineering

ECE105	MATLAB Programming	1
ECE211	Engineering Mechanics-Statics	3
ECE212	Engineering Mechanics-Dynamics	3
ECE215	Mechanics of Materials	3

ECE216	Computer-Aided Engineering	(2) AND
ECE216LL	Computer-Aided Engineering Laboratory	(1) OR
ECE216AA	Computer-Aided Engineering	(3) 3

EEE202	Circuits and Devices	5
MAT225	Elementary Linear Algebra	3

Biomedical Engineering

BI0181	General Biology (Majors) I	(4) OR
BI0181XT	General Biology (Majors) I	(4) 4
BI0201	Human Anatomy and Physiology I	(4) OR
BI0201XT	Human Anatomy and Physiology I	(4) 4

BI0202	Human Anatomy and Physiology II	4
EEE202	Circuits and Devices	5
MAT225	Elementary Linear Algebra	3

Chemical Engineering

CHM235	General Organic Chemistry I	(3) AND
CHM235LL	General Organic Chemistry I Laboratory	(1) OR
CHM235AA	General Organic Chemistry I with Lab	(4) 4
CHM236	General Organic Chemistry II	(3) OR
CHM236AA	General Organic Chemistry II with Lab	(4) 3-4

MAT225 Elementary Linear Algebra 3

Civil or Construction Engineering

ECE211 Engineering Mechanics–Statics 3

ECE212 Engineering Mechanics–Dynamics 3

ECE215 Mechanics of Materials 3

GLG101 Physical Geology: Dynamic Earth Lecture (3) AND

GLG103 Physical Geology: Dynamic Earth Lab (1) OR

GLG101IN Physical Geology: Dynamic Earth (4) 4

MAT225 Elementary Linear Algebra 3

Computer/Computer Systems Engineering

CSC110 Introduction to Computer Science (Java) (3) OR

CSC110AA Introduction to Computer Science (Java) (3) OR

CSC110AB Introduction to Computer Science (Java) (4) 3–4

CSC/EEE120 Digital Design Fundamentals 4

CSC205 Object-Oriented Programming and Data Structures (3) OR

CSC205AA Object-Oriented Programming and Data Structures (3) OR

CSC205AB Object-Oriented Programming and Data Structures (4) OR

CSC205AC Object-Oriented Programming and Data Structures (4) OR

CSC205AD Object-Oriented Programming and Data Structures (4) 3–4

CSC/EEE220 Programming for Computer Engineering 3

CSC/EEE230 Computer Organization and Assembly Language 4

MAT227 Discrete Mathematical Structures 3

Electrical Engineering

CSC110 Introduction to Computer Science (Java) (3) OR

CSC110AA Introduction to Computer Science (Java) (3) OR

CSC110AB Introduction to Computer Science (Java) (4) 3–4

CSC/EEE120 Digital Design Fundamentals 4

EEE202 Circuits and Devices 5

EEE203 Signals and Systems 3

PHY241 University Physics III: Thermodynamics, Optics, and Wave Phenomena 4

Industrial Engineering

CSC110 Introduction to Computer Science (Java) (3) OR

CSC110AA Introduction to Computer Science (Java) (3) OR

CSC110AB Introduction to Computer Science (Java) (4) 3–4

CSC205 Object-Oriented Programming and Data Structures (3) OR

CSC205AA Object-Oriented Programming and Data Structures (3) OR

CSC205AB Object-Oriented Programming and Data Structures (4) OR

CSC205AC Object-Oriented Programming and Data Structures (4) OR

CSC205AD Object-Oriented Programming and Data Structures (4) 3–4

ECE211 Engineering Mechanics–Statics 3

Automotive, Electrical Systems, Manufacturing, Mechanical Systems, and Robotics Engineering

CSC/EEE120 Digital Design Fundamentals 4

ECE214 Engineering Mechanics 4

ECE/MAT280 Foundational Statistics for Engineers 3

EEE202 Circuits and Devices 5

Material Sciences and Engineering

ECE211 Engineering Mechanics–Statics (3) OR

ECE214 Engineering Mechanics (4) 3–4

Mining and Geological Engineering

ECE205 Introduction to Mining Engineering 3

ECE211 Engineering and Mechanics–Statics 3

ECE215 Mechanics of Materials 3

GLG101 Physical Geology: Dynamic Earth Lecture (3) AND

GLG103 Physical Geology: Dynamic Earth Lab (1) OR

GLG101IN Physical Geology: Dynamic Earth (4) 4

General Education Requirements

Arizona General Education Curriculum (AGEC)

AGEC–S Credits: 38–41

A single course with an [HU], [SB], or [L] designation may also be used to satisfy the Oral Communication, Critical Reading, or Awareness Area

First-Year Composition [FYC] Credits: 6

ENG101 First-Year Composition (3) OR

ENG107 First-Year Composition for ESL (3) AND

ENG102 First-Year Composition (3) OR

ENG108 First-Year Composition for ESL (3) 6

Mathematics [MA] Credits: 4–5

MAT220 Calculus with Analytic Geometry I (5) OR

MAT221 Calculus with Analytic Geometry I (4) 4–5

Humanities, Arts and Design [HU] Credits: 6

Any approved general education courses in the Humanities, Arts and Design [HU] area with a Literacy and Critical Inquiry [L] designation. (3)

Any approved general education courses in the Humanities, Arts and Design [HU] area with a Cultural Diversity in the US [C] designation and a

Social-Behavioral Sciences [SB] Credits: 6

COM100 Introduction to Human Communication (3) OR

COM110 Interpersonal Communication (3) OR

COM230 Small Group Communication (3)

AND

Any approved general education courses in the Social-Behavioral Sciences [SB] area. (3) 6

Recommend ECN211 or ECN212 for students intending to transfer to ASU for Civil Engineering, Construction Engineering, Electrical Engineering,

Natural Sciences [SG]/[SQ] Credits: 8

PHY121 University Physics I: Mechanics (4) AND

PHY131 University Physics II: Electricity and Magnetism (4) 8

Subject Options Credits: 8-10

MAT230 Calculus with Analytic Geometry II (5) OR

MAT231 Calculus with Analytic Geometry II (4)

AND

MAT240 Calculus with Analytic Geometry III (5) OR

MAT241 Calculus with Analytic Geometry III (4) 8-10

MCCCD Additional Requirements

MCCCD Additional Requirements Credits: 0-3

Some courses in this area have [SB] and [L] designations and may also be applied to the corresponding AGEC requirements. See the AGEC matrix

Critical Reading Credits: 0-3

CRE101 College Critical Reading and Critical Thinking (3) OR

Equivalent as indicated by assessment (0) 0-3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm10?id=16456337>

Starting Term: 2025 Fall

Final Term: 9999

ASSOCIATE IN SCIENCE (AS) IN ASSOCIATE IN SCIENCE, EMPHASIS IN GEOGRAPHY - METEOROLOGY

Total Credits: 60-64

Major Code: 8604

Description

The Associate in Science (AS), Emphasis in Geography - Meteorology provides the first two years of a four-year curriculum for students who intend to transfer to a four-year institution to study meteorology and/or climatology. This associate degree will prepare students for employment opportunities in a number of careers including forest and conservation workers and air traffic controllers. Upon completion of a bachelor's degree, students may pursue a career in several areas including broadcast meteorology, geography, hydrology, environmental science, and forest fire inspection and prevention. Upon completion of a graduate degree, students may pursue a number of careers including atmospheric and space scientist, geoscientist, climate change analyst, and geography professor.

Program Notes

Students must earn a grade of C or better in all courses within the program. This emphasis is intended to align with the degree requirements for the following transfer partners: ASU (College of Liberal Arts and Sciences), Geography (Meteorology-Climatology), BSRefer to the MCCCD University Transfer Partner website for more information: ASU .

Required Courses

Required Courses Course # Course Title Credits

Credits: 12-17

FYE101 Introduction to College, Career and Personal Success (1) OR

FYE103 Exploration of College, Career and Personal Success (3) 1-3

GIS205 Geographic Information Technologies (3)

OR

GPH111 Physical Geography: Atmosphere, Lithosphere, Water and Hazards Lecture (3) AND

GPH112 Physical Geography: Climate, Landforms, Water and Hazards Laboratory (1)

OR

GPH113 Physical Geography: Atmosphere, Lithosphere, Water, and Hazards (4) 3-4

MAT230 Calculus with Analytic Geometry II (5) OR

MAT231 Calculus with Analytic Geometry II (4) 4-5

MAT240 Calculus with Analytic Geometry III (5) OR

MAT241 Calculus with Analytic Geometry III (4) 4-5

General Education Requirements

Arizona General Education Curriculum (AGEC)

AGEC-S Credits: 38-42

A single course with an [HU], [SB], or [L] designation may also be used to satisfy the Oral Communication, Critical Reading, or Awareness Area

First-Year Composition [FYC] Credits: 6

ENG101 First-Year Composition (3) OR

ENG107 First-Year Composition for ESL (3) AND

ENG102 First-Year Composition (3) OR

ENG108 First-Year Composition for ESL (3) 6

Literacy and Critical Inquiry [L] Credits: 0-3**

Any approved general education course in the Literacy and Critical Inquiry [L] area. 3

Recommend selecting a course that satisfies ([L] and [HU]) or ([L] and CRE101) requirements simultaneously.

**0 credits only if shared with [HU]

Mathematics [MA] Credits: 4-5
MAT220 Calculus with Analytic Geometry I (5) OR
MAT221 Calculus with Analytic Geometry I (4) OR
Higher approved general education course in the Mathematical Applications [MA] area for which MAT22+ is a prerequisite. (4-5) 4-5

Humanities, Arts and Design [HU] Credits: 6
Any approved general education courses in the Humanities, Arts and Design [HU] area with the Cultural Diversity in the US [C] designation. (3 AND
Any approved general education courses in the Humanities, Arts and Design [HU] area. (3) 6

Social-Behavioral Sciences [SB] Credits: 6
COM100 Introduction to Human Communication (3) OR
COM110 Interpersonal Communication (3) OR
COM230 Small Group Communication (3)
AND
GCU102 Human Geography: Spatial Relationships Between Humans and Culture with Their Environment (3) 6

Natural Sciences [SG]/[SQ] Credits: 8
PHY121 University Physics I: Mechanics (4) AND
PHY131 University Physics II: Electricity and Magnetism (4) 8

Subject Options Credits: 8
GPH212 Introduction to Meteorology I (3) AND
GPH214 Introduction to Meteorology Laboratory I (1) AND
GPH213 Climate and Weather (3) AND
GPH215 Climate and Weather Laboratory (1) 8

MCCCD Additional Requirements
MCCCD Additional Requirements Credits: 0-3
Some courses in this area have [SB] and [L] designations and may also be applied to the corresponding AGEC requirements. See the AGEC matrix

Critical Reading Credits: 0-3
CRE101 College Critical Reading and Critical Thinking (3) OR
Equivalent as indicated by assessment (0) 0-3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm10?id=16456289>

Starting Term: 2025 Fall
Final Term: 9999

ASSOCIATE IN SCIENCE (AS) IN ASSOCIATE IN SCIENCE, EMPHASIS IN GEOLOGY

Total Credits: 60-64
Major Code: 8608

Description

The Associate in Science (AS), Emphasis in Geology provides the first two years of a four-year curriculum for students who wish to specialize in geological sciences and/or are preparing for application to graduate programs in related fields. With a bachelor's degree, students may pursue a career as a research lab or field technician in environmental geology, mining, petroleum exploration, geological engineering, forestry, conservation, and hydrology. With a graduate degree, students may pursue a number of careers, including but not limited to secondary school (grades 7-12) teachers and university professors, geologic consultants, seismologists, volcanologists, paleontologists, and geologists in a variety of areas.

Program Notes

Students must earn a grade of C or better in all courses within the program. This emphasis is intended to align with the degree requirements for the following transfer partners: ASU (College of Liberal Arts and Sciences), Earth and Space Exploration (Geological and Planetary Sciences), BSNAU, Geology, BSU of A, Geosciences (Geology Emphasis), BSRefer to the MCCCD University Transfer Partner website for more information: ASU , NAU , U of A .

Required Courses

Required Courses Course # Course Title Credits
Credits: 1-3
FYE101 Introduction to College, Career and Personal Success (1) OR
FYE103 Exploration of College, Career and Personal Success (3) 1-3

General Education Requirements

Arizona General Education Curriculum (AGEC)
AGEC-S Credits: 38-49
A single course with an [HU], [SB], or [L] designation may also be used to satisfy the Oral Communication, Critical Reading, or Awareness Area

First-Year Composition [FYC] Credits: 6
ENG101 First-Year Composition (3) OR
ENG107 First-Year Composition for ESL (3) AND
ENG102 First-Year Composition (3) OR
ENG108 First-Year Composition for ESL (3) 6

Literacy and Critical Inquiry [L] Credits: 0-3
Any approved general education course in the Literacy and Critical Inquiry [L] area. 3

Recommend selecting a course that satisfies ([L] and [SB]) or ([L] and [HU]) or ([L] and COM) or ([L] and CRE101) requirements simultaneously

Mathematics [MA] Credits: 4-5
MAT220 Calculus with Analytic Geometry I (5) OR
MAT221 Calculus with Analytic Geometry I (4) OR
Higher approved general education course in the Mathematical Applications [MA] area for which MAT22+ is a prerequisite. (4-5) 4-5

Humanities, Arts and Design [HU] Credits: 6
Any approved general education courses in the Humanities, Arts and Design [HU] area. 6

Social-Behavioral Sciences [SB] Credits: 6
Any approved general education courses in the Social-Behavioral Sciences [SB] area. 6

Natural Sciences [SG]/[SQ] Credits: 8
GLG101 Physical Geology: Dynamic Earth Lecture (3) AND
GLG103 Physical Geology: Dynamic Earth Lab (1) OR
GLG101IN Physical Geology: Dynamic Earth (4)
AND
GLG102 Historical Geology: Primordial to Present Lecture (3) AND
GLG104 Historical Geology: Primordial to Present Lab (1) OR
GLG102IN Historical Geology: Primordial to Present (4) 8

Subject Options Credits: 8-9
MAT230 Calculus with Analytic Geometry II (5) OR
MAT231 Calculus with Analytic Geometry II (4)
AND
PHY121 University Physics I: Mechanics (4) 8-9

Awareness Areas Credits: 0-6
These requirements may be shared with other AGEC requirements. See the AGEC matrix on aztransfer.com for course designations.

Cultural Diversity in the US [C] Credits: 0-3
Any approved general education course with the Cultural Diversity in the U.S. [C] designation. 0-3

Historical/Global Awareness [H]/[G] Credits: 0-3
Any approved general education course with the Historical [H] or Global [G] awareness area designation. 0-3

MCCCD Additional Requirements
MCCCD Additional Requirements Credits: 0-6
Some courses in this area have [SB] and [L] designations and may also be applied to the corresponding AGEC requirements. See the AGEC matrix

Oral Communication Credits: 0-3
COM100 Introduction to Human Communication (3) OR
COM110 Interpersonal Communication (3) OR
COM225 Public Speaking (3) OR
COM230 Small Group Communication (3) 0-3

Critical Reading Credits: 0-3
CRE101 College Critical Reading and Critical Thinking (3) OR
Equivalent as indicated by assessment (0) 0-3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm10?id=16456316>

Starting Term: 2025 Fall
Final Term: 9999

ASSOCIATE IN SCIENCE (AS) IN ASSOCIATE IN SCIENCE, EMPHASIS IN PHYSICS

Total Credits: 60-64
Major Code: 8606

Description

The Associate in Science (AS), Emphasis in Physics degree provides the first two years of a four-year curriculum for students who wish to specialize in Physics or are preparing for application to professional graduate programs in various medical fields. With a bachelor's degree, students may pursue a career as a secondary education Physics teacher, physicist, or materials scientist. Upon completion of a graduate degree, students may pursue a number of careers, including but not limited to, Physics professor, physicist, engineer, or researcher.

Program Notes

Students must earn a grade of C or better in all courses within the program. This emphasis is intended to align with the degree requirements for the following transfer partners: ASU (College of Integrative Sciences and Arts), Applied Physics, BSASU (College of Liberal Arts and Sciences), Biophysics, BSASU (College of Liberal Arts and Sciences), Physics, BAASU (College of Liberal Arts and Sciences), Physics, BSNAU, Physics, BSU of A, Physics, BSRefer to the MCCCD University Transfer Partner website for more information: ASU, NAU, U of A.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	1-3		
FYE101		Introduction to College, Career and Personal Success (1) OR	
FYE103		Exploration of College, Career and Personal Success (3)	1-3

General Education Requirements

Arizona General Education Curriculum (AGEC)
AGEC-5 Credits: 38-50
A single course with an [HU], [SB], or [L] designation may also be used to satisfy the Oral Communication, Critical Reading, or Awareness Area

First-Year Composition [FYC]	Credits:	6
ENG101	First-Year Composition (3)	OR
ENG107	First-Year Composition for ESL (3)	AND
ENG102	First-Year Composition (3)	OR
ENG108	First-Year Composition for ESL (3)	6

Literacy and Critical Inquiry [L] Credits: 0-3

Any approved general education course in the Literacy and Critical Inquiry area [L]. 3

Recommend selecting a course that satisfies [L] and [SB] or [L] and [HU] or [L] and (COM) or [L] and CRE101 requirements simultaneously.

Mathematics [MA] Credits: 4-5
MAT220 Calculus with Analytic Geometry I (5) OR
MAT221 Calculus with Analytic Geometry I (4) OR
Higher approved general education course in the Mathematical Applications [MA] area for which MAT22+ is a prerequisite (4-5) 4-5

Humanities, Arts and Design [HU] Credits: 6
Any approved general education courses in the Humanities, Arts and Design [HU] area. 6

Social-Behavioral Sciences [SB] Credits: 6
Any approved general education courses in the Social-Behavioral Sciences [SB] area. 6

Natural Sciences [SG]/[SQ] Credits: 8
PHY121 University Physics I: Mechanics (4) AND
PHY131 University Physics II: Electricity and Magnetism (4) 8

Subject Options Credits: 8-10
MAT230 Calculus with Analytic Geometry II (5) OR
MAT231 Calculus with Analytic Geometry II (4) AND
MAT240 Calculus with Analytic Geometry III (5) OR
MAT241 Calculus with Analytic Geometry III (4) 8-10

Awareness Areas Credits: 0-6
These requirements may be shared with other AGEC requirements. See the AGEC matrix on aztransfer.com for course designations.

Cultural Diversity in the US [C] Credits: 0-3
Any approved general education course with the Cultural Diversity in the U.S. [C] designation. 0-3

Historical/Global Awareness [H]/[G] Credits: 0-3
Any approved general education course with the Historical [H] or Global [G] awareness area designation. 0-3

MCCCD Additional Requirements
MCCCD Additional Requirements Credits: 0-6
Some courses in this area have [SB] and [L] designations and may also be applied to the corresponding AGEC requirements. See the AGEC matrix

Oral Communication Credits: 0-3
COM100 Introduction to Human Communication (3) OR
COM110 Interpersonal Communication (3) OR
COM225 Public Speaking (3) OR
COM230 Small Group Communication (3) 0-3

Critical Reading Credits: 0-3
CRE101 College Critical Reading and Critical Thinking (3) OR
Equivalent as indicated by assessment (0) 0-3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm10?id=16456297>

Starting Term: 2025 Fall
Final Term: 9999

ASSOCIATE IN SCIENCE (AS) IN ASSOCIATE IN SCIENCE, EMPHASIS IN SECONDARY EDUCATION

Total Credits: 60-64
Major Code: 8609

Description

The Associate in Science (AS), Emphasis in Secondary Education provides the first two years of a four-year curriculum for students who wish to transfer to a four-year institution and earn a bachelor's degree in secondary education leading to teacher certification for grades 6-12 in Biology, Chemistry, and Physics. Foundational education courses and discipline specific courses are designed to provide future teachers with the knowledge and skills related to educational philosophies, policies, attitudes, behaviors, and instruction in order to effectively perform the duties associated with the position of a classroom teacher. Students will participate in classroom field experiences to connect theory with practice.

Program Notes

Students must earn a grade of C or better in all courses within the program.State certification requirements include demonstration of proficiency in the constitutions of the United States and Arizona. Proficiency can be demonstrated via the Arizona Educator Proficiency Assessments (AEPA) Constitutions of the United States and Arizona test or by taking appropriate coursework: GCU113, POS113, HIS103 and POS221, POS221 and POS222, or POS220.Identity Verified Prints (IVP) Fingerprint Clearance Card is required for participation in field experiences and for admission to a university teacher education program. Applicants must present an IVP Fingerprint Clearance Card to be copied by the advisor or designee. Please contact your advisor for information about obtaining the IVP Fingerprint Clearance Card.This emphasis is intended to align with the degree requirements for the following transfer partners:NAU, Secondary Education - Chemistry, BS in EducationNAU, Secondary Education - Physics, BS in EducationRefer to the MCCCD University Transfer Partner website for more information: NAU .

Required Courses

Required CoursesCourse #Course TitleCredits
Credits: 4-7
FYE101 Introduction to College, Career and Personal Success (1) OR
FYE103 Exploration of College, Career and Personal Success (3) 1-3

GCU/POS113 United States and Arizona Social Studies (3) OR
HIS103 United States History to 1865 (3) AND

POS221 Arizona Constitution (1) OR
 POS220 U.S. and Arizona Constitution (3) 3-4
 Students should consult with an academic, faculty, or program advisor to select the option that aligns with their intended university transfer

Restricted Electives

Restricted Electives Course # Course Title Credits
 Credits: 19-26

In consultation with an academic, faculty, or program advisor, select the secondary education discipline below that best aligns with your academic

Chemistry
 BIO181++ General Biology (Majors) I 4

CHM150 General Chemistry I (4) AND
 CHM151LL General Chemistry I Laboratory (1) OR
 CHM150AA General Chemistry I with Lab (5) OR
 CHM151 General Chemistry I (3) AND
 CHM151LL General Chemistry I Laboratory (1) OR
 CHM151AA General Chemistry I with Lab (4) 4-5

CHM152 General Chemistry II (3) AND
 CHM152LL General Chemistry II Laboratory (1) OR
 CHM152AA General Chemistry II with Lab (4) 4

CHM235 General Organic Chemistry I 3
 CHM235LL General Organic Chemistry I Laboratory 1
 CHM236 General Organic Chemistry II 3
 CHM236LL General Organic Chemistry II Laboratory 1

MAT230 Calculus with Analytic Geometry II (5) OR
 MAT231 Calculus with Analytic Geometry II (4) 4-5

Physics
 AST/GLG106 Life in the Universe 4

MAT230 Calculus with Analytic Geometry II (5) OR
 MAT231 Calculus with Analytic Geometry II (4) 4-5

MAT240 Calculus with Analytic Geometry III (5) OR
 MAT241 Calculus with Analytic Geometry III (4) 4-5

MAT276 Modern Differential Equations (4) OR
 MAT277 Modern Differential Equations (3) 3-4

PHY241 University Physics III: Thermodynamics, Optics, and Wave Phenomena 4

General Education Requirements

Arizona General Education Curriculum (AGEC)

AGEC-5 Credits: 27-31

A single course with an [HU], [SB], or [L] designation may also be used to satisfy the Oral Communication, Critical Reading, or Awareness Area

First-Year Composition [FYC] Credits: 6
 ENG101 First-Year Composition (3) OR
 ENG107 First-Year Composition for ESL (3) AND
 ENG102 First-Year Composition (3) OR
 ENG108 First-Year Composition for ESL (3) 6

Mathematics [MA] Credits: 4-5
 MAT220 Calculus with Analytic Geometry I (5) OR
 MAT221 Calculus with Analytic Geometry I (4) OR
 Higher approved general education course in the Mathematical Applications [MA] area for which MAT22+ is a prerequisite. (4-5) 4-5

Humanities, Arts and Design [HU] Credits: 3-6
 Any approved general education courses in the Humanities, Arts and Design [HU] area with the Literacy and Critical Inquiry [L] designation. (3) AND
 Any approved general education courses in the Humanities, Arts and Design [HU] area with the Historical [H] designation. (3) 6

May be met by HIS103 in the Required Courses area if not used to meet Social-Behavioral Sciences [SB].

Social-Behavioral Sciences [SB] Credits: 3-6
 Any approved general education courses in the Social-Behavioral Sciences [SB] area with Cultural Diversity in the US [C] designation. (3) AND
 Any approved general education courses in the Social-Behavioral Sciences [SB] area. (3) 6

May be met HIS103 in the Required Courses area if not used to meet Humanities, Arts and Design [HU] or may be met by GCU/POS113 in the Required

Natural Sciences [SG]/[SQ] Credits: 8
 PHY121 University Physics I: Mechanics (4) AND
 PHY131 University Physics II: Electricity and Magnetism (4) 8

MCCCD Additional Requirements Credits: 0-6
 MCCCD Additional Requirements Credits: 0-6
 Some courses in this area have [SB] and [L] designations and may also be applied to the corresponding AGEC requirements. See the AGEC matrix

Oral Communication Credits: 0-3
 COM100 Introduction to Human Communication (3) OR
 COM110 Interpersonal Communication (3) OR
 COM225 Public Speaking (3) OR
 COM230 Small Group Communication (3) 0-3

Critical Reading Credits: 0-3
 CRE101 College Critical Reading and Critical Thinking (3) OR
 Equivalent as indicated by assessment (0) 0-3

Starting Term: 2021 Spring
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN ACCOUNTING

Total Credits: 24-27
Major Code: 5665

Description

The Certificate of Completion (CCL) in Accounting program is designed for students seeking to gain skills and knowledge in the field of accounting and tax. Possible entry-level positions for this program include accounting clerk, accounts payable/receivable clerk, claims clerk, credit clerk, bookkeeper, accounting intern, or comparable positions. An Associate in Applied Science (AAS) in Accounting and a Certificate of Completion (CCL) in Enrolled Agent are also available.

Program Notes

Students must earn a grade of C or better in all courses within the program. Consultation with an Academic Advisor is recommended for course selection.

Admission Criteria

None

Required Courses

Required Courses	Course #	Course Title	Credits
Credits: 24-27			
ACC111		Accounting Principles I (3) AND	
ACC230		Uses of Accounting Information I (3) AND	
ACC240		Uses of Accounting Information II (3)	
OR			
ACC111		Accounting Principles I (3) AND	
ACC112		Accounting Principles II (3) AND	
ACC212		Managerial Accounting (3)	
OR			
ACC211		Financial Accounting (3) AND	
ACC212		Managerial Accounting (3)	6-9
ACC105		Payroll, Sales and Property Taxes (3) OR	
ACC222		Payroll Accounting (3)	3
ACC121		Individual Tax Preparation (3) OR	
ACC221		Tax Accounting (3)	3
ACC115		Computerized Accounting 3	
CIS114DE		Excel Spreadsheet	3
CIS105		Survey of Computer Information Systems	3
GBS151		Introduction to Business	3

Starting Term: 2019 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN ADMINISTRATION OF JUSTICE

Total Credits: 15
Major Code: 5007N

Description

The Certificate of Completion (CCL) in Administration of Justice program is designed to be interdisciplinary by nature and provides students with foundational knowledge of the criminal justice system and operational processes for addressing crime within society. This program also examines diverse populations and communities, and their effects on relationships with the criminal justice system. In addition, this program allows students to familiarize themselves with and evaluate various career opportunities in the criminal justice field and is one pathway to the Associate in Applied Science (AAS) in Administration of Justice.

Program Notes

This program is not eligible for Title IV Federal Financial Aid. Students must earn a grade of C or better in all courses within the program.

Admission Criteria

None

Required Courses

Required Courses	Course #	Course Title	Credits
Credits: 15			
AJS101		Introduction to Criminal Justice	3

AJS109 Substantive Criminal Law (3) or
AJS260 Procedural Criminal Law (3) 3

AJS123 Ethics and the Administration of Justice 3
AJS230 The Police Function 3
AJS240 The Correction Function 3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=165303>

Starting Term: 2021 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN ADOBE FOUNDATIONS: ANIMATION AND GRAPHICS PRODUCTION

Total Credits: 9
Major Code: 5167N

Description

The Certificate of Completion (CCL) in Adobe Foundations: Animation and Graphics Production program helps prepare students to create, edit, and enhance digital images, graphics, and animation for use in web, print, and video. A Certificate of Completion in Adobe Foundations: Video and Audio Production and an Associate in Applied Science (AAS) in Web Design and Development are also available.

Program Notes

This program is not eligible for Title IV Federal Financial Aid. Students must earn a grade of C or better in all courses within the program. Courses within any of the following prefixes must be taken within five (5) years prior to completion of the program to be applied toward this award: AIM, BPC, CIS, CLD, CNT, CSC, ITS, and MST.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	9		
CIS120DB		Introduction to Adobe Illustrator	3
CIS120DC		Introduction to Adobe Animate	3
CIS120DF		Introduction to Adobe Photoshop	3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=16453553>

Starting Term: 2025 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN AMAZON WEB SERVICES CLOUD ASSOCIATE

Total Credits: 3-6
Major Code: 5330N

Description

The Certificate of Completion (CCL) in Amazon Web Services (AWS) Cloud Associate builds the knowledge and skills to design, plan, and implement a cloud solution architecture. Students will be introduced to concepts and hands-on opportunities to manage cloud systems/architectures for real world-applications. Students with the requisite experience in the field who complete this CCL can pursue employment in a variety of information technology jobs. This CCL also helps to prepare students for the AWS Certified Solutions Architect – Associate examination, which is the second level of the AWS certifications.

Program Notes

This program is not eligible for Title IV Federal Financial Aid. This Certificate of Completion (CCL) is intended for industry professionals with the requisite experience such as database, Linux, information security, networking, programming, and DevOps who are interested in expanding their knowledge in the area of cloud computing to enhance their employment opportunities. Speak to a program director for additional information. Courses within any of the following prefixes must be taken within five (5) years prior to completion of the program to be applied toward this award: BPC, CIS, CLD, CNT, ITS, and MST. Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	3-6		
CLD110		Amazon Web Services Cloud Foundations (3)	
OR			
Certificate of Completion in Amazon Web Services Cloud Practitioner (5141N)	(3)		
OR			
AWS Certified Cloud Practitioner certification badge	(0)		
OR			
Permission of Program Director	(0)	0-3	
(CCL/5141N is not eligible for Title IV Federal Financial Aid.)			
CLD120		Amazon Web Services Cloud Architect Associate	3

Starting Term: 2025 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN AMAZON WEB SERVICES CLOUD PRACTITIONER

Total Credits: 3
Major Code: 5141N

Description

The Certificate of Completion (CCL) in Amazon Web Services Cloud Practitioner builds the practical knowledge and skills of cloud computing. Cloud computing provides reliable, scalable, secure, and flexible technology solutions for personal and business use. This CCL will introduce students new to or interested in cloud computing to the fundamental concepts of cloud services as well as hands-on opportunities to apply these concepts to real-world applications. Students with the requisite experience in the field who complete this CCL can pursue employment in a variety of information technology jobs. This CCL also helps to prepare students for the Amazon Web Services (AWS) Certified Cloud Practitioner exam, which is the first level of the AWS certification.

Program Notes

This program is not eligible for Title IV Federal Financial Aid. This Certificate of Completion (CCL) is intended for industry professionals with the requisite experience such as database, Linux, information security, networking, programming, and DevOps who are interested in expanding their knowledge in the area of cloud computing to enhance their employment opportunities. Speak to a program director for additional information. Students must earn a grade of C or better in all courses within the program. Courses within any of the following prefixes must be taken within five (5) years prior to completion of the program to be applied toward this award: AIM, BPC, CIS, CLD, CNT, CSC, ITS, and MST.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	3		
CLD110		Amazon Web Services Cloud Foundations	3

Starting Term: 2025 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN ANIMATION

Total Credits: 40
Major Code: 5169

Description

The Certificate of Completion (CCL) in Animation develops knowledge and skills in the area of digital animation, including but not limited to the production of still and time-based media, animation techniques, narrative development, character design, compositing, motion graphics, and interactive design. The curriculum is designed to provide the student with an understanding of animation techniques, use of production equipment, animation terminology, media and interactivity applications, and industry practices. This certificate prepares students for employment and upgrades the skills of persons employed in occupations such as digital animators, media producers, storyboard artists, media artist/designers, and interaction designers. Certificates of Completion (CCL) in Video Game Production, and Associate in Applied Science (AAS) degrees in Animation and Time-Based Media and Video Game Production, are also available. Some of these programs are available at select colleges. Please check with your local college for program availability.

Program Notes

Students must earn a grade of C or better in all courses within the program. This CCL is designed for individuals who are new to the field, as well as to those who already have relevant experience or are employed in the field.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	40		
ART111		Drawing I	3
ART116		Life Drawing I	3
AVC100		Introduction to Digital Arts	1
AVC150		Multimedia Storytelling (3) OR	
AVC191		Storyboarding and Layout (3) OR	
CRW150		Introduction to Creative Writing (3) OR	
CRW172		Introduction to Comic Book Writing (3) OR	
CRW176		Writing Narrative for Video Games (3) OR	
FMT121		Story Theory for Film, Television and Media (3)	3
AVC169		2D Media Design (3) OR	
AVC178		Digital Arts Studies (3)	3
AVC170		3D Computer Design (3) OR	
AVC/TH0246		Digital Fabrication (3)	3

AVC177	Digital Photographic Imaging I	3	
AVC/MMT184	Digital Animation I	3	
AVC/MMT185	3D Modeling for Animation I	3	
AVC200	Animation and Interactivity	3	
AVC240	Cinematography and Directing for 2D/3D Animation	3	
AVC284	Digital Animation II	3	
AVC/MMT285	3D Modeling and Animation II	3	
AVC287	3D Character Animation	3	

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Starting Term: 2024 Fall

Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN APPLECARE HARDWARE REPAIR EXAM PREP

Total Credits: 6

Major Code: 5341N

Description

The Certificate of Completion (CCL) in AppleCare Hardware Repair Exam Prep prepares students to perform troubleshooting and repair of devices and computer models currently supported by Apple. Upon successful completion, students will have the opportunity to become certified in the Global Service Exchange (GSX) using Apple Technical Learning Administration System (ATLAS), the Apple learning management system. The CCL in AppleCare Hardware Repair Exam Prep prepares students to take the AppleCare Hardware Certification exams.

Program Notes

This program is not eligible for Title IV Federal Financial Aid.

Required Courses

Required Courses	Course #	Course Title	Credits
	6		
BPC260		AppleCare Exam Prep: iOS Device Repair	3
BPC262		AppleCare Exam Prep: Mac Computer Models Repair	3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=187370>

Starting Term: 2024 Fall

Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN APPLIED BEHAVIORAL HEALTH

Total Credits: 22-24.5

Major Code: 5305

Description

The Certificate of Completion (CCL) in Applied Behavioral Health is designed to provide students with the knowledge, skills, and practical experience needed to enter the workforce as an assistant to medical and mental health providers. This program focuses on a foundation of bedside patient care to prepare individuals to assist and support clients experiencing mental health challenges. This CCL will also prepare students for the Nurse Assistant State Board certification.

Program Notes

Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits
	22-24.5		
BHS155		Professional Resiliency and Well-Being	3
NCE103		Psychiatric Technician Overview	4
NCE150		Advanced Placement Nurse Assisting (2) OR	
NUR158		Nurse Assisting (4.5)	2-4.5
NCE292AA		Simulation for Patient Care Experiences	2
NCE292AB		Patient Care Experiences	2
PSY101		Introduction to Psychology	3
PSY132		Psychology and Culture	3
PSY266		Psychological Disorders	3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=16456282>

Starting Term: 2025 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN APPLIED ENGLISH LANGUAGE SKILLS

Total Credits: 21-27
Major Code: 5278

Description

The Certificate of Completion (CCL) in Applied English Language Skills is designed to provide English language learners with advanced English language skills for professional and academic purposes. The program includes integrated English language skill courses, vocational and individual skill-based ESL courses, and elective coursework in related areas to help students develop English proficiency and other relevant workplace skills to meet a variety of occupational and academic demands.

Program Notes

Students must earn a grade of C or better in all courses within the program.This certificate aligns with the CEFR B2 Scale and is intended for English language learners.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	9-15		
ESL201	English as a Second Language III	(6) OR	
ESL201AA	English as a Second Language IIIA	(3) AND	
ESL201AB	English as a Second Language IIIB	(3) OR	
Appropriate ESL placement score	(0)	0-6	
ESL202	English as a Second Language IV	(6) OR	
ESL202AA	English as a Second Language IVA	(3) AND	
ESL202AB	English as a Second Language IVB	(3)	6
ESL250	Vocational English		3

Restricted Electives

Restricted Electives	Course #	Course Title	Credits
Credits:	12		
Students must select 12 credits from the following list of courses. Some ESL courses on this list may be repeated for credit. Students should			
CIS102	Interpersonal and Customer Service Skills for IT Professionals		1
CIS105	Survey of Computer Information Systems		3
COM263	Elements of Intercultural Communication		3
CPD102AB	Career Exploration		2
ENG101	First-Year Composition (3) OR		
ENG107	First-Year Composition for ESL (3)		3
ENG102	First-Year Composition (3) OR		
ENG108	First-Year Composition for ESL (3)		3
ESL101	English as a Second Language I (6) OR		
ESL101AA	English as a Second Language IA (3) AND		
ESL101AB	English as a Second Language IB (3)		6
ESL102	English as a Second Language II (6) OR		
ESL102AA	English as a Second Language IIA (3) AND		
ESL102AB	English as a Second Language IIB (3)		6
ESL110	Beginning to Low-Intermediate English Listening and Speaking		3
ESL140	Beginning to Low-Intermediate English Grammar		3
ESL210	High-Intermediate to Advanced English Listening and Speaking		3
ESL240	High-intermediate to Advanced English Grammar		3
ESL298AA	Special Projects		1
ESL298AB	Special Projects		2
ESL298AC	Special Projects		3
FYE101	Introduction to College, Career and Personal Success (1) OR		
FYE103	Exploration of College, Career and Personal Success (3)		1-3
GBS120	Workplace Communication Skills		3
HCC145	Medical Terminology for Healthcare Professionals		3
MGT101	Techniques for Supervision		3
PSY132	Psychology and Culture		3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=189809>

Starting Term: 2024 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN AUTOMATED INDUSTRIAL TECHNOLOGY I

Total Credits: 16
Major Code: 5922

Description

The Certificate of Completion (CCL) in Automated Industrial Technology I prepares students to troubleshoot, maintain and repair a variety of automated electro-mechanical, product assembly and product distribution systems that use other methodologies to accomplish system management. These systems include mechanical, hydraulic, pneumatic, electrical and electronic devices. Through this certificate, graduates will gain the skills to define, install, and maintain complex production systems. An Associate in Applied Science (AAS) in Automated Industrial Technology (AIT) and additional AIT Certificates of Completion (CCL) are also available at select colleges. Please check with your local college for program availability.

