# 2020 <br> 2021 Catalog 붕 <br> MESA <br> COMMUNITY COLLEGE <br> A MARICOPA COMMUNITY COLLEGE 



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## 2020-2012 Academic Calendar

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.

## FALL SEMESTER 2020

| Friday, August 14 | First Day of Faculty Accountability |
| :---: | :---: |
| Saturday, August 22 | Classes Begin |
| Monday, September 7 | Observance of Labor Day |
| Monday, September 21 | Find a Class Opens for Spring |
| Monday, October 5 | Spring 2021 Priority Registration for Currently Enrolled Students |
| Saturday, October 10 | Last Day for Withdrawal without Instructor's Signature+ |
| Monday, October 12 | Student Withdrawal with Instructors Signature Begins++ |
| Monday, October 12 | Spring 2021 Open Registration Begins* |
| Thursday - Sunday, November 26-29 | Thanksgiving Holiday (Campus Closed) |
| Sunday, December 13 | Last Day of Classes |
| Monday - Thursday, December 14-17 | Final Exams** |
| Friday, December 18 | Mid-Year Recess Begins for Students |
| Friday, December 18 | Fall Semester Ends (Last day of Faculty Accountability) |
| Friday - Sunday, December 25 - January 3 | Mid-Year Recess (Campus Closed) |
| SPRING SEMESTER 2021 |  |
| Friday, January 1 | Observance of New Year's Day |
| Monday, January 11 | First day of Faculty Accountability |
| Monday, January 11 | Clock Hour Student Classes Begin |
| Saturday, January 16 | Classes Begin |
| Monday, January 18 | Observance of Martin Luther King, Jr. Holiday |
| Saturday, March 6 | Last Day for Withdrawal without Instructor's Signature+ |
| Monday, March 8 | Student Withdrawal with Instructors Signature Begins++ |
| Monday, February 15 | Observance of Presidents' Day |
| Tuesday, February 16 | Find a Class Opens for Summer/Fall 2021 |
| Monday, March 1 | Summer/Fall 2021 Priority Registration for Currently Enrolled Students* |
| * | Application for May 2021 Graduation |
| Monday - Sunday, March 15-21 | Spring Break |
| Monday, March 15 | Summer/Fall 2021 Open Registration Begins |
| Sunday, May 9 | Last Day of Classes |
| Monday - Thursday, May 10-13 | Final Exams** |
| Thursday - Friday, May 13 or 14 | Commencement |
| Friday, May 14 | Spring Semester Ends (Last day of Faculty Accountability) |
| Monday, May 31 | Observance of Memorial Day |

[^0]+ Through the 7th week, student may initiate an official withdrawal from course(s) without instructor signature (see Appendix S-7 in Catalog Common Pages).
++ After the 7th week, student must initiate an official withdrawal request from instructor and obtain their signature (see Appendix S-7 in Catalog Common Pages).


## SUMMER SEMESTER 2021

| Tuesday, June 1 | Summer Semester <br> Begins |
| :--- | :--- |
| Monday - <br> Thursday, June <br> $\mathbf{2 8}$ - July 1 | Summer Break for <br> Clock Hour Programs |
| Only |  |

[^1]
## President's Letter

## Welcome to Mesa Community College!

Becoming a Thunderbird is a wise choice. MCC offers an affordable and high quality education with a terrific selection of free services such as academic advising, career counseling, tutoring and much more - all designed to keep you on your road to success. As a Guided Pathways to Success (GPS) institution, we are creating clear educational tracks with many points where students can receive assistance to overcome challenges.

For more than half a century, students from around
 Arizona, the nation and the globe have selected our college for credits to transfer to universities as well as to earn degrees and certificates to pursue careers. Students attend MCC for many reasons, but at the heart of their decisions is their belief in the promise of an education for a new life.

You have stepped onto the path many Thunderbirds have taken and then gone on to achieve great things with the knowledge, critical thinking and skills they built at MCC. Entrepreneurs, CEOs, NASA staff, superior court judges, Olympic competitors, members of Congress, mayors, teachers, firefighters, scientists and health care professionals all have been learners on our beautiful campuses.

Students have many opportunities to shine here. Our Phi Theta Kappa honor society members win countless national and international awards each year. MCC scholars earn acclaim, exciting internships and scholarships.

MCC enjoys a global reputation for excellence and innovation. The Aspen Institute for Community College Excellence named MCC one of the nation's top 150 community colleges. We are one of just six community colleges in the nation chosen by Apple to be among the first to teach its app development curriculum. Our numerous business partners include The Boeing Company, Subaru of America, Southwest Empire Caterpillar, Disney, and Earnhardt Ford.

Contributing to student success are our outstanding faculty, dedicated staff, and small-class sizes that provide ideal settings for engaging with professors and other students.

At MCC, our goal is to provide an equal, inclusive and equitable educational opportunity for all who come to learn. If you need advice or help, please reach out to any of our dedicated faculty and staff, and know we are all here to help you triumph.

Be Thunderbird strong!
Lori M. Berquam, Ph.D.
Interim President
Mesa Community College


# About MCC 



## About MCC

## History and Description of Mesa Community College

As an educational, economic, cultural and workforce engine for the East Valley, Mesa Community College has contributed to individual and community success for more than half a century. The largest of 10 colleges in the Maricopa County Community College District of metropolitan Phoenix, MCC delivers an affordable and quality opportunity to earn degrees, certificates and workforce training to advance career goals as well as transfer to four-year institutions via state, national and international education partnerships.

Accredited by the Higher Learning Commission, MCC's more than 30,000 students are served annually online and on two campuses -- Southern \& Dobson and Red Mountain. In addition to academic excellence, MCC offers a full collegiate experience with acclaimed athletics, student government, study abroad, international scholars and student clubs. MCC students enrich the community with nearly 22,000 service-learning volunteer hours each year.

Meeting the needs of the business community with exemplary employees, MCC offers Career and Technical Education (CTE) programs that equip students with the knowledge and skills for today's jobs. Partnering with government, business, high tech and advanced manufacturing companies, CTE programs are cutting edge, in demand, innovative and strategically networked with employers.

Contributing to the community cultural scene, the Arts at MCC present acclaimed dance, theatre and musical performances as well as multidisciplinary art exhibits. Planetarium shows and many other free educational and entertainment activities are enjoyed by the general public.

The Maricopa County Community College District (MCCCD), now serving more than 200,000 students annually, began with Phoenix Junior College in 1920. In 1960, the Arizona Legislature established county junior college districts administered by the Arizona State Board of Directors for Junior Colleges and by governing boards elected by the public. Two years Iater, Arizona voters enthusiastically created the Maricopa County Junior College District to expand affordable college education.

The MCCCD Governing Board created three extensions of Phoenix College, one in northeast Phoenix, one in northwest Phoenix and one in Mesa. In 1963, students began attending classes in an old church building at the corner of Main Street and Extension Road. In the fall of 1966, Mesa Community College opened its 160-acre campus at the corner of Southern and Dobson roads with four permanent buildings. In 2001, a second full-service campus, MCC at Red Mountain, was established in northeast Mesa at Power and McKellips roads.

More than 46 percent of students attending MCC in 2016 were Mesa residents. As the largest of the MCCCD colleges, MCC remains dedicated to enriching lives and serving the community locally and globally by providing education of the highest quality, at the most affordable cost.


## About MCC

## MCC Campuses and Dobson Campus

A source of outstanding transfer, career and service programs for the East Valley of metro Phoenix for more than 50 years, the Southern and Dobson Campus has an urban flair featuring academic excellence and an inviting collegiate experience. Average class sizes of 22 students provide opportunities for interactions with engaged, quality faculty.

## Location:

1833 West Southern Avenue Mesa, AZ 85202
480-461-7000

## MCC Red Mountain Campus

On 98 acres of vibrant Sonoran Desert in northeast Mesa, the Red Mountain Campus offers a focus on successful university transfer with state-of-the-art classrooms, scientific community partnerships and outdoor teaching spaces. Average class sizes of 22 students provide opportunities for interactions with engaged, quality faculty.

## Location:

7110 East McKellips Road Mesa, AZ 85207
480-654-7200

# MCC Vision, Mission, and Values <br> Vision 

Inspire, ensure access, and empower action.

## Mission

We create an inclusive and vibrant learning community where everyone is supported to achieve success.

## Values

## Community

Our people and the communities we serve are the fabric of our institution. We make a positive difference in the lives of our students, communities, and each other by being inclusive, practicing kindness, cultivating meaningful relationships, and promoting active citizenship and civic engagement.

## Diversity, Equity, and Inclusion

Diversity is our greatest asset. We create systems, environments, and interactions that welcome, engage, and support all learners.

## Leadership

As leaders at our college and in our communities, we behave boldly in the face of challenges as we set high expectations, explore new approaches, and hold ourselves accountable through data and transparency.

## Continuous Improvement

We cultivate an adaptable learning environment that welcomes all to experiment, make mistakes, build skills, and grow.

## Integrity

We do what's right, even when it's hard. We model vulnerability and hold ourselves to high standards in the way we work, learn, and interact with one another.

## 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 Technology program is accredited through National Automotive Technician Education Foundation (NATEF) 101 Blue Seal Drive, SE, Suite 101 Leesburg, VA 20175 https://www.aseeducation-foundation.org/ase-education-foundation.

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 www.ada.org/100.aspx.

The MCC Evelyn H. Warren Child Development Lab and the MCC Children's Center are accredited by the National Association for the Education of Young Children (NAEYC), 1313 L St. NW, Suite 500, Washington, DC 20005 www.naeyc.org.


Accreditation Commission for Education in Nursing (ACEN) at 3343 Peachtree Road, NE Suite 850, Atlanta, GA 30326. State approval for the Nursing Programs is provided by the Arizona State Board of Nursing (AZBN) at 4747 N. 7th St. Suite 200, Phoenix, AZ 85014 www.acenursing.org.

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/Animal Health 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

Student outcomes assessment is a term used to describe the measurement and documentation of what Mesa Community College (MCC) students are achieving in their studies at the college. Faculty members across the Maricopa County Community Colleges District (MCCCD) have defined the outcomes of college programs and courses competencies and have developed measures to assess them. At MCC, faculty have also developed Institutional Student Learning Outcomes that are embedded and assessed in courses, curricular programs, co-curricular and extra-curricular programs, and student service areas. These learning outcomes, known as MCC's 4Cs, are consistent with the Vision, Mission, and Values of MCC and MCCCD, and reflect our commitment to Individuals and Community, Innovation, Integrity, Learning, and Service Excellence. The 4Cs are Communication, Critical Thinking, Civic Engagement, and Cultural and Global Engagement.

## Community Partnerships With Mesa Community College

Our civic responsibility is expressed through our commitments to nurturing the next generation of leaders and meeting community needs through student, faculty and staff volunteerism. MCC has partnered with Mesa Public Schools to place full-time, college counselors in eight MPS high schools to guide individual students and broaden family awareness of the importance of college completion. MCC is actively engaged with local, state and national governments, not-for-profit organizations and school systems to enhance lifelong learning prospects and increase the quality of life for all.

## Alumni

The MCC Alumni Association (MCCAA) is committed to serving and uniting alumni to promote the interests of MCC, its alumni, current and future students, and the community. The Office of Alumni Relations collaborates with members of the Association's board and other MCC departments to keep alumni apprised of campus and association news, provide fellowship and networking opportunities, recognize the accomplishments of MCC's alumni, and identify opportunities for alumni to reconnect with the college and get involved.

All students who earn an associates degree, certificate of completion, or complete 48 credit hours or more at MCC are considered alumni and members in the MCCAA.

Contact Alumni Relations at 480-461-7792 for additional information or visit www.mesacc.edu/alumni.

## Chair Academy

## Our Mission Is...

to design and promote world-class training programs and services to advance academic and administrative leadership for post-secondary institutions world-wide in an era of change.

## Our Vision Is...

to advance academic and administrative leadership for post-secondary institutions globally.

## Our Value Statement...

We are committed to excellence and continuous improvement in providing training to organizational leaders while recognizing the needs and respecting the diversity of our clients.

For additional information about the Chair Academy programs and offerings, please visit: www.chairacademy.com.


## Community College National Center for Community Engagement

The Community College National Center for Community Engagement (CCNCCE) is a leader in advancing programs and innovations that stimulate active participation of institutions of education in service learning and community engagement for the attainment of a vital citizenry.

The Community College National Center for Community Engagement is a national organization with a 23-year history of successfully developing and managing innovative partnerships and disseminating lessons learned throughout the higher education community. An outcome of the mission of the CCNCCE is to support and promote the pedagogy of service-learning, a teaching method which combines academic instruction with community service as it focuses on increasing college access and completion, academic achievement and engagement, critical and reflective thinking and civic responsibility. CCNCCE offers a complete battery of services that provide human, financial, and academic resources to community colleges that are endeavoring to develop, expand and sustain service-learning and civic engagement programs on campuses throughout the U.S. and U.S. Territories. www.mesacc.edu/engagement.

## Continuing Education for Practicing Professionals

MCC provides continuing education opportunities to practicing professionals. Opportunities to attain Continuing Education Units (CEU) are currently available for Real Estate professionals.

## Development

The College actively fundraises and seeks contributions from public and private sources including individuals, corporations, organizations, and foundations. The Maricopa Community Colleges Foundation (MCCF) acts as a trustee to assure that donations are distributed in the manner specified by the donor. MCCF is a 501 (c)(3) nonprofit organization; gifts are tax-deductible to the fullest extent of the law.

There are a variety of ways for donors to make gifts to MCC. Visit the website: www.mesacc.edu/development, where you will find helpful links for giving via cash, check, or credit card.

Donors can make gifts of cash, stock, property or bequests. MCC's generous supporters ensure the future of the college, make student scholarships possible, and facilitate the growth of the campuses. For more information, contact the MCC Office of Development at 480-461-7200 or visit www.mesacc.edu/development.


# Student Support 

MESA COMMUNITY COLLEGE

## Student Support

## Student Services <br> Contacts

Area code for all numbers is 480

| Admissions | 461-6700 |
| :---: | :---: |
| Advisement/Transfer Registration Services | 461-7222 |
| Alumni Relations | 461-7792 |
| American Indian Institue | 461-7931 |
| Athletics | 461-7542 |
| Bookstore | 461-7225 |
| Career Services | 461-7592 |
| Cashier Services | 461-7400 |
| Children's Center | 461-7082 |
| College Police |  |
| Emergency | 784-0911 |
| Non-Emergency | 461-7046 |
| Community Outreach Center | 461-6200 |
| Compliance Services | 461-7817 |
| Counseling | 461-7588 |
| Disability Resources and Services | 461-7447 |
| Early Alert Referral System (EARS) | 461-7449 |
| Enrollment Services at Red Mountain | 654-7600 |
| ESL Support Services | 461-7898 |
| Financial Aid (855) | 622-2332 |
| Fitness Center | 461-7555 |
| GED Test Only |  |
| (to register for the GED exam, |  |
| go to GED.com instead of calling) | 461-7336 |


| Group Activity Center | $461-7578$ |
| :--- | :--- |
| Health Improvement Cente | $461-7556$ |
| Homeschool Services | $461-6200$ |
| Information | $461-7000$ |
| Information - MCC at Red Mountain | $654-7200$ |
| International Education | $461-7756$ |
| Learning Enhancement Center (Tutoring) | $461-7678$ |
| Library Reference Desk | $461-7682$ |
| Lost and Found | $461-7046$ |
| Multicultural Affairs \& Student Success | $461-7288$ |
| Multi-Use Computer | $461-7098$ |
| Outreach \& Recruitment | $461-6200$ |
| Records | $461-7659$ |
| Recruitment \& Outreach | $461-6392$ |
| Registration | $461-7700$ |
| Spanish Line | $461-6106$ |
| Student Life and Leadership | $461-7285$ |
| Student Life and Leadership | $654-7759$ |
| at Red Mountain | $461-7336$ |
| Testing Center Information Services | $461-7222$ |
| Transfer Services | $461-7553$ |
| TRIO Student Support Services | $461-7425$ |
| Veterans' Services | $461-7513$ |
| Writing Center |  |

# Advisement Services 

Advisors assist students with goal setting, educational planning, selection of appropriate coursework, provide information on degree progress, and support students in applying for graduation. Additionally, they can provide information on university transfer, recommendations in the use of campus resources, and review academic policies such as graduation and probation. Students who are on academic probation or continuing probation should meet with an Academic Advisor as soon as possible.

New-to-college students must attend New Student Orientation and receive advising prior to registering for classes. Continuing students are strongly encouraged to meet with an academic advisor each semester.

Visit: www.mesacc.edu/advisement, to review advising options including appointments, walk-ins, and virtual advising services.

## Transfer Services

Transfer Services provides support to students looking to transfer to a University. The MCC Transfer Center has representatives from various local Universities to help answer student questions about the transition from a two-year college to a four-year institution. These representatives discuss admission deadlines, scholarship opportunities, and go over the various programs available at their designated institution.

## Career Services

Career Services offers a variety of resources and assistance to those making decisions related to career planning as well as employment and job searches. Services include computerized career guidance, a virtual Career Center at www.mesacc. edu/career, current labor market information, guidance on resume preparation, interviewing techniques, internship opportunities, and job search strategies. In addition, job listings are available online through the Maricopa Career Link at https://maricopa-csm.symplicity.com.

For more information on career services, call 480-461-7592 or visit www.mesacc.edu/career. For more information published by the Maricopa Community College District on this topic, please see the "MCCCD Policies and Procedures" section of this catalog.

## Admissions and Registration

The Office of Admissions, Records and Registration guides students through the enrollment process and plays a role throughout the student's life-cycle. Services include evaluating transcripts, verifying residency, and processing graduation applications, providing student ID's, processing name changes, and transcript evaluations. For more information, go to www.mesacc.edu/admissions-records.

For additional information published by the Maricopa Community College District on this topic, please see the "MCCCD Policies and Procedures"section of this catalog.

## Alumni Relations

The MCC Alumni Association (MCCAA) is committed to serving and uniting alumni to promote the interests of MCC, its alumni, current and future students, and the community. The Office of Alumni Relations collaborates with members of the Association's board and other MCC departments to keep alumni apprised of campus and association news, provide fellowship and networking opportunities, recognize the accomplishments of MCC's alumni, and identify opportunities for alumni to reconnect with the college and get involved.

All students who earn an associate's degree, certificate of completion, or complete 48 credit hours or more at MCC are considered alumni and members of the MCCAA. Contact Alumni Relations at 480-461-7792 for additional information or visit www.mesacc.edu/alumni.

## American Indian Institue

The American Indian Institute provides holistic support for the challenges American Indian students face related to academic progress,
financial aid and finding a sense of belonging on campus in order to graduate or transfer to a university. Services provided include: academic advisement, educational planning, retention, assists with Tribal scholarships, student clubs, peer support, personal growth experiences and participation in cultural events. For more information, call 480-461-7931 or visit www.mesacc.edu/aii.

## Assessment of Student Outcomes with Student Participation

Each spring during Assessment Week, groups of students are selected to participate in an assessment during a regular class period. Results do not affect students' standing in their course or their grade point average. Rather, overall results are used to document student learning and identify areas for program improvement. Students may also be asked to complete opinion surveys related to academic and student services. In addition, graduate and alumni surveys are gathered. Through student participation in these activities, the college is able to determine the effectiveness of a wide range of programs and services.


## Athletics

Intercollegiate Athletics at Mesa Community College (MCC) is an integral part of the total student experience. MCC is a member of the National Junior College Athletic Association (NJCAA) www. njcaa.org/ and the Arizona Community College Athletic Conference (ACCAC) www.accac.org/.

Athletic eligibility and scholarships require that a student athlete have a high school transcript with a graduate date or G.E.D. on file in the Office of Student Admission and Records. A first-year participant must be enrolled as a full-time student (minimum of 12 credits) and maintain a 2.0 grade point average (G.P.A.). A second-year participant must be enrolled as a full-time student and have passed 24 credits with a 2.0 G.P.A. prior to the start of the second season.

Women's athletics offers teams in eight intercollegiate sports: basketball, cross country, golf, soccer, softball, tennis, track and field, and volleyball. Women desiring to participate in a particular sport should contact the head coach of that sport. Men's athletics offers seven intercollegiate sports: baseball, basketball, cross country, golf, soccer, tennis, and track and field. Men desiring to participate in a particular sport should contact the head coach of that sport.

A student athlete should contact the head coach or athletic director for additional information regarding eligibility and athletic scholarships. For information, call 480-461-7542 or visit our website at athletics.mesacc.edu.

## Attendance

For more information published by the Maricopa Community College District on this topic, please see the "MCCCD Policies and Procedures" section of this catalog.

## Bookstore

The Bookstore carries everything to make the most of your college experience: used and new textbooks, school supplies, reference books, general reading books, MCC apparel and gifts, and academically priced software. Shop in-store and online at www.mesaccshop.com.

The MCC Bookstore offers a textbook rental program as well as digital textbooks. Visit Rental Information for more details on our rental program. Visit Digital Content for more details on our digital textbook program.

MCC Bookstore at Southern \& Dobson
480-461-7225
MCC Bookstore at Red Mountain
480-654-7696

## Student Business Services/ Cashier Services

The Cashier/Bursar Office is responsible for collecting and posting payments on students' accounts. The Cashier/Bursar Office oversees monthly tuition payment plans, financial aid disbursement, and the collection of past-due debts. It is important for students to know their payment deadline dates and to familiarize themselves with the refund policy. The refund policy can be found by visiting https://www. maricopa.edu/future-students/payment-options/ refund-policy.

For additional information about services call 480-461-7000 or visit www.mesacc.edu/students/ cashiers/index.html.

## Center for <br> Community \& Civic Engagement Vision

Our vision is to prepare students to become civically engaged citizens.

## Mission

To promote excellence in teaching and learning through active service. We collaborate with the community, encourage servant leadership, promote personal growth, and foster social responsibility.

## Goals

To promote and build Civic Engagement opportunities across the campus.

To assist faculty with incorporating service-learning into their classes.

To help students find appropriate placement sites for service-learning assignments or as a volunteer.

To build working relationships with our community partners while developing reciprocal service-learning opportunities for our students and faculty.

Service-Learning opportunities are incorporated into many classes throughout the college. Interested students can also enroll in 1, 2, or 3 -credit service-learning classes in any one of 25 or more academic disciplines and serve at their choice of over 300 community agencies. We also administer some special programs: AmeriCorps, America Reads, Fast Tracking the Dream to College Completion and the President's Volunteer Service Awards.

## Civic Engagement

Definition: Civic engagement encompasses actions to promote the quality of life in the community through both political and non-political processes.

1. Inclusiveness - demonstrate an ability to engage respectfully with others in a diverse society
2. Application of knowledge - apply the knowledge of one's own study and experiences to active and ethical participation in civic life.
3. Demonstration of civic identity and commit-ment- provide evidence of experience in and reflection on civic engagement activities.
4. Civic communication - communicate and list to others in order to establish personal and professional relationships to further civic actions.
5. Engagement in civic action and reflection - demonstrate the ability to deliberate and collaborate on issues and problems to achieve a civic aim. See the Center for Service-Learning for more information regarding these special programs. For more information, please call 480-461-7393 or visit our website at www.me-sacc.edu/service-learning.

## Children's Center

The Children's Center at Southern and Dobson provides high quality childcare for the children of MCC students and employees. The Center is licensed by the Arizona Department of Health Services to provide care for children three years (must be potty-trained) to twelve years of age. The Children's Center offers a variety of experiences in a fun environment for preschool and older children.

The center has a contract with the Department of Economic Security (DES) for students who are DES-eligible for child care subsidy. The Children's Center is accredited by the National Association for the Education of Young Children. For more information on childcare services, call 480-461-7082 or visit www.mesacc.edu/children.

## Clubs and Organizations

Clubs are an important and vital component of the total educational experience at Mesa Community College. Students may participate in programs that encourage interaction with their peers by attending leadership programs, educational field trips and various other events. Clubs and organizations at the college reflect special interests including cultural events, community service projects and forums dealing with today's issues. Students may join a club at any time by contacting the listed advisor or signing up during club sponsored events. For additional information, please contact the Office of Student Life and Leadership at 480-461-7285 (Southern and Dobson campus) or 480-654-7759 (Red Mountain campus).

Active clubs are listed here: www.mesacc.edu/ student-life/clubs-organizations.

## College Police Department

The MCC College Police Department facilitates the college mission of promoting excellence in teaching and learning by providing a safe and secure campus environment.

In compliance with federal Iaw, MCC College Police compiles and reports annual crime statistics to the U.S. Department of Education. Those statistics are available at any time from our office or may be accessed on our website at www.mesacc.edu/collegesafety.

State-accredited police officers and civilian security personnel staff the College Police Department. The office is open 24 hours a day, seven days a week. All emergency matters should be directed to the College Police Department. For assistance in an emergency, call 480-784-0911 for any of our MCC Campuses. For non-emergencies call 480-4617046.

Proper identification may be requested by authorized College Police personnel, should the need arise. Students failing or refusing to identify themselves properly:

- Will be asked to leave the campus (if conduct or behavior warrants such action)

- Will be reported to the Dean of Student Affairs

Securing personal property, including motor vehicles, bicycles, mopeds, and motorcycles, is the student's responsibility.

Mesa Community College assumes no responsibility for damage to a motor vehicle or for any loss while vehicles are parked or operated on or near the campus. Motorcycles and mopeds can be parked only on crossbars or areas designated for motorcycle parking.

Bicycles must be parked in existing bike racks only. Mopeds, bicycles, and/or motorcycles that are found chained or affixed to trees, buildings, or light posts could be subject to removal. Owners will be responsible for the cost of the lock or chain cut.

Firearms, explosives, knives, or instruments that can be considered dangerous weapons are prohibited on campus. Only certified police officers are permitted to carry firearms on campus. All persons desiring to bring firearms to campus for classroom demonstrations or any other academic reason are required to obtain permission first from the College Police Office.

Alcohol and illegal drugs are prohibited on campus. Effective July 1, 2012, MCCCD became smoke-free. Smoking is not permitted anywhere on college property. Students failing to follow the smoking regulation after an appropriate warning will be reported to the Dean of Student Affairs. Any accidents on campus should be reported to College Police. Students can request a copy of the accident report by using the MCCCD College Police website.

Security escorts are provided to and from parking lots when requested. Minor vehicle assistance, such as dead batteries, is rendered to motorists with disabled cars. College Police do not assist in unlocking vehicles that might have the keys left inside.

Lost and Found is located in the College Police Office. Lost and found items and inquiries should be directed to this office. MCC College Police is located at the west end of the Social/Cultural Science Building at the Southern and Dobson campus, and in the Ironwood Building at MCC at Red Mountain.

The campuses are normally closed between 11:00 PM and 6:00 AM daily. The College Police Office should be notified of any planned activity during those hours.

College traffic/parking regulations are under the jurisdiction of the college administration. Regulations apply to all members of the college community and must be followed at all times. These regulations include:

- Maximum speed limit on campus is 15 miles per hour.
- Stop signs, pavement arrows, right-turn-only signs, and other traffic control devices must be observed and complied with.
- Vehicles must stop at marked crosswalks to yield to pedestrian traffic within the crosswalks.
- Persons driving on campus must follow directions given by College Police personnel and furnish student or other identification when requested.
- Students may park in any marked parking space except those marked Employee, Handicapped, Maintenance, No Parking, or with a yellow or red curb.
- Faculty and staff may park in any marked space including those marked Employee, but not in those marked Handicapped, No Parking, Maintenance, or with a red or yellow curb.
- Persons having a Handicapped sticker on their vehicle may use any marked space on the campus, including those marked Handicapped. Vehicles having a Handicapped permit may not park on red curbs.
- No vehicle other than an emergency vehicle may be parked along red curbs or in striped areas. These are fire hazard and safety zones, and violators may be towed away without warning.
- No vehicle may be parked in driveways where signs indicate No Parking or in a place not specifically marked for parking.
- Visitors may use visitor parking or any student parking space on a temporary basis.
- Backing into angled parking places is not permitted.
- Skateboards, roller skates, rollerblades, and other similar devices shall not be ridden on the campus.
- Vehicles parked on campus for longer than 72 hours will be towed at the owner's expense.

For more information on MCC parking and traffic policies, visit https://www.mesacc.edu/college-po-lice/parking-traffic-control.

Violation of these regulations may result in a citation and fine. In the case of unsafe and/or repeated parking violations, vehicles may be towed at the owner's expense. All monetary fines shall be paid to the college cashier in the Fiscal Office. Payment may be made in person or by mail.

Failure to pay or adjudicate a citation within 15 working days of issue date will result in the fine being doubled. In order to ensure due process, fines may be appealed to the hearing officer in the College Police Office at MCC at Southern and Dobson campus.

Students with unpaid fines will not be able to obtain their transcripts or register for classes. Unpaid fines may be collected via the Arizona Department of Revenue Debt Setoff Program and/ or sent to a collection agency. Citations will be enforced for both students and employees. MCC assumes no responsibility for damage to a motor vehicle or for any loss while vehicles are parked or operated on or near the campus.

For more information, visit www.mesacc.edu/pub-lic-safety.

For more information published by the Maricopa Community College District on this topic, please see the "MCCCD Policies and Procedures" section of this catalog.

## Community Outreach Center

The Community Outreach Center provides programs and services for prospective students, families, and community members who are interested in learning more about early college programs (Dual Enrollment, Achieving a College Education, Hoop of Learning, Early College Academy, and summer bridge programs), concurrent enrollment, GED to MCC transitional services, English language learning classes (non-credit) and other programs and services that assist with preparing for college.

In support of local engagement, the Center offers Hispanic community outreach programs and services, community referrals and resources support. Call 480-461-6200 for more information or visit www.mesacc.edu/outreach.

## Compliance Services

The office of Compliance Services strives to ensure that the college provides timely information, training and support to build a culture of safety and compliance with Federal, State and District laws, regulations \& policies. Reporting to the Senior Associate Vice President, the compliance team helps to manage Title IX investigations, internal department audits and is the liaison to the District Compliance Team. Our Mission is to raise awareness and understanding of campus compliance issues while increasing campus engagement and risk reporting.

## Computer Lab For Multi-Use

The multi-use computer lab requires that students must be currently enrolled in a computer-based class and have a current MCC ID card properly bar-coded to access the lab. For more information please call 480-461-7098. The Multi-Use Computer Lab is located just northeast of the clock tower in the center of campus.

## Fall and Spring Hours:

Monday - Thursday: 7:00 AM - 10:00 PM
Friday: 7:00 AM - 4:00 PM
Saturday: 7:00 AM - 4:00 PM
Closed Sunday

## Summer Hours:

Monday-Thursday: 7:00 AM - 10:00 PM
Closed Friday, Saturday, and Sunday

All computer lab equipment is available on a first-come-first-served basis.

1. Help us maintain a library-like atmosphere by keeping noise levels to a minimum.
2. Please make and take all phone calls outside of the building. Cell phones should be set to quiet mode while inside the lab and classrooms.
3. Conserve paper and toner! Limit yourself to 10 copies of a document and refrain from printing large jobs, especially heavily graphical websites.
4. Don't bring any food or drinks into the lab. This includes leaving drinks on the tables and filing cabinets by the doors. Keep it all outside. Bottled water with cap is acceptable.
5. Please ask your guests to wait in the student lounge. Guests are not allowed in the lab. Only registered MCC students are permitted inside the lab. This includes children.
6. Group projects need to be scheduled with computer lab if space is available.
7. Never install software on any of the computers.
8. Practice good desktop housekeeping. Close all programs you've opened. If you've changed the desktop, please put the settings back to the lab defaults when you leave.

## Counseling

The Counseling Department offers students a variety of services to help them address personal, social, educational, and career concerns. Through the department's support and guidance, students are empowered to complete educational and personal endeavors successfully. Academic
success, personal well being, and emotional well being are interrelated. Students are invited to take advantage of free, confidential services offered to help them achieve their full potential.

Students are best served through an appointment system to arrange for quality personalized sessions. In crisis situations, no appointment is necessary.

## Southern and Dobson Campus Counseling Center

Building 37 N
480-461-7588

## Red Mountain Campus <br> Palo Verde Building

Office 212
480-654-7720
Services provided by the Counseling Department include:

- Student Opportunities for Success Workshops (SOS)
- First-Year Experience Programs and Workshops
- Academic Counseling
- Career Counseling
- Academic and Behavioral Interventions
- Conflict Resolution
- Crisis Intervention
- Community Resource Counseling
- Math Avoidance Reduction Activities
- Substance Abuse Prevention
- Life Skills Coaching
- Individual and Group Counseling
- Classroom Instruction
- Personal counseling to enhance study experiences
- Volunteerism programs that create supportive relationships among students
- Special events, seminars, workshops, and programs to promote personal safety and well-being, and enhance peer support


## Developmental Education

MCC is committed to supporting and promoting student success in a variety of ways. Students who may not be prepared for college-level work can enroll in developmental courses (those numbered below the 100-level) in mathematics, English, and reading. These courses are designed to provide students with the review and skills needed to engage in college-level coursework. The college offers free tutoring in mathematics, English, and reading at several centers, including those especially designed for students taking developmental courses.

For more information about tutoring in specific areas, contact the department or the Learning Enhancement Center:

## Dobson \& Southern

480-461-7678
Red Mountain
480-654-7735

## Mathematics

480-461-7076

## English

480-461-7643

## Reading

480-461-7020

## Disability Resources and Services

The Office of Disability Resources and Services (DRS) provides assistance to students with disabilities, including those with learning, physical, psychological, and other disabilities. Services include academic accommodations and coordination with campus and community services. For more information, call our Southern and Dobson campus at 480-461-7447 or fax 480-4617907. For DRS information at our Red Mountain campus, please call 480-654-7771, or visit www. mesacc.edu/students/disability.

Some of the services offered, depending upon individual need, include the following: scribes and note takers, interpreters, specialized adaptive equipment, emergency wheelchair loan, classroom assistants, special testing arrangements, community referral, academic advisement, and registration assistance. To receive services and accommodations through Disability Resources and Services, students need to provide documentation stating a diagnosis or disability. This documentation
must be obtained from a licensed psychologist, psychiatrist, or medical doctor and printed on official letterhead of that person's office. The documentation is submitted to Disability Resources and Services. The documentation is confidential and will be used for the sole purpose of determining which accommodations are appropriate. Please call 480-461-7447, fax 480-461-7907, or visit www.mesacc. edu/students/disability.

For more information published by the Maricopa Community College District on this topic, please see the "MCCCD Policies and Procedures" section of this catalog.