Program Notes

Students must earn a grade of C or better in all courses within the program. This program may require students to be able to lift objects as heavy as 50 pounds.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits: 16			
AIT100	Industrial Safety	1	
AIT105	Modern Maintenance Operations	3	
AIT110	Mechanical Power Transmission Systems	3	
AIT115	Hydraulic Systems	3	
AIT120	Pneumatic Systems	3	
AIT125	DC and AC Components and Circuits	3	

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=189810>

Starting Term: 2024 Fall

Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN AUTOMATED INDUSTRIAL TECHNOLOGY II

Total Credits: 32

Major Code: 5924

Description

The Certificate of Completion (CCL) in Automated Industrial Technology II prepares students to troubleshoot, maintain and repair a variety of automated electro-mechanical, product assembly, process control, and product distribution systems that use programmable controls and other methodologies to accomplish system management. These systems include robotic, mechanical, hydraulic, pneumatic, electrical and electronic devices. Through this certificate, graduates will gain the skills to define, integrate, install, program, and maintain complex control systems. An Associate in Applied Science (AAS) in Automated Industrial Technology (AIT) and additional AIT Certificates of Completion (CCLs) are also available at select colleges. Please check with your local college for program availability.

Program Notes

Students must earn a grade of C or better in all courses within the program. This program may require students to be able to lift objects as heavy as 50 pounds.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits: 32			
AIT100	Industrial Safety	1	
AIT105	Modern Maintenance Operations	3	
AIT110	Mechanical Power Transmission Systems	3	
AIT115	Hydraulic Systems	3	
AIT120	Pneumatic Systems	3	
AIT125	DC and AC Components and Circuits	3	
AIT205	Power Electronics and Variable Frequency Drives	3	
AIT210	Programmable Logic Controller Programming and Troubleshooting	3	
AIT215	Process Control Systems	4	
AIT225	Industrial Motors and Motor Control	3	
AIT270	Robotics I	3	

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=181231>

Starting Term: 2023 Fall

Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN AUTOMOTIVE AUTOMATIC TRANSMISSION AND TRANSAXLE

Total Credits: 4

Major Code: 5930N

Description

The Certificate of Completion (CCL) in Automotive Automatic Transmission and Transaxle provides individuals with the technical knowledge and skills needed by automotive technicians specializing in the area of automatic transmission and transaxle. The curriculum within this certificate aligns with the Automotive Service Excellence (ASE) Automobile and Light Truck Certification A2 Test.

See program advisor for additional certificate offerings. An Associate in Applied Science (AAS) in Automotive Service is also available.

Program Notes

This program is not eligible for Title IV Federal Financial Aid. Students must earn a grade of C or better for each course listed in the Required Courses area.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	4		
ASE120	Automatic Transmission and Transaxle (4)	OR	
ASE120AU	Automatic Transmission and Transaxle (4)		4

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=181235>

Starting Term: 2023 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN AUTOMOTIVE BRAKE SYSTEMS

Total Credits: 4
Major Code: 5936N

Description

The Certificate of Completion (CCL) in Automotive Brake Systems provides individuals with the technical knowledge and skills needed by automotive technicians specializing in the area of brake systems. The curriculum within this certificate aligns with the Automotive Service Excellence (ASE) Automobile and Light Truck Certification A5 Test.

See program advisor for additional certificate offerings. An Associate in Applied Science (AAS) in Automotive Service is also available.

Program Notes

This program is not eligible for Title IV Federal Financial Aid. Students must earn a grade of C or better for each course listed in the Required Courses area.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	4		
ASE150	Automotive Brake Systems (4)	OR	
ASE150AU	Automotive Brake Systems (4)		4

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=181244>

Starting Term: 2023 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN AUTOMOTIVE CHASSIS

Total Credits: 16
Major Code: 5952

Description

The Certificate of Completion (CCL) in Automotive Chassis provides individuals with the technical knowledge and skills needed by automotive technicians specializing in the area of suspension, steering, brakes and electrical systems. The curriculum within this certificate aligns with the Automotive Service Excellence (ASE) Automobile and Light Truck Certification A4, A5 and A6 Tests.

See program advisor for additional certificate offerings. An Associate in Applied Science (AAS) in Automotive Service is also available.

Program Notes

Students must earn a grade of C or better for each course listed in the Required Courses area.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	16		
ASE140	Automotive Steering, Suspension and Alignment (4)	OR	
ASE140AU	Automotive Steering, Suspension and Alignment (4)		4
ASE150	Automotive Brake Systems (4)	OR	
ASE150AU	Automotive Brake Systems (4)		4
ASE160	Introduction to Automotive Electrical (4)	OR	
ASE160AU	Introduction to Automotive Electrical (4)		4
ASE260	Advanced Automotive Electrical (4)	OR	
ASE260AU	Advanced Automotive Electrical (4)		4

Starting Term: 2023 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN AUTOMOTIVE DRIVE TRAIN

Total Credits: 16
Major Code: 5950

Description

The Certificate of Completion (CCL) in Automotive Drive Train provides individuals with the technical knowledge and skills needed by automotive technicians specializing in the area of automatic and manual transmissions and drivetrains and electrical systems. The curriculum within this certificate aligns with the Automotive Service Excellence (ASE) Automobile and Light Truck Certification A2, A3 and A6 Tests.

See program advisor for additional certificate offerings. An Associate in Applied Science (AAS) in Automotive Service is also available.

Program Notes

Students must earn a grade of C or better for each course listed in the Required Courses area.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits: 16			
ASE120	Automatic Transmission and Transaxle (4) OR		
ASE120AU	Automatic Transmission and Transaxle (4)		
ASE130	Manual Drive Trains and Axles (4) OR		
ASE130AU	Manual Drive Trains and Axles (4)		4
ASE160	Introduction to Automotive Electrical (4) OR		
ASE160AU	Introduction to Automotive Electrical (4)		4
ASE260	Advanced Automotive Electrical (4) OR		
ASE260AU	Advanced Automotive Electrical (4)		4

Starting Term: 2023 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN AUTOMOTIVE ELECTRICAL, HEATING, VENTILATION AND AIR CONDITIONING SYSTEMS

Total Credits: 12
Major Code: 5948N

Description

The Certificate of Completion (CCL) in Automotive Electrical, Heating, Ventilation and Air Conditioning Systems provides individuals with the technical knowledge and skills needed by automotive technicians specializing in the area of electrical systems and heating, ventilation and air conditioning. The curriculum within this certificate aligns with the Automotive Service Excellence (ASE) Automobile and Light Truck Certification A7 and A6 Tests.

See program advisor for additional certificate offerings. An Associate in Applied Science (AAS) in Automotive Service is also available.

Program Notes

This program is not eligible for Title IV Federal Financial Aid. Students must earn a grade of C or better for each course listed in the Required Courses area. This program replaces: CCL/5860 Automotive Heating, Ventilation and Air Conditioning (HVAC)

Required Courses

Required Courses	Course #	Course Title	Credits
Credits: 12			
ASE160	Introduction to Automotive Electrical (4) OR		
ASE160AU	Introduction to Automotive Electrical (4)		4
ASE170	Automotive Heating, Ventilation and Air Conditioning Systems (4) OR		
ASE170AU	Automotive Heating, Ventilation and Air Conditioning Systems (4)		4
ASE260	Advanced Automotive Electrical (4) OR		
ASE260AU	Advanced Automotive Electrical (4)		4

Starting Term: 2023 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN AUTOMOTIVE ELECTRONIC/ELECTRICAL SYSTEMS

Total Credits: 8
Major Code: 5938N

Description

The Certificate of Completion (CCL) in Automotive Electronic/Electrical Systems provides individuals with the technical knowledge and skills needed by automotive technicians specializing in the area of electronic/electrical systems. The curriculum within this certificate aligns with the Automotive Service Excellence (ASE) Automobile and Light Truck Certification A6 Test.

See program advisor for additional certificate offerings. An Associate in Applied Science (AAS) in Automotive Service is also available.

Program Notes

This program is not eligible for Title IV Federal Financial Aid. Students must earn a grade of C or better for each course listed in the Required Courses area. This program replaces: CCL/5449 Automotive Electrical Systems

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	8		
ASE160	Introduction to Automotive Electrical (4) OR		
ASE160AU	Introduction to Automotive Electrical (4)		4
ASE260	Advanced Automotive Electrical (4) OR		
ASE260AU	Advanced Automotive Electrical (4)		4

Starting Term: 2023 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN AUTOMOTIVE ENGINE AND OPERATIONS MANAGEMENT

Total Credits: 8
Major Code: 5942N

Description

The Certificate of Completion (CCL) in Automotive Engine and Operations Management provides individuals with the technical knowledge and skills needed by automotive technicians specializing in the area of engine performance. The curriculum within this certificate aligns with the Automotive Service Excellence (ASE) Automobile and Light Truck Certification A8 Test.

See program advisor for additional certificate offerings. An Associate in Applied Science (AAS) in Automotive Service is also available.

Program Notes

This program is not eligible for Title IV Federal Financial Aid. Students must earn a grade of C or better for each course listed in the Required Courses area.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	8		
ASE180	Introduction to Engine Management (4) OR		
ASE180AU	Introduction to Engine Management (4)		4
ASE280	Engine Management (4) OR		
ASE280AU	Engine Management (4)		4

Starting Term: 2023 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN AUTOMOTIVE ENGINE MANAGEMENT AND REPAIR

Total Credits: 22
Major Code: 5954

Description

The Certificate of Completion (CCL) in Automotive Engine Management and Repair provides individuals with the technical knowledge and skills needed by automotive technicians specializing in the area of engine repair and performance and electrical systems. The curriculum within this certificate aligns with the Automotive Service Excellence (ASE) Automobile and Light Truck Certification A1, A6 and A8 Tests.

See program advisor for additional certificate offerings. An Associate in Applied Science (AAS) in Automotive Service is also available.

Program Notes

Students must earn a grade of C or better for each course listed in the Required Courses area.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits: 22			
ASE100	Introduction to Automotive Service		2
ASE110	Engine Fundamentals (4) OR		
ASE110AU	Engine Fundamentals (4)	4	
ASE160	Introduction to Automotive Electrical (4) OR		
ASE160AU	Introduction to Automotive Electrical (4)	4	
ASE180	Introduction to Engine Management (4) OR		
ASE180AU	Introduction to Engine Management OR (4)	4	
ASE260	Advanced Automotive Electrical (4) OR		
ASE260AU	Advanced Automotive Electrical (4)	4	
ASE280	Engine Management (4) OR		
ASE280AU	Engine Management (4)	4	

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=181229>

Starting Term: 2023 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN AUTOMOTIVE ENGINE REPAIR

Total Credits: 6
Major Code: 5928N

Description

The Certificate of Completion (CCL) in Automotive Engine Repair provides individuals with the technical knowledge and skills needed by automotive technicians specializing in the area of engine repair. The curriculum within this certificate aligns with the Automotive Service Excellence (ASE) Automobile and Light Truck Certification A1 Test.

See program advisor for additional certificate offerings. An Associate in Applied Science (AAS) in Automotive Service is also available.

Program Notes

This program is not eligible for Title IV Federal Financial Aid. Students must earn a grade of C or better for each course listed in the Required Courses area.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits: 6			
ASE100	Introduction to Automotive Service		2
ASE110	Engine Fundamentals (4) OR		
ASE110AU	Engine Fundamentals (4)	4	

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=181237>

Starting Term: 2023 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN AUTOMOTIVE HEATING, VENTILATION AND AIR CONDITIONING SYSTEMS

Total Credits: 4
Major Code: 5940N

Description

The Certificate of Completion (CCL) in Automotive Heating, Ventilation and Air Conditioning (HVAC) Systems provides individuals with the technical knowledge and skills needed by automotive technicians specializing in the area of HVAC systems. The curriculum within this certificate aligns with the Automotive Service Excellence (ASE) Automobile and Light Truck Certification A7 Test.

See program advisor for additional certificate offerings. An Associate in Applied Science (AAS) in Automotive Service is also available.

Program Notes

This program is not eligible for Title IV Federal Financial Aid. Students must earn a grade of C or better for each course listed in the Required Courses area.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	4		
ASE170		Automotive Heating, Ventilation and Air Conditioning Systems (4) OR	
ASE170AU		Automotive Heating, Ventilation and Air Conditioning Systems (4)	4

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=181240>

Starting Term: 2023 Fall

Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN AUTOMOTIVE MAINTENANCE AND LIGHT REPAIR

Total Credits: 22

Major Code: 5946

Description

The Certificate of Completion (CCL) in Automotive Maintenance and Light Repair provides individuals with the technical knowledge and skills needed by automotive technicians specializing in the area of basic electrical and mechanical maintenance and repair. The curriculum within this certificate aligns with the Automotive Service Excellence (ASE) Automobile and Light Truck Certification Tests.

See program advisor for additional certificate offerings. An Associate in Applied Science (AAS) in Automotive Service is also available.

Program Notes

Students must earn a grade of C or better for each course listed in the Required Courses area. This program replaces: CCL/5597N Workforce Development: Automotive Technology Level IICCL/5856 Automotive Maintenance and Light Repair

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	22		
ASE100		Introduction to Automotive Service	2
ASE140		Automotive Steering, Suspension and Alignment (4) OR	
ASE140AU		Automotive Steering, Suspension and Alignment (4)	4
ASE150		Automotive Brake Systems (4) OR	
ASE150AU		Automotive Brake Systems (4)	4
ASE160		Introduction to Automotive Electrical (4) OR	
ASE160AU		Introduction to Automotive Electrical (4)	4
ASE170		Automotive Heating, Ventilation and Air Conditioning Systems (4) OR	
ASE170AU		Automotive Heating, Ventilation and Air Conditioning Systems (4)	4
ASE180		Introduction to Engine Management (4) OR	
ASE180AU		Introduction to Engine Management (4)	4

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=181233>

Starting Term: 2023 Fall

Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN AUTOMOTIVE MANUAL DRIVE TRAIN AND AXLES

Total Credits: 4

Major Code: 5932N

Description

The Certificate of Completion (CCL) in Automotive Manual Drive Train and Axles provides individuals with the technical knowledge and skills needed by automotive technicians specializing in the area of manual drive train and axles. The curriculum within this certificate aligns with the Automotive Service Excellence (ASE) Automobile and Light Truck Certification A3 Test.

See program advisor for additional certificate offerings. An Associate in Applied Science (AAS) in Automotive Service is also available.

Program Notes

This program is not eligible for Title IV Federal Financial Aid. Students must earn a grade of C or better for each course listed in the Required Courses area.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	4		
ASE130	Manual Drive Trains and Axles (4) OR		
ASE130AU	Manual Drive Trains and Axles (4)		4

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=181246>

Starting Term: 2023 Fall

Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN AUTOMOTIVE SERVICE

Total Credits: 45-48

Major Code: 5956

Description

The Certificate of Completion (CCL) in Automotive Service prepares individuals to apply technical knowledge and skills to repair, service, and maintain automobiles. Instruction is in both the theoretical and practical aspects of automotive repair, service and maintenance, and includes brake systems, electrical systems, engine performance, engine repair, suspension and steering, automatic and manual transmissions and drivetrains, and heating and air conditioning systems. The curriculum within this certificate aligns with the Automotive Service Excellence (ASE) Automobile Certification Tests (A1 - A8).

See program advisor for additional certificate offerings. An Associate in Applied Science (AAS) in Automotive Service is also available.

Program Notes

Students must earn a grade of C or better for each course listed in the Required Courses area.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	42		
ASE100	Introduction to Automotive Service		2
ASE110	Engine Fundamentals (4) OR		
ASE110AU	Engine Fundamentals (4)		4
ASE120	Automatic Transmission and Transaxle (4) OR		
ASE120AU	Automatic Transmission and Transaxle (4)		4
ASE130	Manual Drive Trains and Axles (4) OR		
ASE130AU	Manual Drive Trains and Axles (4)		4
ASE140	Automotive Steering, Suspension and Alignment (4) OR		
ASE140AU	Automotive Steering, Suspension and Alignment (4)		4
ASE150	Automotive Brake Systems (4) OR		
ASE150AU	Automotive Brake Systems (4)		4
ASE160	Introduction to Automotive Electrical (4) OR		
ASE160AU	Introduction to Automotive Electrical (4)		4
ASE170	Automotive Heating, Ventilation and Air Conditioning Systems (4) OR		
ASE170AU	Automotive Heating, Ventilation and Air Conditioning Systems (4)		4
ASE180	Introduction to Engine Management (4) OR		
ASE180AU	Introduction to Engine Management (4)		4
ASE260	Advanced Automotive Electrical (4) OR		
ASE260AU	Advanced Automotive Electrical (4)		4
ASE280	Engine Management (4) OR		
ASE280AU	Engine Management (4)		4

Restricted Electives

Restricted Electives	Course #	Course Title	Credits
Credits:	3-8		
ASE240	Advanced Driver Assistance Systems		2
ASE265	Introduction to Electric and Hybrid Vehicles		2
ASE290++	Automotive Service Internship (any suffixed courses)		1-4
ASE296++	Cooperative Education (any suffixed courses)		1-4
ASE298++	Special Projects (any suffixed courses)		1-3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=181234>

Starting Term: 2023 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN AUTOMOTIVE STEERING AND SUSPENSION

Total Credits: 4
Major Code: 5934N

Description

The Certificate of Completion (CCL) in Automotive Steering and Suspension provides individuals with the technical knowledge and skills needed by automotive technicians specializing in the area of steering and suspension. The curriculum within this certificate aligns with the Automotive Service Excellence (ASE) Automobile and Light Truck Certification A4 Test.

See program advisor for additional certificate offerings. An Associate in Applied Science (AAS) in Automotive Service is also available.

Program Notes

This program is not eligible for Title IV Federal Financial Aid. Students must earn a grade of C or better for each course listed in the Required Courses area.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	4		
ASE140		Automotive Steering, Suspension and Alignment (4) OR	
ASE140AU		Automotive Steering, Suspension and Alignment (4)	4

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm?id=187275>

Starting Term: 2024 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN BEGINNING PIANO PEDAGOGY

Total Credits: 16
Major Code: 5743

Description

The Certificate of Completion (CCL) in Beginning Piano Pedagogy program is for pianists who want to teach beginning piano students. Classes offered include learning various methods, techniques, repertoire, skills, style and musicianship necessary to teach piano effectively.

Program Notes

Students must earn a grade of C or better in each course in the program.

Admission Criteria

Acceptance into the program and permission of Program Director is required.

Program Prerequisites

Program Prerequisites	Course #	Course Title	Credits
Credits:	0		
None.			

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	16		
MTC105		Music Theory I (3) OR	
MTC155		Music Theory II (3) OR	
MTC205		Music Theory III (3) OR	
MTC255		Music Theory IV (3)	3

The chosen class level should be taken upon recommendation of the class instructor.

MTC106		Aural Perception I (1) OR	
MTC156		Aural Perception II (1) OR	
MTC206		Aural Perception III (1) OR	
MTC256		Aural Perception IV (1)	1

The chosen class level should be taken upon recommendation of the class instructor.

MUP102AD		Private Instruction: Piano (2) AND/OR	
MUP152AD		Private Instruction: Piano (2) AND/OR	
MUP202AD		Private Instruction: Piano (2) AND/OR	
MUP252AD		Private Instruction: Piano (2)	4

Total of four (4) credits required. Courses may be repeated for credit.

MUP140		Elementary Piano Pedagogy	2

MUP181		Chamber Music Ensembles (1)	2

Total of two (2) credits of MUP181 required.

MUP240 Piano Literature 2

MUP298AA Special Projects (1) OR
MUP298AB Special Projects (2) 2
Total of two (2) credits required.

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=184488>

Starting Term: 2023 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN BIOMEDICAL EQUIPMENT TECHNOLOGY

Total Credits: 26-36
Major Code: 5985

Description

The Certificate of Completion (CCL) in Biomedical Equipment Technology program introduces students to the technical knowledge and skills needed for entry level positions troubleshooting, repairing, and maintaining biomedical equipment used by hospitals, clinics, home healthcare providers, and medical device manufacturers and repair companies. Coursework includes the study of electronics, networking, information security, human anatomy and physiology, regulatory, and healthcare delivery systems.

Program Notes

Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	26-36		
BI0160		Introduction to Human Anatomy and Physiology	4
BME101		Introduction to Biomedical Equipment Technology	3
CIS105		Survey of Computer Information Systems (3) AND	
CIS190		Introduction to Networking (3)	
OR			
CNT140AB		Introduction to Networks (4)	4-6
ELE111		Circuit Analysis I	4
ELE121		Solid-State Devices and Circuits I	4
ELE131		Digital Logic and Circuits	3
HCC130		Fundamentals in Health Care Delivery	3
HCC145		Medical Terminology for Health Care Professionals (3) OR	
HCC145AA		Medical Terminology for Health Care Professionals I (1)	1-3
MAT120		Intermediate Algebra (5) OR	
MAT121		Intermediate Algebra (4) OR	
MAT122		Intermediate Algebra (3) OR	
MAT126		Intermediate Algebra with Review (6) OR	
Permission of Program Director	(0)		0-6

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=161204>

Starting Term: 2021 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN BUILDING INSPECTION

Total Credits: 18
Major Code: 5554

Description

The Certificate of Completion (CCL) in Building Inspection helps prepare the student for a career as an inspector in various areas of the building inspection fields. The student gains the knowledge and develops skills necessary to perform as a building inspector in general building code compliance inspection or in specific areas of code compliance. It is one pathway to the Associate in Applied Science (AAS) in Construction Management.

Program Notes

Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	18		
CON101	Construction and Culture	3	
CON244	Working Drawing Analysis: Blueprint Reading	3	
CON252	Building Construction Methods, Materials, and Equipment	3	
CON262	Introduction International Residential Code (IRC)	3	
CON263	Building Codes	3	
CON271	Construction Safety	3	

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=164092>

Starting Term: 2021 Spring
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN CABLE AND WIRE HARNESS ASSEMBLY

Total Credits: 3
Major Code: 5206N

Description

The Certificate of Completion (CCL) in Cable and Wire Harness Assembly will prepare the successful student to receive the "Certified IPC Specialist" (CIS) certification from The Institute for Interconnecting and Packaging Electronic Circuits (IPC)/Wire Harness Manufacturer's Association (WHMA) in "Requirements and Acceptance for Cable and Wire Harness Assemblies" (IPC/WHMA-A-620 Certification). Topics covered and skills to be demonstrated are: soldered terminations, crimp terminations, insulation displacement terminations (IDC), splices, connectorization, marking/labeling, coaxial cable assemblies, electrical shielding, wire marking and labeling, and testing methodologies. Certification is verified by a certified IPC trainer (CIT).

Program Notes

This program is not eligible for Title IV Federal Financial Aid. Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	3		
AIT128	A-620 Cable and Wire Harness Assembly Certification	3	

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=15992466>

Starting Term: 2025 Spring
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN CISCO CERTIFIED NETWORK PROFESSIONAL: ENTERPRISE

Total Credits: 16
Major Code: 5190

Description

The Certificate of Completion (CCL) in Cisco Certified Network Professional: Enterprise builds the advanced knowledge and skills needed for professional-level networking technologies and architecture. This CCL includes fundamental concepts of virtualization, network assurance, security, automation, and the implementation and troubleshooting of advanced routing technologies, as well as hands-on opportunities to apply these concepts to real-world applications. Students with the requisite experience in the field who complete this CCL can pursue employment in a variety of information technology jobs. This CCL also helps to prepare students for the Cisco Enterprise Network Core Technologies (ENCOR) certification and Implementing Cisco Enterprise Network Advanced Routing and Services (ENARSI) exams aligned with the CCNP Enterprise, CCIE Enterprise Infrastructure, CCIE Enterprise Wireless, and Cisco Certified Specialist - Enterprise core, CCNP Enterprise, Cisco Certified Specialist - Advanced Infrastructure Implementation certifications.

Program Notes

This Certificate of Completion (CCL) is intended for industry professionals with the requisite skills aligned with the Cisco Certified Network Associate (CCNA) industry certification who are interested in expanding their knowledge in the area in professional-level networking or to enhance their employment opportunities. Speak to a program director for additional information. Students must earn a grade of C or better in all courses within the program. Courses within any of the following prefixes must be taken within five (5) years prior to completion of the program to be applied toward this award: AIM, BPC, CIS, CLD, CNT, CSC, ITS, and MST.

Admission Criteria

This Certificate of Completion (CCL) is intended for industry professionals with the requisite experience. To pursue this CCL, students must

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	16		
CNT240	Cisco Certified Network Professional: Enterprise Core (8) OR		
CNT240AA	Cisco Certified Network Professional: Enterprise Core I (4) AND		
CNT240AB	Cisco Certified Network Professional: Enterprise Core II (4)	8	

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MC CCD.woa/wa/freeForm11?id=188748>

Starting Term: 2024 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN CISCO CERTIFIED NETWORK PROFESSIONAL: ENTERPRISE ADVANCED ROUTING AND SERVICES

Total Credits: 8
Major Code: 5187N

Description

The Certificate of Completion (CCL) in Cisco Certified Network Professional: Enterprise Advanced Routing and Services builds the advanced knowledge and skills needed for professional-level networking technologies and architecture. This CCL includes concepts of implementation and troubleshooting of advanced routing technologies and services including Layer 3 VPN services, infrastructure security, and infrastructure services, as well as hands-on opportunities to apply these concepts to real-world applications. Students with the requisite experience in the field who complete this CCL can pursue employment in a variety of information technology jobs. This CCL also helps to prepare students for the Implementing Cisco Enterprise Network Advanced Routing and Services (ENARSI) certification exam aligned with the CCNP Enterprise, Cisco Certified Specialist - Advanced Infrastructure Implementation certifications. Additional Certificates of Completion (CCLs) in Cisco Certified Network Security (CCNA Security), Cisco Certified Network Professional: Enterprise Core, Cisco Certified Network Professional: Enterprise, Cisco Network Administration: CCNP, as well as an Associate in Applied Science (AAS) in Network and Systems Administration, are also available at select colleges. Please check with your local college for program availability.

Program Notes

This program is not eligible for Title IV Federal Financial Aid.This Certificate of Completion (CCL) is intended for industry professionals with the requisite skills aligned with the Cisco Certified Network Associate (CCNA) industry certification who are interested in expanding their knowledge in the area in professional-level networking or to enhance their employment opportunities. Speak to a program director for additional information.Students must earn a grade of C or better in all courses within the program.Courses within any of the following prefixes must be taken within five (5) years prior to completion of the program to be applied toward this award: AIM, BPC, CIS, CLD, CNT, CSC, ITS, and MST.

Admission Criteria

This Certificate of Completion (CCL) is intended for industry professionals with the requisite experience. To pursue this CCL, students must

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	8		
CNT250		Cisco Certified Network Professional: Enterprise Advanced Routing and Services (8) OR	
CNT250AA		Cisco Certified Network Professional: Enterprise Advanced Routing and Services I (4) AND	
CNT250AB		Cisco Certified Network Professional: Enterprise Advanced Routing and Services II (4)	8

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MC CCD.woa/wa/freeForm11?id=15992459>

Starting Term: 2025 Spring
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN CISCO CERTIFIED NETWORK PROFESSIONAL: ENTERPRISE CORE

Total Credits: 8
Major Code: 5189N

Description

The Certificate of Completion (CCL) in Cisco Certified Network Professional: Enterprise Core builds the knowledge and skills needed for professional-level networking technologies and architecture. This CCL includes the fundamental concepts of virtualization, network assurance, security, and automation, as well as hands-on opportunities to apply these concepts to real-world applications. Students with the requisite experience in the field who complete this CCL can pursue employment in a variety of information technology jobs. This CCL also helps to prepare students for the Cisco Enterprise Network Core Technologies (ENCOR) certification exam aligned with the CCNP Enterprise, CCIE Enterprise Infrastructure, CCIE Enterprise Wireless, and Cisco Certified Specialist - Enterprise core certifications.

Additional Certificates of Completion (CCLs) in Cisco Certified Network Security (CCNA Security), Cisco Certified Network Professional: Enterprise, Cisco Certified Network Professional: Enterprise Core and Advanced Routing and Services, Cisco Network Administration: CCNP, as well as an Associate in Applied Science (AAS) in Network and Systems Administration, are also available at select colleges. Please check with your local college for program availability.

Program Notes

This program is not eligible for Title IV Federal Financial Aid.This Certificate of Completion (CCL) is intended for industry professionals with the requisite skills aligned with the Cisco Certified Network Associate (CCNA) industry certification who are interested in expanding their knowledge in the area in professional-level networking or to enhance their employment opportunities. Speak to a program director for additional information.Students must earn a grade of C or better in all courses within the

program. Courses within any of the following prefixes must be taken within five (5) years prior to completion of the program to be applied toward this award: AIM, BPC, CIS, CLD, CNT, CSC, ITS, and MST.

Admission Criteria

This Certificate of Completion (CCL) is intended for industry professionals with the requisite experience. To pursue this CCL, students must

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	8		
CNT240	Cisco Certified Network Professional: Enterprise Core (8) OR		
CNT240AA	Cisco Certified Network Professional: Enterprise Core I (4) AND		
CNT240AB	Cisco Certified Network Professional: Enterprise Core II (4)	8	

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=164763>

Starting Term: 2021 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN CISCO NETWORK ADMINISTRATION AND SECURITY

Total Credits: 16-19
Major Code: 5036

Description

The Certificate of Completion (CCL) in Cisco Network Administration and Security provides training for those interested in working with Cisco network and Internet hardware with a particular emphasis on securing networks from threats and vulnerabilities. Knowledge and skills are developed to install, configure, and maintain Cisco routers and switches; configure routing protocols, and Local Area Networks (LANs); troubleshoot problems with various hardware and software configurations; perform administrative tasks in a network. Specific skills in maintaining integrity, accountability, and confidentiality of data are also developed. Taught by Cisco Certified professionals using the Cisco Network Academy program curriculum, courses are designed to help prepare students for the Cisco Certified Network Associate (CCNA) and Security examinations. Students who complete this program may seek employment in a variety of environments. An additional Certificate of Completion (CCL) in Cisco Certified Network Professional (CCNP), as well as an Associate in Applied Science (AAS) in Network and Systems Administration are also available at select colleges. Please check with your local college for program availability.

Program Notes

Students must earn a grade of C or better in all courses within the program. Students who pursue this Certificate of Completion (CCL) should have a basic level of computer literacy including navigating the internet and computer systems or take CIS105 as indicated in the required courses. Students with the requisite skills may have the CIS105 requirement waived by permission of the Program Director. Courses within any of the following prefixes must be taken within five (5) years prior to completion of the program to be applied toward this award: AIM, BPC, CIS, CLD, CNT, CSC, ITS, and MST.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	16-19		
CIS105	Survey of Computer Information Systems (3) OR		
Permission of the Program Director (0)	0-3		
CNT140AB	Introduction to Networks	4	
CNT150AB	Switching, Routing, and Wireless Essentials	4	
CNT160AB	Enterprise Networking, Security, and Automation	4	
CNT202	Cisco Secure Firewall Appliance Configuration (4) OR		
CNT205	Cisco Certified Network Associate Security (4)	4	

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=174360>

Starting Term: 2022 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN CISCO NETWORK ADMINISTRATION: CCNA

Total Credits: 12-15
Major Code: 5969N

Description

The Certificate of Completion (CCL) in Cisco Network Administration: CCNA provides training for those interested in working with network and Internet hardware. Knowledge and skills are developed to install, configure, and maintain Cisco routers and switches; configure advanced routing protocols, and Local Area Networks (LANs); troubleshoot hardware and software configurations; perform administrative tasks in a network. Taught by Cisco Certified professionals using the Cisco Networking Academy program curriculum, courses are designed to help prepare students for the Cisco Certified Network Associate (CCNA) examination. Students who complete this program may seek employment in a variety of environments. Additional Certificates of Completion (CCLs) in Cisco Network Administration and Security and Cisco Network Administration: CCNP, as well as an Associate in Applied Science (AAS) in Network and Systems Administration, are also available at select colleges. Please check with your local college for program availability.

Program Notes

This program is not eligible for Title IV Federal Financial Aid. Students must earn a grade of C or better in all courses within the program. Students who pursue this Certificate of Completion (CCL) should have a basic level of computer literacy including navigating the internet and computer systems or take CIS105 as indicated in the required courses. Students with the requisite skills may have the CIS105 requirement waived by permission of the Program Director. Courses within any of the following prefixes must be taken within five (5) years prior to completion of the program to be applied toward this award: AIM, BPC, CIS, CLD, CNT, CSC, ITS, and MST. This program replaces: CCL/5967 Networking Technology: Cisco

Required Courses

Required Courses Course # Course Title Credits

Credits: 12-15

CIS105 Survey of Computer Information Systems (3) OR

Permission of Program Director (0) 0-3

CNT140AB	Introduction to Networks	4
CNT150AB	Switching, Routing, and Wireless Essentials	4
CNT160AB	Enterprise Networking, Security, and Automation	4

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=15992460>

Starting Term: 2025 Spring

Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN CISCO NETWORK ADMINISTRATION: CCNP

Total Credits: 28-31

Major Code: 5037

Description

The Certificate of Completion (CCL) in Cisco Network Administration: CCNP provides students with advanced knowledge and skills to install, configure, and maintain Cisco routers and switches; configure advanced routing protocols, Local Area Networks (LANs), and Wide Area Networks (WANs); troubleshoot complex hardware and software configurations; and perform administrative tasks in a network at the professional level. Taught by Cisco Certified professionals using the Cisco Network Academy program curriculum, courses are designed to help prepare students for the Cisco Certified Network Associate (CCNA) and Cisco Certified Network Professional (CCNP) examinations. Students who complete this program may seek employment in a variety of environments. An additional Certificate of Completion (CCL) in Cisco Network Administration and Security, as well as an Associate in Applied Science (AAS) in Network and Systems Administration, are also available.

Program Notes

Students must earn a grade of C or better in all courses within the program. Students who pursue this Certificate of Completion (CCL) should have a basic level of computer literacy including navigating the internet and computer systems or take CIS105 as indicated in the required courses. Students with the requisite skills may have the CIS105 requirement waived by permission of the Program Director. Courses within any of the following prefixes must be taken within five (5) years prior to completion of the program to be applied toward this award: AIM, BPC, CIS, CLD, CNT, CSC, ITS, and MST.

Required Courses

Required Courses Course # Course Title Credits

Credits: 28-31

CIS105 Survey of Computer Information Systems (3) OR

Permission of program director (0) 0-3

CNT140AB	Introduction to Networks	4
CNT150AB	Switching, Routing, and Wireless Essentials	4
CNT160AB	Enterprise Networking, Security, and Automation	4

CNT240	Cisco Certified Network Professional: Enterprise Core (8) OR	
CNT240AA	Cisco Certified Network Professional: Enterprise Core I (4) AND	
CNT240AB	Cisco Certified Network Professional: Enterprise Core II (4)	8

CNT250	Cisco Certified Network Professional: Enterprise Advanced Routing and Services (8) OR	
CNT250AA	Cisco Certified Network Professional: Enterprise Advanced Routing and Services I (4) AND	
CNT250AB	Cisco Certified Network Professional: Enterprise Advanced Routing and Services II (4)	8

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=146560>

Starting Term: 2020 Fall

Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN CNC MACHINE OPERATOR

Total Credits: 6

Major Code: 5103N

Description

The Certificate of Completion (CCL) in CNC Machine Operator prepares students for employment as entry level operators and technicians in the manufacturing industry. The program provides applied skills in the operation of manual/Computer Numeric Control (CNC) machines for current and future needs of the manufacturing industry.

Certificates of Completion (CCLs) in CNC Machining I and CNC Machining II and an Associate in Applied Science (AAS) in Manufacturing Production Technology are also available.

Program Notes

This program is not eligible for Title IV Federal Financial Aid.Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	6		
MPT130	CNC Machine Operator (6)	OR	
MPT130MP	CNC Machine Operator (6)		6

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=187888>

Starting Term: 2024 Spring
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN CNC MACHINING I

Total Credits: 25
Major Code: 5100

Description

The Certificate of Completion (CCL) in CNC Machining I prepares students for employment as entry-level operators and technicians in the manufacturing industry. The program provides applied skills in process planning, quality control, set-up and operation of manual/Computer Numeric Control (CNC) machines for current and future needs of the manufacturing industry. This program introduces students to manual data programming and Computer-Aided Design/Computer-Aided Manufacturing (CAD/CAM). A CCL in CNC Machining II and an Associate in Applied Science (AAS) in Manufacturing Production Technology are also available.

Program Notes

Students must earn a grade of C or better in all courses within the program.This program replaces: CCL/5440 Production Technology: CNC TechnologyCCL/5616 CNC Machining I

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	25		
MPT101	Technical Documentation (3)	OR	
MPT101MP	Technical Documentation (3)		3
MPT110	Inspection Techniques (3)	OR	
MPT110MP	Inspection Techniques (3)		3
MPT111	Geometric Dimensioning and Tolerance (GDT) (3)	OR	
MPT111MP	Geometric Dimensioning and Tolerance (GDT) (3)		3
MPT113	Coordinate Measuring Machines I (3)	OR	
MPT140	Manual CNC Programming (3)		3
MPT120	Introduction to Manual Machining (4)	OR	
MPT120MP	Introduction to Manual Machining (4)		4
MPT130	CNC Machine Operator (6)	OR	
MPT130MP	CNC Machine Operator (6)	OR	
MPT131	CNC Machining Level I (6)	OR	
MPT131MP	CNC Machining Level I (6)		6
MPT132	CNC Machining Level II (3)	OR	
MPT132MP	CNC Machining Level II (3)		3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=187889>

Starting Term: 2024 Spring
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN CNC MACHINING II

Total Credits: 43-44
Major Code: 5102

Description

The Certificate of Completion (CCL) in CNC Machining II prepares students for advanced employment opportunities as operators and technicians in the manufacturing industry. The program provides applied skills in process design as well as advanced knowledge in quality control, Computer Numeric Control (CNC), and Computer Aided-Design/Computer-Aided Manufacturing (CAD/CAM) programming for current and future needs of the manufacturing industry. An Associate in Applied Science (AAS) in Manufacturing Production Technology is also available.