The Adaptive Lab, located in Building 37 N on the Southern and Dobson campus, is a unit of the MCC Disability Resources \& Services Department. The Lab provides ADA-compliant computers for access to information and resources needed by students with disabilities. The area's equipment and software includes screen magnification on large-screen monitors, voice recognition software, synthesized voice screen readers, software and equipment to convert text to electronic formats and Braille. In addition to the workstations in this lab, several workstations throughout the building are adjustable height workstations. Please call 480-461-7939 for more information.


## Disciplinary Standards

For more information published by the Maricopa Community College District on this topic, please see the "MCCCD Policies and Procedures" section of this catalog.

## Early Alert Referral System (EARS)

Early Alert Referral System (EARS) at Mesa Community College is committed to the success of all our students. Numerous campus support services are available throughout your academic journey to assist you in achieving your education goals. MCC has adopted EARS as part of a student success program to aid students in their educational pursuits.

Faculty and staff participate by alerting and referring students to campus services for added support. Students may receive a follow up contact from various campus services as a result of being referred to EARS. Connections to campus
resources and services can be a great asset to students having a successful semester. Students are encouraged to participate, but these services are optional.

Campus Resource information is available at EARS website: www.mesacc.edu/ears or on MCC's homepage click on "Current Students" and then click "Services."

## Early College Programs

Early College programs provide students under the age of 18 (who have not received their high school diploma or GED) with an opportunity to attend college. MCC offers dual enrollment (college courses offered at the students high school), concurrent enrollment (college courses available at the MCC campus), K-12 Summer Camps and Achieving a College Education (ACE) and Hoop of Learning Program (HOL). Both ACE and HOL are scholarship programs designed to improve both high school completion and college readiness and success. This office also provides specialized

services for the home-school community, such as orientation, parent workshops, and pre-enrollment advisement. Tuition assistance grants are available for those who qualify. Call 480-461-6200 for more information or visit: www.mesacc.edu/earlycollege.

## Enrollment Services at Red Mountain

Early College programs provide students under the age of 18 (who have not received their high school diploma or GED) with an opportunity to attend college. MCC offers dual enrollment (college courses offered at the students high school), concurrent enrollment (college courses available at the MCC campus) and Achieving a College Education (ACE) and Hoop of Learning Program (HOL). Both ACE and HOL are scholarship programs designed to improve both high school completion and college readiness and success. This office also provides specialized services for the home-school community, such as orientation, parent workshops, and pre-enrollment advisement. Tuition assistance grants are available for those who qualify. Call 480-461-6200 for more information or visit: www. mesacc.edu/earlycollege.

## ESL Support Services

ESL (English as a Second Language) Support Services provides informational services to prospective students who wish to enroll in ESL courses. The office assists students through the enrollment process by providing services for admission to the college, academic advisement, and course registration for ESL courses. ESL Support Services is located on the main floor of

Kirk Student Center at the Southern and Dobson campus. Please call 480-461-7898 for additional information. For assistance in Spanish, please call 480-461-7455.

## Financial Aid Services

Students who are attending Mesa Community College and who meet the federal requirements of an eligible student for financial aid may apply for the following types of financial assistance: grants, loans, and work-study. To apply for financial aid, students must complete a FREE Application for Federal Student Aid available at www.fafsa.gov. For further information please call 855-622-2332 or chat with a Financial Aid Specialist online at https:// www.mesacc.edu/financial-aid/chat-financial-aid.

Students receiving federal financial aid have specific requirements for academic progress that are applied differently than scholastic standards. Specific information is available at: https://www. mesacc.edu/financial-aid/maintain-your-eligibility.

For more information published by the Maricopa Community College District on this topic, please see the "MCCCD Policies and Procedures" section of this catalog.

## Fitness Center (FC)

The Fitness Center at both Southern \& Dobson and Red Mountain features both resistance and cardiovascular exercise equipment including: Cybex exercise equipment, dumbbells and core equipment, Precor cycles, Precor elliptical runners, recumbent bikes, step mills, and treadmills. Use of this facility can provide students with a total body-conditioning program based on their
individual goals. For more information contact: Jim Haggerty, Southern and Dobson campus at 480-461-7556 or Ric Moreno for the Red Mountain campus, at 480-654-7726.

## Graduation

Students must meet all requirements for graduation including the minimum grade point average (GPA). Specific programs have higher graduation requirements. It is the student's responsibility to be aware of the program requirements. Graduation with Honors is determined after all courses used to fulfill graduation requirements, including credits transferred from other accredited institutions. Students are eligible for the following:

Designations:

- 3.5 to 3.69 With Distinction
- 3.70 to 3.89 With High Distinction
- 3.90 to 4.0 With Highest Distinction

For more information: www.mesacc.edu/ graduation.

## Grievances

For more information published by the Maricopa Community College District on this topic, please see the "MCCCD Policies and Procedures" section AR 2.3.5 \& Appendix S-6 of this catalog.

## Group Activity Center (GAC)

The Group Activity Center (GAC) offers students flexible workout classes in a friendly personalized setting at both Southern \& Dobson and Red Mountain. Both day and evening classes are available so students can create their own schedule. Pick up a GAC schedule of classes in any of the Lifetime Fitness facilities. Classes may include: Body sculpting, Boot camp, Cycling, Kick 'n' Box circuit, Pilates mat work, Total Body Conditioning, Yoga, Zumba and other cardio and muscle conditioning classes. For more information contact Gail Herndon at 480-461-7578.


## Health

Improvement Center (HIC)

The Health Improvement Center (HIC) is at Southern \& Dobson only. The HIC offers a workout experience in functional resistance training through the use of free motion exercise machines. Sorinex weight lifting platforms, free weights, and dumbbells. Cardio-respiratory fitness can be developed through the use of treadmills, step mills, Precor elliptical runners and Precor cycles. For more information contact: Jim Haggerty at 480-461-7556.

## Honors

The Honors Program provides funds to help defray the costs of attending college. The Presidents' Honors Scholarship currently covers in-state/ in-county tuition up to 15 credit hours (plus the $\$ 15$ registration fee) per semester, but does not apply to summer sessions. To be eligible, students must enroll at Mesa Community College within the academic year (two academic semesters) following high school graduation without having attended another accredited college or university before enrolling.

Students who graduate in the top 20 percent of an NCA-accredited Maricopa County high school class and have either tested into at least ENG101, MAT120, and CRE101 or have successfully completed the requisite work to be prepared for placement into those courses are eligible to receive the scholarship. Students may also test into the program if they had a final cumulative high school grade point average of 3.0 or higher and tested into the placement tests (WritePlacer score of 6 or higher; Exemption from CRE101; Placement
in MAT120 or higher). This is an opportunity for recent high school graduates who are willing to make a commitment to their community and their own future.

Students with at least a 3.25 grade point average and 12 cumulative semester credit hours from the Maricopa Community Colleges may qualify for the Honors Achievement Award of up to \$325.00 each semester. These students will be identified as Honors Students and will be eligible to take honors classes and participate in all honors activities and opportunities.

Honors students may register for classes at this location. Call for the registration schedule at 480-461-7079. The Honors Co-Coordinators are: Shereen Lerner at 480-461-7306 and Scott Russell at 480-461-7369. For more information visit our website at www.mesacc.edu/honors. For more information published by the Maricopa Community College District on this topic, please see the "MCCCD Policies and Procedures" section of this catalog.

## Housing/Living Accommodations

> Mesa Community College has no on-campus housing. All housing arrangements are the responsibility of the individual student. The Office of Student Life and Leadership provides a free housing directory of local apartments and also provide a listing of roommates. The Housing Guide and Directory are available only to current Mesa Community College students. To view the Housing Guide, please visit https://www.mesacc. edu/students/student-success-programs/campus-and-community-resources.

Students can also view current listings for rentals and roommates posted by other students.
Listings are available in the Office of Student Life and Leadership in the Kirk Student Center at the

Southern and Dobson location or in the Mesquite Building at the Red Mountain campus. For more information, please call 480-461-7285 for the Southern and Dobson campus or 480-654-7759 at the Red Mountain campus.

## International Education (IE)

Our Vision: To promote global awareness for our campus and community.

Our Mission: To develop a Global Center through study abroad programs, international student services, event programming, service excellence, and opportunities for internationalizing the campus with faculty partnerships to encourage global citizenship and student success. The IE Office offers services for F-1 international students interested in studying at MCC, current international students, and American students interested in studying abroad. IE also serves as a resource for campus international and intercultural initiatives. For more information, please visit www. mesacc.edu/inter-national-education or call 480-461-7756.

## F-1 International Students

The International Education Office provides Admissions services to future F-1 students, and the following services to all continuing F-1 international students who need assistance with: academic and immigration advising, intercultural adjustment, health insurance, housing information, on and off campus employment opportunities, university transfer, changes of major, l-20 extensions, etc. The office also provides support to the International Student Association Club, and organizes cultural activities to enhance cross-cultural understanding among domestic and international students. You can also find more information and/or email us:

Prospective F-1 Students: https://www.mesacc. edu/international-education/future-f-1-students.

Current F-1 Students: https://www.mesacc.edu/ international-education/current-f-1-students.

## Study Abroad

The International Education Office offers a variety of study abroad programs in different worldwide countries. These exciting programs are developed and led by our faculty, and provide a great opportunity to learn and travel at the same time.

The Coordinator of the program assists in selecting programs, the application process, scholarship and financial aid. All programs require an online application and have eligibility requirements.

For additional information regarding Study Abroad or to apply for a program please visit:
https://www.mesacc.edu/study-abroad or email studyabroad@mesacc.edu.

For general information about the International Education department please visit www.mesacc. edu/international-education, email ie@mesacc.edu or call 480-461-7756.

## Learning Enhancement Center (Tutoring and Other Academic Support Services)

Mesa Community College is committed to helping students succeed and excel in their coursework.

The Learning Enhancement Center (LEC) provides FREE tutoring and academic learning resources for MCC students throughout the semester in various locations on campus. Tutoring hours by subject are posted on the LEC website: https://www.mesacc. edu/lec. For more information about our services, call 480-461-7678.

## Math Tutoring Center | MS 100

- Drop-in tutoring for most math courses offered at MCC.
- Math tutorials, videos, and handouts on selected topics.
- Group Study Sessions.
- Computers/software/printing/ study strategies handouts.


## Physical Science Center | PS 100

- Drop-in tutoring for chemistry and physics courses offered at MCC
- Computers/software/printing/ study strategies handouts.

Biology Center | NU 157

- Drop-in tutoring for biology and nursing courses offered at MCC.
- Anatomical models, bones, and microscopes for use in the Center.
- Computers/software/printing/ study strategies handouts.


## Academic Skills Center | EF 124

- Drop-in tutoring for writing and grammar in communication, CPD150, English, English as a Second Language and reading courses offered at MCC.
- Tutorials, videos, and handouts on selected topics.
- Computers/software/printing/ study strategies handouts.


## Elsner Center | LB 175

- Appointment based tutoring for accounting, foreign languages, and CIS courses offered at MCC.
- Computers/software/printing/study strategies handouts.


## PIRC Lab | AD 42

- Drop-in tutoring for psychology courses offered at MCC.
- Computers/software/printing/ study strategies handouts.


## Red Mountain Tutoring Center | Desert Willow Building - first floor | 480-654-7735

- Drop-in tutoring for mathematics, chemistry, and physics courses offered at MCC Red Mountain campus.
- Math tutorials, videos, and handouts on selected topics.
- Group Study Sessions.
- Computers/software/printing/ study strategies handouts.


## Red Mountain Biology Center | Saguaro Building S 154

- Drop-in tutoring for Biology courses offered at MCC Red Mountain campus.
- Anatomical models, bones, and microscopes for use in the Center.
- Computers/software/printing/ study strategies handouts.


## Online Tutoring | Access available from the LEC website and Canvas

- Tutoring through Brainfuse available for math, physics, biology, chemistry, nursing, allied health, writing, reading,
- English for academic purposes, Ianguages,
social sciences, accounting, economics, business and computer science \& technology.
- Tutoring is available on a $24 / 7$ basis for some subjects. Log in to Brainfuse for availability by subject.
- Study skills support.


## Library and High Technology Complex

The Paul A. Elsner and Red Mountain libraries support research and learning activities on both campuses by providing full service libraries, computer commons, writing centers, and learning enhancement centers that provide tutoring services. The library collections include print and electronic resources. Web-based resources include the Online Public Access Catalog, which lists the holdings of all college libraries in the Maricopa Community Colleges District, electronic books, numerous periodical and reference databases, and online reference assistance.

In-house reference services offer individual, personalized assistance, and classroom instruction in library research skills. Faculty librarians are available for consultation during the libraries' scheduled hours. Materials may be checked out at the library circulation desk. Included are materials that instructors have placed on reserve for short-term circulation, interlibrary loan materials obtained from other libraries, and materials from various special collections. A valid student identification card is required for checking out materials. Loan periods vary from three weeks for general circulation materials to three-day, overnight, or one-hour use for reserve materials. For convenience, an outside book drop is available
for returning materials when the library is closed or during vacation periods.

Small group study rooms are available. The library's Southwest Studies Reading Room, located on the third floor of the Paul A. Elsner Library, houses the Southwest Collection and provides a peaceful and beautiful study space.

The Elsner Library also provides academic support for students using a variety of methods and technologies:

- Computer workstations are available on both the first and the second floors of the Paul A. Elsner Library on the Dobson and Southern campus. In these workstations, students can access the Online Public Access Catalog (OPAC), which houses the collection of all Maricopa Community Colleges libraries, as well as research databases, the Internet, and college email.
- Software is accessible on the first floor of the Paul A. Elsner Library, and it can support coursework. Students can find programs in Anthropology, ESL, Math, Nursing, Physics, Reading, Spanish, and other subjects.


## Media Services

Media Services is located in the north wing of the Academic Support Building. The center provides video and DVD copies of theater productions, lectures, special events, and some class materials for students for a fee.

If media equipment is needed for a student presentation in the classroom, your instructor must request an AV equipment delivery from the Media Center. This equipment includes, but is not limited to, VHS/DVD players, computers, display devices, flip charts, overhead projectors, and audio equipment.

To order equipment, your instructor must call 480-461-7678 at the Southern and Dobson Campus, or 480-654-7705 at the Red Mountain Campus at least 24 hours before your class presentation.

Both centers are open from 7:00 a.m. to 10:00 p.m. Monday through Thursday and 7:00 a.m. to 4:00 p.m. on Friday.

## Multicultural and Student Support Services

The Multicultural Services office works collaboratively with other support services, academic departments, and community groups to provide retention services and programs for historically un-der-represented groups. The department provides such services as academic advisement, individual education plans, mentoring, leadership training, and cultural events. For more information call 480-461-7453 or visit www.mesacc.edu/students/ multicultural.

## Outreach and Recruitment

The Office of Outreach \& Recruitment provides college awareness, planning and access opportunities for students and families interested in attending MCC. We provide various programs and services including high school and charter school visits, school and community presentations, college and career fairs, and coordinated campus visits, tours, and open houses. To schedule a visit, or to request more information call 480-461-6392
or email recruiter@mesacc.edu. Follow us on Facebook@Come2MesaCC.

## Parking

(See College Police Department and/or Disability Resources for additional information).

## Petitions

The guidelines and approval to circulate petitions may be obtained in the Office of Student Life and Leadership in the Kirk Center or in the Mesquite Building at the Red Mountain campus. Reservation form and information can be found on the Student Life website at https://www.mesacc.edu/ student-life or call 480-461-7285.

## Records

The Office of Records maintains the official college transcripts, provides enrollment verification, and determines graduation and student athletic eligibility. Information can be found at: www. mesacc.edu/students/admissions.

Transcripts are issued upon request. Students must request an official transcript when transferring another institution. There is no fee for an unofficial transcript and a $\$ 5.00$ fee for official transcripts.

Transcripts are ordered and paid though my.maricopa.edu.

## Ordering Transcripts and Payment Options:

- Online: my.maricopa.edu
- In Person: Visit the Southern \& Dobson or RedMountain Enrollment Centers with a valid photo ID.
- Mail a written and signed request or transcript request form, including full name, student ID number, date of birth, telephone number, dates of attendance at MCC, official or unofficial transcript request, name and address of institution where the transcript needs to be sent, sign and date the letter, and include the $\$ 5.00$ fee. You may pay by check, credit card, or money order.

Official transcripts will not be issued to students having outstanding debts to any of the Maricopa Community Colleges. For further information, visit https://www.mesacc.edu/admissions-records/re-quest-transcripts.

For more information published by the Maricopa Community College District on this topic, please see the "MCCCD Policies and Procedures" section of this catalog.

## Scholarships

Mesa Community College offers a variety of scholarships for new and continuing students. Scholarships are not linked to financial aid and require separate applications. Information, applications, resources, and helpful hints for scholarships are available in the Student Financial Services Office, which is located in Building \#42. Also visit www.mesacc.edu/financial-aid/types-aid/ scholarships.

Additional scholarships are available at several departments on campus. In addition, private community organizations and Native American tribes offer scholarships. The Maricopa Colleges Foundation scholarship application can be accessed online at www.maricopa.edu/ foundation/apply.

## Smoke-Free Policy

Effective July 1, 2012, MCCCD becomes smokefree. Smoking is not permitted anywhere on college property. Students failing to follow the smoking regulation after an appropriate warning will be reported to the Dean of Student Affairs.

## Student Activities and Events

College activities are an important part of any student's college experience, regardless of age or background. These activities provide an opportunity for students to interact socially, develop leadership skills, and gain greater understanding of other cultures.