Program Notes

Students must earn a grade of C or better in all courses within the program. This program replaces: CCL/5647 CNC Machining IICCL/5795 CAM Systems Programming

Required Courses

Required Courses Course # Course Title Credits

Credits: 37

Required Courses for CCL in CNC Machining I

MPT101	Technical Documentation (3) OR	
MPT101MP	Technical Documentation (3)	3
MPT110	Inspection Techniques (3) OR	
MPT110MP	Inspection Techniques (3)	3
MPT111	Geometric Dimensioning and Tolerance (3) OR	
MPT111MP	Geometric Dimensioning and Tolerance (3)	3
MPT113	Coordinate Measuring Machines I (3) OR	
MPT140	Manual CNC Programming (3)	3
MPT120	Introduction to Manual Machining (4) OR	
MPT120MP	Introduction to Manual Machining (4)	4
MPT130	CNC Machine Operator (6) OR	
MPT130MP	CNC Machine Operator (6) OR	
MPT131	CNC Machining Level I (6) OR	
MPT131MP	CNC Machining Level I (6)	6
MPT132	CNC Machining Level II (3) OR	
MPT132MP	CNC Machining Level II (3) OR	3

Required Courses for CCL in CNC Machining II

Students interested in taking MPT250 are advised to take MPT151

MPT150	Introduction to SolidWorks (3) OR	
MPT151	Solid Design I: SolidWorks (3)	3
MPT260	Computer Aided Manufacturing (CAM) I (3) OR	
MPT260MP	Computer Aided Manufacturing (CAM) I (3)	3
MPT262	Computer Aided Manufacturing (CAM) II (3) OR	
MPT262MP	Computer Aided Manufacturing (CAM) II (3)	3
MPT270	Tooling, Fixtures, and Gauges	3

Restricted Electives

Restricted Electives Course # Course Title Credits

Credits: 6-7

Students should complete 6-7 credits from the category below that best aligns with their academic and professional goals.

Quality and Inspection:

MPT215	Workplace Quality Systems	3
MPT216	Applied Statistical Process Control Methods	3
MPT217	Lean and Six Sigma Applied Concepts	3

Industrial Design:

MPT152	Solid Design: Certified SolidWorks Associate/Certified SolidWorks Professional Test Preparation	1
MPT250	Solid Design II: Advanced Part Modeling: SolidWorks	3
MPT255	Solid Design 3D Printing	4
MPT261	Mastercam Certified Programmer Mill Level I: Test Preparation: CPgM1	1

Manual Machining:

MPT220	Manual Machining: NIMS Level I Certification	3
MPT221	Manual Machining: NIMS Level II Certification	3

Related Experience:

AIT100	Industrial Safety	1
AIT105	Modern Maintenance Operations	3
MPT282++	Volunteerism for Manufacturing: A Service Learning Experience	1-3
MPT290++	Manufacturing Production Internship Fall	1-3
MPT296++	Cooperative Education	1-4
WLD101	Welding I	3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=151036>

Starting Term: 2020 Fall

Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN COMPUTER AIDED DRAFTING

Total Credits: 19

Major Code: 5547

Description

The Certificate of Completion (CCL) in Computer Aided Drafting (CAD) program is designed to prepare students as drafting technicians. Students will learn Computer Aided Design to develop skills in completing orthographic layouts, dimensioning, 2D and 3D computer aided drafting, and 3D printing all using American standards (ANSI). The program emphasizes current technological needs in the drafting industry. Students may apply these courses towards the Associate in Applied Science (AAS) in Drafting and Design Technology (3504).

Program Notes

Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	19		
DFT105AA		Computer Aided Drafting I: AutoCAD	3
DFT110		Introduction to Drafting	3
DFT111		Intermediate Drafting	3
DFT254AA		Computer Aided Drafting II: AutoCAD	3
DFT255		3D Printing/Additive Manufacturing	4
MPT150		Introduction to SolidWorks	3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=143791>

Starting Term: 2020 Fall

Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN COMPUTER SYSTEM CONFIGURATION AND SUPPORT

Total Credits: 6-9

Major Code: 5038N

Description

The Certificate of Completion (CCL) in Computer System Configuration and Support program is designed to prepare students for entry-level computer maintenance, help desk, and network technician jobs. The classes focus on the development of knowledge and skills in computer technologies including system components, installation, system configuration, peripheral devices, and notebooks. Emphasis is placed on hardware installation, maintenance, mobile devices, hardware troubleshooting, proper use of tools, safety procedures, and professionalism. This program helps prepare students for the CompTIA A+ certification exams. Students who complete this program may seek employment in a variety of environments. Students can also pursue additional Certificates of Completion (CCL) in a variety of specializations within the information technology field to deepen their knowledge and skills and help prepare them for multiple industry certification examinations. An Associate in Applied Science (AAS) in Network and Systems Administration is also available at select colleges. Please check with your local college for program availability.

Program Notes

This program is not eligible for Title IV Federal Financial Aid. Students must earn a grade of C or better in all courses within the program. Students who pursue this Certificate of Completion (CCL) should have a basic level of computer literacy including navigating the internet and computer systems or take CIS105 as indicated in the required courses. Students with the requisite skills may have the CIS105 requirement waived by permission of the Program Director. Courses within any of the following prefixes must be taken within five (5) years prior to completion of the program to be applied toward this award: AIM, BPC, CIS, CLD, CNT, CSC, ITS, and MST.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	6-9		
CIS105		Survey of Computer Information Systems (3) OR	
Permission of program director	(0)		0-3
BPC170	A+	Exam Prep: Computer Hardware Configuration and Support	3
BPC270	A+	Exam Prep: Operating System Configuration and Support	3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=148336>

Starting Term: 2020 Fall

Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN COMPUTER SYSTEM CONFIGURATION AND SUPPORT, LINUX

Total Credits: 9-12

Major Code: 5039N

Description

The Certificate of Completion (CCL) in Computer System Configuration and Support, Linux program is designed to prepare students for entry-level computer maintenance, help desk, and network technician jobs with an emphasis on Linux. The classes focus on the development of knowledge and skills in computer and network technologies including system components, installation, system configuration, peripheral devices, and notebooks. Emphasis is placed on the Linux Operating system including knowledge and skills required to install, configure and troubleshoot a Linux-based workstation. This program helps prepare students for the CompTIA A+ and Linux+ certification exams. Students who complete this program may seek employment in a variety of environments. Students can also pursue additional Certificates of

Completion (CCLs) in a variety of specializations within the information technology field to deepen their knowledge and skills and help prepare them for multiple industry certification examinations. An Associate in Applied Science (AAS) in Network and Systems Administration is also available.

Program Notes

This program is not eligible for Title IV Federal Financial Aid. Students must earn a grade of C or better in all courses within the program. Students who pursue this Certificate of Completion (CCL) should have a basic level of computer literacy including navigating the internet and computer systems or take CIS105 as indicated in the required courses. Students with the requisite skills may have the CIS105 requirement waived by permission of the Program Director. Courses within any of the following prefixes must be taken within five (5) years prior to completion of the program to be applied toward this award: AIM, BPC, CIS, CLD, CNT, CSC, ITS, and MST.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	9-12		
CIS105		Survey of Computer Information Systems (3)	OR
Permission of program director	(0)		0-3
BPC170	A+	Exam Prep: Computer Hardware Configuration and Support	3
BPC270	A+	Exam Prep: Operating System Configuration and Support	3
CIS126DL		Linux Operating System (3)	OR
CIS126RH		Red Hat System Administration I (3)	3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm?id=143792>

Starting Term: 2020 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN COMPUTER SYSTEM CONFIGURATION AND SUPPORT, NETWORK

Total Credits: 9-13
Major Code: 5044N

Description

The Certificate of Completion (CCL) in Computer System Configuration and Support, Network program is designed to prepare students for entry-level computer maintenance, help desk, and network technician jobs with an emphasis on networking. The courses focus on the development of knowledge and skills in computer and network technologies including system components, installation, system configuration, peripheral devices, and notebooks. Emphasis is placed on elements of a data network, network components, and use of a network. This program helps prepare students for the CompTIA A+ and Network+ certification exams. Students who complete this program may seek employment in a variety of environments. Students can also pursue additional Certificates of Completion (CCLs) in a variety of specializations within the information technology field to deepen their knowledge and skills and help prepare them for multiple industry certification examinations. An Associate in Applied Science (AAS) in Network and Systems Administration is also available.

Program Notes

This program is not eligible for Title IV Federal Financial Aid. Students must earn a grade of C or better in all courses within the program. Students who pursue this Certificate of Completion (CCL) should have a basic level of computer literacy including navigating the internet and computer systems or take CIS105 as indicated in the required courses. Students with the requisite skills may have the CIS105 requirement waived by permission of the Program Director. Courses within any of the following prefixes must be taken within five (5) years prior to completion of the program to be applied toward this award: AIM, BPC, CIS, CLD, CNT, CSC, ITS, and MST. This program replaces: CCL/5909 Computer Hardware and Network Support

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	9-13		
CIS105		Survey of Computer Information Systems (3)	OR
Permission of program director	(0)		0-3
BPC170	A+	Exam Prep: Computer Hardware Configuration and Support	3
BPC270	A+	Exam Prep: Operating System Configuration and Support	3
CIS190		Introduction to Networking (3)	OR
CNT140AB		Introduction to Networks (4)	3-4

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm?id=149317>

Starting Term: 2020 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN CONSTRUCTION BUILDING CODES

Total Credits: 3
Major Code: 5182N

Description

The Certificate of Completion (CCL) in Construction Building Codes is designed specifically to acquaint students with safety principles of building construction under the Uniform Building Code, including structural requirements for wood, masonry and concrete, fire resistance of building construction, fire resistant materials, and ratings and occupancy requirements. After completion of the certificate, students may take the International Code Council Residential Building Code exam for international certification.

Program Notes

This program is not eligible for Title IV Federal Financial Aid.Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	3		
CON263	Building Codes	3	

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm?id=149314>

Starting Term: 2020 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN CONSTRUCTION SAFETY OSHA 30

Total Credits: 3
Major Code: 5179N

Description

The Certificate of Completion (CCL) in Construction Safety OSHA 30 provides training in a comprehensive overview of standards that Occupational Safety and Health Administration (OSHA) has set in place for job site safety. Specifically structured for hazard identification, avoidance, control and prevention.

Program Notes

This program is not eligible for Title IV Federal Financial Aid.Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	3		
CON271	Construction Safety	3	

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=188894>

Starting Term: 2024 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN CONSTRUCTION TRADES: CARPENTRY

Total Credits: 16-18
Major Code: 5108

Description

The Certificate of Completion (CCL) in Construction Trades: Carpentry is designed to provide knowledge, safety, and skills in the carpentry construction trade. This program is an introduction to common construction skills to include safety, codes, construction drawings, tools, wall systems, flooring systems, and roof systems. Students can seek employment as carpentry technicians on residential and commercial job sites. A Certificate of Competency (CCT) in Construction Trades: Carpentry is available. A second Carpentry CCL and Associate in Applied Science (AAS) in Construction Technology are also available.

Program Notes

Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	16-18		
CON102	Foundations of Construction Trades (6)	OR	
CON102AA	Foundations of Construction Trades: Tools, Equipment, and Workspace (2)	AND	
CON102AB	Foundations of Construction Trades: Construction Calculations (2)	AND	
CON102AC	Foundations of Construction Trades: Construction Drawings and Materials (2)	6	
CON103	Foundation of Construction Safety (1)	OR	
CON271	Construction Safety (3)	1-3	

CON110	Construction: Carpentry (9)	OR	
CON110AA	Construction: Carpentry/Floor Systems (3)	AND	
CON110AB	Construction: Carpentry/Wall Systems (3)	AND	
CON110AC	Construction: Carpentry/Ceiling and Roof Systems (3)	9	
		1238	

Starting Term: 2024 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN CONSTRUCTION TRADES: CARPENTRY, COMMERCIAL AND RESIDENTIAL

Total Credits: 25-27
Major Code: 5118

Description

The Certificate of Completion (CCL) in Construction Trades: Carpentry, Commercial and Residential is designed to provide knowledge, safety, and skills in the carpentry construction trade. This program reinforces common construction skills to include use of tools, adherence to safety and codes, and reading construction drawings. It offers further theory and practice in commercial and specialty carpentry, to include steel framing, conventional roofing, interior finishing, and concrete forms. Students can seek employment as carpentry technicians on residential and commercial job sites. A Certificate of Competency (CCT) in Carpentry: Commercial and Residential is also available. The CCL/CCT can be applied to an available Associate in Applied Science (AAS) in Construction Trades.

Program Notes

Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits: 25-27			
CON102	Foundations of Construction Trades (6) OR		
CON102AA	Foundations of Construction Trades: Tools, Equipment, and Workspace (2) AND		
CON102AB	Foundations of Construction Trades: Construction Calculations (2) AND		
CON102AC	Foundations of Construction Trades: Construction Drawings and Materials (2)		6
CON103	Foundation of Construction Safety (1) OR		
CON271	Construction Safety (3)		1-3
CON110	Construction: Carpentry (9) OR		
CON110AA	Construction: Carpentry/Floor Systems (3) AND		
CON110AB	Construction: Carpentry/Wall Systems (3) AND		
CON110AC	Construction: Carpentry/Ceiling and Roof Systems (3)		9
CON210	Carpentry: Commercial and Residential		9

Starting Term: 2022 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN CONSTRUCTION TRADES: CONSTRUCTION MANAGEMENT

Total Credits: 20-29
Major Code: 5595

Description

The Certificate of Completion (CCL) in Construction Trades: Construction Management is designed to provide individuals in the construction industry work-ready skill sets in management, leadership, motivation, oral and written communications, problem solving, planning and scheduling, cost awareness and production control, sustainability, time management, and OSHA safety. The skills acquired prepare individuals for a productive career in the construction industry as a foreman, manager, project manager, and owner. The program provides students a career pathway for entry into the Associate in Applied Science (AAS) in Construction Management.

Program Notes

Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits: 20-29			
CON100	Introduction to Construction		2
CON181	Cost Estimating		3
CON244	Working Drawing Analysis: Blueprint Reading		3
CON251	Microcomputers for Constructors		3
CON252	Building Construction Methods, Materials, and Equipment		3
CON271	Construction Safety (3) OR		
Equivalent	OSHA 30 Certification (0)		0-3

GTC108 Technical Mathematics II (3)
OR
MAT150 College Algebra/Functions (5) AND
MAT182 Plane Trigonometry (3)
OR
MAT151 College Algebra/Functions (4) AND
MAT182 Plane Trigonometry (3)
OR
MAT152 College Algebra/Functions (3) AND
MAT182 Plane Trigonometry (3)
OR
MAT155 College Algebra/Functions with Review (5) AND
MAT182 Plane Trigonometry (3)
OR
MAT156 College Algebra/Functions with Review (6) AND
MAT182 Plane Trigonometry (3)
OR
MAT187 Precalculus (5)
OR
Higher level course in the Mathematical Applications [MA] area (3-5) 3-9
MGT229 Management and Leadership I 3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=189026>

Starting Term: 2024 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN CONSTRUCTION TRADES: ELECTRICAL

Total Credits: 16-18
Major Code: 5112

Description

The Certificate of Completion (CCL) in Construction Trades: Electrical is designed to provide beginning knowledge, safety, and skills in the electrical construction trade. This program is an introduction to common construction to include use of tools, safety, codes, installation of circuitry, equipment, construction drawings, and a basic understanding of electricity. Students can seek employment as electrical technicians on residential and commercial job sites. A Certificate of Competency (CCT) and an Associate in Applied Science (AAS) in Construction Trades are also available.

Program Notes

Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits: 16-18			
CON102	Foundations of Construction Trades (6) OR		
CON102AA	Foundations of Construction Trades: Tools, Equipment, and Workspace (2) AND		
CON102AB	Foundations of Construction Trades: Construction Calculations (2) AND		
CON102AC	Foundations of Construction Trades: Construction Drawings and Materials (2)		6
CON103	Foundation of Construction Safety (1) OR		
CON271	Construction Safety (3)		1-3
CON132	Construction: Electrical Systems (9) OR		
CON132AA	Construction: Electrical Systems/Introduction to Electrical (3) AND		
CON132AB	Construction: Electrical Systems/Electrical Power Generation (3) AND		
CON132AC	Construction: Electrical Systems/Raceways and Wireways (3)		9

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=189028>

Starting Term: 2024 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN CONSTRUCTION TRADES: ELECTRICAL, COMMERCIAL AND RESIDENTIAL

Total Credits: 25-27
Major Code: 5120

Description

The Certificate of Completion (CCL) in Construction Trades: Electrical, Commercial and Residential is designed to provide knowledge, safety, and skills in the electrical construction trade. This program reinforces common construction skills to include use of tools, adherence to safety and codes, and reading construction drawings. This award offers further theory and practice in commercial and specialty electrical, to include work with electric power distribution, motors and motor controls, specialty electrical lighting and services, and electrical currents. Students can seek employment as electrical technicians on residential and commercial job sites. A Certificate of Competency (CCT) and an Associate in Applied Science (AAS) in Construction Trades are also available.

Program Notes

Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	25-27		
CON102		Foundations of Construction Trades (6) OR	
CON102AA		Foundations of Construction Trades: Tools, Equipment, and Workspace (2) AND	
CON102AB		Foundations of Construction Trades: Construction Calculations (2) AND	
CON102AC		Foundations of Construction Trades: Construction Drawings and Materials (2)	6
CON103		Foundation of Construction Safety (1) OR	
CON271		Construction Safety (3) 1-3	
CON132		Construction: Electrical Systems (9) OR	
CON132AA		Construction: Electrical Systems/Introduction to Electrical (3) AND	
CON132AB		Construction: Electrical Systems/Electrical Power Generation (3) AND	
CON132AC		Construction: Electrical Systems/Raceways and Wireways (3)	9
CON232		Construction: Advanced Electrical	9

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=16453364>

Starting Term: 2025 Fall

Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN CONSTRUCTION TRADES: MASONRY

Total Credits: 16-22

Major Code: 5024

Description

The Certificate of Completion (CCL) in Construction Trades: Masonry is designed to provide knowledge, safety, and skills in the masonry trade. This program reinforces common construction skills to include use of tools, adherence to safety and codes, and reading construction drawings. It offers further theory and practice in mortar, masonry units, and installation techniques. Students could seek entry level employment as masons on residential and commercial job sites. The CCL can be applied to an available Associate in Applied Science (AAS) in Construction Technology.

Program Notes

Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	16-22		
CON102		Foundations of Construction Trades (6) OR	
CON102AA		Foundations of Construction Trades: Tools, Equipment, and Workspace (2) AND	
CON102AB		Foundations of Construction Trades: Construction Calculations (2) AND	
CON102AC		Foundations of Construction Trades: Construction Drawings and Materials (2)	6
CON103		Foundation of Construction Safety (1) OR	
CON271		Construction Safety (3) 1-3	
CON106		Foundations of Concrete (4) OR	
Permission of Instructor	(0)	0-4	
CON140		Construction Trades: Introduction to Masonry (9) OR	
CON140AA		Construction Trades: Masonry Fundamentals (4.5) AND	
CON140AB		Construction Trades: Masonry Systems (4.5)	9

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=189374>

Starting Term: 2024 Fall

Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN CONSTRUCTION TRADES: PLUMBING

Total Credits: 16-18

Major Code: 5116

Description

The Certificate of Completion (CCL) in Construction Trades: Plumbing is designed to provide knowledge safety and skills in the plumbing construction trade. This program is an introduction to common construction skills to include safety; codes; construction drawings; tools; fixtures; pipes and fittings; drain, waste, and vent systems; and water distribution systems. Students can seek employment as plumbing technicians on residential and commercial job sites. A Certificate of Competency (CCT) and an Associate in Applied Science (AAS) in Construction Trades are also available.

Program Notes

Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	16-18		
CON102	Foundations of Construction Trades (6) OR		
CON102AA	Foundations of Construction Trades: Tools, Equipment, and Workspace (2) AND		
CON102AB	Foundations of Construction Trades: Construction Calculations (2) AND		
CON102AC	Foundations of Construction Trades: Construction Drawings and Materials (2)		6
CON103	Foundation of Construction Safety (1) OR		
CON271	Construction Safety (3) 1-3		
CON122	Construction: Plumbing (9) OR		
CON122AA	Construction: Plumbing/Pipes and Fittings (3) AND		
CON122AB	Construction: Plumbing/Drain, Waste and Vent (3) AND		
CON122AC	Construction: Plumbing/Fixtures, Faucets and Water Distribution Systems (3)		9

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=189384>

Starting Term: 2024 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN CONSTRUCTION TRADES: PLUMBING, COMMERCIAL AND RESIDENTIAL

Total Credits: 25-27
Major Code: 5122

Description

The Certificate of Completion (CCL) in Construction Trades: Plumbing, Commercial and Residential is designed to provide knowledge safety and skills in the plumbing construction trade. This program reinforces common construction skills to include use of tools, adherence to safety and codes, and reading construction drawings. It offers further instruction and practice in commercial and specialty plumbing, to include work in piping systems; water resource solutions; water disposal systems; and plumbing fixtures and appliances. Students can seek employment as plumbing technicians on residential and commercial job sites. A Certificate of Competency (CCT) and an Associate in Applied Science (AAS) in Construction Trades are also available.

Program Notes

Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	25-27		
CON102	Foundations of Construction Trades (6) OR		
CON102AA	Foundations of Construction Trades: Tools, Equipment, and Workspace (2) AND		
CON102AB	Foundations of Construction Trades: Construction Calculations (2) AND		
CON102AC	Foundations of Construction Trades: Construction Drawings and Materials (2)		6
CON103	Foundation of Construction Safety (1) OR		
CON271	Construction Safety (3) 1-3		
CON122	Construction: Plumbing (9) OR		
CON122AA	Construction: Plumbing/Pipes and Fittings (3) AND		
CON122AB	Construction: Plumbing/Drain, Waste and Vent (3) AND		
CON122AC	Construction: Plumbing/Fixtures, Faucets and Water Distribution Systems (3)		9
CON222	Construction: Advanced Plumbing		9

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=189390>

Starting Term: 2024 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN CONSTRUCTION TRADES: SOLAR ENERGY

Total Credits: 16-18
Major Code: 5028

Description

The Certificate of Completion (CCL) in Construction Trades: Solar Energy is designed to provide knowledge, safety, and skills in the solar energy industry. This program reinforces common construction skills to include use of tools, adherence to safety and codes, and reading construction drawings. It offers the fundamentals in electrical theory as applied to the solar industry. Students could seek entry level employment as solar technicians on residential and commercial job sites. The CCL can be applied to an available Associate in Applied Science (AAS) in Construction Technology.

Program Notes

Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	16-18		
CON102	Foundations of Construction Trades (6) OR		
CON102AA	Foundations of Construction Trades: Tools, Equipment, and Workspace (2) AND		
CON102AB	Foundations of Construction Trades: Construction Calculations (2) AND		
CON102AC	Foundations of Construction Trades: Construction Drawings and Materials (2)		6
CON103	Foundation of Construction Safety (1) OR		
CON271	Construction Safety (3) 1-3		
CON150	Construction Trades: Solar Energy Technology (9) OR		
CON150AA	Construction Trades: Introduction to Solar Energy Systems (3) AND		
CON150AB	Construction Trades: Solar System Design, Maintenance and Troubleshooting (3) AND		
CON150AC	Construction Trades: Solar Energy System Installation and Inspection (3)		9

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=135226>

Starting Term: 2019 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN CORRECTIONS

Total Credits: 15
Major Code: 5776N

Description

The Certificate of Completion (CCL) in Corrections program is designed for students intending to pursue careers in various correctional components of the justice system, including parole, probation, jail, and prisons. Focus is broader learning about the correction function in the context of overall administration of justice system.

Program Notes

This program is not eligible for Title IV Federal Financial Aid. Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	15		
AJS101	Introduction to Criminal Justice		3
AJS123	Ethics and the Administration of Justice (3) OR		
AJS255	The Criminal Justice System Handling of the Mentally Ill (3)		3
AJS212	Juvenile Justice Procedures		3
AJS240	The Correction Function		3
AJS205	Effective Communication and Report Writing in Criminal Justice (3) OR		
AJS275	Criminal Investigation I (3)		3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=187232>

Starting Term: 2024 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN CRIME SCENE INVESTIGATION

Total Credits: 16-18
Major Code: 5964

Description

The Certificate of Completion (CCL) in Crime Scene Investigation is designed to develop knowledge and skills required to investigate and reconstruct crime scenes using scientific evidence and logical analysis. The program provides instruction in criminal investigation procedures, collection and preservation of physical and biological evidence, death investigation techniques, crime scene reconstruction methodology and presentation of testimony in court.

Program Notes

Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	16-18		

AJS213	Evidence Technology: Fingerprints (3) OR	
AJS243	Crime Scene Reconstruction (3)	3
AJS215	Criminalistics: Physical Evidence (3) OR	
AJS219	Crime Scene Technology: Physical Evidence (3) OR	
FOR105	Forensic Science: Physical Evidence (4)	3-4
AJS216	Criminalistics: Biological Evidence (3) OR	
FOR106	Forensic Science: Biological Evidence (4)	3-4
AJS214	Evidence Technology/Photography	3
AJS275	Criminal Investigation I	3
AJS290BN	Courtroom Testimony Seminar	1

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=183050>

Starting Term: 2024 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN CYBER ENGINEERING

Total Credits: 42-43
Major Code: 5149

Description

The Certificate of Completion (CCL) in Cyber Engineering program is designed to focus on the necessary skills required to secure, protect and identify vulnerabilities in a network, including various operating systems and network devices. Emphasis is placed on developing the theoretical, legal, ethical and practical skills needed to maintain security on mission-critical networking and server systems. The program is designed to meet the training needs of government and industry employees. The program covers a variety of information security technologies and structured languages. The Cyber Engineering program also focuses on the skills needed for internationally recognized IT certifications and high demands in business, industry, and government. The Associate in Applied Science (AAS) in Cybersecurity is also available.

Program Notes

Students must earn a grade of C or better in all courses within the program. Courses within any of the following prefixes must be taken within five (5) years prior to completion of the program to be applied toward this award: AIM, BPC, CIS, CLD, CNT, CSC, ITS, and MST.

Required Courses

Required Courses Course # Course Title Credits
Credits: 42-43
The following courses are required and included in the CCL in Cybersecurity Fundamentals

BPC270 A+ Exam Prep: Operating System Configuration and Support (3) OR
MST150++ Any Microsoft Windows course (3) 3

CIS105 Survey of Computer Information Systems 3

CIS111 Ethics in Information Technology (3) OR
ITS120 Legal, Ethical and Regulatory Issues (3) 3

CIS126DL Linux Operating System (3) OR
CIS126RH Red Hat System Administration I (3) 3

CIS156 Python Programming: Level I 3

CIS190 Introduction to Networking (3) OR
CNT140AB Introduction to Networks (4) 3-4

CIS270 Essentials of Network and Information Security (3) OR
ITS110 Information Security Fundamentals (3) 3

ITS240 Ethical Hacking and Network Defense 3

The following courses are required in the CCL in Cyber Engineering

CIS119D0 Introduction to Oracle: SQL (3) OR
CIS276++ Any SQL Database course (3) 3

CIS162++ Any C Programming: Level I course 3
CIS227 Assembler Language 3

CIS238DL Linux System Administration (3) OR
CIS238RH Red Hat System Administration II (3) 3

CIS250 Management of Information Systems 3
CIS262++ Any C Programming: Level II course 3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=15992630>

Starting Term: 2025 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN CYBER OPERATIONS

Total Credits: 41-42
Major Code: 5165

Description

The Certificate of Completion (CCL) in Cyber Operations program is designed to focus on the necessary skills required to secure, protect and identify vulnerabilities in a network, including various operating systems and network devices. Emphasis is placed on developing the theoretical, legal, ethical and practical skills needed to maintain security on mission-critical networking and server systems. The program is designed to meet the training needs of government and industry employees. The program covers a variety of information security technologies and structured languages. The Cyber Operations program also focuses on the skills needed for internationally recognized IT certifications and high demands in business, industry, and government. An Associate in Applied Science (AAS) in Cybersecurity is also available.

Program Notes

Students must earn a grade of C or better in all courses within the program.Courses within any of the following prefixes must be taken within five (5) years prior to completion of the program to be applied toward this award: AIM, BPC, CIS, CLD, CNT, CSC, ITS, and MST.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	41-42		
The following courses are required and included in CCL Cybersecurity Fundamentals.			
BPC270	A+ Exam Prep: Operating System Configuration and Support	(3)	OR
MST150++	Any Microsoft Windows course	(3)	3
CIS105	Survey of Computer Information Systems		3
CIS111	Ethics in Information Technology	(3)	OR
ITS120	Legal, Ethical and Regulatory Issues	(3)	3
CIS126DL	Linux Operating System	(3)	OR
CIS126RH	Red Hat System Administration I	(3)	3
CIS156	Python Programming: Level I		3
CIS190	Introduction to Networking	(3)	OR
CNT140AB	Introduction to Networks	(4)	3-4
ITS110	Information Security Fundamentals		3
ITS240	Ethical Hacking and Network Defense		3
The following courses are required in Cyber Operations			
BPC170	A+ Exam Prep: Computer Hardware Configuration and Support		3
CIS238DL	Linux System Administration	(3)	OR
CIS238RH	Red Hat System Administration II	(3)	3
CIS290AC	Computer Information Systems Internship	(3)	OR
CIS298AC	Special Projects	(3)	3
ITS291	Computer Forensics Foundations		4
ITS292	Advanced Computer Forensics		4

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=183072>

Starting Term: 2024 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN CYBERSECURITY FUNDAMENTALS

Total Credits: 24-25
Major Code: 5154

Description

The Certificate of Completion (CCL) in Cybersecurity Fundamentals is designed to focus on the necessary skills required to secure, protect and identify vulnerabilities in a network, including various operating systems and network devices. Emphasis is placed on developing the theoretical, legal, ethical and practical skills needed to maintain security on mission-critical networking and server systems. The program is designed to provide applied skills necessary for government and industry employees. The program covers a variety of information security technologies and structured languages. The Cybersecurity program also focuses on the skills needed for internationally recognized IT certifications and high demands in business, industry, and government. The Associate in Applied Science (AAS) in Cybersecurity is also available.

Program Notes

Students must earn a grade of C or better in all courses within the program.Courses within any of the following prefixes must be taken within five (5) years prior to completion of the program to be applied toward this award: AIM, BPC, CIS, CLD, CNT, CSC, ITS, and MST.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	24-25		
BPC270	A+ Exam Prep: Operating System Configuration and Support	(3)	OR
MST150++	Any Microsoft Windows course	(3)	3
CIS105	Survey of Computer Information Systems		3

CIS111	Ethics in Information Technology (3) OR	
ITS120	Legal, Ethical and Regulatory Issues (3)	3
CIS126DL	Linux Operating System (3) OR	
CIS126RH	Red Hat System Administration I (3)	3
CIS156	Python Programming: Level I	3
CIS190	Introduction to Networking (3) OR	
CNT140AB	Introduction to Networks (4)	3-4
CIS270	Essentials of Network and Information Security (3) OR	
ITS110	Information Security Fundamentals (3)	3
ITS240	Ethical Hacking and Network Defense	3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=179773>

Starting Term: 2023 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN DATA ANALYTICS

Total Credits: 18-24
Major Code: 5884

Description

The Certificate of Completion (CCL) in Data Analytics is designed to prepare students to model, synthesize, analyze, and present large data sets for business decision making. Courses will focus on the techniques and computer software used in industry to extract data from various data sources, model and integrate that data, and then visualize this data for business decision making and intelligence gathering. This program prepares students for industry certification and is embedded (can be used to fulfill requirements) in the Associate of Applied Science (AAS) in Data Analytics available at MCCCD.

Program Notes

Students must earn a grade of C or better in all courses within the program. CIS214DE is not equivalent to CIS214DA for the purposes of this certificate and should not be used to complete program requirements. Students who have completed GBS221 can use this course in lieu of GBS220. Computer Information System (CIS) courses required by this program are not applicable if taken more than eight (8) years prior to the completion of the program of study. Consult with an Academic Advisor for complete information.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	18-24		
CIS114DE	Excel Spreadsheet	3	
CIS117DM	Microsoft Access: Database Management	3	
CIS214DA	Advanced Excel for Data Analytics	3	
CIS217AM	Advanced Microsoft Access: Database Management (3) OR		
CIS276DA	MySQL Database (3) OR		
CIS276DB	SQL Server Database (3)	3	
GBS151	Introduction to Business	3	
GBS220	Quantitative Methods in Business (3) OR		
GBS221	Business Statistics (3)	3	
MAT150	College Algebra/Functions (5) OR		
MAT151	College Algebra/Functions (4) OR		
MAT152	College Algebra/Functions (3) OR		
MAT155	College Algebra/Functions with Review (5) OR		
MAT156	College Algebra/Functions with Review (6) OR		
Satisfactory District math placement (0)		0-6	

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=186540>

Starting Term: 2024 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN DATA CENTER OPERATIONS

Total Credits: 22
Major Code: 5293

Description

The Certificate of Completion (CCL) in Data Center Operations is designed to prepare students for entry-level employment as a mechanical, electrical, and controls technician in data centers or companies that support data center functions. An Associate in Applied Science (AAS) degree in Automated Industrial Technology is also available.

Program Notes

Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	22		
AIT100	Industrial Safety	1	
AIT105	Modern Maintenance Operations	3	
AIT110	Mechanical Power Transmission Systems	3	
AIT117	Introduction to Data Center Operations	3	
AIT125	DC and AC Components and Circuits	3	
AIT210	Programmable Logic Controller Programming and Troubleshooting	3	
AIT225	Industrial Motors and Motor Control	3	
AIT227	Power Distribution Systems	3	

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm?id=189647>

Starting Term: 2024 Fall

Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN DIGITAL ARTS: DIGITAL PHOTOGRAPHY

Total Credits: 22

Major Code: 5632

Description

The Certificate of Completion (CCL) in Digital Arts: Digital Photography prepares students for careers in photography and digital imaging as photo assistants, commercial photographers, portrait and fine art photographers, digital production technicians and photo retoucher. In the program the student develops an understanding of traditional photographic principles, film, cameras, and printing, and learns how to apply these principles using digital cameras, inkjet printers and computer software. Knowledge and skills can be applied to such occupational areas as media production, marketing, graphic production and multimedia. The program is designed for both those seeking to enter a career in digital photography or digital imaging and those already working in the field who wish to advance and update their knowledge and skills.

Program Notes

Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	22		
ART131	Photography I	3	
ART132	Photography II	3	
AVC100	Introduction to Digital Arts	1	
AVC142	Introduction to Digital Photography	3	
AVC143	Intermediate Digital Photography	3	
AVC177	Digital Photographic Imaging I	3	
AVC270	Digital Photographic Imaging II	3	
AVC274	Digital Photographic Imaging III	3	

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm1?id=175859>

Starting Term: 2022 Fall

Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN DISC JOCKEY TECHNIQUES I

Total Credits: 11

Major Code: 5976N

Description

The Certificate of Completion (CCL) in Disc Jockey Techniques I is designed to prepare students for entry level employment as a live-performance disc jockey (DJ). This program is designed to provide the student with the technical skills required for a successful performance or production and to demonstrate an understanding of common business practices in a highly competitive and rapidly changing entertainment industry. A Certificate of Completion (CCL) in Disc Jockey Techniques II and an Associate in Applied Science (AAS) Disc Jockey Techniques is available for students who want to deepen their knowledge and skills within the field.

Program Notes

This program is not eligible for Title IV Federal Financial Aid. Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	11		
MUC135	Introduction to Disc Jockey Techniques	3	
MUC136	Turntablism: The Art of the Scratch DJ	3	
MUC137	Digital DJ Performance Techniques	3	

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=175858>

Starting Term: 2022 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN DISC JOCKEY TECHNIQUES II

Total Credits: 23
Major Code: 5745

Description

The Certificate of Completion (CCL) in Disc Jockey Techniques II is designed to prepare students for entry level employment as a live-performance disc jockey (DJ). This program is designed to provide the student with the technical skills required for a successful performance or production and to demonstrate an understanding of common business practices in a highly competitive and rapidly changing entertainment industry. An Associate in Applied Science (AAS) in Disc Jockey Techniques is also available.

Program Notes

Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	23		
MHL204		Hip-Hop Music and Culture	3
MUC109		Music Business: Content Creation and Copyright	3
MUC135		Introduction to Disc Jockey Techniques	3
MUC136		Turntablism: The Art of the Scratch DJ	3
MUC137		Digital DJ Performance Techniques	3
MUC138		Disc Jockey Laboratory	1
MUC139		Introduction to Emcee-Rapping Techniques	3
MUC197		Live Sound Reinforcement I	3
MUC293		Self-Promotion for Music	1

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm?id=175656>

Starting Term: 2023 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN EARLY CHILDHOOD EDUCATION

Total Credits: 36
Major Code: 5056

Description

The Certificate of Completion (CCL) in Early Childhood Education is designed to prepare students for employment as early childhood teachers in a variety of educational programs. Students learn effective teaching skills as they apply developmentally appropriate early childhood educational theory in the classroom setting. Courses have been selected with a focus on developing an educational career ladder. An Associate in Applied Science (AAS) in Early Childhood Education is also available and includes additional early childhood electives and general education classes to broaden the student's base of knowledge.

Program Notes

Students must earn a grade of C or better in all courses within the program. For some employment and field experiences (including internship courses), students will be required to have a current Identity Verified Print (IVP) Fingerprint Clearance Card and a current TB test.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	29-34		
CFS101AH		Art Activities for the Young Child (1) AND	
ECH281		Movement/Music for the Young Child (1) OR	
ECH128		Early Learning: Play and the Arts (3) OR	
EED210		Creative and Cognitive Play (3) 2-3	
CFS123		Health and Nutrition In Early Childhood Settings (1) AND	
CFS125		Safety in Early Childhood Settings (1) AND	
ECH280		Food Experiences With Young Children (1) OR	
EED215		Early Learning: Health, Safety, Nutrition and Physical Fitness (3)	3
CFS/ECH176		Child Development (3) OR	
CFS235		Developing Child: Theory into Practice, Prenatal to Age Eight (3) OR	
EED205		The Developing Child: Prenatal to Age Eight (3)	3
CFS/ECH269		Early Childhood Education Seminar (1) AND	
CFS/ECH287		Professional Development in Early Childhood Education (1) OR	

EED255 Independent Study Portfolio Development and Writing for the Early Childhood Profession (3) 2-3

CFS/ECH271 Arranging the Environment (1) AND
CFS282 Mainstreaming The Young Child with A Disability (1) AND
ECH282 Discipline/Guidance of Child Groups (1) OR
EED212 Guidance, Effective Interactions and the Environment (3) 3

CFS/ECH273 Math for the Young Child (1) AND
CFS/ECH275 Literacy Development and the Young Child (1) AND
ECH272 Science for the Young Child (1) AND
ECH279 Early Childhood Curriculum Development (1) OR
EED278 Early Learning Curriculum and Instruction – Birth to Age Eight (3) 3-4

CFS/ECH284AB Early Childhood Teaching Internship (3) OR
EED260 Early Childhood Infant/Toddler Internship (1) AND
EED261 Early Childhood Preschool Internship (1) OR
CFS/ECH284AA Early Childhood Teaching Internship (1) 2-3

ECH140 Learning Made Visible Through Documentation (1) AND
ECH270 Observing Young Children (1) OR
EED280 Standards, Observation and Assessment of Typical/Atypical Behaviors of Young Children Birth Age Eight (3) 2-3

EED200 Foundations of Early Childhood Education 3
EED222 Introduction to the Exceptional Young Child: Birth to Age Eight 3
EED225 Language and Literacy in the Context of Culture and Relationships 3

Restricted Electives

Restricted Electives Course # Course Title Credits

Credits: 2-7

Students must select 2-7 credits from the following courses to meet a minimum of 36 credits for the certificate. Cannot be shared with Required

CFS+++ Any CFS Child/Family Studies course(s)
ECH+++ Any ECH Early Childhood Education course(s)
EDU+++ Any EDU Education course(s)
EED+++ Any EED Early Education course(s)
FCS+++ Any FCS Family and Consumer Science course(s)
ITD+++ Any ITD Infant/Toddler Development course(s)

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=147874>

Starting Term: 2020 Fall

Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN ELECTRONICS TECHNOLOGY

Total Credits: 24

Major Code: 5591

Description

The Certificate of Completion (CCL) in Electronics Technology is designed to prepare students to work as electronics technicians, manufacturing supervisors, test equipment specialists, prototype fabricators, and in other positions in firms that specialize in electronic design, manufacturing, service, and development. Students with this certificate may work in industries that include, but are not limited to, aerospace, biotechnology, communications, entertainment, industrial, medical, power, semiconductor, and transportation. This Certificate of Completion (CCL) comprises the first two semesters of the Associate in Applied Science (AAS) degree in Electronics Technology.

Program Notes

Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses Course # Course Title Credits

Credits: 24

ELE111 Circuit Analysis I 4
ELE112 Circuit Analysis II 4
ELE121 Solid-State Devices and Circuits I 4
ELE131 Digital Logic and Circuits 3
ELE181 Computer Programming for Technology 3
ELE241 Microprocessor Concepts 4
GTC/OSH/MIT106 Industrial Safety 2

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=173311>

Starting Term: 2022 Summer

Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN EMERGENCY MEDICAL TECHNOLOGY

Total Credits: 13

Major Code: 5643N

Description

The Certificate of Completion (CCL) in Emergency Medical Technology curriculum provides the student with the necessary knowledge and skills in accordance with the National EMS Scope of Practice published by National Highway Traffic Safety Administration (NHTSA) and the Arizona Department of Health Services. Successful completion of the curriculum and upon licensure, the candidate can seek employment with ambulance service companies, first responder agencies, fire departments, and hospitals as an Emergency Medical Technician (EMT). Emphasis is on the fundamental principles and skills required to provide emergency medical care for the ill or injured. The primary focus of an EMT is to respond to, assess and triage emergent, urgent, and non-urgent requests for medical care, apply basic knowledge and skills necessary to provide patient care and medical transportation to/from an emergency or health care facility.

This program is designed to meet education requirements for licensure or certification in the State of Arizona. Granting licensure and certification is the sole responsibility of the state board or approval agency. This program is only offered and available to students located in the State of Arizona. The Maricopa County Community College District and colleges define student location within Administrative Regulation 2.2.3(7).

Program Notes

This program is not eligible for Title IV Federal Financial Aid. Students must earn a grade of C or better in all courses within the program. EMT104 requires students to complete additional hours in a competency-based clinical, vehicular, and/or scenario based experience. Depending on the college, this may be completed through EMT104AB or program director-approved rotation.

Admission Criteria

At Rio Salado College, this program is offered through an educational partnership. Employment by the partnership organization is required for

Program Prerequisites

Program Prerequisites Course # Course Title Credits
Credits: 0
None.

Required Courses

Required Courses Course # Course Title Credits
Credits: 13
Students who have current validation in Basic Life Support (BLS) are required to receive credit by evaluation.

EMT101 Basic Life Support/Cardiopulmonary Resuscitation (CPR) for Health Care Providers (0.5) OR
Current validation in Basic Life Support (BLS) Health Care Provider/Professional Rescuer (0) AND
Credit By Evaluation (0.5) 0.5

EMT104AB Applied Practical Studies for Emergency Medical Technology 0.5
EMT104LL Emergency Medical Technology Practicum 2
EMT104 Emergency Medical Technology 10

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=180706>

Starting Term: 2023 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN EMERGENCY MEDICAL TECHNOLOGY COMPREHENSIVE

Total Credits: 16-17
Major Code: 5058

Description

The Certificate of Completion (CCL) in Emergency Medical Technology Comprehensive curriculum provides the student with the necessary knowledge and skills in accordance with the National EMS Scope of Practice published by National Highway Traffic Safety Administration (NHTSA) and the Arizona Department of Health Services. This certificate provides students with the expanded knowledge and skills for pre-hospital settings. Successful completion of the curriculum and upon licensure, the candidate can seek employment with ambulance service companies, first responder agencies, fire departments, and hospitals as an Emergency Medical Technician (EMT). Emphasis is on the fundamental principles and skills required to provide emergency medical care for the ill or injured. The primary focus of an EMT is to respond to, assess and triage emergent, urgent, and non-urgent requests for medical care, apply basic knowledge and skills necessary to provide patient care and medical transportation to/from an emergency or health care facility.

This program is designed to meet education requirements for licensure or certification in the State of Arizona. Granting licensure and certification is the sole responsibility of the state board or approval agency. This program is only offered and available to students located in the State of Arizona. The Maricopa County Community College District and colleges define student location within Administrative Regulation 2.2.3(7).

Program Notes

Students must earn a grade of C or better in all courses within the program. EMT104 requires students to complete additional hours in a competency-based clinical, vehicular, and/or scenario based experience. Depending on the college, this may be completed through EMT104AB or program director-approved rotation.

Required Courses

Required Courses Course # Course Title Credits
Credits: 13
Students who have current validation in Basic Life Support (BLS) are required to receive credit by evaluation.

EMT101 Basic Life Support/Cardiopulmonary Resuscitation (CPR) for Health Care Providers (0.5) OR

Current validation in Basic Life Support (BLS) Health Care Provider/Professional Rescuer (0) AND
Credit By Evaluation (0.5) 0.5

EMT104AB	Applied Practical Studies for Emergency Medical Technology	0.5
EMT104	Emergency Medical Technology	10
EMT104LL	Emergency Medical Technology Practicum	2

Restricted Electives

Restricted Electives	Course #	Course Title	Credits
Credits:	3-4		
AJS/EMT/FSC258		Victimology and Crisis Management in Public Safety	3
BI0156		Introductory Biology for Allied Health	4
HCC145		Medical Terminology for Health Care Professionals	3
PME190		Introduction to ECG Rhythm Analysis and Interpretation for EMS Professionals	3
PME191		Introduction to Pharmacology for EMS Professionals	3
SWU258		Victimology and Crisis Management	3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=139035>

Starting Term: 2019 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN ENTREPRENEURIAL STUDIES LEVEL I

Total Credits: 10-11
Major Code: 5819N

Description

The Certificate of Completion (CCL) in Entrepreneurial Studies Level I program is designed to provide students with an introduction to the entrepreneurial process. Courses include a history of entrepreneurship, current research into its impacts on society, types of business start-up opportunities, and creating a preliminary business plan, as well as securing a healthy financial future. A Certificate of Completion (CCL) in Entrepreneurial Studies Level II is also available.

Program Notes

This program is not eligible for Title IV Federal Financial Aid. Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	10-11		
EPS150		Introduction to Entrepreneurship	3
EPS160		New Venture Creation	2
EPS162		Introduction to Social Entrepreneurship (3) OR	
EPS195		Business Start-Up and Planning (2)	2-3
GBS132		Personal and Family Financial Security	3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=189422>

Starting Term: 2024 Summer
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN ENTREPRENEURIAL STUDIES LEVEL II

Total Credits: 18-19
Major Code: 5820

Description

The Certificate of Completion (CCL) in Entrepreneurial Studies Level II program is designed to prepare students to acquire additional skills, tools and knowledge necessary for successful venture opportunities. A Certificate of Completion (CCL) in Entrepreneurial Studies Level I is also available and fully embedded in this program.

Program Notes

Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	18-19		
EPS150		Introduction to Entrepreneurship	3
EPS160		New Venture Creation	2
EPS162		Introduction to Social Entrepreneurship (3) OR	
EPS195		Business Start-Up and Planning (2)	2-3
GBS132		Personal and Family Financial Security	3

EPS161	New Venture Law and Finance (3) OR	
EPS180	Technology Business Planning (3)	3
EPS165	New Venture Feasibility Analysis	2
MGT253	Owning and Operating a Small Business	3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=16454048>

Starting Term: 2025 Spring
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN FAST TRACK PRACTICAL NURSING

Total Credits: 22-27.5
Major Code: 5114

Description

The Certificate of Completion (CCL) in Fast Track Practical Nursing program provides students with the theory and skills required to practice as a practical nurse in acute care, extended care, and intermediate care settings. The program of study combines nursing theory lectures with planned patient care learning experiences in hospitals, nursing homes and health care agencies. Graduates are eligible to take the National Council Licensure Examination (NCLEX-PN) to become a licensed practical nurse (LPN). Licensing requirements are the exclusive responsibility of the Arizona State Board of Nursing.

The Fast Track Practical Nursing Program is approved by the Arizona State Board of Nursing.

This program is designed to meet education requirements for licensure or certification in the State of Arizona. Granting licensure and certification is the sole responsibility of the state board or approval agency. This program is only offered and available to students located in the State of Arizona. The Maricopa County Community College District and colleges define student location within Administrative Regulation 2.2.3(7).

Program Notes

Students must earn a grade of C or better in all courses within the program. Waiver of Licensure/Certification Guarantee: Admission or graduation from the Nursing Program does not guarantee obtaining a license to practice nursing. Licensure requirements and the subsequent procedures are the exclusive right and responsibility of the Arizona State Board of Nursing. Students must satisfy the requirements of the Nurse Practice Act: Statutes, Rules and Regulations, independently of any college or school requirements for graduation. Pursuant to A.R.S. 32-1606(B)(17), an applicant for professional or practical nurse license by examination is not eligible for licensure if the applicant has any felony convictions and has not received an absolute discharge from the sentences for all felony convictions. The absolute discharge must be received five or more years before submitting this application. If you cannot prove that the absolute discharge date is five or more years, the Board cannot process your application. Level One Fingerprint Clearance is required for admission into the program. Applicants must present a Level One Fingerprint Clearance Card to be copied by the advisor or designee. If there is any question about eligibility for licensure or certification, contact the nursing education consultant at the Arizona State Board of Nursing (602-771-7800). Health Declaration: It is essential that nursing students be able to perform a number of physical activities in the clinical portion of the program. At a minimum, students will be required to lift patients, stand for several hours at a time and perform bending activities. Students who have a chronic illness or condition must be maintained on current treatment and be able to implement direct patient care. The clinical nursing experience also places students under considerable mental and emotional stress as they undertake responsibilities and duties impacting patients' lives. Students must be able to demonstrate rational and appropriate behavior under stressful conditions. Individuals should give careful consideration to the mental and physical demands of the program prior to making application. All students must provide documentation of compliance with all health and safety requirements. Only students in compliance with the mandatory health and safety requirements are permitted to remain enrolled in nursing courses. Health and Safety Requirements for the Fast Track Nursing Program: 1. Students must submit a Health and Safety Documentation Checklist verifying completion of all requirements and maintain current status throughout the program. 2. Students must submit the Health Declaration Form signed by a licensed health care provider. 3. Students must test negative on a timed urine drug screen. 4. Admission to a nursing program requires that students be in compliance with the Maricopa County Community College District Supplemental Background Check policy. Program applications will not be accepted without a copy of an Arizona Department of Public Safety Level One Fingerprint Clearance Card. Upon conditional program admission, the student must comply with all requirements of the current MCCCD background check policy.

Admission Criteria

1. Application and acceptance into Fast-Track Practical Nursing Program.
2. A passing score on a nursing program admission test is required to

Program Prerequisites

Program Prerequisites Course # Course Title Credits
Credits: 0-4.5
Current Certified Nurse Assistant (CNA) (0) OR
Licensed Nurse Assistant (LNA) (0) OR
NCE150 Advanced Placement: Nurse Assisting (2) OR
NUR158 Nurse Assisting (4.5) OR
Equivalent (0-4.5) OR
Waived by Nursing Program Director for Military Veterans demonstrating equivalent work experience (0) 0-4.5

Required Courses

Required Courses Course # Course Title Credits
Credits: 22-23
Students should meet with Nursing Program Director to make appropriate course selection for NUR150 or NUR180PN.

NUR160PN	Practical Nursing Theory and Science I	11
NUR150	Practical Nurse Bridge Course (12) OR	
NUR180PN	Practical Nursing Theory and Science II (11)	11-12

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=165233>

Starting Term: 2024 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN FINGERPRINT IDENTIFICATION AND PHOTOGRAPHY

Total Credits: 10
Major Code: 5010N

Description

The Certificate of Completion (CCL) in Fingerprint Identification and Photography is designed to prepare students for entry level positions in the field of fingerprint classification and identification. It is one pathway to the Associate in Applied Science (AAS) in Forensic Science.

Program Notes

This program is not eligible for Title IV Federal Financial Aid. Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	10		
AJS101		Introduction to Criminal Justice	3
AJS213		Evidence Technology: Fingerprints	3
AJS214		Evidence Technology/Photography	3
AJS290BN		Courtroom Testimony Seminar	1

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=16454696>

Starting Term: 2025 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN FIREFIGHTER OPERATIONS

Total Credits: 16.5-33
Major Code: 5557

Description

The Certificate of Completion (CCL) in Firefighter Operations provides the opportunity for individuals seeking careers in the fire service to acquire minimum standard firefighting skills and prepare for state and/or national certifications, including the Firefighter I and II Certification. An Associate in Applied Science (AAS) in Fire Science is also available.

Program Notes

Students must earn a grade of C or better in all courses within the program.

Admission Criteria

Formal application and admission to the program is required.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	16.5-33		
EMT101		Basic Life Support/Cardiopulmonary Resuscitation (CPR) for Health Care Providers (0.5)	
OR			
Current validation in Basic Life Support (BLS) Health Care Provider/Professional Rescuer (0)			
Credit By Evaluation (0.5)			0.5
EMT104		Emergency Medical Technology (10) AND	
EMT104AB		Applied Practical Studies for Emergency Medical Technology (0.5) AND	
EMT104LL		Emergency Medical Technology Practicum (2)	
OR			
Arizona State EMT Certification (0)			
OR			
Arizona State Paramedic Certification (0)			
Permission of Program Director (0)			0-12.5
FSC102		Fire Department Operations	11
FSC105		Hazardous Materials/First Responder (3) OR	
Permission of Program Director (0)			0-3
FSC130		Fitness for Firefighters/CPAT (1) OR	
Verification of CPAT completion (0)			0-1
FSC134		Fitness and Conditioning for Firefighters	3
FSC174		Functions of Command	2

Starting Term: 2024 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN FOUNDATIONS OF EARLY CHILDHOOD EDUCATION

Total Credits: 18-19
Major Code: 5054

Description

The Certificate of Completion (CCL) in Foundations of Early Childhood Education is designed to prepare students with foundational knowledge regarding the growth and development of the young child. Topics include cognitive and physical development of the young child, language acquisition, curriculum development, health and safety guidelines, business procedures, and family/community relationship building. This CCL is embedded (can be used to fulfill part of the requirements) in a second available CCL, Early Childhood Education. Both CCLs are embedded (can be used to fulfill requirements) in the Associate in Applied Science (AAS) in Early Childhood Education.

Program Notes

Students must earn a grade of C or better in all courses within the program. For some employment and field experiences (including internship courses), students will be required to have a current Identity Verified Print (IVP) Fingerprint Clearance Card and a current TB test.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	18-19		
CFS101AH		Visual Art Experiences for Young Children (1) AND	
ECH281		Movement/Music for the Young Child (1) OR	
ECH128		Early Learning: Play and the Arts (3) OR	
EED210		Creative and Cognitive Play (3)	2-3
CFS123		Health and Nutrition In Early Childhood Settings (1) AND	
CFS125		Safety in Early Childhood Settings (1) AND	
ECH280		Food Experiences with Young Children (1) OR	
EED215		Early Learning: Health, Safety, Nutrition and Physical Fitness (3)	3
CFS/ECH176		Child Development (3) OR	
CFS235		Developing Child: Theory into Practice, Prenatal to Age Eight (3) OR	
EED205		The Developing Child: Prenatal to Age Eight (3)	3
CFS/ECH271		Arranging the Environment (1) AND	
CFS282		Mainstreaming The Young Child with A Disability (1) AND	
ECH282		Discipline/Guidance of Child Groups (1) OR	
EED212		Guidance, Effective Interactions and the Environment (3)	3
CFS/ECH284AA		Early Childhood Teaching Internship (1) OR	
EED260		Early Childhood Infant/Toddler Internship (1) OR	
EED261		Early Childhood Preschool Internship (1)	1
EED200		Foundations of Early Childhood Education	3
EED222		Introduction to the Exceptional Young Child: Birth to Age Eight	3

Starting Term: 2023 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN GENERAL BUSINESS

Total Credits: 21
Major Code: 5683

Description

The Certificate of Completion (CCL) in General Business is designed to provide business training for various entry-level positions in business. The courses include an introduction to business concepts, accounting and computer principles, and legal issues related to business. An Associate in Applied Science (AAS) is also available.

Program Notes

Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	12		
ACC111		Accounting Principles I	3
CIS105		Survey of Computer Information Systems	3
GBS151		Introduction to Business	3
GBS205		Legal, Ethical and Regulatory Issues in Business	3

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Restricted Electives

Restricted Electives Course # Course Title Credits

Credits: 9

Students should select nine (9) credits from the following courses/subjects. Any 100/200 level courses in the following subjects can be used,

ACC+++	Any	ACC	Accounting course(s)	
CIS114DE			Excel Spreadsheet	3
CIS117DM			Microsoft Access: Database Management	3
CIS133DA			Internet/Web Development Level I	3
EPS+++	Any	EPS	Entrepreneurial Studies course(s)	1-3
GBS+++	Any	GBS	General Business course(s)	
MGT+++	Any	MGT	Management course(s)	
MKT+++	Any	MKT	Marketing course(s)	
IBS+++	Any	IBS	International Business course(s)	
REA+++	Any	REA	Real Estate course(s)	
SBS+++	Any	SBS	Small Business Management course(s)	
TQM+++	Any	TQM	Total Quality Management course(s)	

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=187296>

Starting Term: 2024 Fall

Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN GRAPHIC DESIGN

Total Credits: 34

Major Code: 5173

Description

The Certificate of Completion (CCL) in Graphic Design develops the knowledge and skills required to create graphic designs, including images, layouts, typography, packaging, motion and interactive graphics, and branding in various print and digital media. This certificate prepares students for employment and upgrades the skills of persons employed in occupations such as production artists, graphic designers, and art directors. An Associate in Applied Science (AAS) in Graphic Design is also available.

Program Notes

Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses Course # Course Title Credits

Credits: 31

AVC169	2D Media Design	3
AVC177	Digital Photographic Imaging I	3
AVC183	Digital Graphic Arts I	3

ART255	Art Marketing (3) OR	
AVC248	Design Self Promotion (3)	3

AVC100	Introduction to Digital Arts	1
AVC283	Digital Graphic Arts II	3

ART111	Drawing I (3) OR	
ART116	Life Drawing I (3)	3

ART113	Color (3) OR	
AVC114	Digital Color (3)	3

AVC142	Introduction to Digital Photography	3
AVC178	Digital Arts Studies	3
AVC/MMT190	Art of Web Site Design	3

Restricted Electives

Restricted Electives Course # Course Title Credits

Credits: 3

Students must select 3 credits from the following list of courses:

AVC150	Multimedia Storytelling	3
AVC103	Typography in the Digital Age	3
AVC175	Electronic Publishing Design I	3
AVC289	Computer Illustration	3
AVC192	Advanced Web Presentation Design	3
AVC200	Animation and Interactivity	3
AVC210	Design Tools for Imagery, Production, and Publishing	3
AVC/TH0246	Digital Fabrication	3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=189388>

Starting Term: 2024 Fall

Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN H.V.A.C.R RESIDENTIAL SERVICE

Total Credits: 16-20
Major Code: 5241

Description

The Certificate of Completion (CCL) in H.V.A.C.r Residential Service is designed to provide entry-level training in the areas of heating, ventilation, air conditioning and refrigeration (H.V.A.C.r) systems, electricity, electronic controls, and general repair. Students will have the opportunity to learn skills necessary to assess and solve problems quickly.

Program Notes

Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	16-20		
CON102		Foundations of Construction Trades (6) OR	
CON102AA		Foundations of Construction Trades: Tools, Equipment, and Workspace (2) AND	
CON102AB		Foundations of Construction Trades: Construction Calculations (2) AND	
CON102AC		Foundations of Construction Trades: Construction Drawings and Materials (2)	6
CON103		Foundation of Construction Safety (1) OR	
CON271		Construction Safety (3) 1-3	
CON/HVA170		Construction Trades: H.V.A.C.r (9) OR	
CON/HVA170AA		Construction Trades: H.V.A.C.r for Residential Systems (3) AND	
CON/HVA170AB		Construction Trades: H.V.A.C.r Installation (4) AND	
CON/HVA170AC		Construction Trades: H.V.A.C.r Troubleshooting (4)	9-11

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=186128>

Starting Term: 2024 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN HUMAN RESOURCES MANAGEMENT

Total Credits: 24
Major Code: 5580

Description

The Certificate of Completion (CCL) in Human Resources Management program is designed to provide skills necessary for careers in human resources management. The program is designed to provide students a series of courses with an emphasis in management and is designed to prepare students for an entry-level position in human resources. Graduates may be employed in employment (recruiting, interviewing, and hiring), benefits administration, compensation, and employee relations. A Certificate of Completion (CCL) in Human Resources: Compensation and Benefits is also available.

Program Notes

Students must earn a grade of C or better in all courses within the program.

Admission Criteria

None

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	24		
BPC110		Computer Usage and Applications (3) OR	
CIS105		Survey of Computer Information Systems (3)	3
GBS205		Legal, Ethical, and Regulatory Issues in Business	3
GBS131		Business Calculations (3) OR	
MAT112		Mathematical Concepts and Applications (3) OR	
Satisfactory completion of higher level Mathematics course			3
GBS120		Workplace Communication Skills	3
MGT229		Management and Leadership I	3
MGT251		Human Relations in Business	3
MGT276		Human Resources Management	3
MGT286		Human Resource Employment Management	3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=184876>

Starting Term: 2023 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN ILLUSTRATION

Total Credits: 31
Major Code: 5174

Description

The Certificate of Completion (CCL) in Illustration develops knowledge and skills in creating visual narratives through traditional and digital media. The program emphasizes art principles, knowledge, and skills needed to solve design and compositional problems. Focus areas include graphic arts, publications, and storyboarding for animation, video, and media. This certificate prepares students for employment and upgrades the skills of persons employed in occupations such as freelance artist-designer, concept artist, visual development artist for gaming/film, and storyboarder. Students may also pursue an Associate in Applied Science (AAS) in Illustration and Sequential Art.

Program Notes

Students must earn a grade of C or better in all courses within the program.

Program Prerequisites

Program PrerequisitesCourse #Course TitleCredits
Credits: 0
None.

Required Courses

Required CoursesCourse #Course TitleCredits
Credits: 25
AVC169 2D Media Design 3
AVC177 Digital Photographic Imaging I 3

ART255 Art Marketing (3) OR
AVC248 Design Self Promotion (3) 3

AVC289 Computer Illustration 3
AVC100 Introduction to Digital Arts 1
ART111 Drawing I 3

ART113 Color (3) OR
AVC114 Digital Color (3) 3

ART116 Life Drawing I 3
AVC178 Digital Arts Studies 3

Restricted Electives

Restricted ElectivesCourse #Course TitleCredits
Credits: 6
Students must select six (6) credits from the following list of courses. Students may select from one focus area or may select from different

Animation Focus Area
AVC/MMT184 Digital Animation I 3
AVC/MMT185 3D Modeling for Animation I 3

Drawing Focus Area
ART117 Life Drawing II 3
ART118 Art Anatomy 3
ART122 Drawing and Composition II 3

Painting Focus Area
ART165 Watercolor Painting I 3
ART166 Watercolor Painting II 3
ART167 Painting I 3
ART168 Painting II 3
ART263 Figure Painting 3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=189811>

Starting Term: 2025 Spring
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN INDUSTRIAL CONTROL SYSTEMS

Total Credits: 14
Major Code: 5313N

Description

The Certificate of Completion (CCL) in Industrial Control Systems program curriculum is designed to prepare students to troubleshoot, maintain, and repair a variety of automated electro-mechanical, product assembly, process control, and product distribution systems that use programmable controllers, process controllers, and electronic control systems. An Associate in Applied Science (AAS) in Automated Industrial Technology (AIT) and additional AIT Certificates of Completion (CCL) are also available at select colleges. Please check with your local college for program availability.

Program Notes

This program is not eligible for Title IV Federal Financial Aid.Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	14		
AIT100	Industrial Safety	1	
AIT125	DC and AC Components and Circuits	3	
AIT205	Power Electronics and Variable Frequency Drives	3	
AIT210	Programmable Logic Controller Programming and Troubleshooting	3	
AIT215	Process Control Systems	4	

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=189837>

Starting Term: 2025 Spring

Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN INDUSTRIAL ELECTRICAL SYSTEMS

Total Credits: 10

Major Code: 5317N

Description

The Certificate of Completion (CCL) in Industrial Electrical Systems program curriculum is designed to prepare students to troubleshoot, maintain and repair a variety of automated electro-mechanical, product assembly and product distribution systems that use electrical devices. An Associate in Applied Science (AAS) in Automated Industrial Technology (AIT) and additional AIT Certificates of Completion (CCL) are also available at select colleges. Please check with your local college for program availability.

Program Notes

This program is not eligible for Title IV Federal Financial Aid.Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	10		
AIT100	Industrial Safety	1	
AIT125	DC and AC Components and Circuits	3	
AIT225	Industrial Motors and Motor Control	3	
AIT227	Power Distribution Systems	3	

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=189840>

Starting Term: 2025 Spring

Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN INDUSTRIAL FLUID SYSTEMS

Total Credits: 7

Major Code: 5318N

Description

The Certificate of Completion (CCL) in Industrial Fluid Systems program curriculum is designed to prepare students to troubleshoot, maintain and repair a variety of automated electro-mechanical, product assembly and product distribution systems that use hydraulic and pneumatic devices. An Associate in Applied Science (AAS) in Automated Industrial Technology (AIT) and additional AIT Certificates of Completion (CCL) are also available at select colleges. Please check with your local college for program availability.

Program Notes

This program is not eligible for Title IV Federal Financial Aid.Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	7		
AIT100	Industrial Safety	1	
AIT115	Hydraulic Systems	3	
AIT120	Pneumatic Systems	3	

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=189843>

Starting Term: 2025 Spring

Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN INDUSTRIAL MECHANICAL SYSTEMS

Total Credits: 7
Major Code: 5319N

Description

The Certificate of Completion (CCL) in Industrial Mechanical Systems program curriculum is designed to prepare students to troubleshoot, maintain and repair a variety of automated electro-mechanical, product assembly and product distribution systems that use mechanical devices. An Associate in Applied Science (AAS) in Automated Industrial Technology (AIT) and additional AIT Certificates of Completion (CCL) are also available at select colleges. Please check with your local college for program availability.

Program Notes

This program is not eligible for Title IV Federal Financial Aid. Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits: 7			
AIT100		Industrial Safety	1
AIT105		Modern Maintenance Operations	3
AIT110		Mechanical Power Transmission Systems	3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=173262>

Starting Term: 2024 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN INDUSTRIAL TECHNOLOGY FOR SEMICONDUCTOR

Total Credits: 3
Major Code: 5260N

Description

The Certificate of Completion (CCL) in Industrial Technology for Semiconductor prepares individuals to apply basic engineering principles and technical skills to operate and monitor equipment for the fabrication of semiconductors or microchips from silicon wafers, and to troubleshoot, maintain, and repair the specialized equipment used in this process. Includes instruction in AC and DC circuits, digital fundamentals, solid state devices, manufacturing processes, vacuum principles and technology, industrial electronics, quality assurance, and semiconductor manufacturing technology.

Program Notes

This program is not eligible for Title IV Federal Financial Aid. Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits: 3			
AIT132		Industrial Technology for the Semiconductor Industry	3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm?id=92540>

Starting Term: 2016 Spring
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN INSTRUCTIONAL ASSISTANCE

Total Credits: 27
Major Code: 5119

Description

The Certificate of Completion (CCL) in Instructional Assistance program is designed to prepare students to assist the classroom teacher in grades K through 12. Program requirements include coursework in foundations of education and language as well as practical application coursework, including a practicum within a classroom setting.

Program Notes

Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:			18
CFS/ECH176		Child Development	3
EDU220		Introduction to Serving English Language Learners (ELL)	3
EDU221		Introduction to Education	3
EDU222		Introduction to the Exceptional Learner	3
EDU230		Cultural Diversity in Education	3
EDU/ENH291		Children's Literature	3

Restricted Electives

Restricted Electives Course # Course Title Credits
Credits: 9
Restricted Electives (BPC110 or CIS105), COM225, and (ENG101 or ENG107) courses are recommended if completing coursework for the Associate in

BPC110	Computer Usage and Applications (3) OR	
CIS105	Survey of Computer Information Systems (3)	3
COM225	Public Speaking	3
EDU101A+	Tutor Training and Practicum (any suffixed course)	1-3
EDU236	Classroom Relationships	3
EDU282A+	Service-Learning Experience in Education (any suffixed course)	1-3
EDU/HUM/ST0292	The Art of Storytelling	3
ECH/EDU298A+	Special Projects (any suffixed course)	3

ENG101	First-Year Composition (3) OR	
ENG107	First-Year Composition for ESL (3)	3

Any foreign language course 3-4

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm?id=187276>

Starting Term: 2024 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN INTERMEDIATE PIANO PEDAGOGY

Total Credits: 16-17
Major Code: 5749

Description

The Certificate of Completion (CCL) in Intermediate Piano Pedagogy program is for pianists who want to teach intermediate piano students. Classes offered include learning various methods, techniques, repertoire, skills, style and musicianship necessary to teach piano effectively.

Admission Criteria

None

Program Prerequisites

Program Prerequisites	Course #	Course Title	Credits
Credits:			0-16
Certificate of Completion in Beginning Piano Pedagogy (5743N)	(16)	OR	
permission of program director (0)			0-16

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:			16-17
MHL140	Survey of Music History (3) OR		
MHL241	Music History and Literature to 1750 (3) OR		
MHL242	Music History and Literature 1750 to present (3)	3	
MHL242	preferred.		
MUP141	Intermediate Piano Pedagogy	2	
MUP181	Chamber Music Ensembles (1)	2	
	Two (2) credits of MUP181 required.		
MUP241	Piano Artistry	2	
MUP101AD	Private Instruction: Piano (1) OR		
MUP151AD	Private Instruction: Piano (1) OR		
MUP166	Jazz Piano I (1) OR		
MUP289	Basics of Piano Accompanying Instrument (2)	1-2	
	Students should work with instructor to arrange Private Instruction with emphasis in Jazz Piano.		
MUP102AD	Private Instruction: Piano (2) AND/OR		
MUP152AD	Private Instruction: Piano (2) AND/OR		
MUP202AD	Private Instruction: Piano (2) AND/OR		
MUP252AD	Private Instruction: Piano (2)	4	
	Total of four (4) credits required. Courses may be repeated for credit.		
MUP298AA	Special Projects (1) OR		
MUP298AB	Special Projects (2)	2	
	Total of two (2) credits required.		

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm?id=149316>

Starting Term: 2020 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN INTERNATIONAL RESIDENTIAL CODE

Total Credits: 3
Major Code: 5181N

Description

The Certificate of Completion (CCL) in International Residential Code covers International Residential Code for construction trades, including building, mechanical, plumbing and electrical, for one and two family residential construction. After completion of the certificate, students may take the International Code Council International Building Code exam for international certification.

Program Notes

This program is not eligible for Title IV Federal Financial Aid. Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	3		
CON262		Introduction International Residential Code (IRC)	3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=187330>

Starting Term: 2024 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN IT FUNDAMENTALS

Total Credits: 3
Major Code: 5299N

Description

The Certificate of Completion (CCL) in IT Fundamentals is designed to provide the fundamental IT skills necessary for employment as a technician in a variety of industries. This certificate helps prepare students for the CompTIA ITF+ certification exam.

Program Notes

This program is not eligible for Title IV Federal Financial Aid. Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	3		
CIS101		Technician IT Fundamentals	3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=164061>

Starting Term: 2021 Spring
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN J-STD SOLDERING CERTIFICATION

Total Credits: 3
Major Code: 5196N

Description

The Certificate of Completion (CCL) in J-STD Soldering Certification will prepare the successful student to receive the "Certified IPC Specialist" (CIS) certification from The Institute for Interconnecting and Packaging Electronic Circuits (IPC) in "Requirements for Soldered Electrical and Electronic Assemblies" (IPC J-STD-001). Topics covered and skills to be demonstrated are: soldered wires and terminals, through hole connections, surface mount components, and inspection. Certification is verified by a certified J-STD trainer.

Program Notes

This program is not eligible for Title IV Federal Financial Aid. Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	3		
AIT123	J-STD	Soldering Certification	3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=187952>

Starting Term: 2024 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN JAMF TRAINING FOUNDATION

Total Credits: 9
Major Code: 5303N

Description

The Certificate of Completion (CCL) in Jamf Training Foundation offers a core understanding of Jamf Pro and Jamf Protect as well as an enterprise-focused examination of the macOS, iOS, and iPadOS platforms. The hands-on and example-based environment provides experience in the configuration of Jamf Pro, Jamf Protect, device enrollment, distributing App Store apps, building and managing packages to deploy to computers, configuration and settings for computers and mobile devices, device security, a scripting overview (Bash), and an introduction to the security standards.

Program Notes

This program is not eligible for Title IV Federal Financial Aid.Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	9		
BPC260	AppleCare Exam Prep:	iOS Device Repair	3
BPC262	AppleCare Exam Prep:	Mac Computer Models Repair.	3
BPC265	Jamf Training Foundation		3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=16453214>

Starting Term: 2025 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN LANDSCAPE TECHNOLOGY

Total Credits: 34
Major Code: 5073

Description

The Certificate of Completion (CCL) in Landscape Technology program emphasizes the technology of landscape design, installation, and management. The program also focuses on the production of landscape plants. The program is designed to prepare students to become employed in nurseries or landscape construction and maintenance industry as technicians, supervisors, managers, or owners. In addition the program prepares students for jobs with government agencies or other agencies involved with the technical phases of the Landscape Horticulture industry. An Associate in Applied Science (AAS) in Sustainable Horticulture and Certificates of Completion (CCLs) in Landscape Horticulture, Sustainable Agriculture, and Cannabis Cultivation are also available.

Program Notes

Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	34		
AGS100	Safety and Standard Operating Procedures for Sustainable Horticulture		1
AGS160	Introduction to Landscape Design		4
AGS164	Plant Growth and Development		4
AGS182AA	Gardening Practices and Techniques		3
AGS200	Southwest Landscape Plants: Identification and Care		4
AGS210	Landscape Construction		4
AGS260	Soils		4
AGS262	Irrigation Design, Installation, Operation, and Trouble Shooting		3
AGS268	Integrated Pest Management in the Cultivated Environment		4
AGS285	Propagation of Horticultural Plants		3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=141531>

Starting Term: 2019 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN LAW ENFORCEMENT

Total Credits: 15
Major Code: 5987N

Description

The Certificate of Completion (CCL) in Law Enforcement is designed for students who are interested in pursuing a course of study specifically focused on law enforcement. The certificate program specializes in training and education related to the duties of law enforcement. The program is designed for the student with no Arizona police academy experience and is one pathway to the Associate in Applied Science (AAS) in Administration of Justice.

Program Notes

This program is not eligible for Title IV Federal Financial Aid.Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	15		
AJS101		Introduction to Criminal Justice	3
AJS123		Ethics and the Administration of Justice	3
AJS205		Effective Communication and Report Writing in Criminal Justice	3
AJS230		The Police Function	3
AJS275		Criminal Investigation I	3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=184297>

Starting Term: 2024 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN LEGAL STUDIES

Total Credits: 15
Major Code: 5966N

Description

The Certificate of Completion (CCL) in Legal Studies is designed for students who are interested in pursuing a course of study specifically focused on legal studies. It is one pathway to the Associate in Applied Science (AAS) in Administration of Justice.

Program Notes

This program is not eligible for Title IV Federal Financial Aid.Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	15		
AJS109		Substantive Criminal Law	3
AJS201		Rules of Evidence	3
AJS123		Ethics and the Administration of Justice (3) OR	
AJS205		Effective Communication and Report Writing in Criminal Justice (3)	3
AJS210		Constitutional Law	3
AJS260		Procedural Criminal Law	3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=139036>

Starting Term: 2020 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN MANAGEMENT

Total Credits: 18
Major Code: 5729

Description

The Certificate of Completion (CCL) in Management is designed to provide skills for management careers. Students completing this program are better equipped to apply competencies needed for successful performance in management occupations such as manufacturing, wholesaling, retailing, and service industries. An Associate in Applied Science (AAS) in Management is also available.