## Student Life and Leadership

The Office of Student Life and Leadership serves as the home to a variety of offerings and opportunities for the students of Mesa Community College. Not only are all student clubs and organizations housed within the department, the department sponsors and collaborates with others to host various events throughout the year, including heritage month celebrations, diversity activities, vendor days, health and wellness events, etc. It is not unusual during the year to hear free live music performed on campus, explore different cultures during the various cultural days, or enjoy social activities at either MCC campus. Students interested in becoming a part of any MCC activity may visit the Office of Student Life in the Kirk Student Center at MCC at Southern and Dobson, or in the Mesquite Building at MCC at Red Mountain campus.

## Housing and Food Resources

Student Life and Leadership also provides all students information regarding housing near
campus. Students looking for housing can check out the binder in the office to either find a place to live, find a roommate, or post for either as well. Student Life and Leadership is responsible for maintaining the on-campus food pantry, the Mesa Market. With a student ID, individuals can receive up to 10 food items a week. Additionally, both the Southern and Dobson and Red Mountain campuses each host monthly fresh food distribution from United Food Bank. For more information about services offered by the Office of Student Life and Leadership, please visit https:// www.mesacc.edu/student-life.

## Bus Services

Bus passes are available for purchase through at the MCC bookstore through the MCCCD Travel Reduction Program, but forms for these subsidies are offered to students in the Office of Student Life and Leadership. To qualify for a student discount, at the time of purchase, the student must be enrolled in 12 or more credit hours. We offer a limited number of 30 -day passes each semester, on a first-come first serve basis. Semester passes are sold during the first day of the semester. For more information about the Maricopa Community College District reduced fare bus passes, please visit: https://www.mesacc.edu/student-life/ services-campus-resources.

The Valley Metro Bus is available for Dobson Road, north and southbound travel and Southern Avenue, east and westbound travel. Valley Metro bus service is also available to the Red Mountain campus. Bus route 184 (north and southbound Power Road) stops at the circle between Mesquite and Desert Willow buildings.

For specific bus route information, you can refer to their website at www.valleymetro.org or you can obtain a Bus Book at the MCC Library. ASU shuttle
services are no longer offered. Reduced Fares: Reduced local fares are also available for youth (ages 6-18), seniors (age 65 and older), persons with disabilities and Medicare cardholders.

Students should be ready to provide proof of eligibility upon boarding. Call the Valley Metro Customer Service at 602-253-5000 for information on how to apply for a Reduced Fare Certification Card.

## Leadership Opportunities

The Office of Student Life and Leadership offers various opportunities for leadership development for currently enrolled MCC students. Opportunities include a variety of one-day, weekend and week long leadership retreats and programs. For more information, contact the Office of Student Life and Leadership in the Kirk Student Center or the Mesquite Building at the Red Mountain campus. Information on various leadership training opportunities can also be found at https://www. mesacc.edu/student-life/events-leadershipopportunities or call 480-461-7285.

## Student Government (ASMCC)

The student body elects the Associated Students of MCC (ASMCC) Executive Board each spring. The ASMCC officers work to serve the needs and interests of MCC students by promoting and maintaining a democratic form of government. The Executive Board appoints the ASMCC Cabinet. ASMCC represents the student body on various college committees and works with MCC staff, faculty, and administration to achieve this goal. They also plan activities to meet the intellectual and social needs of MCC students. The ASMCC Senate includes the ASMCC Cabinet, Independent Senators and a voting representative from each recognized active MCC club or organization.

The Senate meets weekly, and all MCC students are invited to attend. Please call the Office of Student Life and Leadership for more details at 480-461-7285 for MCC at Southern and Dobson, or 480-654-7759 for MCC at Red Mountain. The ASMCC office is located in the Office of Student Life and Leadership in the Kirk Student Center. To participate or get more information, please call 480-461-7278 or visit www.mesacc.edu/students/ asmcc/.

## Dance

In the MCC Dance Program, a student can choose from a variety of one-credit dance movement classes such as Ballet, Tap, Jazz, Modern, Hip Hop, Belly Dancing, Salsa, Swing, Ballroom, Flamenco and Improvisation. MCC also offers three-credit dance humanities lecture courses, such as Introduction to Dance, World Dance Studies and Dance in Popular Culture. Choreography and Rhythmic Theory for Dance classes are also available as lecture/ movement classes. The MCC Dance Program gives beginning, intermediate and experienced dance students an opportunity to perform in an end of the year showcase. More experienced dancers can sign up to be in a formal dance production each semester. Non-audition classes are Dance

Workshop and Tap Dance Ensemble. Membership in the MCC Dance Company is by audition only and requires Tuesday/Thursday 12:00-4:00 PM rehearsals in addition to technique class. For more information, please contact Tina Rangel at 480-4617597, or email tina.rangel@ mesacc.edu.

## Intercollegiate Sports

Intercollegiate Sports at Mesa Community College are an integral part of the total student activity program. MCC is a member of the Arizona Community College Athletic Conference (ACCAC) and the National Junior College Athletic Association (NJCAA). The thirteen colleges that participate in the conference are: Arizona Western, Yuma; Central Arizona, Coolidge; Cochise, Douglas; ChandlerGilbert Community College, Chandler; Eastern Arizona, Thatcher; Glendale Community College, Glendale; Mesa Community College, Mesa; Paradise Valley Community College, Phoenix; Phoenix Community College, Phoenix; Pima Community College, Tucson; Scottsdale Community College, Scottsdale; South Mountain Community College, Phoenix; Yavapai, Prescott; and Northland Pioneer, Holbrook. Students desiring to participate in athletics should contact the head coach or the athletic director prior to the start of the season.


Student athletes must conform to the eligibility rules established by the NJCAA, ACCAC, and the Maricopa Community Colleges.

The men's athletic program includes:
Fall: Basketball, Cross Country, and Soccer
Spring: Baseball, Golf, Tennis, and Track/Field
The women's athletic program includes:
Fall: Basketball, Cross Country, Soccer, and Volleyball
Spring: Softball, Tennis, Track/Field, and Golf
Please visit https://www.mesatbirdsports.com/ landing/index for more information.

Music
Opportunities for the pursuit of musical interest may be found in the A Cappella Choir, Madrigal Singers, Music Theatre Orchestra, Vocal Chamber Workshop, Instrumental Ensembles, Band, and Jazz Ensemble. Vocal and instrumental soloists make recitals, competitions, and public appearances.

Any MCC student is eligible for admission through audition. Consult the college schedule, or call the Music Department Office for audition dates at 480-461-7577.

## Student

## Identification (ID) Card

All new students will be provided identification cards upon registration at no charge, with verification of enrollment and a valid photo ID, such as a driver's license or another school ID. This is a permanent MCC ID that provides access to college services and activities. Replacements
will be provided for a $\$ 5.00$ fee. Student IDs are available in the Enrollment Center at the Southern \& Dobson campus, or in Enrollment Services at the Red Mountain campus. For information about Student ID cards, please call 480-461-7000 or 480-654-7600 at the Red Mountain campus.

For more information published by the Maricopa Community College District on this topic, please see the "MCCCD Policies and Procedures" section of this catalog.

## Student Insurance

Every registered MCC student who is enrolled in an approved credit and/or non-credit class or is engaged in school-sponsored, supervised, approved, and calendared activities in a college of the Maricopa County Community Colleges District is covered during the policy term. This plan applies only to college-related accidents. The student is automatically insured, and the cost is covered in the campus activity fee. Information on filing a claim, detailed brochures, and medical insurance information is available in the Dean of Student Affairs office located on the top floor of the Kirk Student Center at MCC at Southern and Dobson or in the Office of Student Life and Leadership in the Mesquite Building at the Red Mountain campus.

International Education students can purchase insurance through International Student Health Insurance Plan with Relation Insurance. You can view the brochure or enroll online at www. renstudent.com/mcccd. For more information, please call 480-461-7756.

## Technology Support

Technology support services are available to students, faculty, and staff for technology related
questions and assistance. Technology Support Services staff members assist students with use of their college email accounts. Students and employees are encouraged to call Technology Support Services if they have questions or need help with:

- Creating their email account
- Using their email account
- Resetting email passwords
- Configuration of email clients
- Sending/receiving/reading email not related to other ISPs (Internet Service Provider)
- Accessing the MCC website
- General questions about email
- Browser usage

Assistance is available via the Internet on theTechnology Support Services website at www.mesacc. edu/its/ or by email at tss@mesacc.edu or by phone at 480-461-7217.

## Testing Services and Placement Testing

Students must first create a student account and apply for college admissions prior to submitting any documents for college course placement review. 'New to MCC' students can apply for admissions in person at either MCC campus or online: https:// www.mesacc.edu/enroll

Maricopa Community Colleges--Mesa CC included, have updated our requirements for placement into English, Reading and Math courses. An unweighted high school GPA of 2.6 or higher for students who attended a US high school within the past 10 years will now be considered for direct course placement using their GPA. Students who passed their GED exam since 2014 can be considered for direct
placement into college level courses with certain GED scores. And students who have taken the ACT (American College Test) can be placed directly into college level courses with certain scores.

All other students can take either EdReady for English/ Reading (https://maricopa.edready.org/ home) or (ACCUPLACER (WritePlacer, Reading Comprehension and/or Algebra or Advanced Algebra) or prove prerequisite coursework complete: AP (Advanced Placement) or CLEP (College Level Examination Program) credit earned. Please consult the MCC Testing Center web page for more information. You can also upload your unofficial high school transcript, GED results or ACT/SAT scores using a 'Dynamic Form' on Testing Services web page. If you need personal assistance, please call our office during regular business hours. Placement testing is still required for many students or some early college programs such as CNA, EMT, Dual Enrollment, ACE Program or Hoop of Learning, just to name a few.

Testing Services is offered at both our Southern and Dobson and Red Mountain campus. Students should allow 2-1/2 hours to complete all three placement tests if needed. Photo ID and your MEID or Maricopa Student ID number are required for all testing services. Sample Questions are available on our website: www.mesacc.edu/testing.

EdReady placement can be taken from home, at your convenience, as long as you have a high speed internet connection. Take the time to go through all the modules and strive for the highest placement possible. Not taking EdReady seriously will not help you in your goal of shortest plan to graduation.

ACCUPLACER placement testing is computer-based with no time limit. Allow enough time to finish. The testing schedule hours may change during peak registration times and during the summer months.

CELSA--English as a Second Language--is a paper and pencil test with a 45 -minute time limit. The HESI A2 exam is required as part of the Nursing Program application process. It is offered at either our Red Mountain (480-654-7811) or our Southern and Dobson (480-461-7336) locations. The cost is $\$ 40$. for Maricopa County Community College District (MCCCD) students. There is an additional \$25 proctoring fee for students attending any college outside of MCCCD. Valid photo ID is required to take the HESI A2 exam. Visit our website for more information specific to the HESI A2 exam at www.mesacc.edu/testing. Instructor make-up exams are available for students who miss an exam in class due to illness, schedule conflicts, personal circumstances or the need for special accommodations. Students should work with their instructors to see if this is an option and to make arrangements to use this service. Photo identification is required for makeup exams.

Private testing rooms, visual enlargers, and other services are available for students with special needs and arranged through Disability Resources and Services, call: 480-461-7447. Many other exams are available by appointment and prior arrangements. Examples include PearsonVue, GED, CLEP, CertiPort, Castle Worldwide and proctored exams for other colleges and outside agencies. Please review our department website or call Testing Services directly for more information.

## Testing Services Hours \& Locations

Monday-Thursday: 8:00 AM - 6:00 PM
Friday:10:00AM - 5:00 PM

## Summer hours:

Monday through Thursday: 8:00 AM - 6:00PM Friday: Closed
(The last test is given out one hour before the office closes)

## Red Mountain Location

Enrollment Services
Mesquite Building \#5
Phone: 480-654-7811
rmtesting@mesacc.edu

## Southern and Dobson Location

Testing Center, Building \#38
Phone: 480-461-7336
testing@mesacc.edu
For more information published by the Maricopa Community College District, please review the common pages "MCCCD Policies and Procedures" section of the catalog.

## Theatre Arts

Several dramatic productions are staged at MCC during the year. Auditions for each production are open to all students in the college, whether or not they are enrolled in theatre classes. Audition dates and times will be posted around the Theatre Outback at the south end of campus and are also available through the Theatre Office and website. Production rehearsals are usually held in the evenings, although some afternoon rehearsals may be required. All rehearsals are at the discretion of the director.

Students interested in working on productions (acting, stage construction, lighting, costuming, make-up, etc.) should contact the Theatre Office at 480-461-7170 or the director at the time of the auditions.

The Stage Door Players is the student theatre club at MCC. It is devoted to developing, promoting, and publicizing the theatre events at the college. Working on the Theatre Department productions attains membership. All students are invited to participate. For more information, call Kevin

Dressler, Kara Thomson, or Marisa Estrada in the Theatre Department or visit www.mesacc.edu/ programs/theatre-arts/.

To watch a variety of MCC plays, season tickets are available.

## Regular ticket prices are:

MCC students \$7.00
Seniors \$8.00 Faculty/Staff \$10.00
General Public \$12.00
Children under 5 not allowed

## Travel for Students

As a college sanctioned activity, students participating in group travel are required to abide by set policies and procedures. Some of the regulations for students on college-sponsored trips are listed below. All participating students will be required to adhere to established policies and procedures. Participants must complete all required college travel forms before taking a college-sponsored trip and in some cases attend required orientations.

Please contact the Office of Student Life and Leadership for required forms.

- All students officially representing the college are required to travel to and from the travel site with the college group to which they belong.
- The registered occupants of hotel rooms are financially responsible for any damage or theft that occurs in their respective rooms. Such occupants are also responsible for charges against their room, such as telephone calls, Internet services, etc.

All attendees are required to participate in each activity listed on the daily agenda. Students without the approval of their advisor(s)will make no deviations to the schedule.

- Participants are expected to conduct themselves in a manner which:
- Reflects positively on themselves, the club/ organization/team, the college, and the district
- Reflects commitment to integrity in personal, social, and academic involvements
- Is respectful of others and worthy of respect from others

- The use of non-prescription drugs and/or alcohol is strictly forbidden according to the policies of the MCCCD. Students are expected not only to refrain from consumption of alcohol and/ or drugs, but also to actively discourage others from consumption of these substances.
- Any student violating these travel regulations and/or the student code of conduct may be sent home and may be required to reimburse the college for the full cost of the trip and may result in disciplinary action or the student code of conduct may be sent home and may be required to reimburse the college for the full cost of the trip and may result in disciplinary action.

Additional information on student travel is available from the Office of Student Life and Leadership and the Dean of Student Affairs.

## Trio Student Support Services

TRIO Student Support Services (SSS) is a federally funded college persistence and retention program for first-generation, low-income college students and college students with disabilities. Participants in SSS have access to services such as: tutoring, academic advising, scholarship search and preparation, career exploration and planning, transfer planning and mentoring.

## Veterans' Services

The Veterans' Services office assists qualified students with veteran/dependent educational benefits. Veterans' benefits are available to veterans and children or spouses of veterans or 100\% permanently disabled veterans. To secure benefits, the student must apply through the Veteran Services office. The Veterans' Services office provides
one-stop enrollment service. A veteran/dependent of a veteran has an opportunity to receive academic advisement, course registration, and assistance with financial aid. Please visit our office and complete the veterans'/dependent packet today.

For more information call MCC at Southern and Dobson 480-461-7425 or MCC at Red Mountain 480-654-7600 or visit www.mesacc.edu/students/ veterans.

For more information published by the Maricopa Community College District on this topic, please see the "MCCCD Policies and Procedures" section of this catalog.

## The Writing Center

The Writing Center provides free tutoring by faculty for any class-related writing assignment and offers one-credit classes in spelling, vocabulary improvement, grammar, and mechanics. The Writing Center, located on the ground floor of the Paul A. Elsner library, is open.

## Writing Center Hours:

## Fall/Spring Monday - Thursday

8:00AM to 8:00 PM,
Friday
8:00 AM to 4:00 PM

## Summer Monday- Thursday <br> 9:00 AM to 7:00 PM

Appointments are required for tutoring; no appointments are needed to use the computers, which are available on a first-come/first-served basis.

For more information or to schedule an appointment, call: 480-461-7513 or visit www.mesacc.edu/ dept/d13/eng/writing_center.


# Academic <br> Departments 

MESA
COMMUNITY COLLEGE
A MARICOPA COMMUNITY COLLEGE

# Academic 

# Departments 

# Administration of Justice Studies 



Dr. Kerry L. Muehlenbeck Department Chair

Barbara L. Lyne<br>Administrative Specialist Senior barbara.lyne@mesacc.edu<br>Department Telephone: 480-461-7080<br>SCO3W, Building SC 14<br>https://www.mesacc.edu/programs/<br>administration-of-justice

The Administration of Justice Studies (AJS) Department prepares students for careers in all areas of criminal justice. Students select from a variety of courses and may earn an Associates Degree in Applied Science in the Administration of Justice Studies (AAS-AJS) and/or any number of Certificates of Completion (CCLs) in the areas listed below. For specific degree and/or certificate requirements, please see Career and Technical Education, https:// www.mesacc.edu/programs/cte.

- Administration of Justice Studies
- Corrections
- Crime Scene Investigation
- Fingerprint Identification and Photography
- Law Enforcement
- Legal (Judicial) Studies
- Victimology

The AJS Department continues to teach introductory and advanced firearms courses that focus on
firearms safety and use. Students who are 21 years of age and successfully complete AJS151 may earn a concealed weapons permit. In addition, options for hands-on learning and experiences in the field are available through various service learning and internship opportunities.

Mesa Community College's AJS Department provides a comprehensive approach to students who seek an understanding of the criminal justice discipline. It meets the needs of the most rapidly growing academic and professional fields in the United States. Students who plan to major in any of the AJS programs are strongly encouraged to meet with an AJS advisor. These advisors are familiar with career-entry requirements and can guide students in making appropriate decisions concerning the correct course of study. All residential faculty in the AJS Department actively participate in student advisement for AJS majors. Please call the number above to schedule an advisement.

## Applied Sciences \& Technology



Bryce Bond

Department Chair

Department Telephone: 480-461-7144

Building TC 50
https://www.mesacc.edu/departments/ap-plied-sciences-and-technology

The Applied Sciences \& Technology Department offers courses and programs in the following areas:

[^2]- Automation Technology
- Automotive Performance
- Dental Hygiene
- Electrical Mechanical Drafting
- Electronics Technology
- Interior Design
- Machinist Technology
- Manufacturing
- Micro Circuit Mask Design
- Sustainable Agriculture
- Urban Horticulture
- Veterinary Technology
- Welding Technology

Applied Science \& Technology is making progress through our relentless commitment to excellence, we prepare students to graduate with the knowledge, skills, and behaviors needed to provide long-term workplace success. Through meaningful dialog with our advisory committees, partnerships with local industry leaders, and continuous labor market scanning, we endeavor to grow and adapt our CTE programs to meet the workforce needs of today and anticipate the emerging opportunities for the future. For more information, see the "Career \& Technical Education" section of this catalog.

## Art

Dr. Ginger Leyendecker
Department Chair
Department Telephone: 480-461-7524
Building AC 30
https://www.mesacc.edu/departments/art

The Art Department offers courses and programs in the following areas:

- $\operatorname{Art}(A R T)$
- Art History (ARH)
- Digital Arts (ART)

The mission of the Art Department is to support a learning environment that encourages visual literacy, promotes the aesthetics of cultural diversity, enhances the quality of life, and provides our students with the opportunity to develop the skills and techniques necessary to be successful in the field of art.

Art exhibitions will be on display in the MCC campus Art Gallery. Exhibitions will include the annual Art Student Show, the Art Faculty Show, and exhibits by nationally known artists. Lectures and workshops are held throughout the year for our students and the public. Empty Bowls is an annual fundraiser

organized by ceramics faculty and students, which raises money for local food banks.

Each spring the Art Department collaborates with departments across campus to present the "Festival of the Arts," featuring artists, musicians, theatre performances, dancers, poets and storytellers, fashion designers, DJs, and student clubs and organizations.

If you plan to major in art, you can choose between degrees in Fine or Digital Art. We also offer certificates of completion.
https://www.mesacc.edu/programs/fine-arts https://www.mesacc.edu/programs/digital-arts

It is recommended that students planning to transfer as art majors to a four-year college or university take a planned set of courses leading to an Associate in Arts, Fine Arts. The AA-FA is a general degree that includes special requirements enabling art majors to graduate from MCC after earning 63 credit hours.

The basic studio art courses required for most art majors planning to transfer to a four-year institution include:

- ARH101 Prehistoric Through Gothic Art
- ARH102 Renaissance Through Contemporary Art
- ART111 Drawing 1
- ART112 Two Dimensional Design
- ART113 Color
- ART115 Three Dimensional Design
- ART255 Art Marketing

Students planning to major in Fine Art should choose four classes from the list of restricted electives:

- ART162 Ceramics I
- ART116 Life Drawing I
- ART131 Photography I
- ART165 Paining I
- ART122 Drawing and Composition II
- ART167 Watercolor Paining
- ART250 Printmaking
- ART277 Fibers

Students can also get a studio certificate in Drawing and Painting or Ceramics by taking the core classes and then five classes in their area of interest.

Please consult an academic advisor and a college or university catalog to assure compliance with the specific requirements of the institution where you want to transfer.

Degrees/Certs Offered through Art The Art Department also offers the Associate of Applied Science (AAS) and Certificate of Completion (CCL) in the following areas of specialty:

- Digital Arts Photography
- Digital Arts Illustration
- Digital Arts Graphic Design


## Business



## Dr. Richard Toler

Department Chair
Department Telephone: 480-461-7711
BP Building 43A
https://www.mesacc.edu/departments/business

The Business \& Information Systems Department offers courses and programs in the following areas:

- Accounting (ACC)
- Business (BIS)
- Computer Information Systems (CIS)
- Entrepreneurial Studies (EPS)
- Fashion Merchandising \& Design (TEC)
- International Business (IBS)
- Management (MGT)
- Marketing (MKT)
- Multimedia \& Game Technology
- Networking \& Security (MST/CNT/BPC/CIS)
- Organizational Management
- Real Estate \& Real Estate Appraisal (REA)
- Small Business Management (SBS)
- Total Quality Management (TQM)
- Web Technology

The emphasis of Business and Information Systems is to provide quality academic coursework, for competency and application-based learning utilizing state-of-the-art technologies to prepare students with marketable skills that are responsive to the current needs of a variety of workplace settings, and to prepare students to transfer to a four-year university.

The department also offers courses in Computer Information Systems (CIS), Business and Personal Computers (BPC), Fashion Merchandising and Design (TEC). See Computer Information Systems, Fashion Merchandising and Design, and Network Academy for details on these courses.

Please see Network Academy for information on courses, certificates, and degrees in network administration and security. For additional information on the Network Academy, visit https://www.mesacc. edu/programs/networking-security.

Faculty advisement is available by appointment and drop-in. The department has computer labs available for student use at the Southern and Dobson Multi-use Lab (BA3E) - Just north of the Clock Tower.

Operating hours during the Fall and Spring semesters are:

Monday through Thursday 7:00 AM - 10:00 PM
Friday 7:00 AM - 8:20 PM
Saturday 7:00 AM - 4:20 PM
Hours vary during holidays and summer. For holiday and summer hours, please visit the lab for current information. All labs are closed on Sunday.

## Communication, Theatre \& Film Arts



## Erin Rawson

Department Chair
Department Telephone: 480-461-7524
Building AC 30
https://www.mesacc.edu/departments/com-munication-theatre-film-arts

The Communication, Theatre \& Film Arts Department offers courses and programs in the following areas:

- Communication (COM)
- Theatre Arts (THE)
- Theatre Production (THP)
- Cinema (THE)


## Communication, Theatre and Film Arts

Communication skills are essential to daily living and success on the job. Those who are skilled in communication have an advantage when it comes to job placement and promotion. Presentational, interpersonal, and teamwork skills top the list of competencies employers desire in their workforce.

Study and practice in Communication also helps to build positive relationships with family and friends, in addition to clients, patients, and customers. Theatre courses allow you to meet the human need for personal development, self-assurance, and confidence.

It is recommended that theatre majors enroll in a wide range of theatre courses in order to ensure a total grasp of the field. The Theatre \& Film Arts program presents three to four major main stage productions per year. Open auditions are available. The program is active in the Kennedy Center American College Theatre Festival and participates in the AriZoni Awards.

## Counseling

Dr. HC Adams

Department Chair
Southern \& Dobson Campus: 480-461-7588
Building 37N
Red Mountain Campus: 480-654-7210
Palo Verde Building, Office 212
https://www.mesacc.edu/departments/counseling

The Counseling Department offers a variety of services to support students' personal, academic, career, and other goals. Counselors support and empower students to effectively address barriers that negatively impact their academic, career, and personal endeavors.

Counselors take a holistic approach in supporting the students' goals, as personal and emotional well being is central to effective learning. Students are invited to take advantage of confidential cost-free services to achieve their full potential. Students are encouraged to make an appointment to arrange for quality personalized sessions; however, in urgent or crisis situations no appointment is necessary.

Services provided by the Counseling Department include:

- Academic Counseling
- Career Counseling
- Personal Counseling
- Academic Interventions
- Behavioral Interventions
- Conflict Resolution
- Crisis Intervention
- STEM Success Activities
- Successful-Year Experience Programs
- Customized Workshops for Learning Communities
- Campus-wide Workshops
- Substance Abuse Prevention
- Substance Abuse Intervention
- Community Resource Counseling
- Support Group
- Classroom Instruction
- Peervention Volunteer Program / IGNITE
- Campus \& Community Volunteer Opportunities
- Special events, seminars, workshops, and programs to promote personal safety, well being, and enhanced student success

The Counseling Department offers courses designed to assist students in identifying their academic, career and personal goals.

- Advancing Academic Achievements (AAA)
- Counseling and Personal Development (CPD)

Counseling courses focus on a variety of skills that are designed to help students build confidence in order to be successful in any chosen career field. They also support students making positive changes in their personal lives. Courses offered through the Counseling Department are transferable to other colleges and universities, depending on the programs and policies of the transfer institution.

For transfer status of courses to Arizona universities consult the Course Equivalency Guide at:
http://aztransmac2.asu.edu/cgi-bin/WebObjects/ CEG.

If you are interested in going into the field of counseling you should make an appointment and speak to a counselor about your pathway. The following courses are offered by the Counseling Department for all students:

- CPD150 Strategies for College Success
- CPD160 Introduction to Multiculturalism
- CPD102AB Career Exploration
- CPD102AD Eliminating Self-Defeating Behavior
- CPD102AH Stress Management
- CPD103BC African American Cultural Pride
- CPD103BE Native American Cultural Pride
- CPD282AC Volunteerism
- CPD282AB Volunteerism
- CPD282AA Volunteerism
- AAA115 Creating College Success
- AAA150 Strategies for College Success


## Cultural Science

## Dr. Annalisa Alvrus

Department Chair
Department Telephone: 480-461-7060
Building SC 14
https://www.mesacc.edu/departments/cultur-al-science

The Cultural Science Department offers courses and programs in the following areas:

- Anthropology
- Ethnic Studies (including African American Studies, American Indian Studies, and Chicano/a Studies)
- Geography
- Geographic Information Systems
- Social Work
- Sociology
- Sustainability
- Women and Gender Studies

The Cultural Science Department educates students to become culturally aware global citizens. We provide a supportive learning environment in which students examine current cultural issues and evaluate the relevance of those issues to their lives and to the world around them. From the perspectives of a variety of cultural sciences, students use scientific methodology to analyze problems faced by people around the world and throughout time, developing an understanding of culture, cultural variation, and historical factors that influence modern problems. The Department includes the Ethnic Studies program (American Indian Studies, African American Studies, Chicano Studies); Geography; Geographic Information Systems; Anthropology; Sociology; Social Work; Women \& Gender Studies; and Sustainability.

Degrees and Certificates offered through the Cultural Science Department.

Academic Certificates:

- African American Studies
- Global Citizenship
- Women's Studies
- Sustainability

Associate of Applied Sciences:

- Geospatial Technologies

Certificate of Completion:

- Applications in Geospatial Technologies


## Education Studies

Dr. Tawn Hauptli<br>Department Chair<br>Department Telephone: 480-461-7904

Building ES 9
https://www.mesacc.edu/departments/educa-tion-studies

The Education Studies Department offers courses and programs in the following areas:

- Child/Family Studies (CFS)
- Early Childhood (ECH)
- Education (EDU)
- Early Education (EED)
- Education Professional Development (EPD)
- Excellence in Teaching and Learning (ETL)
- Game Studies (GST)

The Education Studies Department serves the needs of pre-service educators, paraprofessionals, and certified teachers. Programs and training to serve grades P-12 are available in the areas of early childhood, elementary, special, and secondary education. The Education Studies Department provides comprehensive support for aspiring and practicing educators by:

- Partnering with educational institutions to create a seamless transfer for students
- Incorporating service-learning into programs
- Developing culturally sensitive educators responsive to the needs of a global society, and providing a solid foundation of academic coursework and field experience for early care and teacher preparation as well as professional development

Degrees and Certificates offered through Education Studies: https://www.mesacc.edu/departments/ education-studies/degrees-certificates

## English

Dr. Craig Jacobsen<br>Department Chair<br>Department Telephone: 480-461-7636<br>Building LA 3<br>www.mesacc.edu/programs/departments/ english

The English Department offers courses and programs in the following areas:

- Composition (ENG)
- Literature (ENH)
- Humanities (HUM)
- English as a Second Language (ESL)
- Creative Writing (CRW)
- Journalism (JRN) and Mass Communications (MCO)

MCC's English faculty help students acquire the critical literacy skills they need to succeed. Courses in composition help students to improve their communication, while classes in literature, film, and interdisciplinary humanities help them to see their world in new ways. English as a Second Language courses assist non-native speakers as they acquire written and spoken fluency in English. Creative writing students hone their craft, and in journalism courses students learn the foundations of reportage in multiple media.

## If you plan to major in English:

English majors are always in demand for their excellent writing and speaking skills, and for the critical thinking and problem-solving skills they develop through the study of language and literature. The English major provides a strong foundation for many career paths, including law, marketing, public relations, technical communications, journalism, publishing, teaching, and writing.

If you want to pursue a bachelor's degree in English or a related program, Arizona's public universities offer many options for transfer. Meet with the English Department Chair to discuss your options.

## Exercise Science



## Jennifer Fay Department Chair Department Telephone: 480-461-7551 Building: ES-9 https://www.mesacc.edu/departments/exer-cise-science

The Mesa Community College (MCC) Exercise Science Department offers courses and programs in the following areas:

- Kinesiology
- Exercise and Wellness

Kinesiology draws from a body of knowledge in physiological, biomechanical, neural, and psychological sciences in preparation for post-graduate careers in, for example, physical / occupational therapy, medicine, physician assistant, cardiac rehabilitation, sport performance, strength and conditioning, and athletic training. Exercise Science/ Kinesiology focuses on the mechanical, neural, physiological, and psychological mechanisms underlying human movement and consists of four subdisciplines: Exercise Physiology, Motor Behavior, Biomechanics, and Health Psychology.

The major prepares students for post-baccalaureate degrees in Physical/Occupational Therapy, Medical School, Physician Assistant, Dentistry, Kinesiology or Chiropractic School.

- ASU Downtown BS Kinesiology (See MAPP in Kinesiology)
- NAU BS Exercise Science


## Academic Departments

- GCU BS Exercise Science (emphasis PrePhysical Therapy)

The following are transfer courses for Exercise Science/Kinesiology major at ASU Downtown:

- EXS101 Introduction to Exercise Science Kinesiology, and Physical Education
- EXS290 Introduction to Evidence-Based Practice
- HES100/WED110 Healthful Living/Principles of Physical Fitness/Wellness (satisfies SB General Education Requirement)

Exercise and Wellness provides students with the knowledge, skills, and abilities requisite to comprehensively support individuals in adopting health-and fitness-enhancing lifestyles that include a foundational commitment to a physically-active lifestyle. Professional pursuits include, for instance, health promotion/fitness careers with community based organizations, private health/fitness clubs as well as clinical/medical rehabilitation.

Exercise and Wellness focuses on physical activity and healthy lifestyle prescriptions, promotion, and program design and delivery in a variety of fitness, community, worksite, organizational, and healthcare settings.

Careers include worksite fitness programs, com-
mercial fitness centers/multipurpose clubs, planned community fitness/recreation, hospital-based fitness centers, college/university fitness and wellness, strength and conditioning, sports medicine clinics or graduate study in physical therapy, medical school, or clinical exercise physiology.

There is a Health Education and Health Promotion BS, located under Exercise and Wellness. ASU Downtown BS Health Education and Health Promotion: See Maricopa-ASU Pathway Partnership (MAPP) in Exercise and Wellness Also see (Health Educator/Health Promotion) under Exercise and Wellness.

The following are transfer courses for the Exercise and Wellness major at ASU Downtown:

- EXS214 Instructional Lab -

Flexibility and Mind/Body Exercises

- EXS216 Instructional Lab -

Exercises Strength and Conditioning

- EXS218 Instructional Lab Cardiorespiratory
- HES100/WED110 Healthful Living or Principles of Fitness and Wellness
- FON241 Principles of Human Nutrition

The department also offers a broad range of activity classes; please refer to PED prefix courses in order to review a list of activity classes offered at MCC.


## Pathways offered at Mesa Community

 College: Maricopa-ASU Pathway Partnership (MAPP):Communication skills are essential to daily living and success on the job. Those who are skilled in communication have an advantage when it comes to job placement and promotion. Presentational, interpersonal, and teamwork skills top the list of competencies employers desire in their workforce.

## Kinesiology - ASU Downtown

- Exercise and Wellness


## Associate of Applied

Science Degree (AAS):

- Exercise Science and Personal Training degree


## Associate Degrees:

- Associate in Science: Emphasis Exercise Science / Kinesiology
- Associate of Arts: Emphasis Exercise and Wellness


## Certifications (CCL):

- Personal Training Specialist Certificate
- Nutrition for Fitness and Wellness Professionals (See Career and Technical Programs)


## Fire Science/Emergency Management Technology



Dr. Hans Silberschlag

Department Chair
Department Telephone: 480-461-6300
Office: Downtown Center
https://www.mesacc.edu/departments/fire-sci-ence-emt

The Fire Science/EMS program offers theory and certification-based training programs for aspiring and current industry professionals. Our Emergency Medical Services programs (EMT and Paramedicine) offer unique pathways to obtain didactic, practical, and clinical experience necessary to advance your education and career opportunities inside in the emergency response profession. Fire Science offers career readiness programs for aspiring firefighters and entry level emergency management support staff. Our program also meets many fire departments' educational requirements for promotional and growth opportunities in leadership, management, and supervision. The program offers both credit and non-credit classes in:

- Paramedic
- Emergency Medical Technician
- CPR
- Candidate Physical Ability Test (CPAT)
- Fire Science and Fire Operations
- Fire Officer Leadership
- Emergency Management
- Hazardous Materials
- Wildland Firefighter

Students may earn an AAS degree in Emergency Response and Operations with specific areas of study in Fire Operations, Fire Science, Emergency Management, or Paramedic. The certificates of completion include the following:

- Emergency Medical Technology
- Paramedicine
- Fire Operations
- Fire Officer Leadership
- Emergency Management

See Career and Technical Programs for certificates and degrees and the special admissions requirements that apply to these programs.