Program Notes

Students must earn a grade of C or better in all courses within the program.

Admission Criteria

None

Required Courses

Required CoursesCourse #Course TitleCredits

Credits: 18

ACC111 Accounting Principles I 3

BPC110 Computer Usage and Applications (3) OR

CIS105 Survey of Computer Information Systems (3) 3

GBS151 Introduction to Business 3

GBS205 Legal, Ethical, and Regulatory Issues in Business 3

MGT229 Management and Leadership I 3

MGT251 Human Relations in Business 3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=168309>

Starting Term: 2021 Spring

Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN MARKETING

Total Credits: 21

Major Code: 5094

Description

The Certificate of Completion (CCL) in Marketing program meets students' needs by providing skills necessary for marketing careers. The program is designed to develop competencies essential for success in Marketing. By completing this program, students will be better equipped for successful performance in a variety of marketing/management occupations including wholesaling, retailing, professional sales, and entrepreneurship. An Associate in Applied Science (AAS) in Marketing and Sales is available.

Program Notes

Students must earn a grade of C or better in all courses within the program.

Admission Criteria

None

Required Courses

Required CoursesCourse #Course TitleCredits

Credits: 18

BPC110 Computer Usage and Applications (3) OR

CIS105 Survey of Computer Information Systems (3) 3

GBS151 Introduction to Business 3

GBS120 Workplace Communication Skills 3

MKT263 Advertising Principles 3

MKT267 Principles of Sales 3

MKT271 Principles of Marketing 3

Restricted Electives

Restricted ElectivesCourse #Course TitleCredits

Credits: 3

Students should select from the following courses in consultation with Department Advisor.

CIS103 Introduction to Social Media 3

MKT101 Introduction to Public Relations 3

MKT110 Marketing and Social Networking 3

MKT268 Merchandising 3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm?id=163369>

Starting Term: 2021 Fall

Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN MECHANICAL DRAFTING

Total Credits: 37-40

Major Code: 5600

Description

The Certificate of Completion (CCL) in Mechanical Drafting program prepares students to work in the mechanical drafting field. The program emphasizes current technological trends in the industry and is designed both for those planning to enter a career in the field as well as for those already working in the field who want to advance and update their knowledge and skills.

Program Notes

Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses Course # Course Title Credits
Credits: 37-40
GTC107 Technical Mathematics I (3) OR
Permission of Program Director. 0-3

DFT105AA	Computer Aided Drafting I: AutoCAD	3
DFT110	Introduction to Drafting	3
DFT111	Intermediate Drafting	3
DFT112	Advanced Drafting	3
DFT115	Geometric Dimensioning and Tolerancing	3
DFT254AA	Computer Aided Drafting II: AutoCAD	3
DFT255	3D Printing/Additive Manufacturing	4
GTC108	Technical Mathematics II	3
GTC216	Properties of Materials	3
MPT130MP	CNC Machine Operator	6
MPT150	Introduction to SolidWorks	3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=16457089>

Starting Term: 2025 Summer
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN MICROSOFT DESKTOP ASSOCIATE

Total Credits: 3
Major Code: 5030N

Description

The Certificate of Completion (CCL) in Microsoft Desktop Associate program is designed to provide students with background knowledge and skills required for learning the specific tasks and industry recognized standards associated with how to effectively install and configure Windows operating systems. The course includes basic features of the Windows operating system, virtualization improvements, network connectivity, access to resources, monitor and maintain Windows clients and backup and recovery. It is designed to prepare students for the Microsoft 365 Certified: Modern Desktop Administrator Associate certification exam. Students who complete this program may seek employment in a variety of environments. Students can also pursue additional Certificates of Completion (CCL) in a variety of specializations within the information technology field to deepen their knowledge and skills and to help prepare them for multiple industry certification exams. An Associate in Applied Science (AAS) in Network and Systems Administration is also available at select colleges. Please check with your local college for program availability.

Program Notes

This program is not eligible for Title IV Federal Financial Aid. Students must earn a grade of C or better in all courses within the program. Students are encouraged, but not required, to complete CIS105, or CIS190, or CNT140AB prior to beginning this CCL. Students who pursue this Certificate of Completion (CCL) should have a basic level of computer literacy including navigating the internet and computer systems or take CIS105. Courses within any of the following prefixes must be taken within five (5) years prior to completion of the program to be applied toward this award: AIM, BPC, CIS, CLD, CNT, CSC, ITS, and MST.

Required Courses

Required Courses Course # Course Title Credits
Credits: 3
MST150WT Installing and Configuring Microsoft Windows 10 3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=15992875>

Starting Term: 2025 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN MUSIC BUSINESS I

Total Credits: 16
Major Code: 5106

Description

The Certificate of Completion (CCL) in Music Industry Studies: Music Business I is designed to provide aspiring music industry professionals with a broad background in music management, production, and entrepreneurship activities. The program combines foundational and applied learning experiences to help students gain a strategic understanding of commercial music as both an art and profession. There is a Certificate of Completion (CCL) in Music Industry Studies: Music Business II available, as well as an Associate in Applied Science (AAS) in Music Industry Studies: Music Business.

Program Notes

Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits: 16			
MGT253	Owning and Operating a Small Business	3	
MKT110	Marketing and Social Networking (3) OR		
MKT271	Principles of Marketing (3)	3	
MUC109	Music Business: Content Creation and Copyright	3	
MUC110	Music Business: Marketing and Monetization	3	
MUC293	Self-Promotion for Music	1	
MTC180	Computer Literacy for Musicians (3) OR		
MUC180	Computer Literacy for the Music Business (3)	3	

Note: Students who have not already completed MTC180 must take MUC180

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=15992877>

Starting Term: 2025 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN MUSIC BUSINESS II

Total Credits: 35-37
Major Code: 5258

Description

The Certificate of Completion (CCL) in Music Industry Studies: Music Business II is designed to provide aspiring music industry professionals with a broad background in music management, production, and entrepreneurship activities. The program combines theoretical and applied learning experiences to help students gain a strategic understanding of commercial music as both an art and profession. An Associate in Applied Science (AAS) in Music Industry Studies: Music Business is available.

Program Notes

Students must earn a grade of C or better in all courses within the program.

Admission Criteria

None

Required Courses

Required Courses	Course #	Course Title	Credits
Credits: 25-26			
MGT253	Owning and Operating a Small Business	3	
MKT110	Marketing and Social Networking	3	
MKT271	Principles of Marketing	3	
MUC109	Music Business: Content Creation and Copyright	3	
MUC110	Music Business: Marketing and Monetization	3	
MTC180	Computer Literacy for Musicians (3) OR		
MUC180	Computer Literacy for the Music Business (3)	3	

Note: Students who have not already completed MTC180 must take MUC180

MUC209	Music Industry Entrepreneurship	3	
MUC293	Self-Promotion for Music	1	

Music Industry Capstone Experience

MUC290AA	Music Business Internship (1) OR		
MUC296WA	Cooperative Education (1) OR		
MUC298AA	Special Projects (1)	1	

Overview of Music Genres

MUC242	Music Genres and Styles (2) OR		
MHL155	Survey of American Music (3)	2-3	

Restricted Electives

Restricted Electives	Course #	Course Title	Credits
Credits: 10-11			
Students should work with their program advisor to select 10-11 credits from courses that align with the academic/career goals and further th			
Music Business and Marketing			
GBS+++	Any GBS General Business course		
MKT+++	Any MKT Marketing course		
MUC+++	Any MUC Music: Commercial/Business course		
Music Production			
MTC+++	Any MTC Music: Theory/Composition course		
MUC+++	Any MUC Music: Commercial/Business course		

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=15992914>

Starting Term: 2025 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN MUSIC INDUSTRY STUDIES: AUDIO PRODUCTION TECHNOLOGIES

Total Credits: 40
Major Code: 5334

Description

The Certificate of Completion (CCL) in Music Industry Studies: Audio Production Technologies offers students hands-on study of audio engineering and related media fields. Students learn and apply the concepts and theories associated with music recording, live sound reinforcement, and sound design. The program is designed to give students foundational knowledge and experience essential in the field of audio production. An Associate in Applied Science (AAS) is also available.

Program Notes

Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	31		
MTC101		Introduction to Music Theory	3
MUC109		Music Business: Content Creation and Copyright	3
MUC110		Music Business: Marketing and Monetization (3) OR	
MUC145		Recording Studio Business Operations (3)	3
MUC111		Digital Audio Workstation I (DAW I)	3
MUC122		Sound Design I	3
MUC191		Electronic Music I	3
MUC195		Studio Music Recording I (3) OR	
MUC195AA		Studio Music Recording I (3)	3
MUC196		Studio Music Recording II (3) OR	
MUC196AA		Studio Music Recording II (3)	3
MUC197		Live Sound Reinforcement I	3
MUC218		Audio Mixing Techniques	3
MUC296WA		Cooperative Education (1) OR	
MUC297AA		Audio Production Internship (1) OR	
MUC298AA		Special Projects (1)	1

Restricted Electives

Restricted Electives	Course #	Course Title	Credits
Credits:	9		
Students must select a total of nine (9) credits from the list below in consultation with an academic advisor.			
NOTE: at least one (1) of the following courses must be completed: MUC281, MUC289, MUC292, or MUC295.			
MUC112		Digital Audio Workstation II (DAW II)	3
MUC192		Electronic Music II	3
MUC193		Computer-Based Sound Synthesis	3
MUC198		Live Sound Reinforcement II	3
MUC222		Sound Design II	3
MUC281		Electronic Music III	3
MUC289		Live Sound Reinforcement III	3
MUC292		Sound Design III	3
MUC295		Studio Music Recording III	3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=15993227>

Starting Term: 2025 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN NURSE ASSISTING

Total Credits: 2-4.5
Major Code: 5963N

Description

The Certificate of Completion (CCL) in Nurse Assisting prepares students for employment as a nurse assistant. The program combines classroom instruction with clinical laboratory practice and long-term care and/or acute care experiences. Students who complete the program are eligible to take a written and practical certification examination if desired to meet employment requirements to be a nurse assistant. Certification/licensing requirements are the exclusive responsibility of the Arizona State Board of Nursing.

The MCCCDC Nurse Assisting program is approved by the Arizona State Board of Nursing.

Waiver of Licensure/Certification Guarantee:

Admission or completion from the MCCCDC Nurse Assisting program does not guarantee obtaining a license or certificate to practice as a nurse assistant. Licensure and certification requirements and the subsequent procedures are the exclusive right and responsibility of the Arizona State Board of Nursing. Students must satisfy the requirements of the Nurse Practice Act: Statutes, Rules and Regulations, independently of any college of school requirements for graduation.

Pursuant to A.R.S. §32-1606(B)(17), an applicant for professional or practical nurse license by examination is not eligible for licensure if the applicant has any felony convictions and has not received an absolute discharge from the sentences for all felony convictions. The absolute discharge must be received five or more years before submitting this application. If you cannot prove that the absolute discharge date is five or more years, the Board cannot process your application.

All nurse assistant applicants for certification will be fingerprinted to permit the Department of Public Safety to obtain state and federal criminal history information. All applicants with a positive history are investigated. If there is any question about eligibility for licensure or certification, contact the nursing education consultant at the Arizona State Board of Nursing (602-899-5150).

Health Declaration:

It is essential that students be able to perform a number of physical activities in the clinical portion of the program. At a minimum, students will be required to lift patients, stand for several hours at a time and perform bending activities. The clinical nursing experience also places students under considerable mental and emotional stress as they undertake responsibilities and duties impacting patients' lives. Students must be able to demonstrate rational and appropriate behavior under stressful conditions. Individuals should give careful consideration to the mental and physical demands of the program prior to making application.

Health and Safety Requirements for MCCCDC Nurse Assisting Program:

1. Students must meet and maintain health and safety requirements throughout the program.
2. Admission to a Maricopa County Community College District health program requires that students be in compliance with the MCCCDC Supplemental Background Check Policy. Evidence of a current Arizona Department of Public Safety Level One Fingerprint Clearance Card is required for program application.
3. Negative urine drug screen.

Grade Requirements:

Student must obtain a C grade or better in all courses.

University Transfer Students:

For students planning a university program:

Students who are planning to earn the Bachelor of Science in Nursing may obtain their prerequisite courses at Maricopa Community Colleges. For information on courses that meet requirements for admission into a baccalaureate program, please contact a program advisor.

THE NURSE ASSISTING PATHWAY

The nurse assisting pathway is designed to prepare students to complete the Nurse Assistant certification/licensure through the Arizona State Board of Nursing to practice in a health care agency as a nurse assistant. Completion of the Nurse Assistant program of study provides job ready skills as a nurse assistant.

This program is designed to meet education requirements for licensure or certification in the State of Arizona. Granting licensure and certification is the sole responsibility of the state board or approval agency. This program is only offered and available to students located in the State of Arizona. The Maricopa County Community College District and colleges define student location within Administrative Regulation 2.2.3(7).

Program Notes

This program is not eligible for Title IV Federal Financial Aid. Students must earn a grade of C or better in all courses within the program.

Admission Criteria

Application and acceptance into the program, high school graduate or GED, and meet current health and safety course requirements.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	2-4.5		
NUR158		Nurse Assisting (4.5)	OR
Advanced Placement course:			
NCE150		Advanced Placement: Nurse Assisting (2)	2-4.5

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCDC.woa/wa/freeForm?id=67483>

Starting Term: 2015 Spring

Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN NURSING REFRESHER

Total Credits: 10

Major Code: 5739N

Description

The Certificate of Completion (CCL) in Nursing Refresher program provides registered nurses with a review and update of nursing theory and practice. The goal of the program is to update and refine theoretical and practical nursing knowledge and facilitate the nurse's transition back into professional practice. The Nursing Refresher program is approved by the Arizona State Board of Nursing. Successful program completion satisfies the Arizona State Board of Nursing RN license renewal requirement for applicants who do not meet the practice mandate as stated in The Nurse Practice Act, R4-19312 (B).

Health Declaration: It is essential that Nursing Refresher students be able to perform a number of physical activities in the clinical portion of the program. At a minimum, students will be required to lift patients, stand for several hours at a time and perform bending activities. The clinical nursing experience also places students under considerable mental and emotional stress as they undertake responsibilities and duties impacting patients' lives. Students must be able to demonstrate rational and appropriate behavior under stressful conditions. Individuals should give careful consideration to the mental and physical demands of the program prior to making application.

This program is designed to meet education requirements for licensure or certification in the State of Arizona. Granting licensure and certification is the sole responsibility of the state board or approval agency. This program is only offered and available to students located in the State of Arizona. The Maricopa County Community College District and colleges define student location within Administrative Regulation 2.2.3(7).

Program Notes

This program is not eligible for Title IV Federal Financial Aid. Students must earn a grade of C or better in all courses within the program. Massachusetts Nurse of the Future Core Competencies are integrated into the student learning outcomes/program competencies. Course Fee Information: Please see class schedule for information regarding course fees.

Admission Criteria

Formal application and admission to the program is required. All applicants must have an active or inactive Registered Nurse (RN) license that

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	10		
NUR295		Registered Nurse Refresher	10

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=159109>

Starting Term: 2020 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN ORGANIZATIONAL LEADERSHIP

Total Credits: 18
Major Code: 5731

Description

The Certificate of Completion (CCL) in Organizational Leadership is designed to prepare students with knowledge and skills needed in today's changing workplace. The program provides leadership and communication skills and techniques for planning, organizing, leading and controlling business situations. This program also emphasizes procedures for effective resource allocation. The CCL in Organizational Leadership is fully embedded in an Associate in Applied Science (AAS) in Organizational Management.

Program Notes

Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	18		
BPC110		Computer Usage and Applications (3) OR	
CIS105		Survey of Computer Information Systems (3)	3
GBS110		Human Relations in Business and Industry (3) OR	
MGT251		Human Relations in Business (3)	3
GBS120		Workplace Communication Skills	3
GBS151		Introduction to Business	3
MGT175		Business Organization and Management (3) OR	
TQM240		Project Management in Quality Organizations (3)	3
MGT101		Techniques of Supervision (3) OR	
MGT229		Management and Leadership I (3)	3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=16454041>

Starting Term: 2025 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN PARAMEDICINE

Total Credits: 44.5-45.5
Major Code: 5990

Description

The Certificate of Completion (CCL) in Paramedicine is a nationally accredited program designed to prepare students to become Paramedics. This program is a formal education in such paramedicine topics as anatomy and physiology, pathophysiology, cardiology, pulmonary, pharmacology, pediatrics, geriatrics hematology, and toxicology. Paramedicine builds upon EMT education and includes paramedic scope of practice. Paramedicine is integrated with fire service, law enforcement, ground transport services, flight transport services, search and rescue, hospitals, clinical setting, community paramedicine, and EMS education. There is an Associate in Applied Science (AAS) in Paramedicine available.

Program Notes

Students must earn a grade of C or better in all courses within the program.

Admission Criteria

Students must be current and in good standing with the Arizona Department of Health Services Bureau of Emergency Medical Services–Certified a

Required Courses

Required Courses Course # Course Title Credits

Credits: 44.5–45.5

BI0160 Introduction to Human Anatomy and Physiology (4) OR

PME160 Emergency Medical Services Professionals: Anatomy and Physiology (3) 3–4

EMT101 Basic Life Support/Cardiopulmonary Resuscitation (CPR) for Health Care Providers 0.5

PME201 Advanced Cardiac Life Support (ACLS) Initial Provider in Paramedicine 1

PME202 Pediatric Advanced Life Support (PALS) Initial Provider in Paramedicine 1

PME203 Pediatric Emergencies for Prehospital Professionals (PEPP) Initial Provider in Paramedicine 1

PME204 Neonatal Resuscitation Provider (NRP) in Paramedicine 0.5

PME205 Advanced Medical Life Support (AMLS) Initial Provider in Paramedicine 1

PME206 International Trauma Life Support (ITLS) Provider/Pre-Hospital Trauma Life Support (PHTLS) 1

PME240 Pharmacology in Paramedicine 3

PME245 Airway and Ventilatory Management in Paramedicine 3

PME250 Comprehensive Patient Assessment in Paramedicine 1

PME251 Medical Emergencies in Paramedicine I 4

PME252 Medical Emergencies in Paramedicine II 4

PME253 Medical Emergencies in Paramedicine III 4

PME254 Technical Operations in Paramedicine 2.5

PME260 Trauma Patient Management in Paramedicine 2

PME270 Immersive Total Patient Management Experience (ITPME) 2

PME280 Preparation for Paramedicine Practicum 1

PME281 Paramedicine Clinical Practicum: Comprehensive (2) OR

PME281AA Paramedicine Clinical Practicum: Phase I (1) AND

PME281AB Paramedicine Clinical Practicum: Phase II (1) 2

PME288 Paramedicine Comprehensive Field Internship Practicum 5

PME289 Preparation for Paramedic National Credentialing 2

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=178661>

Starting Term: 2023 Fall

Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN PERSONAL TRAINING

Total Credits: 18–18.5

Major Code: 5421

Description

The Certificate of Completion (CCL) in Personal Training is designed to prepare students for the American College of Sports Medicine (ACSM), National Strength and Conditioning Association (NSCA), National Academy of Sports Medicine (NASM), and the American Council on Exercise (ACE) personal trainer certifications. These certifications are generally required for employment in personal training positions and/or professional advancement within the fitness industry. The curriculum provides students with the foundational skills needed to design and implement fitness programs appropriate to clients' goals and aligned with current industry best practices. A CCL in Personal Training: Advanced, an Associate in Applied Science (AAS) in Exercise Science: Health, Fitness, and Sports Performance, and an Associate in Arts (AA), Emphasis in Exercise Science are also available for students interested in continuing their studies in this field.

Program Notes

Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses Course # Course Title Credits

Credits: 17–17.5

EMT101 Basic Life Support/Cardiopulmonary Resuscitation (CPR) for Health Care Providers (0.5) OR

WED106 Cardiopulmonary Resuscitation (CPR)/Automated External Defibrillator (AED) (0.5) OR

Current CPR/AED certification (0) 0–0.5

EXS101 Introduction to Exercise Science 3

EXS125 Introduction to Exercise Physiology 3

EXS146 Introduction to Exercise Testing 1

EXS215 Resistance Training and Recovery Techniques 3

EXS217 Cardiorespiratory and Flexibility Training 3

FON100 Introductory Nutrition (3) OR

FON241 Principles of Human Nutrition (3) 3

PED101ST	Strength Training (1) OR	
PED101RT	Resistance Training for Improved Sports Performance (1)	1

Restricted Electives

Restricted Electives	Course #	Course Title	Credits

Credits: 1

Complete one (1) credit from one of the following course options not already selected in the Required Courses area. Choose a course that best

EXS++++	Any EXS Exercise Science course	1
FON++++	Any FON Food and Nutrition course	1
HES++++	Any HES Health Science course	1
PED++++	Any PED Physical Education course	1
IFS110	Critical Research for College Success	1

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=15993302>

Starting Term: 2025 Fall

Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN PERSONAL TRAINING: ADVANCED

Total Credits: 30-30.5

Major Code: 5445

Description

The Certificate of Completion (CCL) in Personal Training: Advanced is designed to prepare students for the American College of Sports Medicine (ACSM), National Strength and Conditioning Association (NSCA), National Academy of Sports Medicine (NASM), and the American Council on Exercise (ACE) personal trainer certifications. These certifications are generally required for employment in personal training positions and/or professional advancement within the fitness industry. The curriculum is designed to prepare students for employment in positions such as personal training within health and fitness clubs, wellness centers, and public and private recreation facilities. The curriculum includes the foundational courses required for the CCL in Personal Training coupled with advanced hands-on courses that foster the development of critical thinking and leadership skills important for developing, implementing and leading exercise programs. An Associate in Applied Science (AAS) in Exercise Science: Health, Fitness, and Sports Performance and an Associate in Arts (AA), Emphasis in Exercise Science are also available for students interested in continuing their studies in this field.

Program Notes

Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits

Credits: 29-29.5

EMT101	Basic Life Support/Cardiopulmonary Resuscitation (CPR) for Health Care Providers (0.5)	OR
WED106	Cardiopulmonary Resuscitation (CPR)/Automated External Defibrillator (AED) (0.5)	OR
Current	CPR/AED certification (0)	0-0.5

EXS101	Introduction to Exercise Science	3
EXS125	Introduction to Exercise Physiology	3
EXS146	Introduction to Exercise Testing	1
EXS215	Resistance Training and Recovery Techniques	3
EXS217	Cardiorespiratory and Flexibility Training	3
EXS246	Advanced Exercise Testing	2
EXS255	Program Design: Muscular Fitness and Performance	3
EXS257	Program Design: Cardiorespiratory Fitness	3

Student must complete three (3) credits from the following EXS internship course options:

EXS270	Exercise Science Internship (3)	OR
EXS270AA	Exercise Science Internship (1) AND	
EXS270AB	Exercise Science Internship (2)	3

FON100	Introductory Nutrition (3)	OR
FON241	Principles of Human Nutrition (3)	3

PED101RT	Resistance Training for Improved Sports Performance (1)	OR
PED101ST	Strength Training (1)	1

PED101BC	Boot Camp (1)	OR
PED101BS	Body Sculpting (1)	OR
PED101CY	Cycling - Indoor (1)	OR
PED101GF	Group Fitness/Aerobics (1)	OR
PED101KB	Kickboxing (1)	OR
PED101LD	Latin Dancing (1)	OR
PED101PC	Physical Conditioning (1)	OR
PED101PS	Pilates (1)	OR
PED101SR	Stretch and Relaxation (1)	OR
PED101TC	Tai Chi (1)	OR
PED101TX	Suspension Training (1)	OR
PED101YG	Gentle Yoga (1)	OR
PED101YH	Hatha Yoga (1)	OR
PED101Y0	Yoga (1)	OR
PED101YP	Power Yoga (1)	OR
PED101YR	Restorative Yoga (1)	OR
PED101ZU	Zumba Fitness (1)	1

Restricted Electives

Restricted Electives Course # Course Title Credits

Credits: 1

Complete one (1) credit from one of the following course options not already selected in the Required Courses area. Choose a course that best

EXS++++ Any EXS Exercise Science course (1)
FON++++ Any FON Food and Nutrition course (1)
HES++++ Any HES Health Science course (1)
PED++++ Any PED Physical Education course (1)
IFS110 Critical Research for College Success (1)

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=164729>

Starting Term: 2021 Fall

Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN PROGRAMMING AND SYSTEMS ANALYSIS LEVEL I

Total Credits: 24

Major Code: 5048

Description

The Certificate of Completion (CCL) in Programming and Systems Analysis Level I provides an exploration of different computer language and technical skills. The CCL includes, but is not limited to the following: operating systems, local area networks, business communication, team roles, and dynamics. A Certificate of Completion (CCL) in Programming and Systems Analysis Level II, Certificate of Completion (CCL) in iOS App Development and an Associate in Applied Science (AAS) in Programming and Systems Analysis are also available.

Program Notes

Students must earn a grade of C or better in all courses within the program. Consultation with an Academic Advisor is recommended for course selection. Courses within any of the following prefixes must be taken within five (5) years prior to completion of the program to be applied toward this award: AIM, BPC, CIS, CLD, CNT, CSC, ITS, and MST.

Required Courses

Required Courses Course # Course Title Credits

Credits: 24

CIS105 Survey of Computer Information Systems 3

CIS119D0 Introduction to Oracle: SQL (3) OR

CIS276DA MySQL Database (3) OR

CIS276DB SQL Server Database (3) 3

CIS126DL Linux Operating System (3) OR

CIS126RH Red Hat System Administration I (3) OR

MST150++ Any Microsoft Windows course (3) 3

CIS133DA Internet/Web Development Level I 3

CIS150 Programming Fundamentals (3) OR

CIS150AB Object-Oriented Programming Fundamentals (3) 3

CIS166++ Any Web Scripting course(s) 3

GBS151 Introduction to Business 3

Select a programming language from below that best aligns with academic and professional goals (1 course for a total of 3 credits) in one of

CIS156 Python Programming: Level I (3) OR

CIS159 Visual Basic Programming I (3) OR

CIS162++ Any C Programming: Level I course (3) OR

CIS163AA Java Programming: Level I (3) OR

CIS165++ Any Mobile Application Development course (3) 3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=16456954>

Starting Term: 2025 Fall

Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN PROGRAMMING AND SYSTEMS ANALYSIS LEVEL II

Total Credits: 36-38

Major Code: 5962

Description

The Certificate of Completion (CCL) in Programming and Systems Analysis Level II provides an in-depth exploration of different computer language and technical skills. This CCL includes, but is not limited to the following: local area networks, team roles, and dynamics. A Certificate of Completion (CCL) in iOS Application Development and an Associate in Applied Science (AAS) in Programming and Systems Analysis are available.

Program Notes

Students must earn a grade of C or better in all courses within the program. Consultation with an Academic Advisor is recommended for course selection.

Required Courses

Required Courses Course # Course Title Credits

Credits: 33-34

The following courses are required and included in CCL Programming and Systems Analysis Level I

CIS105	Survey of Computer Information Systems	3
CIS119D0	Introduction to Oracle: SQL (3) OR	
CIS276DA	MySQL Database (3) OR	
CIS276DB	SQL Server Database (3)	3
CIS126DL	Linux Operating System (3) OR	
CIS126RH	Red Hat System Administration I (3) OR	
MST150++	Any Microsoft Windows course (3)	3
CIS133DA	Internet/Web Development Level I	3
CIS150	Programming Fundamentals (3) OR	
CIS150AB	Object-Oriented Programming Fundamentals (3)	3
CIS156	Python Programming: Level I (3) OR	
CIS159	Visual Basic Programming I (3) OR	
CIS162++	Any C Programming: Level I course (3) OR	
CIS163AA	Java Programming: Level I (3) OR	
CIS165++	Any Mobile Application Development course (3)	3
CIS166++	Any Web Scripting course(s)	3
GBS151	Introduction to Business	3

The following courses are required for CCL Programming and Systems Level II

CIS190	Introduction to Networking (3) OR	
CNT140AB	Introduction to Networks (4) OR	
MST140	Microsoft Networking Essentials (3)	3-4
CIS225AB	Object-Oriented Analysis and Design (3) OR	
CIS250	Management of Information Systems (3)	3

Select a programming language from below that best aligns with academic and professional goals (1 course for a total of 3 credits) in one of

CIS256	Python Programming: Level II (3) OR	
CIS259	Visual Basic Programming II (3) OR	
CIS262++	Any C Programming: Level II course (3) OR	
CIS263AA	Java Programming: Level II (3) OR	
CIS265	Advanced iOS Application Development (3)	3

Restricted Electives

Restricted Electives Course # Course Title Credits

Credits: 3-4

Select one of the courses below that best aligns with academic and professional goals for a total of 3-4 credits. Students may not choose cou

CIS151	Computer Game Development-Level I	3
CIS156	Python Programming: Level I	3
CIS159	Visual Basic Programming I	3
CIS162++	Any C Programming: Level I course	3
CIS163AA	Java Programming: Level I	3
CIS165++	Any Mobile Application Development course	3
CIS224	Project Management Microsoft Project for Windows	3
CIS251	Computer Game Development-Level II	3
CIS256	Python Programming: Level II	3
CIS259	Visual Basic Programming II	3
CIS262++	Any C Programming: Level II course	3
CIS263AA	Java Programming: Level II	3
CIS265	Advanced iOS Application Development	3
CIS267	Pega System Architect Essentials	4
GBS211	Legal, Ethical and Regulatory Issues of the Internet Studies	3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=15992184>

Starting Term: 2025 Fall

Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN PROJECT MANAGEMENT

Total Credits: 17

Major Code: 5477N

Description

The Certificate of Completion (CCL) in Project Management prepares the student for career opportunities as a project manager and provides those working as project managers with the skills required to prepare for project management certification exams. This program covers principles, requirements, benefits, and tools of project management.

Program Notes

Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	17		
CIS224	Project Management	Microsoft Project for Windows	3
MGT242	Project Scope and Procurement Management		2
MGT243	Project Time and Cost Management		2
MGT244	Project Risk and Quality Management		2
MGT245	Project Human Resources and Committee Management		2
MGT246	Principles of Project Management		3
TQM240	Project Management in Quality Organizations		3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=168830>

Starting Term: 2022 Fall

Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN PYTHON APPLICATIONS

Total Credits: 12-22

Major Code: 5340N

Description

The Certificate of Completion (CCL) in Python Applications is designed to provide students with a set of skills necessary to successfully perform Python related programming projects. The courses consist of both practical knowledge and hands-on experience with the Python language and the programming techniques used in the industry. Through the elective courses, students will be able to apply the knowledge obtained to specific areas of interest using Python.

Program Notes

This program is not eligible for Title IV Federal Financial Aid. Students must earn a grade of C or better in all courses within the program. Required Courses and Restricted Electives must be taken within five (5) years prior to completion of the program to be applied toward this award.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	9-15		
CIS105	Survey of Computer Information Systems (3)	OR	
Permission of Program Director (0)			0-3
CIS150AB	Object-Oriented Programming Fundamentals (3)	OR	
Permission of Program Director (0)			0-3
CIS119D0	Introduction to Oracle: SQL (3)	OR	
CIS276DA	MySQL Database (3)	OR	
CIS276DB	SQL Server Database (3)		3
CIS156	Python Programming: Level I		3
CIS256	Python Programming: Level II		3

Restricted Electives

Restricted Electives	Course #	Course Title	Credits
Credits:	3-7		
Specialization 1: Cybersecurity and Networking			
CNT140AB	Introduction to Networks		4
CIS256CN	Python for Cybersecurity and Networking		3
Specialization 2: Data Analytics			
CIS256DA	Python for Data Analytics		3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=183269>

Starting Term: 2023 Fall

Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN REAL ESTATE: PRELICENSE

Total Credits: 6.5

Major Code: 5139N

Description

The Certificate of Completion (CCL) in Real Estate: Prelicense introduces students to the real estate profession. This program is designed to prepare students to meet the requirements to take the Arizona State Real Estate Salesperson's Exam. Emphasis will be placed on license laws, real and personal property, financing, purchasing, selling,

renting, legal descriptions, rights and interests in property, ownership, contracts, real estate terminology and economics, investing in real estate, foreclosure, land use, and evaluation.

This program is designed to meet education requirements for licensure or certification in the State of Arizona. Granting licensure and certification is the sole responsibility of the state board or approval agency. This program is only offered and available to students located in the State of Arizona. The Maricopa County Community College District and colleges define student location within Administrative Regulation 2.2.3(7).

Program Notes

This program is not eligible for Title IV Federal Financial Aid.Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits: 6.5			
REA179	Real Estate Principles I (3) AND		
REA180	Real Estate Principles II (3) OR		
REA201	Real Estate Principles I and II (6)		6
REA290AH	Real Estate Seminar: Contract Writing		0.5

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=184489>

Starting Term: 2024 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN RED HAT LINUX ADMINISTRATOR

Total Credits: 6-9
Major Code: 5049N

Description

The Certificate of Completion (CCL) in Red Hat Linux Administrator program is designed to help prepare students for employment or to improve current professional skills. The program includes Red Hat Enterprise Linux system basics and management including sophisticated manipulation of file structures, backup systems, troubleshooting, user account management, hard disk maintenance and configuration, process monitoring and prioritizing, and system resource control. This program helps prepare students for the Red Hat Certified System Administrator (RHCSA) certification exam. Students who complete this program may seek employment in a variety of environments. Students can also pursue additional Certificates of Completion (CCLs) in a variety of specializations within the information technology field to deepen their knowledge and skills and help prepare them for multiple industry certification examinations. An Associate in Applied Science (AAS) in Network and Systems Administration is also available.

Program Notes

This program is not eligible for Title IV Federal Financial Aid.Students must earn a grade of C or better in all courses within the program.Students who pursue this Certificate of Completion (CCL) should have a basic level of computer literacy including navigating the internet and computer systems or take CIS105 as indicated in the required courses. Students with the requisite skills may have the CIS105 requirement waived by permission of the Program Director.Courses within any of the following prefixes must be taken within five (5) years prior to completion of the program to be applied toward this award: AIM, BPC, CIS, CLD, CNT, CSC, ITS, and MST.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits: 6-9			
CIS105	Survey of Computer Information Systems (3) OR		
	Permission of program director (0)		0-3
CIS126RH	Red Hat System Administration I 3		
CIS238RH	Red Hat System Administration II		3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=184490>

Starting Term: 2024 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN RED HAT LINUX ENGINEER

Total Credits: 9-12
Major Code: 5050N

Description

The Certificate of Completion (CCL) in Red Hat Linux Engineer program is designed to help prepare students for employment or to improve current professional skills. The program includes in depth Red Hat Enterprise Linux system networking including integrating Linux servers and workstations into a network environment with multi-platform network operating systems with a variety of open-standard and proprietary protocols. This program helps prepare students for the Red Hat Certified System Administrator (RHCSA) and Red Hat Certified Engineer (RHCE) certification exams. Students who complete this program may seek employment in a variety of environments. Students can also pursue additional Certificates of Completion (CCL) in a variety of specializations within the information technology field to deepen their knowledge and skills and help prepare them for multiple industry certification examinations. An Associate in Applied Science (AAS) in Network and Systems Administration is also available.

Program Notes

This program is not eligible for Title IV Federal Financial Aid. Students must earn a grade of C or better in all courses within the program. Students who pursue this Certificate of Completion (CCL) should have a basic level of computer literacy including navigating the internet and computer systems or take CIS105 as indicated in the required courses. Students with the requisite skills may have the CIS105 requirement waived by permission of the Program Director. Courses within any of the following prefixes must be taken within five (5) years prior to completion of the program to be applied toward this award: AIM, BPC, CIS, CLD, CNT, CSC, ITS, and MST.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	9-12		
CIS105	Survey of Computer Information Systems (3)	OR	
Permission of Program Director	(0)		0-3

CIS126RH	Red Hat System Administration I	3	
CIS238RH	Red Hat System Administration II		3
CIS240RH	Red Hat System Administration III		3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=171606>

Starting Term: 2022 Spring
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN ROBOTICS TECHNOLOGY

Total Credits: 7
Major Code: 5252N

Description

The Certificate of Completion (CCL) in Robotics Technology prepares students for the field of robotics operations, applications, programming and Automation System Integration. The program emphasizes knowledge and skills required to troubleshoot, program, repair, operate and work safely with robots. Courses in this certificate can apply toward the Associate in Applied Science (AAS) in Automated Industrial Technology and preparation for industry validated certification.

Program Notes

This program is not eligible for Title IV Federal Financial Aid. Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	7		
AIT100	Industrial Safety		1
AIT270	Robotics I		3
AIT275	Robotics II		3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=172196>

Starting Term: 2021 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN SOCIAL MEDIA MARKETING

Total Credits: 17-18
Major Code: 5830

Description

The Certificate of Completion (CCL) in Social Media Marketing is designed to provide useful skills important in a variety of strategic marketing areas, e.g., social media, digital communications, integrated marketing, media relations, and brand management. An Associate in Applied Science (AAS) in Marketing and Sales is also available.

Program Notes

Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	15		
CIS103	Introduction to Social Media		3
GBS120	Workplace Communication Skills		3
MKT110	Marketing and Social Networking		3
MKT111	Applied Marketing and Social Networking		3
MKT271	Principles of Marketing		3

Restricted Electives

Restricted Electives	Course #	Course Title	Credits
Credits:	2-3		
MKT101		Introduction to Public Relations	3
MKT280AB		Marketing Internship	2
MKT298AB		Special Projects	2

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=16453215>

Starting Term: 2025 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN SUSTAINABLE HORTICULTURE

Total Credits: 33
Major Code: 5886

Description

The Certificate of Completion (CCL) in Sustainable Horticulture program focuses on hands-on skills in sustainable agriculture and urban farming.

Program Notes

Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	33		
AGS100		Safety and Standard Operating Procedures for Sustainable Horticulture	1
AGS164		Plant Growth and Development	4
AGS182AA		Gardening Practices and Techniques	3
AGS212		Sustainable Livestock Production	3
AGS217		Introduction to Hydroponics and Greenhouse Management	4
AGS260		Soils	4
AGS262		Irrigation Design, Installation, Operation, and Trouble Shooting	3
AGS265		Sustainable Crop Production	4
AGS268		Integrated Pest Management in the Cultivated Environment	4
AGS285		Propagation of Horticultural Plants	3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=184893>

Starting Term: 2023 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN TECHNICAL THEATRE

Total Credits: 21-48
Major Code: 5462

Description

The Certificate of Completion (CCL) in Technical Theatre is designed to prepare students for a wide range of careers within theatre operations and production. The curriculum includes a foundation of applied skills within technical theatre including backstage personnel skills, as well as hands-on experience working on live theatre productions and events. Students may select from a choice of specializations in audio, costuming, group/solo cosplay, hair and makeup, lighting, properties, puppetry, and set/scenic construction. Program graduates can directly enter the workforce into positions such as cosplay actor, puppeteer, sound engineer, lighting technician, carpenter, scenic painter, stage crew, stage management, wardrobe crew, costume stitcher, costume crafts apprentice, and hair/makeup artist in a range of settings including live theatre, television and film, conferences and events, attractions and shows.