MCC partners with the City of Mesa for use of their Fire Training Academy which enables students to experience various aspects of structural firefighting in a recruit firefighter training environment. The MCC Fire Academy provides a hands-on approach blended with coursework, which introduces students to various characteristics and skills of a firefighter. Students are exposed to extreme temperatures, confined spaces, working at various heights, lifting heavy objects, and intense physical work. It is highly recommended that students be physically and mentally prepared for the rigors of a Fire Academy experience before entering the program.

The Fire Academy curriculum is based on firefighter training required by NFPA 1001. Successful completion of the Fire Academy program will allow the student the opportunity to achieve a Firefighter I/II certification with IFSAC accreditation. This process requires additional practical and written testing with a certifying agency responsible for firefighter Certifications.

The MCC Fire Science/EMT program offers an opportunity to participate in service-learning. Service Learning volunteers may work for various public or private entities performing duties such as assistance to citizens who have suffered loss of clothing, shelter, or food due to fire, natural disaster, or other emergency situation. Participants can earn college credit for volunteerism by enrolling in FSC282. For information, contact the Fire Science Department at 480-461-6300, or visit the MCC Service Learning website: www.mesacc.edu/communi-ty-civic-engagement.

The MCC Fire Science program offers scholarships specifically for Fire Science/EMT majors: The David Karam Scholarship and The Chuck Inman Scholarship. For information about these scholarships, contact the Financial Services office at 480-461-
7815. To ensure selection of appropriate academic pathways, please contact our Academic Adviser at

480-461-7619 or visit us at the MCC Downtown Center. You may also meet with a resident faculty adviser upon request. Please contact us for information about transfer to baccalaureate and graduate programs.

If you plan to major in Fire Science/EMT a suggested Course Pathway to fulfill all of the requirements for an AAS degree in Emergency Response and Operations is available upon request in the department.

## Library Science

## Trevor Smith

Department Chair
Department Telephone: 480-461-7671
Building LB 11
https://www.mesacc.edu/library
The Library Science Department offers courses and programs in Information Literacy (IFS).

## MCC Libraries

Mesa Community College provides students with access to two beautiful academic libraries: The Library at Red Mountain and the Library at Southern \& Dobson. Both libraries provide a full suite of services to support students in their academic studies and lifelong learning.

## Help with Research

Library Faculty love helping students with their research! The reference desk is the place where students can go to get help with finding articles, books and websites for their assignments and projects. Librarians also help with finding a topic, creating citations, developing a search strategy, evaluating the credibility of a source, and anything else related to finding and assessing information. $24 / 7$ librarian help is available through our Ask A Librarian virtual chat service.

## Study Spaces

The libraries provide students with lots of places to study with natural light, study tables, and soft, comfortable seating. Students can reserve a study room in advance using our online reservation system. Family friendly study rooms, a silent study space, a lactation room and a Reflection room are available at the Southern \& Dobson library.

## Resources

The MCC Libraries provide access to books, ebooks, and electronic databases that contain thousands of journal, magazine, and newspaper articles. Many course textbooks are on Reserve and available at the circulation desk for in-library use. Beyond books for research use, we have Young Adult, Graphic Novel, and Leisure Reading collections for fun use!

## Technology

The MCC Libraries provide desktop computers for use. Cloud-based printing is available for a nominal charge. Graphing calculators and laptops are available for students to check out. Scanning and copy machines are also available.

## Courses \& Instruction

The MCC Libraries offer Information Studies (IFS) courses where students can delve into the wonderful world of information. Several IFS courses
fulfill Arizona General Education Curriculum (AGEC) requirements. Library Instruction is also available to support classes that have a research component.

Life Science


## Dr. Andrew Baldwin

## Department Chair

Department Telephone: 480-461-7115
Building NU 6
https://www.mesacc.edu/departments/life-science

The Life Science Department offers courses and programs in the following areas:

## Biology (BIO)

Biology is a lab-based natural science, so most courses have a laboratory component. Any student pursuing careers in wild life, sustainability, biotechnology or health-related fields require strong foundations in biology. Students of any major are required to take lab science classes to gain a well-rounded college experience. We offer a variety of exciting non-majors options to satisfy this requirement. All courses transfer to universities. Our department maintains live animal collections, sponsors summer study-abroad programs, has stu-

dent study labs that provide access to lab materials for independent study and tutoring, and sponsors a variety of student clubs.

- Majors
- Non-Majors
- Departmental Clubs
- Holycross Expedition
- Study Abroad with Life Science

All three public Arizona universities require or accept the following courses for life science majors:

- BIO181 General Biology (Majors) I
- BIO182 General Biology (Majors) II
- BIO201 Human Anatomy and Physiology I
- BIO202 Human and Anatomy and Physiology II
- BIO205 Microbiology

The three public Arizona universities offer a wide range of baccalaureate programs for students who wish to major in Life Science:

ASU

- BS Biology
- BS Conservation Biology
- BS Microbiology
- BS Plant Biology
- BS Molecular Biosciences and Biotechnology
- BS Biology with Concentration in Biology and Society


## ASU WEST

- BS Life Sciences


## NAU

- BS Biology
- BS Biology (with emphases)
- BS Botany
- BS Microbiology
- BS Microbiology (Preprofessional)
- BS Zoology
- BS Zoology (Preprofessional)


## UA

- BA Biochemistry
- BA Ecology and Evolutionary Biology
- BS Biochemistry
- BS Ecology and Evolutionary Biology
- BS General Biology
- BS Microbiology
- BS Molecular and Cellular Biology
- BS Health Sciences: Physiological Sciences


## Mathematics and Computer Science



## Daphne Rossiter <br> Department Chair <br> Department Telephone: 480-461-7728 <br> Building MC 5 <br> https://www.mesacc.edu/departments/mathe-matics-computer-science

The Mathematics and Computer Science Department offers courses and programs in the following areas:

- Computer Science (CSC)
- Mathematics (MAT)

The Mathematics/Computer Science Department offers courses and programs in Mathematics (MAT)
and Computer Science (CSC). At MCC, you can take all of the courses required for the first two years of any public Arizona university math or computer science program, and most out-of-state colleges and/ or universities.

Courses are offered in traditional classroom settings, at different campuses and sites, and in flexible formats such as hybrid and distance learning. If you wish to take a math and/or computer science course, you must first take a Math placement test at one of our Testing Centers. Prior to the start date of the course, you must have satisfied the prerequisite.

There are many academic and professional opportunities open to those who want to study Mathematics and/or Computer Science. All three public Arizona universities (ASU, NAU and UofA) offer bachelor's degree programs in Mathematics and Computer Science.

## Music

## Dr. Craig Peterson

Department Chair
Department Telephone: 480-461-7575
Building MU 43
https://www.mesacc.edu/departments/music
The Music Department offers courses and programs in the following areas:

- Music: Commercial Business (MUC)
- Music: Education (MUE)
- Music: Performance (MUP)
- Music: Theory/Composition (MTC)

All students considering a major and/or minor in music must be advised by the Music Department. The mission of the Music Department is to provide
a high quality experience to student musicians and a stimulating music education experience to the non-musicians we serve. The Music Department is a resource for transfer education, music education, and career and vocational preparation in music technology, music business, and music performance. High-quality musical experiences serve our community through classroom education and live musical performances.

Courses and programs are designed to enhance students' skills, prepare them for transfer to university programs, and equip them with knowledge and skills required to prepare for careers in the music field. In addition, the department produces a number of musical performances each year and serves as home base for several community musical groups. For more information about courses, programs, performances, and groups, call the department office at 480-461-7575.

- Auditions
- Audio Production Technologies
- Instrumental Music
- Music Business
- Music Theatre
- Music Theory and Composition
- Private Instruction
- Vocal Music

It is recommended that students planning to transfer as music majors to a baccalaureate-granting college or university take a planned set of courses leading to the Associate in Arts (AA). The AA is a general degree that includes special requirements enabling music majors to graduate from MCC after earning 64 credit hours.

The three public Arizona universities offer the following baccalaureate programs in music:

ASU

- BA Music
- BM Secondary Education (Choral /Instrumental)
- Performance, Music Therapy, Music Theory and/or Composition

NAU

- BA Music
- BM Performance, Secondary Music Education, Choral/Instrumental


## UA

- BA Music
- BM Secondary Education (Choral/Instrumental) Performance
- BFA Music Theatre - Theatre Arts

The MCC Music Department in partnership with Ottawa University offers a Music Education degree in Elementary and Secondary Music. Students complete their freshman and sophomore music and general education coursework, and their junior and senior performance ensembles and private instruction with MCC. Upper-division education courses are taken through Ottawa University. The basic music courses required for most music majors planning to transfer to a baccalaureate-granting institution include:

- MTC105/106 Music Theory and Aural Perception I
- MTC155/156 Music Theory and Aural Perception II
- MTC205/206 Music Theory and Aural Perception III
- MTC255/256 Music Theory and Aural Perception IV
- MUE137 Class Brass I
- MUE138 Class Brass II
- MUE235 Class Percussion I
- MUE236 Class Percussion II
- MUE237 Class Woodwinds I
- MUE238 Class Woodwinds II
- MUP123 Studio Class/Piano, Voice, Guitar, Instrumental, Jazz Styles (. 5 credits 6 semesters)
- MUP131 Class Piano I
- MUP132 Class Piano II
- MUP133 Class Voice I
- MUP134 Class Voice II
- MUP166 Jazz Piano I
- MUP167 Jazz Piano II
- MUP209 Conducting
- MUP231 Class Piano III
- MUP232 Class Piano IV
- MHL241 Music History
- MHL242 Music History
- Private instruction (2 credits 6 semesters)
- Performing ensemble
- Small (1 credit 6 semesters)
- Large (2 credits 6 semesters)

The Music Department offers the Associate in Applied Science (AAS) and Certificate of Completion (CCL) in:

- Audio Production Technologies/ Sound Design
- Music Business


## Academic Departments

## Nursing



Mary Boyce<br>Department Chair<br>Department Telephone: 480-461-7122

Building HW 8
https://www.mesacc.edu/departments/nursing
The Nursing Department offers courses and programs in the following areas:

- Nursing Science: Basic (NUR)
- Nursing: Continuing Education (NCE)
- Health Core Curriculum (HCC)
- Health Care Related (HCR)
- Health Related (HLR)


## Nursing Programs/Pathways:

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.

The Certificate of Completion (CCL) in Nurse Assisting prepares students for entry level employment in
various health care settings as a nursing assistant. Students who complete the program are eligible to take a written and practical certification examination and work as a Certified Nursing Assistant or a Licensed Nursing Assistant

The Certificate of Completion (CCL) in Nursing Refresher program provides registered nurses with a review and update of nursing theory and practice. 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).

The Nursing Theory and Science Transition (Paramedic Bridge) course is intended for experienced paramedics seeking advanced placement into the AAS in Nursing Program. Prospective students must apply to their desired program of study and meet all of the requirements listed for specific certificates or degrees they wish to earn.

The Nursing Department is committed to student success. We have a nursing skills lab where students can practice clinical skills. We offer email, phone, and onsite advisement for nursing in the Health \& Wellness building.


All nursing and pre-nursing students can join the Student Nurses Association (SNA). Many scholarships are available to qualified nursing majors.

- Advising and Information
- Students Connect Here
- Registered Nurse
- Nurse Assisting
- Paramedic to RN
- Nurse Refresher


## Philosophy and Religious Studies

## Dr. Keith Crudup

Department Chair
Department Telephone: 480-461-7860
Building BP 43A
https://www.mesacc.edu/departments/philos-ophy-religious-studies

The Philosophy and Religious Studies Department offers courses and programs in the following areas:

- Philosophy (PHI)
- Religious Studies (REL)

The Department of Philosophy and Religious Studies offers dozens of courses each year. Our two disciplines are twin approaches to the wisdom and practices of people across the world and throughout history. The study of science, history, literature, psychology, and more are integrated in our shared pursuit of a greater perspective. We offer our students the freedom to question everything, challenge the answers, and discover new possibilities.

Arizona's three state universities offer B.A. degrees in Philosophy. There are many academic and professional opportunities for those who wish to study Philosophy, such as a career as an analyst, journalist,ethics consultant, or researcher, or a track through Law School. In addition, businesses find philosophy majors very valuable. Lastly, several comedians were Philosophy majors. We recommend you visit with one of our Philosophy faculty to discuss becoming a major. The universities' Philosophy major requires:

- PHI101 Introduction to Philosophy
- PHI103 Introduction to Logic
- PHI105 Introduction to Ethics

Arizona's three state universities offer B.A. degrees in Religious Studies. ASU offers a Ph.D. program. Community college students have wide freedom in taking courses to prepare themselves. We recom-

mend you visit with one of our Religious Studies faculty to explore what works for you. Religious Studies is a good foundation for several careers, particularly international work in either the corporate or non-profit world. Teaching is also an option Religious Studies also serves well to prepare students for graduate work in law, archaeology, linguistics, literature, and public administration. We offer courses in Religious Studies including:

- REL100
- REL205


## Physical Science

## Dr. John Griffith

Department Chair
Department Telephone: 480-461-7015
Building PS 15
https://www.mesacc.edu/departments/physi-cal-science

The Physical Science Department offers courses and programs in the following areas:

- Astronomy (AST)
- Chemistry (CHM)
- Engineering (ECE and EEE)
- Geology (GLG)
- Physics (PHY)


## Astronomy

Astronomy appeals to science as well as non-science majors or anyone wanting to learn more about the Universe and fulfills general education requirements.

## Chemistry

Chemistry supports healthcare, medicine, science and engineering, and fulfills general education requirements.

## Engineering

Engineering students transfer to civil, mechanical, chemical, electrical, and others types of engineering programs.

## Geology

Geology offers face-to-face, internet, and field courses for Earth Science majors, or to satisfy a science requirement. Geology classes have no prerequisites.

## Physics

Physics (PHY) courses fulfill general education requirements, and are essential for those majoring in physics or other sciences as well as Engineering.

Check with a program advisor at your transfer institution if you plan to major in any PhysicalScience.

## Psychological Science

## Christina Ahles

Department Chair
Department Telephone: 480-461-7032
Building BP 43A https://www.mesacc.edu/departments/psy-chological-science

The Department of Psychological Science has what you need to ensure that the best two years of your four-year degree happen at MCC. We offer a range of courses and educational experiences to expand students' understanding of human behavior. Our vast, Psychology Instructional Resource Center supports successful learning with free resources like tutoring services, interactive psychology apps, textbooks and learning manipulates. Our national-ly-recognized, Psi Beta Honor Society encourages professional growth through leadership, outreach and opportunities to work closely with faculty. An understanding of human behavior will help to pre-
pare you for work in a variety of careers. If you want to see more of your world, then it helps to think like a psychologist! More information can be found at the following links:

- PIRC Lab
- PSI Beta
- Psychological Sciences: What It Can Do for You

Students who plan to major in psychology can complete their lower-division general education and major courses to prepare for upper-division psychology coursework. Students who are interested in psychology as a minor or as an elective may choose from among a large variety of classes. It is important for students to know that one does not "specialize" within psychology until graduate school (masters and/or doctoral work). An undergraduate degree in psychology is usually a general psychology degree, but the emphasis depends on the student's interest.

PSY101 is the prerequisite for all 200-level courses. Additional prerequisites may also be required for some courses. The 200-level courses are introductions to almost all of the specialization areas in psychology and students may choose them based on their interest.

Arizona State University and University of Arizona require the following courses for psychology majors:

- PSY101 Introduction to Psychology
- PSY230/231 Introduction to Statistics
- PSY290 Research Methods

Northern Arizona University requires the following courses for psychology majors:

- PSY101 Introduction to Psychology
- PSY230 Introduction to Statistics


## Reading

Annah McMahon<br>Department Chair<br>Department Telephone: 480-461-7033<br>Building AD 42<br>https://www.mesacc.edu/departments/reading

The Reading Department offers courses and programs in the following areas:

- Critical Reading (CRE101)
- Reading (RDG/ESL)

The Reading Department embraces the philosophy that each individual should be respected and valued. Therefore, each individual must be afforded the opportunity to develop skills and talents through an accessible, student-oriented learning environment. The vision of the reading department is to empower students to develop the disciplinary literacy and critical thinking skills needed to obtain personal, academic and professional goals, and support 21st century learners in navigating their contribution to the local and global communities.

Students can take the ASSET, CELSA, ACCUPLACER, or COMPASS placement test to determine which reading class(es) to take. Multiple measures is also being applied as a placement tool for students. Refer to the placement chart for multiple measures placement. Many reading classes are available in English as a Second Language format as well. It is best to take reading classes early in your college career since these classes build skills that will enhance your success as a student.