Students can earn an embedded Certificate of Completion (CCL) in Stage Crew along with one additional area: Audio Technician, Costuming, Group/Solo Cosplay, Hair and Makeup, Lighting, Properties, Puppetry, and Set/Scenic construction. An Associate in Arts, Fine Arts (AAFA), Emphasis in Theatre is also available for students interested in university transfer.

Program Notes

Students must earn a grade of C or better in all courses within the program. Students should select an area of specialization based on their personal, academic, and professional goals. Students should speak to a program director or academic advisor for details.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	14-23		
ENG101		First Year Composition	0-3
Students who intend to take THE220 must take ENG101.			

THE111 Introduction to Theatre 3

THE220 Modern Drama (3) OR
TH0225 Visual Script Analysis (2) OR
THP291AC Summer Conservatory: Script Analysis (ACT) (1) 1-3

TH0203 Technical Theatre Production (3) OR
 THP201AB Theatre Production II (2) 2-3

TH0251 Safety Practices in Theatre and Film Production 1
 TH0266 Production Careers in Technical Theatre 1
 TH0269 Technical Theatre Portfolio Development 1
 THP213 Introduction to Technical Theatre 4
 THP296++ Cooperative Education 1-4

Restricted Electives

Restricted Electives Course # Course Title Credits

Credits: 7-25

Students must also select and complete one of the following specialization areas in Technical Theatre based on their personal, academic, and

Specialization 1: Audio Technician

MUC122 Sound Design I 3
 MUC197 Live Sound Reinforcement I 3
 MUC198 Live Sound Reinforcement II 3

TH0202AB Theatre Production I Electrics (1) OR
 THP201AA Theatre Production I (1) OR
 THP201AB Theatre Production II (2) OR
 THP202 Theatre Production Projects (1) 1-2

Specialization 2: Cosplay I

TEC111 Intermediate Apparel Construction (3) OR
 THP206 Introduction to Costume Construction for Theatre (4) 3-4

TH0115 Makeup for Stage and Screen 3
 TH0208 Costume Play Solo Performance Practicum 3

TH0250 Stage Properties 3

Specialization 3: Cosplay II

CIS103 Introduction to Social Media (3) OR
 MKT110 Marketing and Social Networking (3) 3

TEC111 Intermediate Apparel Construction (3) OR
 THP206 Introduction to Costume Construction for Theatre (4) 3-4

TH0115 Makeup for Stage and Screen 3
 TH0215 Advanced Makeup Techniques for Stage and Screen 3
 TH0218 Wig and Hair Production for Theatre and Film 3
 TH0208 Costume Play Solo Performance Practicum 3
 TH0209 Costume Play Group Performance Practicum 3
 TH0250 Stage Properties 3

Specialization 4: Costuming

TH0202AC Theatre Production I Costume Shop (1) OR
 THP201AA Theatre Production I (1) OR
 THP201AB Theatre Production II (2) 1-2

THP206 Introduction to Costume Construction for Theatre 4

Students should work with their program advisor to select 3 credits that align with the academic/career goals and further their development i

TEC113 Textiles: Dyeing (1) AND
 TEC114 Textiles: Block Printing/Silk Screening (1) AND
 TEC115 Textiles: Hand Painting (1) OR
 TEC225 Pattern Design I (3)
 TH0115 Makeup for Stage and Screen (3) 3

Specialization 5: Hair and Makeup

TH0115 Makeup for Stage and Screen 3
 TH0215 Advanced Makeup Techniques for Stage and Screen 3
 TH0218 Wig and Hair Production for Theatre and Film 3

TH0202AC Theatre Production I Costume Shop (1) OR
 THP201AA Theatre Production I (1) OR
 THP201AB Theatre Production II (2) 1-2

Specialization 6: Lighting

TH0202AB Theatre Production I Electrics (1) OR
 THP201AA Theatre Production I (1) OR
 THP201AB Theatre Production II (2) 1-2

TH0218 Beginning Stage Lighting 3
 TH0263 Entertainment Industry Drafting I: 2D CAD 3

Specialization 7: Properties

TH0202AA Theatre Production I Scene Shop (1) OR
 TH0202AC Theatre Production I Costume Shop (1) OR
 THP201AA Theatre Production I (1) OR
 THP201AB Theatre Production II (2) OR 1-2

TH0267 Painting Techniques for Film, TV and Theatre (3) OR
 THP206 Introduction to Costume Construction for Theatre (4) 3-4

TH0250 Stage Properties 3

Specialization 8: Puppetry

THP112 Acting I (3) OR
 THP151 Theatre for Youth (3) 3

THP201AA Theatre Production I (1) OR
 THP201AB Theatre Production II (2) OR

TH0202AA Theatre Production I Scene Shop (1) OR
 TH0202AC Theatre Production I Costume Shop (1) 1-2

TH0219 Introduction to Puppetry 3
 TH0250 Stage Properties 3
 THP206 Introduction to Costume Construction for Theatre 4

Specialization 9: Set/Scenic Construction
 ARC/INT111 Architectural Computer Aided Design I: Introduction (3) OR
 CAD100 Fundamentals of 2D AutoCAD (3) 3

TH0202AA Theatre Production I Scene Shop (1) OR
 THP201AA Theatre Production I OR (1)
 THP201AB Theatre Production II (2) 1-2

TH0263 Entertainment Industry Drafting I: 2D CAD 3

TH0267 Painting Techniques for Film, TV and Theatre (3) OR
 WLD102 Basic Welding Metal Sculpture (3) 3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=184795>

Starting Term: 2023 Fall
 Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN TECHNICAL THEATRE: COSTUMING

Total Credits: 8-9
 Major Code: 5090N

Description

The Certificate of Completion (CCL) in Technical Theatre: Costuming is designed to provide students with skills in the acquisition, construction, alteration, and maintenance of costumes for theatrical performances. Courses include instruction in costume construction, theory and period styles. A Certificate of Completion (CCL) in Technical Theatre and the Associate in Arts, Fine Arts (AAFA), Emphasis in Theatre are also available.

Program Notes

This program is not eligible for Title IV Federal Financial Aid. Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	5-6		
THP201AA		Theatre Production I (1) OR	
THP201AB		Theatre Production II (2) OR	
TH0202AC		Theatre Production I Costume Shop (1)	1-2
THP206		Introduction to Costume Construction for Theatre	4

Restricted Electives

Restricted Electives Course # Course Title Credits
 Credits: 3
 Students should select courses for a total of 3 credits based on their career goal. Speak to a Program Director for additional information.

TEC113	Textiles: Dyeing	1
TEC114	Textiles: Block Printing/Silk Screening	1
TEC115	Textiles: Hand Painting	1
TEC225	Pattern Design I	3
TH0115	Makeup for Stage and Screen	3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=184901>

Starting Term: 2023 Fall
 Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN TECHNICAL THEATRE: HAIR AND MAKEUP

Total Credits: 10-11
 Major Code: 5091N

Description

The Certificate of Completion (CCL) in Technical Theatre: Hair and Makeup is designed to provide students with the skills to apply makeup and produce wigs for theatrical performances. The classes include instruction in makeup techniques and wig ventilation; period and contemporary hairstyling and costuming; wig work and hairpiece application; synthetic hair and masks; cosmetic preparations and treatments; makeup artistry; and attachment, removal, and camouflaging of prostheses. A Certificate of Completion (CCL) in Technical Theatre and the Associate in Arts, Fine Arts (AAFA), Emphasis in Theatre are also available.

Program Notes

This program is not eligible for Title IV Federal Financial Aid. Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	10-11		
TH0115		Makeup for Stage and Screen	3
TH0215		Advanced Makeup Techniques for Stage and Screen	3
TH0216		Wig and Hair Production for Theatre and Film	3
THP201AA		Theatre Production I (1) OR	
THP201AB		Theatre Production II (2) OR	
TH0202AC		Theatre Production I Costume Shop (1)	1-2

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=184079>

Starting Term: 2023 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN VETERINARY ASSISTING

Total Credits: 18
Major Code: 5960

Description

The Certificate of Completion (CCL) in Veterinary Assisting prepares students for introductory careers in veterinary medicine and animal health which require basic knowledge and skills involving animal care and management, veterinary medical care, and client communications and service.

Program Notes

Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	18		
COM100		Introduction to Human Communication (3) OR	
COM110		Interpersonal Communication (3) OR	
COM225		Public Speaking (3) OR	
COM230		Small Group Communication (3)	3
ENG101		First-year Composition (3) OR	
ENG107		First-year Composition for ESL(3)	3
VET101		Introduction to Veterinary Technology	3
VET101LL		Animal Care Skills I Laboratory	2
VET103		Veterinary Assisting I	3
VET104		Veterinary Assisting II	3
VET109		Veterinary Assisting Internship	1

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=184298>

Starting Term: 2024 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN VICTIMOLOGY

Total Credits: 15
Major Code: 5392N

Description

The Certificate of Completion (CCL) in Victimology is designed for students who are interested in pursuing a course of study specifically focused on crisis intervention, community services, and victim rights. It is one pathway to the Associate in Applied Science (AAS) in Administration of Justice.

Program Notes

This program is not eligible for Title IV Federal Financial Aid. Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	15		
AJS101		Introduction to Criminal Justice	3
AJS162		Domestic Violence	3
AJS225		Criminology	3
AJS255		The Criminal Justice System Handling of the Mentally Ill	3
AJS/EMT/FSC258		Victimology and Crisis Management in Public Safety	3

Starting Term: 2025 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN VIDEO GAME PRODUCTION: AUDIO AND SOUND

Total Credits: 30
Major Code: 5130

Description

The Certificate of Completion (CCL) in Video Game Production: Audio and Sound provides students with the introductory skills in audio and sound for video games. Coursework focuses on the music aspects of Video Game Production. An Associate in Applied Science (AAS) in Video Game Production is available. Certificates of Completion (CCL) are also available in Video Game Production: Game Art, Video Game Production: Coding and Scripting, and Video Game Production: Narrative.

Program Notes

Students must earn a grade of C or better in all courses within the program. Courses within any of the following prefixes must be taken within five (5) years prior to completion of the program to be applied toward this award: AIM, BPC, CIS, CLD, CNT, CSC, ITS, and MST.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	30		
AVC100		Introduction to Digital Arts	1
CIS105		Survey of Computer Information Systems	3
CIS151		Computer Game Development Level I	3
CRW176		Writing Narrative for Video Games	3
MUC111		Digital Audio Workstation I (DAW I) (3) OR	
MUC192		Electronic Music II (3)	3
MUC122		Sound Design I	3
MUC191		Electronic Music I	3
MUC195		Studio Music Recording I	3
MUC222		Sound Design II	3
MUC292		Sound Design III	3
VGP298AB		Special Projects	2

Starting Term: 2025 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN VIDEO GAME PRODUCTION: CODING AND SCRIPTING

Total Credits: 33
Major Code: 5129

Description

The Certificate of Completion (CCL) in Video Game Production: Coding and Scripting provides students with the introductory skills to code and write script for video games. Coursework focuses on the coding and scripting aspects of Video Game Production. An Associate in Applied Science (AAS) in Video Game Production is also available. Certificates of Completion (CCL) are also available in Video Game Production: Game Art, Video Game Production: Audio and Sound and Video Game Production: Narrative.

Program Notes

Students must earn a grade of C or better in all courses within the program. Courses within any of the following prefixes must be taken within five (5) years prior to completion of the program to be applied toward this award: AIM, BPC, CIS, CLD, CNT, CSC, ITS, and MST.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	33		
AVC100		Introduction to Digital Arts	1
CIS105		Survey of Computer Information Systems	3
CIS107		The Electronic Game Industry	3
CIS120DC		Introduction to Adobe Animate	3
CIS130DB		3D Studio Max: Animation	3
CIS150AB		Object-Oriented Programming Fundamentals	3
CIS151		Computer Game Development Level I	3
CIS156		Python Programming: Level I	3
CIS163AA		Java Programming: Level I	3
CRW176		Writing Narrative for Video Games	3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=16452559>

Starting Term: 2025 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN VIDEO GAME PRODUCTION: GAME ART

Total Credits: 39
Major Code: 5123

Description

The Certificate of Completion (CCL) in Video Game Production: Game Art provides students with the introductory skills to design Art for video games. Coursework focuses on the artistic aspect of Video Game Production. An Associate in Applied Science (AAS) in Video Game Production is available. Certificates of Completion (CCL) are also available in Video Game Production: Audio and Sound, Video Game Production: Coding and Scripting, and Video Game Production: Narrative.

Program Notes

Students must earn a grade of C or better in all courses within the program. Courses within any of the following prefixes must be taken within five (5) years prior to completion of the program to be applied toward this award: AIM, BPC, CIS, CLD, CNT, CSC, ITS, and MST.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	39		
ART116	Life Drawing I	3	
AVC100	Introduction to Digital Arts	1	
AVC150	Multimedia Storytelling	3	
AVC200	Animation and Interactivity	3	
AVC/MMT184	Digital Animation I	3	
AVC/MMT185	3D Modeling for Animation I (3) OR		
CIS130DA	3D Studio Max: Modeling (3)	3	
AVC240	Cinematography and Directing for 2D/3D Animation (3) OR		
CIS230DB	3D Studio Max: Lighting and Rendering (3)	3	
AVC247	High Resolution Digital Model Making through 3D Laser Scanning and Photogrammetry (3) OR		
AVC287	3D Character Animation (3)	3	
AVC/MMT285	3D Modeling and Animation II (3) OR		
CIS130DB	3D Studio Max: Animation (3)	3	
CIS105	Survey of Computer Information Systems	3	
CIS151	Computer Game Development -Level I	3	
CRW176	Writing Narrative for Video Games	3	
MUC122	Sound Design I	3	
VGP298AB	Special Projects	2	

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=16452563>

Starting Term: 2025 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN VIDEO GAME PRODUCTION: GAME NARRATIVE

Total Credits: 27
Major Code: 5125

Description

The Certificate of Completion (CCL) in Video Game Production: Game Narrative provides students with the introductory skills to write narrative for video games. Coursework focuses on the narrative aspect of Video Game Production. An Associate in Applied Science (AAS) in Video Game Production is also available. Certificates of Completion (CCL) are available in Video Game Production: Game Art, Video Game Production: Audio and Sound and Video Game Production: Coding and Scripting.

Program Notes

Students must earn a grade of C or better in all courses within the program. Courses within any of the following prefixes must be taken within five (5) years prior to completion of the program to be applied toward this award: AIM, BPC, CIS, CLD, CNT, CSC, ITS, and MST.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	27		
AVC100	Introduction to Digital Arts	1	
CIS105	Survey of Computer Information Systems	3	
CIS151	Computer Game Development Level I	3	

MUC122	Sound Design I	3	
CRW160	Introduction to Writing Poetry	3	
CRW170	Introduction to Writing Fiction	3	
CRW176	Writing Narrative for Video Games	3	
CRW190	Introduction to Screenwriting	3	
CRW270	Intermediate Fiction Writing	3	
VGP298AB	Special Projects	2	

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=165448>

Starting Term: 2021 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN WEB APP DEVELOPMENT

Total Credits: 9-12
Major Code: 5835N

Description

The Certificate of Completion (CCL) in Web App Development prepares students for employment in entry-level coding, programming, and software development positions with an emphasis on web apps. Courses in this certificate can apply toward the Associate in Applied Science (AAS) in Mobile App Development and Certificates of Completion (CCL) in Mobile App Development and Cross-Platform App Development.

Program Notes

This program is not eligible for Title IV Federal Financial Aid. Students must earn a grade of C or better in all courses within the program. Students should consult with a Department Advisor in arranging their schedules. Courses within any of the following prefixes must be taken within five (5) years prior to completion of the program to be applied toward this award: AIM, BPC, CIS, CLD, CNT, CSC, ITS, and MST.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	9-12		
CIS105	Survey of Computer Information Systems	(3)	OR
Permission of Program Director, Department or Division Chair	(0)		0-3
CIS133DA	Internet/Web Development Level I	3	
CIS166AA	Introduction to JavaScript	3	
CIS233DA	Internet/Web Development Level II	3	

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=163998>

Starting Term: 2021 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN WEB DEVELOPMENT

Total Credits: 39
Major Code: 5988

Description

The Certificate of Completion (CCL) in Web Development prepares students to create and administer interactive and professional websites. The program provides students with knowledge and skills in developing dynamic websites, client and server side programs, database structures, and object-oriented design. A Certificate of Completion (CCL) in Web Design and an Associate in Applied Science (AAS) in Web Design/Development are also available. Some of these programs are available at select colleges. Please check with your local college for program availability.

Program Notes

Students must earn a grade of C or better in each course in the program. Courses within any of the following prefixes must be taken within five (5) years prior to completion of the program to be applied toward this award: AIM, BPC, CIS, CLD, CNT, CSC, ITS, and MST. This program replaces: CCL/5051 Web Developer CCL/5060 Web Developer CCL/5168 Web Development and Graphic Design CCL/5346 Web Development

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	36		
The following courses are required and included in the CCL in Web Foundations:			
CIS105	Survey of Computer Information Systems	3	
CIS120DF	Introduction to Adobe Photoshop	3	
CIS133DA	Internet/Web Development Level I	3	
CIS136	Content Management Systems: WordPress	3	
CIS166AA	Introduction to Javascript	3	
CIS233DA	Internet/Web Development Level II	3	
CIS235	e-Commerce	3	

The following courses are required for the CCL in Web Development:

CIS166AE	Web Scripting with PHP: Hypertext Preprocessor (PHP)	3
CIS119D0	Introduction to Oracle: SQL (3) OR	
CIS276++	Any Database Management Systems course (3)	3
CIS126DL	Linux Operating System (3) OR	
CIS126RH	Red Hat System Administration I (3)	3
Programming Language: Select two courses for a total of 6 credits		
CIS150AB	Object-Oriented Programming Fundamentals	3
CIS156	Python Programming: Level I	3
CIS159	Visual Basic Programming I	3
CIS162++	Any C Programming course	3
CIS163AA	Java Programming: Level I	3
CIS165++	Any Mobile Application Development course	3
CIS256	Python Programming: Level II	3
CIS262AD	C# Level II	3
CIS263AA	Java Programming: Level II	3
CIS265++	Any Advanced Application Development course	3

Restricted Electives

Restricted ElectivesCourse #Course TitleCredits

Credits: 3

Students should select any course with a CIS prefix in consultation with their program advisor to further develop skills in the areas of Data

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=164829>

Starting Term: 2021 Fall

Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN WEB FOUNDATIONS

Total Credits: 21

Major Code: 5984

Description

The Certificate of Completion (CCL) in Web Foundations introduces students to designing and developing web pages. This CCL prepares students for entry level web positions. Certificates of Completion (CCL) in Web Design and Web Development are available. An Associate in Applied Science (AAS) degree in Web Design/Development is also available.

Program Notes

Students must earn a grade of C or better in all courses within the program. Courses within any of the following prefixes must be taken within five (5) years prior to completion of the program to be applied toward this award: AIM, BPC, CIS, CLD, CNT, CSC, ITS, and MST.

Required Courses

Required CoursesCourse #Course TitleCredits

Credits: 21

CIS105	Survey of Computer Information Systems	3
CIS120DF	Adobe Photoshop Level I: Digital Imaging	3
CIS133DA	Internet/Web Development Level I	3
CIS136	Content Management Systems: WordPress	3
CIS166AA	Introduction to Javascript	3
CIS233DA	Internet/Web Development Level II	3
CIS235	e-Commerce	3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=16453348>

Starting Term: 2025 Fall

Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN WELDING

Total Credits: 13-18

Major Code: 5444N

Description

The Certificate of Completion (CCL) in Welding develops skills in oxyacetylene (gas) and electric (arc) welding with emphasis on preparing for the American Welding Society Arc certification exam.

Program Notes

This program is not eligible for Title IV Federal Financial Aid. Students must earn a grade of C or better in all courses within the program.

Required Courses

Required CoursesCourse #Course TitleCredits
Credits: 13-18
WLD101 Introduction to Welding 3

WLD106AA Introduction to SMAW (5) OR
Permission of Instructor 0-5

Students must select one – two (1-2) courses for a total of 5-10 credits from the following courses:

WLD106AB	SMAW 6010 Plate 5	
WLD106AC	SMAW 7018 Plate 5	
WLD106AD	SMAW Introduction to Pipe	5
WLD206AA	Introduction to GMAW/FCAW and GTAW	5
WLD206AB	Advanced GMAW and FCAW	5
WLD206AC	Advanced GTAW Non-Ferrous	5
WLD206AD	Advanced GTAW Ferrous	5
WLD208AA	SMAW Code Welding	5

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=146932>

Starting Term: 2020 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN WELDING: FUNDAMENTALS

Total Credits: 20-23
Major Code: 5995

Description

The Certificate of Completion (CCL) in Welding: Fundamentals prepares students to work in industry using oxy-fuel welding and cutting (OFW) (OFC) and shielded metal arc welding (SMAW) processes. This certificate provides an introduction to the knowledge and skills required to work with modern industrial welding equipment using advanced welding techniques including gas metal arc welding (GMAW), flux core arc welding (FCAW) and gas tungsten arc welding (GTAW). An Associate in Applied Science (AAS) in Welding as well as certificates in the following areas of specialization are also available: Welding: Gas Metal/Flux Cored Arc Welding (GMAW)/(FCAW), Welding: Gas Tungsten Arc Welding (GTAW) Ferrous, Welding: Gas Tungsten Arc Welding (GTAW) Non-Ferrous, Welding: Shielded Metal Arc welding (SMAW) Plate, and Welding: Shielded Metal Arc Welding (SMAW) Pipe.

Program Notes

Students must earn a grade of C or better in all courses within the program.

Required Courses

Required CoursesCourse #Course TitleCredits
Credits: 10-13
WLD101 Introduction to Welding (3) OR
Permission of Program Director 0-3

WLD106AA Introduction to SMAW 5

WLD106AB SMAW 6010 Plate (5) OR
WLD106AC SMAW 7018 Plate (5) OR
WLD206AA Introduction to GMAW/FCAW and GTAW (5) 5

Restricted Electives

Restricted ElectivesCourse #Course TitleCredits
Credits: 10

Select 10 credits in consultation with a Program and/or Academic Advisor to further develop skills in the focus areas listed below. WLD106AB,

Focus Area: Gas Metal / Flux Cored Arc Welding (GMAW)/(FCAW) and Gas Tungsten Arc Welding (GTAW):

WLD206AA	Introduction to GMAW/FCAW and GTAW	5
WLD206AB	Advanced GMAW and FCAW	5
WLD206AC	Advanced GTAW Non-Ferrous	5
WLD206AD	Advanced GTAW Ferrous	5
WLD208AB	GMAW Code Welding	5
WLD208AC	FCAW Code Welding	5

Focus Area: Shielded Metal Arc Welding (SMAW) Plate:

WLD106AC	SMAW 7018 Plate 5	
WLD208AA	SMAW Code Welding	5

Focus Area: Shielded Metal Arc Welding (SMAW) Pipe:

WLD106AB	SMAW 6010 Plate 5	
WLD106AD	SMAW Introduction to Pipe	5
WLD208AA	SMAW Code Welding	5
WLD208AD	SMAW Code Welding Pipe	5

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=146967>

Starting Term: 2020 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN WELDING: SHIELDED METAL ARC WELDING (SMAW) PIPE

Total Credits: 15
Major Code: 5863N

Description

The Certificate of Completion (CCL) in Welding: Shielded Metal Arc Welding (SMAW) Pipe prepares students to complete industry certification on carbon steel pipe. An Associate in Applied Science (AAS) in Welding as well as certificates in the following areas of specialization are also available: Welding: Gas Metal / Flux Cored Arc Welding (GMAW)/(FCAW), Welding: Gas Tungsten Arc Welding (GTAW) Ferrous, Welding: Gas Tungsten Arc Welding (GTAW) Non-Ferrous, and Welding: Shielded Metal Arc Welding (SMAW) Plate.

Program Notes

This program is not eligible for Title IV Federal Financial Aid. Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	15		
WLD106AA		Introduction to SMAW	5
WLD106AB		SMAW 6010 Plate 5	
WLD106AD		SMAW Introduction to Pipe	5

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=167769>

Starting Term: 2021 Fall
Final Term: 9999

CERTIFICATE OF COMPLETION (CCL) IN WELDING: SHIELDED METAL ARC WELDING (SMAW) PLATE

Total Credits: 10
Major Code: 5871N

Description

The Certificate of Completion (CCL) in Welding: Shielded Metal Arc Welding (SMAW) Plate prepares students to complete industry certification on carbon steel. An Associate in Applied Science (AAS) in Welding as well as certificates in the following areas of specialization are also available: Welding: Gas Metal / Flux Cored Arc Welding (GMAW)/(FCAW), Welding: Gas Tungsten Arc Welding (GTAW) Ferrous, Welding: Gas Tungsten Arc Welding (GTAW) Non-Ferrous, and Welding: Shielded Metal Arc Welding (SMAW) Pipe.

Program Notes

This program is not eligible for Title IV Federal Financial Aid. Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	10		
WLD106AA		Introduction to SMAW	5
WLD106AC		SMAW 7018 Plate 5	

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm10?id=15993197>

Starting Term: 2024 Fall
Final Term: 9999

ARIZONA GENERAL EDUCATION CURRICULUM - A (AGEC-A) IN ARIZONA GENERAL EDUCATION CURRICULUM - A

Total Credits: 35*-44
Major Code: 8001

Description

Designed to satisfy General Education requirements in many liberal arts majors as well as other majors that articulate with an Associate in Arts degree (e.g., social sciences, fine arts, humanities, elementary education). AGECE-A requires a minimum of college mathematics or college algebra to satisfy the Mathematics [MA] requirement.

General Education Requirements

Arizona General Education Curriculum (AGEC)

AGEC-A Credits: 35*-44

The Arizona public community colleges and universities have agreed upon a common structure for a general education core. This core provides s

First-Year Composition [FYC] Credits: 6*

ENG101 First-Year Composition (3) OR

ENG107 First-Year Composition for ESL (3) AND

ENG102 First-Year Composition (3) OR

ENG108 First-Year Composition for ESL (3) 6*

*FYC may be met with fewer than 6 credits if student has transfer credit from ASU, NAU or UAZ for a single course that meets FYC in full.

Literacy and Critical Inquiry [L] Credits: 3

Any approved general education course in the Literacy and Critical Inquiry [L] area.

Mathematics [MA] Credits: 3-6

MAT140 College Mathematics (5) OR

MAT141 College Mathematics (4) OR

MAT142 College Mathematics (3) OR

MAT145 College Mathematics with Review (5) OR

MAT146 College Mathematics with Review (6) OR

Higher approved general education course in the Mathematical Applications [MA] area (3-6) 3-6

Computer/Statistics/Quantitative Applications [CS] Credits: 3

Any approved general education courses in the Computer/Statistics/Quantitative Applications [CS] area.

Humanities, Arts and Design [HU] Credits: 6

Any approved general education courses in the Humanities, Arts and Design [HU] area.

Social-Behavioral Sciences [SB] Credits: 6

Any approved general education courses in the Social-Behavioral Sciences [SB] area.

Natural Sciences [SG]/[SQ] Credits: 8

Any approved general education course in the Science Quantitative [SQ] area (4) AND

Any approved general education course in the Science Quantitative [SQ] area or the Science General [SG] area (4). 8

Awareness Areas Credits: 0-6

These requirements may be shared with other AGECE requirements. See the AGECE matrix on aztransfer.com for course designations.

Cultural Diversity in the US [C] Credits: 0-3

Any approved general education course in the Cultural Diversity in the U.S. [C] area.

Historical/Global Awareness [H]/[G] Credits: 0-3

Any approved general education course in the Historical [H] or Global [G] area.

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm10?id=15993199>

Starting Term: 2024 Fall

Final Term: 9999

ARIZONA GENERAL EDUCATION CURRICULUM - B (AGEC-B) IN ARIZONA GENERAL EDUCATION CURRICULUM - B

Total Credits: 32-37

Major Code: 8002

Description

Designed to satisfy the General Education requirements in the Associate in Business-General Requirements (ABUS-GR) and Associate in Business-Special Requirements (ABUS-SR) degrees. AGECE-B requires a minimum of brief calculus to satisfy the Mathematics [MA] requirement.

General Education Requirements

Arizona General Education Curriculum (AGECE)

AGECE-B Credits: 32-37

The Arizona public community colleges and universities have agreed upon a common structure for a general education core. This core provides s

First-Year Composition [FYC] Credits: 6

ENG101 First-Year Composition (3) OR

ENG107 First-Year Composition for ESL (3) AND

ENG102 First-Year Composition (3) OR

ENG108 First-Year Composition for ESL (3) 6*

*FYC may be met with fewer than 6 credits if student has transfer credit from ASU, NAU or UAZ for a single course that meets FYC in full.

Literacy and Critical Inquiry [L] Credits: 3

Any approved general education course in the Literacy and Critical Inquiry [L] area. 3

Mathematics [MA] Credits: 3-5

MAT212 Brief Calculus (3) OR

MAT213 Brief Calculus (4) OR

Higher general education courses in the Mathematical Applications [MA] area (3-5). 3-5

Computer/Statistics/Quantitative Applications [CS] Credits: 3

CIS105 Survey of Computer Information Systems 3

Humanities, Arts and Design [HU] Credits: 6

Any approved general education courses in the Humanities, Arts and Design [HU] area. 6

Students are encouraged to choose course work from more than one discipline.

Social-Behavioral Sciences [SB] Credits: 6
ECN211 Macroeconomic Principles (3) AND
ECN212 Microeconomic Principles (3) 6

Natural Sciences [SG]/[SQ] Credits: 8
Any approved general education course in the Science Quantitative [SQ] area (4) AND
Any approved general education course in the Science Quantitative [SQ] area or the Science General [SG] area (4). 8

Awareness Areas Credits: 0-6
These requirements may be shared with other AGEC requirements. See the AGEC matrix on aztransfer.com for course designations.

Cultural Diversity in the US [C] Credits: 0-3
Any approved general education course with the Cultural Diversity in the U.S. [C] designation. 0-3

Historical/Global Awareness [H]/[G] Credits: 0-3
Any approved general education course with the Historical [H] or Global [G] awareness area designation. 0-3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm10?id=15993198>

Starting Term: 2024 Fall
Final Term: 9999

ARIZONA GENERAL EDUCATION CURRICULUM - S (AGEC-S) IN ARIZONA GENERAL EDUCATION CURRICULUM - S

Total Credits: 36*-52
Major Code: 8003

Description

Designed to satisfy General Education requirements in majors with more prescriptive mathematics and mathematics-based science requirements such as many in the sciences, technology, engineering and mathematics that articulate with an Associate in Science degree. AGEC-S requires a minimum of the first course in a calculus sequence to satisfy the Mathematics [MA] requirement, and a minimum of eight (8) credits of either university chemistry, university physics, general biology for majors, or physical and historical geology to satisfy the Natural Sciences [SQ/SG] requirement. In addition, students must select six (6)- to ten (10) additional credits of Subject Options composed of math and/or science appropriate to their major.

General Education Requirements

Arizona General Education Curriculum (AGEC)
AGEC-S Credits: 36*-52
The Arizona public community colleges and universities have agreed upon a common structure for a general education core. This core provides s

First-Year Composition [FYC] Credits: 6*
ENG101 First-Year Composition (3) OR
ENG107 First-Year Composition for ESL (3) AND
ENG102 First-Year Composition (3) OR
ENG108 First-Year Composition for ESL (3) 6*

*FYC may be met with fewer than 6 credits if student has transfer credit from ASU, NAU or UAZ for a single course that meets FYC in full.

Literacy and Critical Inquiry [L] Credits: 0-3**
Recommend selecting a course that satisfies [L] Literacy and Critical Inquiry and [SB] Social-Behavioral Sciences or [L] Literacy and Critica

**0 credits only if shared with [HU] or [SB]

Mathematics [MA] Credits: 4-5
MAT220 Calculus with Analytic Geometry I (5) OR
MAT221 Calculus with Analytic Geometry I (4) OR
Higher approved general education course in the Mathematical Applications [MA] area for which MAT22+ is a prerequisite. (4-5) 4-5

Humanities, Arts and Design [HU] Credits: 6
Any approved general education courses in the Humanities, Arts and Design [HU] area. 6

Social-Behavioral Sciences [SB] Credits: 6
Any approved general education courses in the Social-Behavioral Sciences [SB] area. 6

Natural Sciences [SG]/[SQ] Credits: 8-10
Students must complete eight to ten (8-10) credits of General Chemistry, University Physics, General Biology for Majors, or Geology.

CHM150 General Chemistry I (4) OR
CHM151 General Chemistry I (3) AND
CHM151LL General Chemistry I Laboratory (1) OR
CHM150AA General Chemistry I (5) OR
CHM151AA General Chemistry I (4)
AND
CHM152 General Chemistry II (3) AND
CHM152LL General Chemistry II Laboratory (1) OR
CHM152AA General Chemistry II (4) 8-9

OR
PHY115 University Physics I (5) OR
PHY121 University Physics I: Mechanics (4)
AND
PHY116 University Physics II (5) OR
PHY131 University Physics II: Electricity and Magnetism (4) 8-10

OR
BI0181++ General Biology (Majors) I (4) AND
BI0182++ General Biology (Majors) II (4) 8

OR
GLG101 Introduction to Geology I – Physical Lecture (3) AND
GLG103 Introduction to Geology I – Physical Laboratory (1) OR
GLG101IN Introduction to Geology I – Physical (4)
AND
GLG102 Introduction to Geology II – Historical Lecture (3) AND
GLG104 Introduction to Geology II – Historical Laboratory (1) OR
GLG102IN Introduction to Geology II – Historical (4) 8

Subject Options Credits: 6–10

Refer to transfer resources, including academic advisement and transfer guides, to select six to ten (6–10) additional math and/or science cr

Awareness Areas Credits: 0–6

These requirements may be shared with other AGECE requirements. See the AGECE matrix on aztransfer.com for course designations.

Cultural Diversity in the US [C] Credits: 0–3

Any approved general education course in the Cultural Diversity in the U.S. [C] area. 0–3

Historical/Global Awareness [H]/[G] Credits: 0–3

Any approved general education course in the Historical [H] or Global [G] area. 0–3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=16453190>

Starting Term: 2025 Fall

Final Term: 9999

ACADEMIC CERTIFICATE (AC) IN AFRICAN-AMERICAN STUDIES

Total Credits: 15–18

Major Code: 6226N

Description

The interdisciplinary Academic Certificate (AC) in African-American Studies enhances students understanding of African-Americans by examining history, social issues, literature, culture, religion, ethnic relations, and gender issues. Through coursework, students develop skills in critical thinking, inquiry, and discourse while becoming more informed.

Program Notes

This program is not eligible for Title IV Federal Financial Aid. Courses selected must satisfy the following General Education Requirements: Awareness Area: Cultural Diversity in the United States (C) 3 credits Historical Awareness (H) 3 credits Core Area: Humanities (HU) 3 credits Social and Behavioral Sciences (SB) 6 credits

Required Courses

Required Courses	Course #	Course Title	Credits
Credits: 6			
AFR110		Introduction to African-American Studies	3
AFR/ASB/CCS202		Ethnic Relations in the United States	3

Restricted Electives

Restricted Electives	Course #	Course Title	Credits
Credits: 9–12			
AFR/HIS203		African-American History to 1865	3
AFR/HIS204		African-American History 1865 to Present	3
ENH114		African American Literature	3
HUM214		African-Americans in Film	3
SOC143		Sociology of African American Problems	3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=189716>

Starting Term: 2024 Fall

Final Term: 9999

ACADEMIC CERTIFICATE (AC) IN CERAMICS

Total Credits: 33

Major Code: 6256N

Description

The Academic Certificate (AC) in Ceramics is designed for students who wish to develop specialized skills in ceramics beyond the foundational level. The courses in this certificate offer an emphasis in creative problem-solving and portfolio development, as well as the advanced training required for art careers. With the certificate, students may pursue a career as a practicing artist or continue their education at specialized art schools. An Associate in Arts, Fine Arts (AAFA) is also available.

Program Notes

This program is not eligible for Title IV Federal Financial Aid. Students must earn a grade of C or better in all courses within the program.

Admission Criteria

NA

Program Prerequisites

Program PrerequisitesCourse #Course TitleCredits
Credits: NA
NA

Required Courses

Required CoursesCourse #Course TitleCredits
Credits: 18
ARH102 Art from Renaissance to Modernism 3
ART111 Drawing I 3
ART112 Two-Dimensional Design 3
ART113 Color 3
ART115 Three-Dimensional Design 3
ART255 Art Marketing 3

Restricted Electives

Restricted ElectivesCourse #Course TitleCredits
Credits: 15
ART161 Ceramics I 3
ART162 Ceramics II 3
ART261 Ceramics III 3
ART262 Ceramics IV 3
ART290AC Studio Art 3
ART290GC Studio Art: Ceramics 3
ART290KC Studio Art: Glazing Techniques 3
ART290LC Studio Art: Clay Bodies 3

Free Electives

Free ElectivesCourse #Course TitleCredits
Credits: NA
NA

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm?id=125955>

Starting Term: 2019 Spring
Final Term: 9999

ACADEMIC CERTIFICATE (AC) IN COMMUNICATION COMPETENCE IN THE WORKPLACE

Total Credits: 30-33
Major Code: 6219N

Description

The Academic Certificate (AC) in Communication Competence in the Workplace is an interdisciplinary program of study that provides intensive study of written and oral communication skills in different contexts including interpersonal communication, small group interaction, team-building, problem solving, public speaking and presentation skills, conflict resolution, assertiveness, and leadership. Students develop skills to enhance their professional, social, and personal interactions, and become more competitive and effective in the workforce.

Program Notes

This program is not eligible for Title IV Federal Financial Aid. Students must earn a grade of C or better for all courses within the Required Courses area.

Required Courses

Required CoursesCourse #Course TitleCredits
Credits: 18-21
COM110 Interpersonal Communication 3
COM225 Public Speaking 3
COM230 Small Group Communication 3
COM282AC Service-Learning Experience in Communication 3

CRE101 College Critical Reading and Critical Thinking (3) OR
Equivalent as Indicated by Assessment 0-3

ENG101 First-Year Composition (3) OR
ENG107 First-Year Composition for ESL (3) 3

ENG102 First-Year Composition (3) OR
ENG108 First Year Composition for ESL (3) 3

Restricted Electives

Restricted ElectivesCourse #Course TitleCredits
Credits: 9
If choosing BPC110 or CIS105 only one can be applied

BPC110	Computer Usage and Applications	3
CIS105	Survey of Computer Information Systems	3
COM207	Introduction to Communication Inquiry	3
COM222	Argumentation	3
COM/THP241	Oral Interpretation of Literature	3
COM250	Introduction to Organizational Communication	3
COM259	Communication in Business and Professions	3
COM263	Elements of Intercultural Communication	3
ENG111	Technical and Professional Writing	3
GBS233	Business Communication	3
IBS109	Cultural Dimension for International Trade	3
SWU295	Foundations of Social Work Practice	3

Free Electives

Free ElectivesCourse #Course TitleCredits

Credits: 3

Any approved General Education course in the Cultural Awareness (C) value (3) OR

COM++++ Any COM communication course (3) except courses used to satisfy Required Courses or Restricted Electives areas. 3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm?id=114839>

Starting Term: 2018 Spring

Final Term: 9999

ACADEMIC CERTIFICATE (AC) IN COMMUNICATION SKILLS FOR NON-NATIVE ENGLISH SPEAKERS

Total Credits: 30

Major Code: 6222N

Description

The Academic Certificate (AC) in Communication Skills for Non-Native English Speakers is an interdisciplinary program of study designed to extend traditional ESL coursework. It provides Non-Native English Speakers with oral and written communication skills including interpersonal communication, small group interaction, team-building, problem solving, public speaking and presentation skills, conflict resolution, assertiveness, and leadership. Students develop skills to enhance their professional, social, and personal interactions, and become more competitive and effective in the workforce.

Program Notes

This program is not eligible for Title IV Federal Financial Aid.Students must earn a grade of C or better for all courses within the Required Courses area.

Required Courses

Required CoursesCourse #Course TitleCredits

Credits: 21

COM120 Articulation and Pronunciation for Effective Communication 3

COM221 Oral Fluency in American Speech 3

COM282AC Service-Learning Experience in Communication 3

COM100 Introduction to Human Communication (3) OR

COM110 Interpersonal Communication (3) 3

CRE101 College Critical Reading and Critical Thinking (3) OR

Equivalent as Indicated by Assessment 3

ENG101 First Year Composition (3) OR

ENG107 First-Year Composition for ESL (3) 3

ENG102 First Year Composition (3) OR

ENG108 First Year Composition for ESL (3) 3

Restricted Electives

Restricted ElectivesCourse #Course TitleCredits

Credits: 9

If choosing BPC110 or CIS105 only one can be applied

BPC110 Computer Usage and Applications 3

CIS105 Survey of Computer Information Systems 3

COM230 Small Group Communication 3

COM259 Communication in Business and Professions 3

ENG111 Technical Writing 3

GBS233 Business Communication 3

IBS109 Cultural Dimension for International Trade 3

SWU295 Foundations of Social Work Practice 3

Any approved General Education course in the cultural awareness [C] value (3) OR

COM+++ Any COM Communication course (3) 3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=15993333>

Starting Term: 2025 Fall

Final Term: 9999

ACADEMIC CERTIFICATE (AC) IN CREATIVE WRITING

Total Credits: 24
Major Code: 6224N

Description

The Academic Certificate (AC) in Creative Writing program is designed to provide students and professional writers with access to a community of writers and creative writing activities, instruction and guidance from established authors, and ongoing support in improving their writing skills and marketing their work. As students take courses in the program, they will build a portfolio of original work that may be submitted for publication. The program offers classes, workshops, and other activities such as readings and contests, which are accessible to writers of all levels regardless of academic or professional standing. The program aims to serve a diverse community who may be underrepresented in traditional creative writing programs. Completion of the certificate does not lead to a particular degree program, but may aid students in their pursuit of a career in the writing professions and in their continued enjoyment of writing for personal growth.

Program Notes

This program is not eligible for Title IV Federal Financial Aid. Students must earn a grade of C or better in all courses within the program.

Admission Criteria

Students who wish to enroll in the Creative Writing program must complete a formal application; contact Program Director.

Required Courses

Required Courses Course # Course Title Credits
Credits: 21

ENG210 Creative Writing (3) may be substituted for CRW150 with permission of Program Director.
CRW150 Introduction to Creative Writing 3

CRW200 must be repeated for a total of two (2) credits.
CRW200 Readings for Writers (1) 2

CRW201 Portfolio 1

Students must complete six (6) credits from Series I and nine (9) credits from Series II in consultation with a Program Director.

Series I: Credits: 6
Students must complete two (2) of the following courses for a total of six (6) credits.

CRW120 Introduction to Writing Children's Literature 3
CRW160 Introduction to Writing Poetry 3
CRW170 Introduction to Writing Fiction 3
CRW172 Introduction to Comic Book Writing 3
CRW180 Introduction to Writing Nonfiction 3
CRW190 Introduction to Screenwriting 3
TH0118 Playwriting 3

Series II: Credits: 9
Students must complete three (3) of the following courses for a total of nine (9) credits.

CRW202 The Writer as Witness 3
CRW204 Journaling 3
CRW220 Intermediate Writing Children's Literature 3
CRW251 Topics in Creative Writing 3
CRW260 Intermediate Poetry Writing 3
CRW261 Topics in Writing: Poetry 3
CRW270 Intermediate Fiction Writing 3
CRW271 Topics in Writing: Fiction 3
CRW272 Planning and Structuring the Novel 3
CRW273 Writing the Novel 3
CRW274 Revising the Novel 3
CRW281 Topics in Writing: Non-Fiction 3
CRW290 Intermediate Screenwriting 3
CRW291 Topics in Writing: Plays 3

Restricted Electives

Restricted Electives Course # Course Title Credits
Credits: 3

CRW++++ Any CRW Creative Writing prefixed course not listed under Required Courses area. 1-3
ENG235 Magazine Article Writing 3
ENH++++ Any ENH English Humanities prefixed course 3
HUM/THF210 Contemporary Cinema 3
THE260 Film Analysis 3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=182649>

Starting Term: 2023 Fall
Final Term: 9999

ACADEMIC CERTIFICATE (AC) IN DRAWING AND PAINTING

Total Credits: 33
Major Code: 6257N

Description

The Academic Certificate (AC) in Drawing and Painting is designed for students who wish to develop specialized skills in drawing and painting beyond the foundational level. The courses in this certificate offer an emphasis in creative problem-solving and portfolio development, as well as the advanced training required for art careers. With the certificate, students may pursue a career as a practicing artist or continue their education at specialized art schools. An Associate in Arts, Fine Arts (AAFA) is also available.

Program Notes

This program is not eligible for Title IV Federal Financial Aid. Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	18		
ARH102		Art from Renaissance to Modernism	3
ART111		Drawing I	3
ART112		Two-Dimensional Design	3
ART113		Color	3
ART115		Three-Dimensional Design	3
ART255		Art Marketing	3

Restricted Electives

Restricted Electives	Course #	Course Title	Credits
Credits:	15		
Complete 15 credits from the following list of courses.			

ART116		Life Drawing I	3
ART117		Life Drawing II	3
ART118		Art Anatomy	3
ART122		Drawing II	3
ART165		Watercolor Painting I	3
ART166		Watercolor Painting II	3
ART167		Painting I	3
ART168		Painting II	3
ART211		Drawing and Composition III	3
ART216		Life Drawing III	3
ART217		Life Drawing IV	3
ART222		Drawing and Composition IV	3
ART263		Figure Painting	3
ART265		Watercolor Painting III	3
ART266		Watercolor Painting IV	3
ART267		Painting III	3
ART268		Painting IV	3
ART290AA		Studio Art	1
ART290AB		Studio Art	2
ART290AC		Studio Art	3
ART290BC		Studio Art: Drawing	3
ART290DC		Studio Art: Life Drawing	3
ART290HC		Studio Art: Watercolor	3
ART290JC		Studio Art: Color	3
ART290PC		Studio Art: Painting	3

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=188736>

Starting Term: 2025 Fall

Final Term: 9999

ACADEMIC CERTIFICATE (AC) IN LANGUAGE STUDIES

Total Credits: 12-18

Major Code: 6237N

Description

The Academic Certificate (AC) in Language Studies is designed to provide students with a foundation in the study of culture, language, and linguistic structures. The certificate provides students with the essential language skills and vocabulary to communicate in a language other than English.

Program Notes

This program is not eligible for Title IV Federal Financial Aid. Students must earn a grade of C or better in all courses within the program. Students may qualify to enter higher level language courses via departmental placement. Students wishing to earn credit for courses in which they placed out of should take the CLEP examination or apply credits earned through Advanced Placement (AP) or International Baccalaureate (IB) exams.

Program Prerequisites

Program Prerequisites	Course #	Course Title	Credits
Credits:	0-5		
201-level proficiency in a language other than English as indicated by assessment or coursework.			

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	6-8		
SLC201		Introduction to Linguistics	3

AND

Students must choose 3-5 credits in 202 or higher-level coursework in the language used to satisfy the program prerequisites.

Restricted Electives

Restricted Electives Course # Course Title Credits

Credits: 6-10

Students must choose two (2) courses from the list below. Prerequisites may not be used to satisfy the Restricted Electives:

AFR/ASB/CCS202 Ethnic Relations in the United States (3) OR
SOC241 Race and Ethnic Relations (3) 3

COM163 Intercultural Communication in Everyday Life 3
COM263 Elements of Intercultural Communication 3
JPH245 Traditional and Modern Japanese Culture 3
PSY132 Psychology and Culture 3
AHU+++ Any AHU Arabic Humanities course(s)
ARB+++ Any ARB Arabic course(s)
ASL+++ Any ASL American Sign Language course(s)
CHI+++ Any CHI Chinese course(s)
FLA+++ Any FLA Foreign Language Acquisition course(s)
FRE+++ Any FRE French course(s)
GER+++ Any GER German course(s)
GRK+++ Any GRK Greek course(s)
IPP+++ Any IPP Interpreter Preparation Program course(s)
ITA+++ Any ITA Italian course(s)
ITH+++ Any ITA Italian Humanities course(s)
JPN+++ Any JPN Japanese course(s)
LAT+++ Any LAT Latin course(s)
NAV+++ Any NAV Navajo course(s)
NVH+++ Any NVH Navajo Humanities course(s)
PIM+++ Any PIM Pima course(s)
POR+++ Any POR Portuguese course(s)
RUS+++ Any RUS Russian course(s)
SLC+++ Any SLC Studies in Language and Culture course(s)
SPA+++ Any SPA Spanish course(s)
SPH+++ Any SPH Spanish Humanities course(s)
TRS+++ Any TRS Translation and Interpretation course(s)

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm?id=24580>

Starting Term: 2008 Summer I

Final Term: 9999

ACADEMIC CERTIFICATE (AC) IN ORAL COMMUNICATION FLUENCY FOR NON-NATIVE ENGLISH SPEAKERS

Total Credits: 15

Major Code: 6223N

Description

The Academic Certificate (AC) in Oral Communication Fluency for Non-Native English Speakers is a concentrated program of study in communication and oral fluency designed to extend traditional ESL coursework. It provides Non-Native English Speakers with intense practice in pronunciation and fluency of American speech as well as experience in all communication contexts including interpersonal communication, small group interaction, problem solving, and public speaking. Students develop skills to enhance their professional, academic, and social interactions to become more competitive and effective in the academic environment and in the workplace.

Program Notes

This program is not eligible for Title IV Federal Financial Aid. Students must earn a grade of "C" or better for all courses within the Required Courses area.

Required Courses

Required Courses Course # Course Title Credits

Credits: 12

COM110 Interpersonal Communication 3
COM120 Articulation and Pronunciation for Effective Communication 3
COM221 Oral Fluency in American Speech 3
COM282AC Service-Learning Experience in Communication 3

Restricted Electives

Restricted Electives Course # Course Title Credits

Credits: 3

Any approved General Education course in the cultural awareness [C] value

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm11?id=16456981>

Starting Term: 2025 Fall

Final Term: 9999

ACADEMIC CERTIFICATE (AC) IN SPANISH LANGUAGE AND CULTURE

Total Credits: 25
Major Code: 6243N

Description

The Academic Certificate (AC) in Spanish Language and Culture is designed to provide students with the essential language skills and vocabulary to communicate with confidence in diverse communicative situations. Instruction in the diverse cultural context will help students to understand the complex interdependence of language and culture.

Program Notes

This program is not eligible for Title IV Federal Financial Aid. Students must earn a grade of C or better in all courses within the program. Students may qualify to enter higher level Spanish courses by placement or may qualify to exempt out of taking any Spanish courses by assessment. Students wishing to earn credit for any course of which they are exempt by assessment should take the CLEP examination.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits: 16			
SPA101	Elementary Spanish I	4	
SPA102	Elementary Spanish II	4	
SPA201	Intermediate Spanish I	4	
SPA202	Intermediate Spanish II	4	

Restricted Electives

Restricted Electives	Course #	Course Title	Credits
Credits: 9			
Select six (6) credits taught in Spanish and three (3) credits taught in English.			

ARH217	Mexican Art History	3	
FLA240	Foreign Language Teaching Methods	3	
HIS145	History of Mexico	3	
MHL156	Music in Latin America and the Caribbean	3	3
SLC201	Introduction to Linguistics	3	
SPA115	Beginning Spanish Conversation I	3	
SPA116	Beginning Spanish Conversation II	3	
SPA117	Health Care Spanish I	3	
SPA118	Health Care Spanish II	3	
SPA119	Spanish for Educational Settings I	3	
SPA120	Spanish for Educational Settings II	3	
SPA205	Spanish for Medical Interpretation I	3	
SPA206	Spanish for Medical Interpretation II	3	
SPA225	Intermediate Spanish Conversation I	3	
SPA226	Intermediate Spanish Conversation II	3	
SPA235	Advanced Spanish Conversation I	3	
SPA236	Advanced Spanish Conversation II	3	
SPA241	Spanish and Spanish-American Film I	3	
SPA242	Spanish and Spanish-American Film II	3	
SPA251	Spanish Civilization	3	
SPA265	Advanced Spanish I	3	
SPA266	Advanced Spanish II	3	
SPA282++	Volunteerism for Spanish: A Service Learning Experience (any suffixed course)	1-3	
SPA298++	Special Projects (any suffixed course)	1-3	
SPH245	Hispanic Heritage in the Southwest	3	
SPH298++	Special Projects (any suffixed course)	1-3	

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm10?id=175640>

Starting Term: 2023 Fall
Final Term: 9999

BACHELOR OF ARTS (BA) IN EARLY CHILDHOOD EDUCATION - DUAL LANGUAGE

Total Credits: 120
Major Code: 9304

Description

The Bachelor of Arts (BA) in Early Childhood Education - Dual Language is designed to prepare individuals for employment in early childhood professions in dual language educational settings. The Bachelor's degree includes advanced instruction in child development, curriculum design and development, theory and practice in the education of young children, and the intersections of family, community, and learning and development for dual language learners. Upon completion of the Bachelor's of Arts, students may work as teachers of children from birth to third grade. The BA in Early Childhood Education - Dual Language degree provides a pathway for students seeking Arizona Department of Education Early Childhood Teacher Certification (Birth - Age 8 or Grade 3) with an endorsement in Bilingual Education and/or English as a Second Language. Certificates of Completion (CCL) in Foundation of Early Childhood Education and Early Childhood Education, as well as the Associate of Applied Science (AAS) in Early Childhood Education are also available and embedded within the Bachelor's of Arts.

Program Notes

Students must earn a grade of C or better in all courses within the program. For some employment and field experiences (including internship courses), students will be required to have a current Identity Verified Print (IVP) Fingerprint Clearance Card and a current TB test. Students currently on a pathway to receive an Associate in Arts with an Emphasis in Early Childhood Education who are interested in pursuing the Bachelor's of Arts in Early Childhood Education - Dual Language should consult with a faculty or academic advisor to determine courses needed to best align with this program.

Required Courses

Required CoursesCourse #Course TitleCredits

Credits: 79–87

CFS101AH Visual Art Experiences for Young Children (1) AND

ECH281 Movement/Music for the Young Child (1) OR

EED210 Creative and Cognitive Play (3) OR

ECH128 Early Learning: Play and the Arts (3) 2–3

CFS123 Health and Nutrition In Early Childhood Settings (1) AND

CFS125 Safety in Early Childhood Settings (1) AND

ECH280 Food Experiences With Young Children (1) OR

EED215 Early Learning: Health, Safety, Nutrition and Physical Fitness (3) 3

CFS/ECH176 Child Development (3) OR

CFS235 Developing Child: Theory into Practice, Prenatal – Age Eight (3) OR

EED205 The Developing Child: Prenatal to Age Eight (3) 3

CFS/ECH269 Early Childhood Education Seminar (1) AND

CFS/ECH287 Professional Development in Early Childhood Education (1) OR

EED255 Independent Study Portfolio Development and Writing for the Early Childhood Profession (3) 2–3

CFS/ECH271 Arranging the Environment (1) AND

CFS282 Mainstreaming The Young Child with A Disability (1) AND

ECH282 Discipline/Guidance of Child Groups (1) OR

EED212 Guidance, Effective Interactions and the Environment (3) 3

CFS/ECH273 Math for the Young Child (1) AND

CFS/ECH275 Literacy Development and the Young Child (1) AND

ECH272 Science for the Young Child (1) AND

ECH279 Early Childhood Curriculum Development (1) OR

EED278 Early Learning Curriculum and Instruction – Birth to Age Eight (3) 3–4

CFS/ECH284AB Early Childhood Teaching Internship (3) OR

EED260 Early Childhood Infant/Toddler Internship (1) AND

CFS/ECH284AA Early Childhood Teaching Internship (1) OR

EED261 Early Childhood Preschool Internship (1) 2–3

ECH140 Learning Made Visible Through Documentation (1) AND

ECH270 Observing Young Children (1) OR

EED280 Standards, Observation and Assessment of Typical/Atypical Behaviors of Young Children Birth Age Eight (3) 2–3

EDU/EED115 Digital Literacy for Teaching and Learning in Education 3

EDU220 Introduction to Serving English Language Learners (ELL) 3

EDU225 Professionalism and Ethics in Education 1

EDU/ENH291 Children's Literature 3

EED200 Foundations of Early Childhood Education 3

EED222 Introduction to the Exceptional Young Child: Birth to Age Eight 3

EED225 Language and Literacy in the Context of Culture and Relationships 3

EEP311 Foundations of Dual Language Learning – Birth to Age Eight 3

EEP312 Family, Community, and School Collaboration for Dual Language Learners – Birth to Age Eight 3

EEP313 Bilingual and ESL Methods – Birth to Age Eight 3

EEP314 Teaching of Reading and Writing for Dual Language Learners – Birth to Age Eight 3

EEP315 Social Studies and Arts Methods for Dual Language Learners – Birth to Age Eight 3

EEP316 Math and Science Methods for Dual Language Learners – Birth to Age Eight 3

EEP411 Sheltered Instruction for Bilingual Settings – Birth to Age Eight 3

EEP412 Assessment of Dual Language Learners – Birth to Age Eight 3

EEP413 Reading Instructional Practices, Interventions, and Assessments – Birth through Adolescence 3

EEP414 Science of Reading and Systematic Phonics Instruction – Birth through Adolescence 3

EEP415 Student Teaching in a Dual Language K–3 Setting 3

ENG213 Introduction to the Study of Language (3) OR

SLC201 Introduction to Linguistics (3) 3

FYE101 Introduction to College, Career and Personal Success (1) OR

FYE103 Exploration of College, Career and Personal Success (3) 1–3

Select one of the following US History/Government options. These courses satisfy the United States Constitution requirement for state teacher

GCU/POS113 United States and Arizona Social Studies (3) OR

HIS103 United States History to 1865 (3) AND

POS221 Arizona Constitution (1) 3–4

General Education Requirements

Arizona General Education Curriculum (AGEC)

AGEC–A Credits: 17–20

A single course with an [HU], [SB], [L], or [SG]/[SQ] designation may also be used to satisfy the Oral Communication, Critical Reading, or Aw

First-Year Composition [FYC] Credits: 6

ENG101 First-Year Composition (3) OR

ENG107 First-Year Composition for ESL (3) AND

ENG102 First-Year Composition (3) OR

ENG108 First-Year Composition for ESL (3) 6

Mathematics [MA] Credits: 3–6

MAT140 College Mathematics (5) OR

MAT141 College Mathematics (4) OR

MAT142 College Mathematics (3) OR

MAT145 College Mathematics with Review (5) OR

MAT146 College Mathematics with Review (6) OR

Higher level course in the Mathematical Applications [MA] area (3–6) 3–6

Natural Sciences [SG]/[SQ] Credits: 8

Any approved general education course in the Natural Sciences (Quantitative) [SQ] area. (4) AND

Any approved general education course in the Natural Sciences (Quantitative) [SQ] area or the Natural Sciences (General) [SG] area. (4) 8

MCCCD Additional Requirements
MCCCD Additional Requirements Credits: 3
Courses in this area may also be applied to the AGEC Core Requirements. To minimize total credits required for degree and maximize transferab

Oral Communication Credits: 3
COM100 Introduction to Human Communication (3) OR
COM110 Interpersonal Communication (3) OR
COM225 Public Speaking (3) OR
COM230 Small Group Communication (3) OR
COM259 Communication in Business and Professions (3) OR
COM263 Elements of Intercultural Communication (3) 3

Critical Reading Credits: N/A
This area is not required for Bachelor programs

<https://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm10?id=175606>

Starting Term: 2023 Fall
Final Term: 9999

BACHELOR OF APPLIED SCIENCE (BAS) IN DATA ANALYTICS AND PROGRAMMING

Total Credits: 120-131
Major Code: 9306

Description

The Bachelor of Applied Science (BAS) in Data Analytics and Programming is an advanced program which brings together data analytics and object-oriented programming in this emerging field. This BAS in Data Analytics and Programming is designed to prepare students to model, synthesize, analyze, and present large data sets for business decision making. Courses will focus on the techniques, programming languages and computer software used in industry to store and extract data from various data sources, model and integrate that data, and visualize this data for business decision making and intelligence gathering. A bachelor's degree in Data Analytics and Programming prepares students for application to professional graduate and post-baccalaureate programs in a variety of disciplines in data analytics, programming, and data science.

Program Notes

Students must earn a grade of C or better in all courses within the program.

Required Courses

Required Courses	Course #	Course Title	Credits
Credits:	100-105		
CIS105		Survey of Computer Information Systems	3
CIS114DE		Excel Spreadsheet	3
CIS150AB		Object-Oriented Programming Fundamentals	3
CIS156		Python Programming: Level 1	3
CIS162AD		C# Programming I	3
CIS214DA		Advanced Excel for Data Analytics	3
CIS215		Foundations of Data Analytics and Programming	3
CIS216		Data Governance, Management, and Quality	3
CIS224		Project Management Microsoft Project for Windows	3
CIS250		Management of Information Systems	3
CIS256		Python Programming Level II	3
CIS256DA		Python for Data Analytics	3
CIS260BI		Data Visualization: Power BI	3
CIS260TB		Data Visualization: Tableau	3
CIS262AD		C# Level II	3
CIS276DA		My SQL Database (3) OR	
CIS276DB		SQL Server Database (3) 3	
CIS276DC		No SQL 3	
CIS314		Data Privacy and Integrity	3
CIS315		Data Protection 3	
CIS316		Descriptive Analytics	3
CIS317		Data Complexity 3	
CIS318		Predictive Analytics	3
CIS415		Big Data	3
CIS416		Data Analytic Presentations	3
CIS480		Data Analytics and Programming Capstone Project	3
CIS490		Applied Data Analytics and Programming Internship	3
CLD110		Amazon Web Services Cloud Foundations (3) OR	
May be waived by permission of the Program Director, Department or Division Chair (0) 0-3			
CLD120		Amazon Web Services Cloud Architect Associate	3
CLD417		Cloud Analytics	3
COM225		Public Speaking	3
FYE101		Introduction to College, Career and Personal Success (1) OR	
FYE103		Exploration of College, Career and Personal Success (3) 1-3	
GBS220		Quantitative Methods in Business	3
PHI103		Introduction to Logic	3
PSY101		Introduction to Psychology	3
SBU200		Society and Business	3

General Education Requirements

Arizona General Education Curriculum (AGEC)

AGEC-A Credits: 20-26

A single course with an [HU], [SB], [L], or [SG]/[SQ] designation may also be used to satisfy the Oral Communication, Critical Reading, or Aw

First-Year Composition [FYC] Credits: 6

ENG101 First-Year Composition (3) OR

ENG107 First-Year Composition for ESL (3) AND

ENG102 First-Year Composition (3) OR

ENG108 First-Year Composition for ESL (3) 6

Mathematics [MA] Credits: 3-6

MAT150 College Algebra/Functions (5) OR

MAT151 College Algebra/Functions (4) OR

MAT152 College Algebra/Functions (3) OR

MAT155 College Algebra/Functions with Review (5) OR

MAT156 College Algebra/Functions with Review (6) OR

Higher level course in the Mathematical Applications [MA] area (3-6) 3-6

Humanities, Arts and Design [HU] Credits: 3

Any approved general education courses in the Humanities, Arts and Design [HU] area 3

AND

Met by PHI103 in Required Courses.

Natural Sciences [SG]/[SQ] Credits: 8

Any approved general education course in the Natural Sciences (Quantitative) [SQ] area (4) AND

Any approved general education course in the Natural Sciences (Quantitative) [SQ] area or the Natural Sciences (General) [SG] area (4). 8

Awareness Areas Credits: 0-3

These requirements may be shared with Core Requirements.

Cultural Diversity in the US [C] Credits: 0-3

Any approved general education course with the Cultural Diversity with the U.S. [C] awareness area designation. 3

**Maricopa Community Colleges
Field of Interest Matrix 2025-2026**

AREAS/PROGRAM

INSTITUTION

DESCRIPTION

The Maricopa County Community College Field of Interest Matrix identifies all programs currently available for offering within the ten (10) community colleges and skill centers of the district. The programs are grouped under Field of Interest as requested by the colleges. For specific information regarding individual programs, contact the college(s) listed as participating institutions.

Applied Technology

Air Conditioning/Refrigeration/Facilities	GW
Aircraft Maintenance Technology	CG
Aircraft Maintenance Technology-Airframe	CG
Aircraft Maintenance Technology-Powerplant	CG
Airway Science Technology, Flight Emphasis	CG
Applied Electrical Technologies	RS
Architectural and Civil CAD Technology	GC
Architectural AutoCAD	SC
Architectural Technology	SC
Automated Industrial Technology	EM, MC
Automated Industrial Technology I	EM, MC
Automated Industrial Technology II	EM, MC
Automotive Automatic Transmission and Transaxle	GC, GW, MC
Automotive Brake Systems	GC, GW, MC
Automotive Chassis	GC, GW, MC
Automotive Drive Train	GC, GW, MC
Automotive Electrical, Heating, Ventilation and Air Conditioning Systems	GC, GW, MC
Automotive Electronic/Electrical Systems	GC, GW, MC
Automotive Engine and Operations Management	GC, GW, MC
Automotive Engine Management and Repair	GC, GW, MC
Automotive Engine Repair	GC, GW, MC
Automotive Heating, Ventilation and Air Conditioning Systems	GC, GW, MC
Automotive Maintenance and Light Repair	GC, GW, MC

**Maricopa Community Colleges
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AREAS/PROGRAM
INSTITUTION

Automotive Manual Drive Train and Axles	GC, GW, MC
Automotive Service	GC, GW, MC
Automotive Steering and Suspension	GC, GW, MC
Basic Automotive Maintenance	RS
Basic Automotive Repair	GW
Building Inspection	MC
Cable and Wire Harness Assembly	MC
CAD Application	GC
CAD Fundamentals	GC
Caterpillar Technician Training	MC
Certified Flight Instructor Instrument Airplane Rating	CG
CNC Machine Operator	GW, MC
CNC Machining I	GW, MC
CNC Machining I (Day)	GW
CNC Machining II	GW, MC
Collision Repair Technician (Day)	GW
Computer Aided Drafting	MC
Construction Building Codes	MC
Construction Management	MC
Construction Safety OSHA 30	MC
Construction Technology	MC, SM
Construction Trades - Mechanical Trades: Plumbing	GW
Construction Trades - Mechanical Trades: Sheet Metal	GW
Construction Trades: Carpentry	GW, MC, SM
Construction Trades: Carpentry, Commercial and Residential	MC, SM
Construction Trades: Carpentry, Commercial and Residential (Day)	GW
Construction Trades: Construction Management	MC
Construction Trades: Electrical	MC, SM
Construction Trades: Electrical, Commercial and Residential	MC, SM
Construction Trades: Electricity	GW
Construction Trades: Heat and Frost Insulation	GW

**Maricopa Community Colleges
Field of Interest Matrix 2025-2026**

AREAS/PROGRAM
INSTITUTION

Construction Trades: Ironworking	GW
Construction Trades: Masonry	MC, SM
Construction Trades: Millwrighting	GW
Construction Trades: Painting and Drywalling	GW
Construction Trades: Plumbing	MC, SM
Construction Trades: Plumbing, Commercial and Residential	GW, MC, SM
Construction Trades: Pre-Apprenticeship	GW
Construction Trades: Solar Energy	MC
Data Center Operations	EM, MC
Datacenter Administration	EM, GC
Drafting and Design Technology	MC
Educational Construction Trades Partnership: Carpentry	RS
Educational Construction Trades Partnership: Carpentry, Commercial and Residential	RS
Educational Construction Trades Partnership: Electrical	RS
Educational Construction Trades Partnership: Electrical, Commercial and Residential	RS
Educational Construction Trades Partnership: H.V.A.C.r Residential Service	RS
Educational Construction Trades Partnership: Plumbing	RS
Educational Construction Trades Partnership: Plumbing, Commercial and Residential	RS
Electrical Technology	GW
Electrical Technology - Commercial Wiring	GW
Electrical Technology - Industrial Wiring	GW
Electrical Technology: Residential Wiring	GW
Energy and Industrial Technology	EM
Environmental Science and Water Resources Technologies	GW
Environmental Science Technology	GW
Gifted Education	MC
H.V.A.C.r Residential Service	GW, MC
HVAC Commercial Installation and Service Technician	GW

**Maricopa Community Colleges
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AREAS/PROGRAM
INSTITUTION

HVAC Residential Installation and Service Technician (Day)	GW
Industrial Control Systems	EM, MC
Industrial Design Technology	GW
Industrial Design Technology: Design Specialist	GW
Industrial Electrical Systems	EM, MC
Industrial Fluid Systems	EM, MC
Industrial Mechanical Systems	EM, MC
Industrial Sewing	PC
Industrial Technology for Semiconductor	CG, EM, MC
International Residential Code	MC
Introduction to Semiconductor Manufacturing	RS
J-STD Soldering Certification	MC
Lineman Technology Level I	RS
Lineman Technology Level II	RS
Lineman Technology Level III	RS
Lineman Technology Level IV	RS
Manufacturing Production Technology	MC
Mechanical Drafting	MC
Nuclear Power Technology	EM
Precision Optics Level I	RS
Precision Optics Level II	RS
Quality Assurance	GW
Robotics Technology	EM, MC
Semiconductor Manufacturing	RS
Water and Wastewater Treatment	GW
Welding	MC
Welding: Fundamentals	MC
Welding: Fundamentals (Day)	GW
Welding: Gas Metal / Flux Cored Arc Welding (GMAW)/(FCAW)	MC
Welding: Gas Tungsten Arc Welding (GTAW) Ferrous	MC
Welding: Gas Tungsten Arc Welding (GTAW) Ferrous and Non-Ferrous (Day)	GW

**Maricopa Community Colleges
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AREAS/PROGRAM
INSTITUTION

Welding: Gas Tungsten Arc Welding (GTAW) Non-Ferrous	MC
Welding: Shielded Metal Arc Welding (SMAW) Pipe	MC
Welding: Shielded Metal Arc Welding (SMAW) Pipe (Day)	GW
Welding: Shielded Metal Arc Welding (SMAW) Plate	MC

Behavioral Science and Human Services

Addictions and Substance Use Disorders	RS
Addictions and Substance Use Disorders Level I	RS
Addictions and Substance Use Disorders Level II	RS
Administration of Justice	CG, EM, GC, MC, PC, PV, RS, SC, SM
Administration of Justice Studies	CG, EM, GC, MC, PC, PV, RS, SC, SM
Advanced Behavioral Sciences	GC, SM
Advanced Corrections and Detention	RS
Advanced Juvenile Corrections	RS
Associate in Arts, Emphasis in Counseling and Applied Psychological Science	CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Associate in Arts, Emphasis in Criminal Justice	CG, EM, GC, MC, PC, PV, RS, SC, SM
Associate in Arts, Emphasis in Family Life Education	EM, GC, MC, PC, PV, RS, SC, SM
Associate in Arts, Emphasis in Law and Policy	CG, EM, GC, MC, PC, PV, RS, SC, SM
Associate in Arts, Emphasis in Political Science	CG, EM, GC, MC, PC, PV, RS, SC, SM
Associate in Arts, Emphasis in Psychology	CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Associate in Arts, Emphasis in Social Work	EM, GC, MC, PC, PV, RS, SC, SM
Basic Corrections	RS

**Maricopa Community Colleges
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AREAS/PROGRAM
INSTITUTION

Basic Detention	RS
Behavioral Sciences	GC, SM
Child and Family Organizations Management and Administration	GC, RS
Community Emergency Response Team (CERT): Level I	PC
Corrections	CG, EM, GC, MC, PC, PV, RS, SC, SM
Corrections and Detention	RS
Crime Scene Investigation	CG, EM, GC, MC, PC, SC, SM
Developmental Disabilities Specialist	GC
Driver Operator	GC, PC, PV
Emergency Communications	RS
Emergency Communications and Deployment	PC
Emergency Management	GC, PC, PV
Fingerprint Identification and Photography	CG, EM, GC, MC, PC, SC, SM
Fire Science	GC, MC, PC, PV
Fire Service Management	GC, PC, PV
Firearms	RS
Firefighter Operations	GC, MC, PC, PV
Forensic Science	CG, EM, GC, MC, PC, PV, RS, SC, SM
Foundations of Behavioral Sciences	GC, PC, RS, SM
Hazardous Materials Response	PC
Homeland Security	CG, GC, PC, RS, SM
Juvenile Corrections	RS
Law Enforcement	CG, EM, GC, MC, PC, PV, RS, SC, SM
Law Enforcement Field Training	RS
Law Enforcement Investigation	GC, RS
Law Enforcement Training	CG, GC, RS
Law Enforcement Training Academy	GC, RS
Leadership in Public Safety Organizations	CG, GC, PC, RS

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AREAS/PROGRAM
INSTITUTION

Legal Studies	CG, EM, GC, MC, PC, PV, RS, SC, SM
Non-Sworn Fire Service Professional	GC, PC, PV
Paralegal	PV, RS
Paralegal Studies	PC
Professional Addictions Counseling	RS
Public Safety Administration	PC, RS
Public Safety Leadership	RS
Public Safety Technology	RS
Search Warrant Preparation	RS
Substance Use Prevention and Interventions	RS
Terrorism Liaison Training: Level I	PC
Terrorism Liaison Training: Level II	PC
Victimology	CG, GC, MC, PC, PV, RS, SC, SM
Workforce Development and Community Re-Entry	RS
Workforce Development: Foundations in Addictions and Substance Use Disorders	RS

Business, Entrepreneurialism, and Management

Accounting	CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Administrative Professional	EM, GC, PC, PV, SM
Advocate Driven Healthcare: Customer Service	RS
Aesthetician (24 Hours Per Week)	GW
Aesthetician (High School)	GW
Airline Operations	RS
Airline Operations: Reservations and Ticketing Services	RS
Associate in Business, General Requirements (ABUS-GR)	CG, EM, GC, GW, MC, PC, PV, RS, SC, SM

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INSTITUTION

Associate in Business, Special Requirements (ABUS-SR)	CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Automobile Insurance: Customer Service	RS
Baking and Pastry Arts	SC
Bank Account Management: Customer Service	RS
Banking and Finance	GW, PC
Beauty and Wellness	GW, MC
Broadband Telecommunications	RS
Broadband Telecommunications: Field Operations	RS
Business Administration Fastrack	GC, PC, SC
Business Technology: Customer Service	RS
Cannabis Business Administration and Management	SC
Cannabis Business Advanced Entrepreneurship	SC
Cannabis Business Fundamentals	SC
Certified Bookkeeping	GC, PC, PV, RS, SC
Commercial Baking and Pastry	EM, SC
Commercial Real Estate	GC, SC, SM
Cosmetologist (32 Hours Per Week)	GW
Cosmetologist (High School)	GW
Cosmetology Instructor	GW
Credit Counseling: Customer Service	RS
Culinary Arts	EM, SC
Culinary Arts I	EM
Culinary Arts II	EM
Culinary: Foundations	SC
Culinary: Professional	SC
Debt Resolution: Customer Service	RS
Debt Resolution: Sales	RS
Enrolled Agent	GC, PC, PV, RS, SC, SM
Entrepreneurial Studies Level I	GC, GW, MC, PC, PV, RS, SC, SM
Entrepreneurial Studies Level II	GC, GW, MC, PC, RS, SM