The Reading Department computer lab is located in EF4E. The Academic Skills Center, another lab with tutoring services, is available for ESL reading classes
as well as RDG081 and RDG100 series and CRE101. Check posted hours for availability.

Reading faculty are available to provide advisement. It is recommended that students meet with faculty for advisement before registering in reading classes. Students who need help with coursework can get the assistance they need through the Academic Skills Center.

The department offers the Milly Olsen Memorial Scholarship. See the Financial Services website or visit the office for more information about these scholarships.

## Social Science



## Dr. Paul Hietter

## Department Chair

Department Telephone: 480-461-7860
Building SC 14
https://www.mesacc.edu/departments/so-cial-science

The Social Science Department offers courses and programs in the following areas:

- Economics (ECN)
- History (HIS)
- Political Science (POS)

The Social Science Department is committed to an innovative learner-centered environment to assist students, faculty, and staff in achieving their academic goals. The Social Science Department strives to help each person achieve his or her potential as an effective and productive citizen by understanding the economic, historic, and political foundations of local, state, national, and international communities. Students are encouraged to form study groups, take advantage of the Learning Enhancement

Center, and interact with faculty for advisement. The Social Science Department offers a scholarship each spring. Details are available in the Social Science Office.

- Model United Nations
- Social Science Scholarships

All three Arizona State universities require or accept the following courses as requirements for each major:

## Economics Majors

- MAT212 Brief Calculus
- GBS221 Business Statistics OR
- MAT206 Elements of Statistics
- ECN211 Macroeconomics
- ECN212 Microeconomics


## History Majors

- HIS100 History of Western Civilization to Middle Ages AND
- HIS101 History of Western Civilization Middle Ages to 1789 AND
- HIS102 History of Western Civilization, 1789 to Present
- HIS103 United States History to 1865
- HIS104 United States History, 1865 to Present


## Political Science Majors

- POS110 American National Government
- POS120 World Politics OR
- POS140 Comparative Government
- POS210 Political Ideologies


## World Languages

## Dr. Steven Budge

Department Chair
Department Telephone: 480-461-7031
Building 41
www.mesacc.edu/programs/departments/ worldlanguages

The mission of the World Languages Department is to help prepare our students to develop the language, intercultural, and life skills necessary to be an active and contributive member in our local and global community. We promote language learning, multiculturalism, and building community in order to enrich students' lives and broaden their frame of reference. We aim to provide excellence in our service and advisement in order to make a positive difference in the lives of our students.

The World Languages Department offers courses and programs in the following areas:

- American Sign Language (SLG)
- Arabic (ARB)
- Chinese (CHI)
- French (FRE)
- German (GER)
- Japanese (JPN)
- Navajo (NAV)
- Russian (RUS)
- Spanish (SPA)

The foundational courses (courses numbered 101, 102, 201, and 202) fulfill language requirements for specific degree programs. They are prerequisites for advanced language courses at the community college and 300 and 400-level language courses at 4 -year institutions. These university equivalent courses emphasize the four language skills: listening, speaking, reading, and writing. Course 101 has
no prerequisite. These courses are offered in a variety of formats (hybrid, face-to-face, and online).

The conversational courses (courses numbered $115,116,225$, and 226) are offered for those who wish to develop conversational abilities. These courses emphasize speaking and listening skills. Course 115 has no prerequisite.

The industry-specific courses (courses numbered $117,118,119,120,109,169$, and 209) are offered for those who wish to develop language skills in order to communicate with clients and employees in specific work environments. These language classes are customized in order to meet the schedule and content needs of each specific industry. Contact your employer today to schedule one of these courses with the World Languages Department.

The humanities and language studies courses (SPH245, NVH245, SLC201, SPA241 and 242, and FLA240) are designed to meet the diverse academic needs of the student. They include studies in linguistics, second language acquisition, foreign language teaching methods, film, and culture and heritage studies. Please consult the current course schedule for details. Many foreign language courses are transferable to other colleges and universities, depending upon the programs and policies of the institution. For transferability status of courses to Arizona universities, consult the Course Equivalency Guide.

The World Languages Department has a state-of-the-art language laboratory to facilitate and stimulate the language learning process. The language laboratory is located in Building \#4, AS 110 at MCC at Southern and Dobson. Hours vary from semester to semester. For more information, contact the World Languages Department office. The department has joined efforts with the Learning Enhancement Center to provide tutoring services for our language programs at various campuses and sites.


# Graduation policies $\&$ Requirements 

# Graduation Policies \& Requirements 

## 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 single public community college or university in Arizona or transferring among public institutions in Arizona while pursuing their degrees.

1. A semester in which a student earns course credit will be counted toward continuous enrollment. Non-credit courses, audited courses, failed courses, or courses from which the student withdraws do not count toward the determination of continuous enrollment for catalog purposes.

EXAMPLE A

| Admitted \& Earned Course Credit at a Public Community College or University | Fall 2018 (Active) |
| :--- | :--- |
| Continued at a Public Community College | Spring 2019, Fall 2019 (Active) |
| Transferred to a University | Spring 2020 (2018 or Any |

EXAMPLE B

| Admitted \& Earned Course Credit at a Public Community College or University | Fall 2018 (Active) |
| :--- | :--- |
| Enrolled But Earned All Ws, Zs, or Fs | Spring 2019 (Inactive) |
| Enrolled in Audit Courses Only | Fall 2019 (Inactive) |
| Nonattendance | Spring 2020 (Inactive) |
| Transferred to a University | Fall 2020 (2020 or Any |

2. Students who do not meet the minimum enrollment standard stipulated in No. 1 during three consecutive semesters (fall/spring/fall or spring/fall/spring) and the intervening summer term* at any public Arizona community college or university are no longer considered continuously enrolled, and must meet require-
ments of the public Arizona community college or university catalog in effect at the time they are readmitted or of any single catalog in effect during subsequent terms of continuous enrollment after readmission.

EXAMPLE A

| Admitted \& Earned Course Credit at a Public Community College or University | Fall 2018 (Active) |
| :---: | :---: |
| Nonattendance | Spring 2019, Fall 2019, Spring 2020 (Inactive) |
| Readmitted \& Earned Course Credit at a Public Community College | Fall 2020 (Active) |
| Transferred to a University | Spring 2021 (2020 or Any Subsequent Catalog) |
| EXAMPLE B |  |
| Admitted \& Earned Course Credit at a Public Community College or University | Fall 2018 (Active) |
| Nonattendance | Spring 2019 (Inactive) |
| Readmitted \& Earned Course Credit at a Public Community College | Summer 2019 (Active) |
| Nonattendance | Fall 2019, Spring 2020 (Inactive) |
| Transferred to a University | Fall 2020 (2018 or Any Subsequent Catalog) |

* 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. Students admitted or readmitted to a public Arizona community college or university during a summer term must follow the requirements of the catalog in effect the following fall semester or of any single catalog in effect during subsequent terms of continuous enrollment.

## EXAMPLE

| Admitted \& Earned Course Credit at a Public Community College or University | Summer 2018 (Active) |
| :--- | :--- |
| Continued at a Public Community College | Fall 2018, Spring 2019 (Active) |
| Nonattendance | Fall 2019 (Inactive) |
| Readmitted \& Earned Course Credit at a Public Community College | Spring 2020 (Active) |
| Transferred to a University | Summer 2020 (2018 or Any |

4. Students transferring among Arizona public higher education institutions must meet the admission requirements, residency requirements, and all curricular and academic requirements of the degree-granting institution.

NOTE: Time Limit for Transfer Coursework

Students should be aware that the receiving institution may have age and credit limits on certain coursework to be used in transfer. Students should be knowledgeable about the policies on time limits for transfer coursework for the institution to which they plan to transfer.

## General Graduation Requirements

Note: Also see Catalog Under Which a Student Graduates (AR 2.2.5)

All students are required to complete the degree and/or certificate requirements as approved by the MCCCD Governing Board. The college reserves the right to make necessary course and program changes in order to meet current educational standards. In addition, students must:

1. Be credited in the Admissions and Records Office/Office of Student Enrollment with no fewer than: 60 semester credit units in courses numbered 100 or above for the Associate in Arts, Associate in Science, Associate in Arts, Elementary Education, and Associate in General Studies degrees, and 62 semester credits for the Associate in Business-General Requirements and Associate in Business-Special Requirements degrees. Minimum semester credits for completion of Associate in Arts, Associate in Science, and Associate in Arts, Fine Arts degrees with emphasis areas vary by emphasis, with none requiring fewer than 60 credits. Refer to the Program (Degree) Search at https://curriculum.maricopa.edu/ for credit minimums by emphasis. Minimum semester credits for completion of Associate in Applied Science degrees vary by specific career program, with none requiring fewer than 60 credits. For specific certificate programs, be credited with no fewer than the minimum total of credit units required for the certificate program.

Students not continuously enrolled, as outlined in the Catalog Under Which a Student Graduates policy, must satisfy current graduation requirements.
2. Have earned a minimum of 12 semester credit units toward the degree or certificate at the district college granting the degree or certificate. The 12 hours in the AAS degree curricula must be in the Required Courses area and/or Restricted Electives courses. Courses from the General Education Core and Distribution area are excluded. In cases where the certificate requires fewer than 12 credit units, a minimum of six credit units must be completed at the college awarding the certificate. The minimum of six credit hours in the certificate or degree curricula must be in the Required Courses area and/or the Restricted Electives. Courses from the General Education Core and Distribution areas are excluded.

Shared Programs are programs offered at multiple colleges but not available at all colleges. The requirements are identical at all the colleges offering the program.

A shared program requires a minimum of six credit hours from the total program requirements to be completed with a grade of ' C ' or better at the college awarding the certificate or degree. The minimum of six credit hours in the certificate or degree curricula may be in the Required Courses area and/or the Restricted Electives. (The exception is the Nursing program; Nursing students must apply for graduation from the college where they have successfully completed Block 4 of the Associate in Applied Science in Nursing.) Courses from the General Education Core and Distribution areas are excluded. For those shared programs with less than six credit hours, the total hours for the program must be completed at the college awarding the certificate.
3. Have filed an application for the degree or certificate with the Admissions and Records Office/Office of Student Enrollment Services on the date determined by the college/center.
4. Have a minimum cumulative grade point average of 2.000 at the college granting the degree.
5. Have a minimum cumulative grade point average of 2.000 in all courses used to fulfill degree requirements Some specific programs have higher grade requirements. It is the student's responsibility to be aware of these program requirements.
6. Have removed, thirty (30) days after the anticipated graduation date, all deficiencies on the record to use those courses toward program completion.
7. Have removed any indebtedness to any MCCCD college/center.
8. Have paid graduation ceremony fee, if participating in ceremony. See fee schedule for charges. See Graduation with Honors for information on honors designation.

## Certificates/Degrees

The Maricopa Community Colleges offer Certificates of Completion as well as Associate Degrees, which are conferred on students who have completed a program of study. These certificates and degrees are as follows: (1) Certificate of Completion (Career Program Specified); (2) Academic Certificate; (3) General Education Certificate; (4) Associate in Arts; (5) Associate in Arts, Elementary Education; (6) Associate in Arts, Fine Arts; (7) Associate in Business-General Requirements; (8) Associate in Business-Special Requirements; (9) Associate in Science; (10) Associate in Applied Science (Career Program Specified); (11) Associate in General Studies.

All candidates for a degree and/or certificate must complete the General Graduation Requirements as approved by the MCCCD Governing Board.

All students are urged to meet with a faculty advisor, program advisor or counselor as soon as possible to determine which program meets their needs and to plan their course of study.

## Licensure Disclaimer

Maricopa Community Colleges courses and programs prepare students for entry into a variety of professions. Many of these professions require that a person hold an occupational license or certificate in order to work in a particular field. Typically, a person must meet certain legal requirements before obtaining such a license or certificate. These requirements are established by county, state or federal agencies, and often are based on a person's character, or whether the person has been convicted of a criminal offense. It is possible for a student who has obtained a degree or certificate from a community college to be denied the right to work in a particular profession after completing the degree or certificate because of concerns over the student's character or criminal background. Any student preparing to enter a field for which a professional license or certificate is required is strongly advised to consult with the appropriate government agency that issues such credentials. That agency can provide the student complete information about any requirements the law imposes for working in a particular occupation.

## MCCCD General Education Statement

The general education core of the program of study for an associate degree or a certificate helps students develop a greater understanding of themselves, of their relationship with others, and of the richly diverse world in which they live. The general education experience provides students with opportunities to explore broad areas of commonly held knowledge and prepares them to contribute to society through personal, social, and professional interactions with others. General education fosters students' personal development by opening them to new directions, perspectives, and processes.

Through its general education requirements, the Maricopa County Community College District is committed to helping students develop qualities and skills that will serve them throughout their lives. General education opportunities encourage students to:

- Build self-awareness, self-respect, and self-confidence
- Recognize and respect the beliefs, traditions, abilities, and customs of all people and all cultures
- Consider the local, global, and environmental impacts of personal, professional, and social decisions and actions
- Access, evaluate, analyze, synthesize, and use information wisely
- Communicate effectively personally, socially, and professionally
- Think critically, make informed decisions, solve problems, and implement decisions
- Consider the ethical implications of their choices
- Value the learning process throughout their lives
- Integrate and connect ideas and events in a historical perspective, and see relationships among the past, the present, and the future
- Develop a personal sense of aesthetics
- Use technological resources appropriately and productively
- Work cooperatively and respectfully with others to serve their communities

The general education experience at MCCCD is composed of specific elements across the curriculum designed to provide the learner with essential knowledge and skills:

- Communication
- Arts and Humanities
- Numeracy
- Scientific Inquiry in the Natural and Social Sciences
- Information Literacy
- Problem-Solving and Critical Thinking
- Cultural Diversity


## General Education Designations (example: (FYC), [SB], [HU], etc.)

Effective Fall 2000 the course evaluation and/or general education designation, as listed in the Arizona Course Equivalency Guide (CEG) within AZ Transfer, is valid for the term in which the student is awarded credit on the transcript. A course evaluation and/or general education designation may be subject to change. Given that curriculum is dynamic at both MCCCD and the institutions to which MCCCD students transfer, students have the option to petition for general education evaluations and/or general education designations.

The college reserves the right to make necessary course and program changes in order to meet current educational standards.

The following academic policies govern the associate degrees designed for university transfer: 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); and Associate in Science (AS). Note that academic policies that govern the Associate in General Studies (AGS) and Associate in Applied Science (AAS) degrees are listed separately, with the requirements for each of those degrees.

- The graduation policies within the general catalog must be satisfied (administrative regulation 2.3.9).
- Minimum semester credits for completion vary slightly by degree and specific emphasis (when applicable). Refer to the Program (Degree) Search at https://curriculum.maricopa.edu/ for credit minimums for individual degree programs.
- Credits completed toward these minimums must be in courses numbered 100 or above with a grade of ' $\mathrm{C}^{\prime}$ or better. These credits must include a minimum of 35* in satisfaction of the requirements of the Arizona

General Education Curriculum (AGEC) along with a maximum of 6 credits towards MCCCD's Additional Requirements.

- Detailed degree requirements are maintained by the Center for Curriculum and Transfer Articulation (CCTA); refer to the program search at https://curriculum.maricopa.edu/.


## General Education Requirements:

- The AGEC requirements include a designated number of courses approved for each of the following areas:


## Core

- First Year Composition [FYC],
- Mathematical Applications [MA],
- Computer/Statistics/Quantitative Applications [CS] (CS not required for Associate in Science),
- Literacy and Critical Inquiry [L],
- Humanities, Arts and Design [HU],
- Social-Behavioral Sciences [SB], and
- Natural Sciences (Science Quantitative [SQ], Science General [SG]).


## Awareness Areas

- Cultural Diversity in the U.S. [C]
- Global [G] or Historical [H] Awareness
-     * Note that there are three different AGECs each aligning with a different subset of associate Degrees--AGEC-A for the AA, AAEE, and AAFA degrees, AGEC-B for the ABUS-GR and ABUS-SR degrees, and AGEC-S for the AS degree. For some types of AGECs/Associate degrees, students are allowed to choose from a broad list of courses; for others the courses are more restricted or even specified.
- A single course can simultaneously count toward a Core Area, one or more Awareness Areas, MCCCD Additional Requirements and, for some degree types, other lower division courses used to meet the degree requirements. For example, CRE101 may be used to satisfy both the MCCCD Reading Requirement and the Literacy and Critical Inquiry area [L] of the AGEC core. 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 for the Associate in Science (AS) degree, a single course cannot be used to satisfy more than one AGEC Core Area.
- The AGEC-A and AGEC-B require a minimum of 35 credits* and the AGEC-S requires a minimum of 36 credits*, however, the AGEC credit count within the total credits for a degree may be under these minimums if courses are also applied toward Required Courses or Restricted Electives and the credits are counted in those areas. Awareness Areas and MCCCD's Additional Requirements may also be shared with AGEC Core Areas. Optimizing credits in this way is often recommended because some programs and universities limit transferable credits at 64.