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AREAS/PROGRAM
INSTITUTION

Esports Business Operations	GC, PC, PV, RS, SM
Esports Event Production	PV
Fashion Merchandising	MC, PC
Financial Industry	GW
Financial Services	GC, GW, PC, SC, SM
Financial Services Retirement Accounts: Customer Service	RS
Financial Services: Pre-licensure	CG, GC, GW, PC, SC
General Business	CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Hair Stylist (32 Hours Per Week)	GW
Hospitality: Food and Beverage Management	SC
Hospitality: Golf Management	SC
Hospitality: Hotel Management	SC
Hospitality: Meeting and Event Management	SC
Hospitality: Restaurant Management	SC
Hospitality: Spa and Wellness Center Management	SC
Hospitality: Tourism Development and Management	SC
Human Resources Management	GC, GW, MC, PC, RS, SC, SM
Human Resources: Compensation and Benefits	GW, PC, SM
Insurance: Customer Service	RS
Loan Consolidation: Customer Service	RS
Management	GC, MC, PC, PV, RS, SC, SM
Marketing	GC, GW, MC, PC, PV, SC, SM
Marketing and Sales	GC, GW, MC, PC, PV, SC
Massage Therapy (24 Hours Per Week)	GW
Nail Technician	GW
Organizational Leadership	CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Organizational Management	CG, EM, GC, GW, MC, PC, PV, RS, SC, SM

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AREAS/PROGRAM
INSTITUTION

Pharmacy Prescription Benefits: Customer Service	RS
Prescription Prior Authorization: Customer Service	RS
Project Management	MC
Property Insurance: Customer Service	RS
Public Administration	RS
Quality Customer Service	RS
Real Estate Broker: Prelicense	SC
Real Estate: Prelicense	GC, MC, RS, SC, SM
Retail Management	EM, GC, GW, PC, RS, SM
Risk Management and Insurance	RS, PV
Small Business Management II	GC, GW, PC, RS
Small Business Management Level I	CG, EM, GC, GW, PC, RS
Small Business Start-Up	PV
Social Media Marketing	CG, EM, GC, MC, PC, PV, SC, SM
Utilities: Customer Service	RS
Water Utility Operations: Account Services and Delivery Management	RS
Web Hosting: Customer Service	RS

Computer and Information Technology

Adobe Foundations: Animation and Graphics Production	CG, GC, MC, PV, SM
Adobe Foundations: Audio and Video Production	SM
Amazon Web Services Cloud Associate	CG, GC, GW, MC, PC, PV, RS, SC, SM
Amazon Web Services Cloud Practitioner	CG, GC, GW, MC, PC, PV, RS, SC, SM
Amazon Web Services Cloud Specialist	CG, GC, PC, PV, SC, SM
Android App Development	GW, PC, RS, SM
AppleCare Hardware Repair Exam Prep	MC
Associate in Science, Emphasis in Computer Science	CG, EM, GC, GW, MC, PC, PV, RS, SC, SM

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AREAS/PROGRAM
INSTITUTION

Cisco Certified Network Professional: Enterprise	GC, GW, MC, PV, SC, SM
Cisco Certified Network Professional: Enterprise Advanced Routing and Services	GC, MC, PV, SC, SM
Cisco Certified Network Professional: Enterprise Core	GC, MC, PV, SC, SM
Cisco Network Administration and Security	CG, EM, GC, GW, MC, PV, SC, SM
Cisco Network Administration: CCNA	CG, EM, GC, GW, MC, PC, PV, SC, SM
Cisco Network Administration: CCNP	GC, MC, PC, SC, SM
Computer Information Systems	GW
Computer System Configuration and Support	CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Computer System Configuration and Support, Linux	CG, EM, GC, GW, MC, PC, PV, SC, SM
Computer System Configuration and Support, Network	CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Computer System Configuration and Support, Security	CG, EM, GC, GW, PC, PV, RS, SC, SM
Critical Infrastructure	EM, GC
Cross Functional Design and Web Essentials	SC
Cross-Platform App Development	GW, PC, RS, SM
Cyber Defense	EM
Cyber Engineering	CG, EM, GC, MC, PC, PV, RS, SC, SM
Cyber Operations	CG, GC, GW, MC, PV, SC, SM
Cybersecurity	CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Cybersecurity Fundamentals	CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Cybersecurity Management and Information Security	GC
Data Analytics	CG, EM, GW, MC, PV, RS, SC
Data Analytics and Programming	MC
Database Development	EM, SC

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AREAS/PROGRAM
INSTITUTION

Desktop Support	CG, EM, GC, GW, PC, PV, RS, SC, SM
Emerging Technology: Digital and Wireless Technologies	PC
Emerging Technology: Wireless Optimization	PC
Foundations of Mobile App Development	PC, RS, SM
Information Technology	CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
iOS App Development	GW, PC, PV, RS, SM
IT Fundamentals	GC, MC
IT Security Associate	EM
Jamf Training Foundation	MC
Linux Associate	CG, EM, GC, GW, PC, PV, SC, SM
Linux System Administration	EM, GC, PC, PV, SC, SM
Microsoft Desktop Associate	EM, GC, GW, MC, PC, PV, SM
Microsoft Office Professional	CG, EM, GC, PC, PV, RS, SC, SM
Microsoft Office Specialist	CG, GC, PV, RS, SC, SM
Microsoft System Administration	PC
Mobile App Development	PC, PV, RS, SM
Native Mobile App Development	PC, PV, RS, SM
Network and Cyber Fundamentals	GW
Network and Systems Administration	CG, EM, GC, GW, MC, PC, PV, SC, SM
Programming	RS, SM
Programming and Systems Analysis	CG, EM, GC, MC, PC, PV, RS, SC
Programming and Systems Analysis Level I	CG, EM, GC, MC, PC, PV, RS, SC
Programming and Systems Analysis Level II	CG, EM, GC, MC, PC, PV, RS, SC
Python Applications	CG, MC, SM

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AREAS/PROGRAM
INSTITUTION

Red Hat Linux Administrator	EM, GC, GW, MC, PC, SC, SM
Red Hat Linux Engineer	EM, GC, GW, MC, PC, SC, SM
Video Game Production	GC, MC, PV
Video Game Production: Audio and Sound	GC, MC, PV
Video Game Production: Coding and Scripting	GC, MC, PV
Video Game Production: Game Art	GC, MC, PV
Video Game Production: Game Narrative	GC, MC, PV
VMware Foundations	GC, GW, PC
VMware Network Administrator	GC
VMware Systems Administrator	GC, PC
Web App Development	CG, GC, GW, MC, PC, PV, RS, SM, SC
Web Design	CG, EM, GC, PV, RS, SC, SM
Web Design/Development	CG, EM, GC, MC, PC, PV, RS, SC, SM
Web Development	CG, EM, GC, GW, MC, PC, PV, SC, SM
Web Foundations	CG, EM, GC, MC, PC, PV, RS, SC, SM
Windows App Development	PC, RS, SM

Culture and Society

African-American Studies	MC
American Indian Studies	PC, SC
Applied Bilingual Spanish Language Skills	CG, GW, SM
Applied English Language Skills	MC, PV, SM
Applied Storytelling	EM, SM

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INSTITUTION

Associate in Arts, Emphasis in American Indian Studies	CG, EM, GC, MC, PC, PV, SC, SM
Associate in Arts, Emphasis in Anthropology	CG, EM, GC, MC, PC, PV, RS, SC, SM
Associate in Arts, Emphasis in Communication	CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Associate in Arts, Emphasis in Economics	CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Associate in Arts, Emphasis in English (Creative Writing)	CG, EM, GC, MC, PC, PV, RS, SC, SM
Associate in Arts, Emphasis in English (Literature)	CG, EM, GC, MC, PC, PV, RS, SC, SM
Associate in Arts, Emphasis in History	CG, EM, GC, MC, PC, PV, RS, SC, SM
Associate in Arts, Emphasis in Humanities	CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Associate in Arts, Emphasis in Information Studies and eSociety	CG, EM, GC, MC, PC, PV, RS, SC, SM
Associate in Arts, Emphasis in Japanese	EM, GC, MC, PC, PV, RS, SC, SM
Associate in Arts, Emphasis in Journalism and New Media Studies	EM, MC, GC, PC, PV, RS, SC, SM
Associate in Arts, Emphasis in Philosophy	CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Associate in Arts, Emphasis in Religious Studies	CG, EM, GC, MC, PC, PV, RS, SC, SM
Associate in Arts, Emphasis in Sociology	CG, EM, GC, MC, PC, PV, RS, SC, SM
Associate in Arts, Emphasis in Spanish	CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Associate in Arts, Emphasis in Women and Gender Studies	CG, EM, GC, MC, PC, PV, RS, SC, SM
Chicana and Chicano Studies	CG, GC, PC
Communication Competence in the Workplace	GC, MC
Communication Skills for Non-Native English Speakers	GC, MC
Creative Writing	EM, GC, MC, PC, PV, RS

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AREAS/PROGRAM
INSTITUTION

Deaf Interpreter Preparation	PC
Deaf Studies	PC
Foundations of Storytelling	EM, SM
International Studies	PC
Interpreter Preparation	PC
Journalism and New Media Studies	MC
Language and Literary Culture of the USA	RS
Language Studies	CG, GC, MC, RS
Oral Communication Fluency for Non-Native English Speakers	GC, MC
Public Relations	MC
Southwest Studies	PC
Spanish Language and Culture	CG, GW, MC, RS
Sustainability and Ecological Literacy	EM, RS, SM
Sustaining and Advancing Indigenous Nations	SC
Traditional and Fact-Based Storytelling	EM, SM
Women and Gender Studies	CG

Education

Associate in Arts, Elementary Education (AAEE)	CG, EM, GC, MC, PC, PV, RS, SC, SM
Associate in Arts, Emphasis in Early Childhood Education	CG, EM, GC, MC, PC, PV, RS, SC, SM
Associate in Arts, Emphasis in Educational Studies Early Childhood	CG, EM, GC, MC, PC, PV, RS, SC, SM
Associate in Arts, Emphasis in Secondary Education	CG, EM, GC, MC, PC, PV, RS, SC, SM
Associate in Science, Emphasis in Secondary Education	CG, EM, GC, MC, PC, PV, RS, SC, SM
Early Childhood Education	CG, GC, MC, PC, PV, RS
Early Childhood Education - Dual Language	MC

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INSTITUTION

Early Childhood Education Management and Administration	PV, RS
Elementary Education and Special Education	GC, PV, RS
Foundations of Early Childhood Education	CG, GC, MC, PC, PV, RS
Infant and Toddler Development	GC, PV, RS
Instructional Assistance	MC, SM

Health Sciences

Accelerated Pharmacy Technology	SC
Applied Behavioral Health	MC
Associate in Arts, Emphasis in Community Health	CG, EM, GC, PC, PV, RS, SC, SM
Associate in Arts, Emphasis in Exercise Science	CG, EM, GC, MC, PC, PV, RS, SC, SM
Associate in Arts, Emphasis in Nutritional Science	CG, EM, GC, MC, PC, PV, RS, SC, SM
Associate in Arts, Emphasis in Speech and Hearing Science	EM, GC, PC, PV, RS, SC, SM
Basic Phlebotomy	PC
Biomedical Equipment Technology	MC
Clinical Data Coordination	PV
Clinical Medical Assisting	PC
Clinical Neurodiagnostic Technology	GW
Clinical Phlebotomy	GW, PC
Clinical Research Coordination	PV
Community Health Paramedicine	GC
Community Health Work	PV, SC
Computed Tomography	GW
Critical Care Paramedicine	GC, PC, PV
Dental Assisting	PC

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INSTITUTION

Dental Hygiene	MC, PC, RS
Diagnostic Medical Sonography	GW
Electrocardiogram (ECG) Technician	GW
Electroneurodiagnostic (END) Technology	GW
Emergency Medical Technology	CG, GC, MC, PC, PV, RS
Emergency Medical Technology (EMT)	GW
Emergency Medical Technology (EMT) (High School)	GW
Emergency Medical Technology Comprehensive	CG, GC, MC, PC, PV
Exercise Science: Health, Fitness, and Sports Performance	CG, GC, MC, PV, SC, SM
Fast Track Practical Nursing	GC, GW, MC
Foundations of Recreation Management	SC
Foundations of Recreation Youth Services	SC
Foundations of Sports Medicine	RS
Health and Wellness Coaching	GC
Health Information Technology	PC
Health Information: Long Term Care Settings	PC
Health Science Education	GW
Health Services Management	GW
Healthcare Regulatory Compliance	GW
Histologic Technology	PC
Hospital Central Service Technology	GW
Laboratory Assisting	PC
Magnetic Resonance Imaging	GW
Massage Therapy	PC
Medical Administrative Assisting	PC
Medical Assisting	GW, PC
Medical Billing and Coding: Physician Based	GW
Medical Billing and Coding: Physician-Based	PC
Medical Coding: Hospital-Based	PC
Medical Laboratory Science	PC
Nuclear Medicine Technology	GW

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AREAS/PROGRAM
INSTITUTION

Nuclear Medicine Technology and Computed Tomography	GW
Nurse Assisting	EM, GC, GW, MC, PV, SC
Nursing	CG, EM, GC, GW, MC, PC, PV, SC
Nursing (RN to BSN)	GW
Nursing Refresher	GW, MC
Nutrition and Dietetic Technology	PV
Nutrition for Personal Trainers and Coaches	SC
Occupational Therapy Assistant	GW
Operating Room Nursing	GW
Paramedicine	GC, MC, PC, PV
Personal Training	CG, GC, MC, PV, SC, SM
Personal Training: Advanced	CG, GC, MC, PV, SC, SM
Pharmacy Technician	GW
Physical Therapist Assisting	GW
Practical Nursing	CG, EM, GC, GW, MC, PC, PV, SC
Preschool Education	CG, GC, RS
Radiologic Technology	GW
Recreation Management	SC
Respiratory Care	GW
Sleep Medicine (Polysomnographic) Technology	GW
Spanish Interpreting for Healthcare Professionals	GW
Speech Language Pathology Assistant	EM
Surgical Technology	GW
Sustainable Food Systems	RS
Sustainable Food Systems: Food Entrepreneur	RS
Sustainable Food Systems: Food Service	RS
Tactical Emergency Casualty Care	GC, PC, PV
Workforce Development: Professional Cooking and Sustainable Practices	RS
Yoga Instruction Level II	SC

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INSTITUTION

Yoga Instruction: Level I	SC
Yoga Instruction: Supplement	SC

Science, Technology, Engineering and Mathematics

Artificial Intelligence and Machine Learning	CG, EM
Associate in Arts, Emphasis in Geography	CG, EM, GC, MC, PC, PV, RS, SC, SM
Associate in Arts, Emphasis in Mathematics	CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Associate in Arts, Emphasis in Sustainability and Environmental Studies	CG, EM, GC, MC, PC, PV, RS, SC, SM
Associate in Science, Emphasis in Astronomy	CG, EM, GC, MC, PC, PV, SC, SM
Associate in Science, Emphasis in Biochemistry	CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Associate in Science, Emphasis in Biological Sciences	CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Associate in Science, Emphasis in Chemistry	CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Associate in Science, Emphasis in Engineering	CG, EM, GC, GW, MC, PC, PV, SC, SM
Associate in Science, Emphasis in Geography - Meteorology	CG, EM, GC, MC, PC, PV, SC, SM
Associate in Science, Emphasis in Geology	CG, EM, GC, MC, PC, PV, RS, SC, SM
Associate in Science, Emphasis in Physics	CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Biotechnology and Molecular Biosciences	GC
Cannabis Cultivation	MC
Electronics Engineering Technology	MC
Electronics Technology	MC

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Engineering Technology	CG, EM, GC, PV, SM
Environmental and Natural Resource Stewardship	PC
Equine Massage Therapy	SC
Equine Science	SC
Fundamentals of Applied Molecular Bioscience-Level 1	GC
Fundamentals of Horticulture	MC
Landscape Technology	MC
Mortuary Science	CG
Sustainability	CG, GC, PV, RS, SC, SM
Sustainable Horticulture	MC
Veterinary Assisting	MC
Veterinary Technology	MC

Visual and Performing Arts

Alteration Specialist	PC
Animation	GC, MC, PC
Animation and Time-Based Media	GC, MC, PC
Apparel Construction	PC
Associate in Arts, Fine Arts	CG, EM, GC, GW, MC, PC, PV, SC, SM
Associate in Arts, Fine Arts, Emphasis in Art	CG, EM, GC, GW, MC, PC, PV, SC, SM
Associate in Arts, Fine Arts, Emphasis in Dance	CG, GC, MC, PC, PV, SC, SM
Associate in Arts, Fine Arts, Emphasis in Music	CG, EM, GC, MC, PC, PV, SC, SM
Associate in Arts, Fine Arts, Emphasis in Musical Theatre	CG, EM, GC, MC, PC, PV, SC, SM
Associate in Arts, Fine Arts, Emphasis in Theatre	CG, EM, GC, MC, PC, PV, SC, SM
Beginning Piano Pedagogy	MC

**Maricopa Community Colleges
Field of Interest Matrix 2025-2026**

AREAS/PROGRAM
INSTITUTION

Ceramics	GC, MC
Commercial and Freelance Photography	GC, PC
Commercial Interior Design	SC
Costume Design and Production, Level I	PC
Costume Design and Production, Level II	PC
Dance Performance and Technology	SC
Digital Arts: Digital Photography	CG, MC
Digital Media Arts	GC, PC
Disc Jockey Techniques	MC
Disc Jockey Techniques I	MC
Disc Jockey Techniques II	MC
Documentary Film Production	GC
Drawing and Painting	MC
Editing	SC
Fashion Design	MC, PC
Fashion Design: Entrepreneur	PC
Fashion Design: Level I	PC
Fashion Design: Level II	PC
Fashion Illustration	PC
Film and Media Production	GC
Foundations of Visual Communication	SC
Graphic Design	MC, PC
Illustration	CG, MC, PC
Illustration and Sequential Art	CG, MC, PC
Interior Design	PC, SC
Interior Design Kitchen and Bath	PC, SC
Interior Design Technology	PC, SC
Interior Design Upholstery and Soft Goods Production	PC
Interior Merchandising and Home Staging	PC, SC
Intermediate Piano Pedagogy	MC
Motion Picture Production	SC

**Maricopa Community Colleges
Field of Interest Matrix 2025-2026**

AREAS/PROGRAM
INSTITUTION

Motion Picture, Television, and New Media Production	SC
Music Industry Studies: Audio Production Technologies	GC, MC, PC, PV
Music Industry Studies: Music Business	MC, PC, PV, SM
Music Industry Studies: Music Business I	MC, PC, PV, SM
Music Industry Studies: Music Business II	MC, PC, PV, SM
Pattern Design, Level I	PC
Pattern Design, Level II	PC
Photography	CG, GC, MC, PC
Residential Interior Design	PC, SC
Screenwriting	SC
Sequential Art	CG, PC
Stage Combat	PV
Technical Theatre	MC, PC, SC
Technical Theatre: Audio Technician	GC, PC, PV
Technical Theatre: Costuming	GC, MC, PC, PV
Technical Theatre: Hair and Makeup	MC
Technical Theatre: Lighting	PC, PV
Technical Theatre: Properties	EM, PC, PV, SC
Technical Theatre: Puppetry	PC, PV
Technical Theatre: Set/Scenic Construction	EM, PC
Technical Theatre: Stage Crew Technician	EM, GC, PC, PV, SC
Time-Based Media	PC
Visual Communication	SC
Visual Communication: Creative Branding	SC
Visual Communication: Design	SC

Faculty and Administration

Governing Board Members

Susan Bitter Smith	President.
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Tom Nerini	Board Member
Donna Davis	Board Member
Jacqueline Smith	Board Member
Linda Thor	Board Member
Kelli Butler	Board Member
Temya Jackson Long	Student Board Member

Mesa Community College Administrators

Daniel, Richard Ph.D.	College President
Budach, Robert, MBA, PMP, CASP	Vice President, Administrative Services
Russell, Joanne, Ph.D	Vise President, Academic Affairs
Hollins, Jeannetta, Ph.D	Vise President, Student Affairs
Snitzer, Marcy	Associate Vice President, Marketing, Communications and Advancement
Mitchell, Dennis, M.P.A	Associate Vice President, Institutional Electiveness
Achs, Carol, B.S., M.A.	Dean of Instruction
Boyce, Mary, B.S., M.S.N, CCRN, CNE	Dean of Instruction
Voss, Michael, M.A Ed.	Dean of Instruction
Leanna Hall, Ph.D	Dean of Instruction
Pelaez, Indra, Ed.D	Dean of Student Affairs
Voller, Julie, Ed.D.	Dean of Student Affairs
Perales, Kathleen, M.Ed.	Associate Dean, Career & Community Connections

Mesa Community College Residential Faculty

Afnan-Manns, Sheila L., B.A., M.S., M.L.I.S.
Ahles, Christina R., B.S., M.A.
Ahn, Emi O., B.A., M.A., Ph.D.
Al-Hashimi, Basil, B.A., M.A.
Aldridge, Mary E., B.A., B.A., M.A., Ph.D.
Allen, Carie, B.A., J.D.
Allen, Elizabeth A., B.S.B., B.S.N., M.S.N.
Alsen, Beth A., B.A., M.Ed., Ed.D.
Alvrus, Annalisa B., B.A., M.A., Ph.D.
Anderson, Cody A., B.S., M.S.
Anderson, Keith D., B.A., M.F.A., Ph.D.
Araujo, Melissa A. B.S., M.A.
Archer, Mace, B.A., M.F.A.
Arreguin, Alex, B.A., M.Ed., M.A.
Atencia-Oliden, Elizabeth M., B.A., M.A., Ph.D.
Avilez, Adam C., B.S., M.S.
Baba, Lisa, B.S., M.S.
Baldwin, Andy S., B.S., M.S., Ph.D.
Bannon, Brenden, A.S., A.S., B.A.
Barnhart, Malena, B.A., M.F.A.
Baron, Bob F., B.A., M.L.S., M.A.H., Ph.D.
Barto, Michelle L., B.A., M.Ed.
Bartreau, Nicole D., B.S.N., M.S.N.
Beckman, Christine M., B.S., M.A., Ed.D.
Besaw-McGavren, Christine M., B.S., M.C.
Beshk, John, B.S., M.B.A.
Bieseda, Michael J., B.S., B.S., M.B.A., M.Ed., Ph.D.
Bond, Bryce W., A.A.S. *
Boorse, Graham C., B.S., Ph.D.
Booth, Dexter L., B.F.A., M.A., Ph.D.
Borlongan, Burton B., B.F.A.
Borman, Derek G., B.S., M.A., Ph.D.

Bowling, Evonne M., B.S., M.S.
Branch Moore, Angel, B.A., M.A., Ed.D.
Brause, Dawn, A.S., B.S.
Brewer, Paul W., B.M.E., M.M.E.
Brown, Dan, B.A.Ed., M.A.
Broxham, Kimberly, A.A.
Broyles, Jeremy, B.A., M.A., M.F.A.
Budge, Steve T., B.A., M.A., Ed.D.
Bunte, Melissa K., B.S., B.S., M.S., Ph.D.
Burliss, Dawn E., B.S., M.B.A.
Cain, David, B.S, M.S., Ed.D.
Caldwell, Jennifer A., B.A., M.Ed.
Callaway, Micheal A., B.A., M.A., Ph.D.
Cavalcant, Sylwia, B.A., M.A., M.Ed
Ceinaturaga, Shelley B., B.A., M.A.
Cervený, Niccole Villa, B.S., M.A., Ph.D.
Chavez, Lilian, B.S., M.A., Ph.D.
Cheroske, Alex G., B.A., M.S., Ph.D. *
Chowdhury, Madeleine P., B.S., M.S.
Conden, Peter J., A.A.S., B.S., M.S.
Cordeiro, Suzanne, A.A., B.A., B.S., B.S.N., M.Ed., M.Ed., M.A., M.S.N.
Corkins, Jim, B.S., M.S., Ed.D.
Costion, Kirk, B.A., M.A., Ph.D.
Crandall, Elizabeth R., B.S.N., M.S.N.
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Crudup, Keith J., B.A., M.A., Ph.D.
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Files, J.B., A.A.S., B.S.
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Guerin, Aimee L., B.A., M.A., Ed.D.
Hackler, Ken, A.A., B.A., M.B.A.

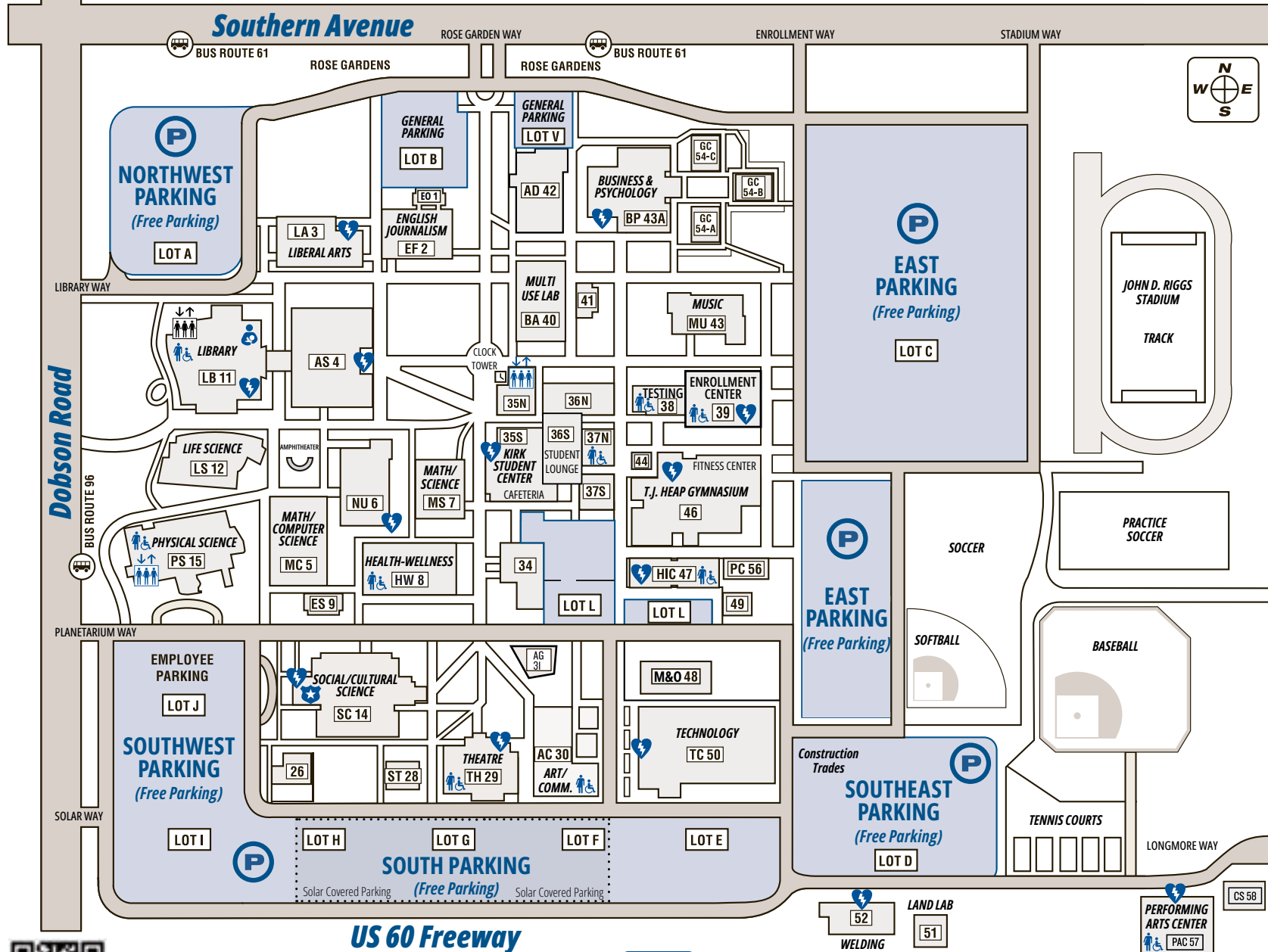
Haleem, Dilshad, B.C.S., M.S.
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Hamilton, Andrew M., B.A., B.S., M.B.A. *
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McMahon, Annah T., B.S., M.A. *
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Osteen, Andrea, B.A., M.A.
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Pipher, Shakira L., A.A., B.S.W., M.S.W
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Rathkamp, Joshua R., B.A., M.F.A., M.F.A.
Richardson, Ann, B.S., M.S.
Richardson-Delgado, Jodi, B.M., M.Ed., Ph.D. *
Rodriguez, Amelia, B.A., M.S.
Rodriguez, Nadine Arroyo, B.A., M.Ed.
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Rossiter, Daphne A., B.A., M.A.
Rozsa, Kate, M.S., M.N.S.
Rushing, Derek N., B.S., M.A.
Sanders, Sara, M.S., Ph.D.
Sands, Teryl, M.A., Ph.D.
Santiago, Kristina, B.A., M.A.
Scott, Michael P., B.S., M.A.
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Seela, Jeff, B.S., Ph.D.
Sehgal, Amanpreet K., B.A., Ed., B.S., M.S.
Seigle, Jennifer, B.A., M.F.A., J.D.
Shryock, Darin, B.S., M.M. *
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Skroch, Steve
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Stevenson, Paulette J., B.A., M.A., Ph.D. *
Stock, Anthoney A., B.S., M.S.
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Strait, Jonathan C., B.S.
Strickland, Jennifer S., A.A., B.A., M.Ed., Ph.D.
Tate, Jamie L., A.A.S.
Taylor, Scott, B.F.A., M.F.A.
Terlisner, Nathan, B.S., M.S., M.S.
Thomson, Kara E., A.A., B.F.A., M.F.A.
Townsley, Jen M., B.A., M.A., Ed.D.

Tran-Nguyen, Ly T. L., B.S., M.A., Ph.D.
Ung, Sophie, B.S., M.B.A., Ph.D.
Valenzuela, Krista, B.A. M.Ed.
Van Tassell, Heidi A., B.A., B.S., M.S. *
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Vaughan, Barry F., B.A., M.A., M.A., Ph.D.
Venema, Jeremy T., B.A., M.A., Ph.D.
Verch, Janelle, A.A.S., B.S., M.Ed.
Verch, Todd A., B.S.D., M.S.D.
Waclawski, Phil Paul, B.S., M.S. *
Wakefield, Kelli, B.S., M.S.
Wasbotten, Leia E., B.A., M.M., D.M.A
Weaver, Kevin, A.A.S.
Webb, Eddie D., B.A., M.F.A., Ed.D.
Weiss, Belinda M., A.A.S., B.S., M.S.N.
Whitcomb, Sean A., B.A., M.S.
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Wilson, Dennis, B.S., Ph.D.
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Windman, Todd, B.S., M.S., Ph.D.
Woehl, Mark, A.A.
Wolf, Blake, B.S., M.Ed., M.S.
Wallace, Jennifer, B.S., M.Ed.
Wood, Shawn E., B.S., M.Ed.
Woodcock, Bailey, B.S.
Wyatt, Jennie, B.S.
Yong, Promise, B.S., Ph.D.
Young, Marji, A.S., B.A., M.A.
Yount, Dave J., B.A., M.A., Ph.D.
Zitek, Kimberlee A., A.A., B.A.



(not to scale) 02/25



To View or Download the Campus Map
Scan QR Code or Visit
mesacc.edu/maps

KEY



 College Police



 Automatic External Defibrillator (AED)



 Elevators
1330

 Lactation Room Single-User Restrooms

Directory

LOCATION	BLDG. #
Admissions & Records	EC 39
Agribusiness/Urban Horticulture	TC 50
American Indian Institute.....	36N
Applied Sciences Offices/Classrooms ..	TC 50
Architecture & Construction	TC 50
Art Faculty Offices/Classrooms	AC 30
Art Gallery	AG 31
Athletic Equipment Room	HIC 47
Athletic Program Offices/ Compliance Office	49
Athletics Administration/Program Offices ..	44
Athletics Sports Offices/Training Room ..	46
Athletics Student Learning and Advisement Center	PC 56
Automotive Technology/Lab	TC 50
Bookstore	37S
Business Faculty Offices/Classrooms ..	BP 43A
Cafeteria/Snack Bar	KSC 35S
Career Services	36N
Cashier Services	EC 39
Center for Community and Civic Engagement	KSC 35N
Center for Teaching & Learning (CTL) ..	AS 4
Ceramics Studio	AC 30
Child Development Lab	TC 50
Children's Center	26
Coffee Shop	AS 4
College Police	SC 14
College Storage	58
College Technology Services	AD 42
Community Room/LB145	LB 11
Computer Multi-Use Lab	BA 40
Copy Center/Mail Room	AS 4
Counseling Center	37N

LOCATION	BLDG. #
Cultural Science Faculty Offices	SC 14
Cycle Room	46
Dance Room	46
Deans Offices	KSC 35N
Disability Resources & Services	37N
Drafting/CAD	TC 50
Education Faculty Offices/Classrooms ..	SC 14
Electronics Technology	TC 50
English Faculty Offices/Classrooms ..	EO 1, LA 3
ENROLLMENT CENTER	EC 39
Admissions, Records, Registration, Advisement, Cashier, Financial Aid, Scholarships	
Exercise Science Faculty Offices/Classrooms	HW 8
Fashion Merchandising and Design ...	TC 50
Financial Aid	EC 39
Fiscal Services	AD 42
First Aid	SC 14
Fitness Center	46
Foundations For Student Success	LB 11
Greenhouse/Land Lab	51
Gymnasium, T. J. Heap	46
Health Improvement Center (HIC)	HIC 47
Health-Wellness	HW 8
Help Center & Tech Support	AS 4
Honors	KSC 35S
Horticulture Faculty Offices	TC 50
Human Resources	AD 42
Institutional Advancement (IA)	AS 4
Institutional Effectiveness	NU 6
Interior Design	TC 50
International Education	36N
Journalism	EF 2

LOCATION	BLDG. #
Kirk Student Center/Navajo Room ..	KSC 35S
Learning Enhancement Center	LB 11
Library, Paul A. Elsner	LB 11
Life Science Classrooms/Labs	LS 12
Life Science Faculty Offices	NU 6
Lost & Found	SC 14
Mail Room/Copy Center	AS 4
Maintenance & Operations	48
Manufacturing/Automation	TC 50
Math/Computer Science Faculty Offices and Classrooms	MC 5
MCC Online	AS 4
Mesa Legend (College Newspaper)	EF 2
Mesa Market.....	KSC 35S
Music Faculty Offices/Classrooms	MU 43
Nursing Faculty Offices/Classrooms ..	HW 8
Nutrition Faculty Offices/Classrooms ..	TC 50
OUTREACH CENTER	GC 54B
ACE Program, Early College, ELL, HOOP of Learning	
Performing Arts Center	PAC 57
Philanthropy & Alumni Engagement ..	AD 42
Philosophy Faculty Offices/Classrooms ..	BP 43A
Photography Lab	AC 30
Physical Science Faculty Offices/Classroom/ Labs/and Tutor Center	PS 15
Planetarium	PS 15
President's Office	LB 11
Psychological Science Offices/Classrooms.....	BP 43A
Reading Faculty Offices/Classrooms ..	AD 42
Receiving Dock	34
Religious Studies Offices/Classrooms ..	BP 43A
Recruitment	GC 54A

LOCATION	BLDG. #
Social Science Faculty Offices/ Classrooms	SC 14
Sound Lab/Music Studios	ST 28
Southwest Studies Reading Room	LB 11
Communication Faculty Offices and Classrooms	AC 30
SPECIAL FACILITIES	
Single-User Restrooms 37N, 38, AC 30, EC 39, HW 8, LB 11, HIC 47, PAC 57, PS 15, TH 29	
Lactation Room	LB 11
Reflection, Prayer, and Meditation Rooms	LB 11
Student Life and Leadership	KSC 35S
Student Lounge	36S
Student Government/ASMCC	KSC 35S
Student Care Services	36N
Testing Center	38
Theatre/Box Office.....	TH 29
Theatre Design Lab	ST 28
Theatre Faculty Offices/Classrooms ..	TH 29
Theatre Scene Shop.....	TH 29
TUTORING	LB 11
Biology	NU 6
Foreign Language/ESL	LB 11
Math/Computer Science	MS7
Physics/Chemistry	PS 15
Psychology	AD 42
Thunderbird Tech Studio	LB 11
Writing	LB 11
University Transfer Center	GC 54A
Veteran Services	KSC 35N
Vice Presidents Offices	LB 11
Welding Technology	52
World Language Faculty Offices	AS 41
World Language Learning Lab	AS 4

Campus MAP



**MESA
COMMUNITY COLLEGE**
A MARICOPA COMMUNITY COLLEGE
Red Mountain Campus

Campus Map

7110 East McKellips Road
Mesa, Arizona 85207-1908
480.654.7200
www.mesacc.edu
(Click on Red Mountain link)



ENTRANCE

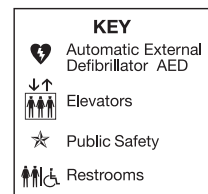
Power Road

McKellips Road

MAIN ENTRANCE

LEGEND

- RDM V Acacia Village**
Classrooms (V116 – V126)
Instructional Support Services
Nurse Assisting Program
Student Lounge
- RDM DW Desert Willow**
Academic Engagement Center
Classrooms (DW119 – DW226)
College Technology Services
Community Partnerships (DW136B)
HelpCenter
Learning Enhancement Center
Library (2nd Floor) Public Copier Available
- RDM I Ironwood**
College Police
Maintenance & Operations
Receiving
- RDM M Mesquite**
Administration Office (M222)
Community Room (2nd Floor)
Disability Resources & Services
Enrollment Services:
Academic Advising • Admissions
Career Services • Cashier Services
Financial Aid • Registration
Testing Services/GED/HESI
Transfer Services • Veteran Services
Fitness Center (M160)
Mesquite Grill
Student Life & Leadership (2nd Floor)
Student Lounge (2nd Floor)
- RDM PV Palo Verde**
Classrooms (PV105 – PV250)
Counseling Services (2nd Floor)
Faculty Offices (2nd Floor)
Fiscal Services (2nd Floor)
Human Resources (2nd Floor)
Instructional Support Services (2nd Floor)
International Ed / Study Abroad (2nd Floor)
Physical Science Laboratories (1st Floor)
- RDM R Rosewood**
Classrooms (R101 – R104)
- RDM S Saguaro**
Center for Teaching and Learning (2nd Floor)
Classrooms (S152 – S282)
Faculty Offices (2nd Floor)
Instructional Support Services (2nd Floor)
Life Science Laboratories (1st Floor)
Rehearsal and Performance (RAP) Center (S140)
Undergraduate Research Lab (S151)



Locations & Maps

Downtown Center

Primary Location

145 North Centennial Way
Mesa, AZ 85201

Phone:

Main: 480-461-6300

Public Safety: 480-461-6116

MCC Online

Location

mesacc.edu/online

1833 W. Southern Avenue
Mesa, AZ 85202

480-461-7217

Disclaimer

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