## Coursework beyond General Education:

- For some degree types, the additional coursework required to complete the degree is specified while others offer the student more latitude. See degree checksheets for more complete description. Consultation with an academic advisor about course selection is always recommended.
- Oral Communication and Critical Reading are MCCCD Additional Requirements required for Associate in Arts and Associate in Science degrees. Refer to the Program (Degree) Search at curriculum.maricopa.edu for acceptable options to meet these requirements for individual degree programs.
- Within the Restricted Electives, course recommendations are made for specific transfer institutions. Students should select a transfer plan (group of courses) based on their intended transfer institution. However, not all transfer institutions are reflected in these recommendations. Therefore, students may instead meet the minimum number of Restricted Elective credits using a combination of courses from the transfer plans listed. Restricted Electives should be selected in consultation with an academic, faculty, or program advisor.
- General Electives may need to be selected to meet the minimum total credits required for the degree. All courses numbered 100-or-higher may be applied as General Electives. Students are encouraged to select courses that align with their goals.
- Note that some majors require up to a 4th semester proficiency (202-course level) in a non-English language. Students should consult with an academic advisor to discuss options to complete these requirements.
- 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 bacca-laureate-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: https://aztransfer.com/, https://curriculum.maricopa.edu/, as well as those of individual universities. For appropriate course selection, students should consult with an academic advisor.
- 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 requirements.


## Transfer Credit from Institutions Outside of MCCCD:

- Credits transferred from outside of MCCCD must be at a grade of "C" (2.0 on a 4.0 scale) or better.
- External courses evaluated either as equivalent to an MCCCD course or as elective credit may be applied toward the minimum credits for degree completion.
- 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 (CEG) for the semester(s) in which the course(s) were completed. If a transcript evaluation determines there is no MCCCD 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 comprised 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 MCCCD 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.
- Credit awarded at a Maricopa Community College for prior learning is transferable to the other colleges in the district but is not necessarily transferable to other colleges and universities. No more than 20 such assessed semester credit hours may be applied toward AGEC, and no more than 30 credits (including up to 20 toward AGEC) may be applied toward a degree.


## Completion and Transfer:

- Completion of the AGEC with a minimum Grade Point Average of at least 2.0 on a 4.0 scale for Arizona residents and 2.50 for non-residents 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.
- While MCCCD's associate degrees are designed to facilitate a seamless transfer to other Arizona institutions, courses may be transferable and/or meet associate degree requirements, but may not necessarily meet the specific requirements of a particular degree, major, or area of emphasis at another institution.

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 and within their allowed transferable credit limit. For some majors, the statewide Common Course matrix and AZTransfer Major Guides at https://aztransfer.com/ and/or university transfer guides can also provide some guidance. For appropriate course selection, students should consult with an academic advisor.
*Credit minimums may be lower if students have transfer credit from ASU, NAU or UAZ for a single course that meets First Year Composition in full. See notes on individual degree policies.

# 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. The AGEC-A and AGEC-B require a minimum of 35* credit hours, and the AGEC-S requires a minimum of $36^{*}$ credit hours.

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.

There are three types of AGECs in MCCCD: AGEC-A, AGEC-B, and AGEC-S. As described below, these AGECs are also 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 Core courses in First Year Composition [FYC], Literacy and Critical Inquiry [L], Mathematical Studies [MA/CS] (Exception: The AGEC-S does not require CS.), Social-Behavioral Sciences [SB], Humanities, Design and Fine Arts [HU], and Natural Science [SQ/SG]. Students must satisfy two Awareness areas: Cultural Diversity in U.S. and either Global Awareness or Historical Awareness.

## Purpose of the AGECs

AGECs were designed to articulate with different academic majors, 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; 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: www.aztransfer.com

1. The AGEC-A is designed to satisfy 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. 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 credits of either university chemistry, university physics or general biology for majors to satisfy the Natural Sciences [SQ/SG] requirement. In addition, students must select six to ten additional credits 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* (AGEC-A, AGEC-B) and 36 credit hours* (AGEC-S) in courses numbered 100 and above and that a minimum of 12 of those credits be taken 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 courses applied to the AGEC must be completed with a grade of 'C' or better.
- A single course can simultaneously count toward a Core Area and one or more Awareness Areas. For example, a course in world geography can 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 Core Area.
- The AGEC-A and AGEC-B require a minimum of 35* credits and the AGEC-S requires a minimum of $36^{*}$ credits, however, the AGEC credit count within the total credits for a degree may be lower than these minimums if courses are also applied toward Required Courses or Restricted Electives and the credits are counted in those areas. Awareness Areas and MCCCD's

Additional Requirements may also be shared with AGEC Core Areas. Optimizing credits in this way is often recommended because some programs and universities limit transferable credits at 64.

## Transfer Credit from Institutions Outside of MCCCD

- Credits transferred from outside of MCCCD must be a grade of 'C' (2.0 on a 4.0 scale) or better.
- External courses evaluated either as equivalent to an MCCCD course or as elective credit may be applied toward the minimum credits for degree completion.
- 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 (CEG) for the semester(s) in which the course(s) were completed. If a transcript evaluation determines there is no MCCCD 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 comprised 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 MCCCD 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.
- Credit awarded at a Maricopa Community College for prior learning in non-traditional setting is transferable to the other colleges in the MCCC district but is not necessarily transferable to other colleges and universities. 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 at least 2.0 on a 4.0 scale for Arizona residents and 2.50 for non-residents 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 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 General Education Core and Awareness Areas within each AGEC:

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.

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 AGEC course requirements are usually more prescriptive. Students pursuing a major-specific pathway should consult the Program (Degree) Search at curriculum.maricopa. edu for specific degree and AGEC requirements. Consultation with an academic advisor about course selection is always recommended.

* 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.


## Arizona General Education Curriculum--Arts (AGEC-A) Requirements

The AGEC-A requires a minimum of 35 credits (32 if FYC is met by single transfer course)*, however, the AGEC credit count within the total credits for a degree may be lower if courses are also applied toward Required Courses or Restricted Electives and the credits are counted in those areas. Credits count once toward the total 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)* within an associate degree provided that all requirements listed below are completed.

Credits
A. Core Areas:

35 (min.)*
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 their respective Core Area, Required Course(s) or Restricted Elective(s). AGEC designations are subject to change. Courses may meet more than one requirement but are only counted once toward the total credits for the degree. See AGEC matrix for each course's value(s) in the semester it is taken.

1. First-Year Composition [FYC 6* ENG101 OR ENG107 (3)* AND ENG102 OR ENG108
2. Literacy and Critical Inquiry [L]
3. Mathematical Applications [MA]

Requires a course in college mathematics (MAT140, MAT141, MAT142, MAT145, MAT146) or college algebra (MAT150, MAT151, MAT152, MAT155, MAT156) or pre calculus (MAT187) or higher [MA]-approved general education course.
4. Computer/Statistics/Quantitative Applications [CS]
5. Humanities, Arts and Design [HU]

Students are encouraged to choose course work from more than one discipline.
6. Social-Behavioral Sciences [SB] Students are encouraged to choose course work from more than one discipline.
7. Natural Sciences [SQ/SG]

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.

## B. Awareness Areas

0-6
Some courses may be used to satisfy both a Core Area and one or more Awareness Area(s). (See AGEC matrix for current course values.)

1. Cultural Diversity in the United States [C]
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.


## Arizona General Education Curriculum Business (AGEC-B) Requirements

The AGEC-B requires a minimum of 35 credits (32 if FYC is met by single transfer course)*, however, the AGEC credit count within the total credits for a degree may be lower if courses are also applied toward Required Courses or Restricted Electives and the credits are counted in those areas. Credits count once toward the total for the degree. Therefore, the AGEC-B may be met with fewer than 35 credits (fewer than 32 if FYC is met by single transfer course)* within an associate degree provided that all requirements listed below are completed.

Credits
A. Core Areas:

35 (min.)*
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 their respective Core Area, Required Course(s) or Restricted Elective(s). AGEC designations are subject to change. Courses may meet more than one requirement but are only count-
ed once toward the total credits for the degree.
See AGEC matrix for each course's value(s) in the semester it is taken.

1. First-Year Composition [FYC]

> ENG101 OR ENG107

AND ENG102 OR ENG108 (3)*
2. Literacy and Critical Inquiry [L]
3. Mathematical Applications [MA]

Requires a course in college mathematics
MAT212 Brief Calculus OR
MAT213 Brief Calculus OR
Higher [MA] designated course
4. Computer/Statistics/Quantitative Applications [CS] 3 CIS105 Survey of Computer Information Systems
5. Humanities, Arts and Design [HU]

Students are encouraged to choose course work from more than one discipline.
6. Social-Behavioral Sciences [SB]

6
ECN211 Macroeconomics AND ECN212 Microeconomics
7. Natural Sciences [SQ/SG]

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.
B. Awareness Areas

Some courses may be used to satisfy both a Core Area and one or more Awareness Area(s). (See AGEC matrix for current course values.)

1. Cultural Diversity in the United States [C]
2. Global Awareness [G] OR Historical Awareness [H] (0-3)
[^3]
# Arizona General Education <br> Curriculum - Science (AGEC-S) Requirements 

The AGEC-S requires a minimum of 36 credits ( 33 if FYC is met by single transfer course)*, however, the AGEC credit count within the total credits for a degree may be lower if courses are also applied toward Required Courses or Restricted Electives and the credits are counted in those areas. Credits count once toward the total for the degree. Therefore, the AGEC-S may be met with fewer than 36 credits (fewer than 33 if FYC is met by single transfer course)* within an associate degree provided that all requirements listed below are completed.

Credits
A. Core Areas:

36 (min.)*
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 their respective Core Area, Required Course(s) or Restricted Elective(s). AGEC designations are subject to change. Courses may meet more than one requirement but are only counted once toward the total credits for the degree. See AGEC matrix for each course's value(s) in the semester it is taken.

1. First-Year Composition [FYC 6* ENG101 OR ENG107 (3)* AND ENG102 OR ENG108 (3)*
2. Literacy and Critical Inquiry [L] 0-3 (0 credits only if shared with HU or SB) 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 for each course's value(s) in the semester it is taken.)
3. 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 pre-requisite.
4. Humanities, Arts and Design [HU]

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 AGEC matrix for each course's value(s) in the semester it is taken.)
5. 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 AGEC matrix for each course's value(s) in the semester it is taken.)
6. Natural Sciences [SQ/SG]

Students must complete eight (8) credits of General Chemistry, University Physics or General Biology for Majors. Consult specific requirements of university transfer major for guidance. [(CHM150 or CHM151) \& CHM151LL] or CHM150AA or CHM151AA General Chemistry I AND
[CHM152 \& CHM152LL] or CHM152AA General Chemistry II
OR
PHY115 or PHY121 University Physics I
AND
PHY116 or PHY131 University Physics II
B. Awareness Areas

Some courses may be used to satisfy both a Core Area 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)

* 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.


## AGEC Area Requirements Descriptions/Definitions

## CORE AREAS

## 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, gather, interpret, and evaluate evidence and 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 AGEC-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]

The Social-Behavioral Sciences Core area provides scientific methods of inquiry and empirical knowledge about human behavior, both within society and within individuals. This area of emphasis in general education curriculum 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 Core area 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 U.S. and either Global Awareness or Historical Awareness. Courses can satisfy a Core area and one or two Awareness areas simultaneously. Therefore, no additional semester credits are required to satisfy the two Awareness areas.

## 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 not only of different groups of European immigrants and their descendants, but also of diverse groups of 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; and
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, and the natural sciences, as well as in the social science traditionally called history.

[^4]
## Academic Certificate (AC) Requirements

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 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 studies 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;
- Requires a cumulative GPA of 2.0 or better in required courses for completion;
- 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 presump-
tion 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 (https://curriculum.maricopa. edu/).


## Academic Certificate (AC) in African-American Studies

## Total Credits: 15-18 <br> Major Code: 6226N

## Description

The interdisciplinary Academic Certificate (AC) in Af-rican-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
Credits: 6
AFR110 Introduction to African-American Studies (SB, C)
AFR/ASB/
CCS202 Ethnic Relations in the United States (SB, C, H)

Restricted Electives Credits: 9-12
$\begin{array}{ll}\text { AFR203 African-American History: The Slavery } \\ & \text { Experience (SB, C, H) }\end{array}$
AFR204 African-American History: Reconstruction to the Present (SB, C, H) 3
CPD103BC African-American Cultural Pride and Awareness (AFS Department Elective) 2
ENH114 African-American Literature (HU, C) 3
HIS203 African-American History I (SB, C, H) 3
HIS204 African-American History II (SB, C, H) 3
HUM214 African-Americans in Film (HU, C) 3
REL225 African-American Religions (HU, C) 3
SOC143 Sociology of African American Problems (SB, C) 3

## Academic Certificate (AC) in American Indian Studies

## Total Credits: 15 <br> Major Code: 6208N

## Description

The Academic Certificate (AC) in American Indian Studies program explores the unique experiences of the American Indian people living in the Southwest and provides students the opportunity to study the cultures, values, histories, and contemporary lives of the indigenous people of North America. The Certificate includes courses that investigate their language, literature, arts, philosophy, religions, and politics.

## 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 required 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.

## Admission Criteria

None.
Required CoursesCredits: 12
ENG101 First-Year Composition (3) OR
ENG107 First-Year Composition for ESL (3) ..... 3
AIS/SOC105 Introduction to American Indian Studies ..... 3
AIS/SOC160 American Indian Law ..... 3
AIS213/REL203 American Indian Religions (3) ORAIS/HIS140 American Indian History (3)3
Restricted ElectivesSelect at total of 3 credits from the following list exceptthose used to satisfy Required Courses area.
AIS+++ Any AIS American Indian Studies course ..... 3
ARH145 History of American Indian Art ..... 3
CCS101 Chicano and Chicana Studies ..... 3
ENH259 American Indian Literature ..... 3
GCU221 Arizona Geography ..... 3
HIS+++ Any HIS History course ..... 3
NAV+++ Any NAV Navajo course ..... 3
SPH245 Hispanic Heritage in the Southwest ..... 3
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 for all courses required within the program.

## Required Courses

Credits: 18
ARH102 Renaissance Through Contemporary Art 3 ART111 Drawing I 3
ART112 Two-Dimensional Design 3
ART113 Color 3
ART115 Three-Dimensional Design 3
ART255 Art Marketing 3
Restricted Electives 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

## Academic Certificate (AC) in Communication Competence in the Workplace

## Total Credits: 30-33 <br> 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 | 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
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 Effective Helping in a Diverse World 3

## Free Electives

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.

# Academic Certificate (AC) in Communication Skills for Non-Native 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 Credits: 21

COM120 Pronunciation of American Speech 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)

## Restricted Electives <br> Credits: 9 <br> If choosing BPC110 or CIS105 only one can be applied BPC110 Computer Usage and Applications 3 <br> CIS105 Survey of Computer Information Systems 3 <br> COM230 Small Group Communication 3 <br> COM259 Communication in Business and Professions 3 <br> ENG111 Technical Writing 3 <br> GBS233 Business Communication 3 <br> IBS109 Cultural Dimension for International Trade 3 <br> SWU295 Effective Helping in a Diverse World 3 <br> Any approved General Education course in the cultural awareness [C] value (3) OR <br> COM+++++ Any COM Communication course (3) <br> <br> Academic Certificate (AC) <br> <br> Academic Certificate (AC) in Creative Writing

 in Creative Writing}
## Total Credits: 24 <br> 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 for all courses required within the program.

## Admission Criteria:

Students who wish to enroll in the Creative Writing program must complete a formal application; contact Program Director.

Program Prerequisites:
Credits: 0
None.

## Required Courses

Credits: 21
ENG210 Creative Writing (3) may be substituted for CRW150 with permission of Program Director.
CRW150 Introduction to Creative Writing
CRW200 must be repeated for a total of two (2) credits.
CRW200 Readings for Writers (1)
CRW201 Portfolio
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 |
| THE118 | 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
CRW203 Dialogue 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

Credits: 3
CRW+++++ Any CRW Creative Writing prefixed course not listed under Required Courses area. 1-3
ENG235 Magazine Article Writing ..... 3
ENG/THE260 Film Analysis ..... 3
ENH+++++ Any ENH English Humanities prefixed course ..... 3
HUM/THF210 Contemporary Cinema ..... 3
Free ElectivesCredits: 0
None.
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 for all courses required within the program.

Required Courses Credits: 18
ARH102 Renaissance Through Contemporary Art 3
ART111 Drawing I
ART112 Two-Dimensional Design 3
ART113 Color 3
ART115 Three-Dimensional Design 3
ART255 Art Marketing 3
Restricted Electives 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
ART290PC Studio Art: Painting

## Academic Certificate (AC) in Electronic Music

## Total Credits: 40 <br> Major Code: 6231N

## Description

The Academic Certificate (AC) in Electronic Music is intended for the student who would like to obtain acknowledgment for completion of electronic music courses, and is not designed to prepare students for employment. While the completion of the certificate does not lead to a particular degree, it does provide and enhance the development of musicianship for enjoyment and personal growth. This program provides the student with fundamental musical skills covering a variety of topics, including theory, performance, composition, and history. In addition, students receive a high level of technical training in creating electronic music. As students complete courses in the program, they will build a portfolio of original compositions that may be used to seek admittance to a bachelor's-level music program.

## Program Notes:

Students must earn a grade of ' $C$ ' or better in all courses required within the program.
This program is not eligible for Title IV Federal Financial Aid.

## Program Prerequisites:

Credits: 0-3

$$
\begin{array}{ll}
\text { MTC100 } & \text { Fundamentals of Music (2) OR } \\
\text { MTC101 } & \text { Introduction to Music Theory (3) OR } \\
& \text { Permission of instructor }
\end{array}
$$

## Required Courses

Credits: 40
Students are required to complete a total of six (6) credits of MTC240.
MTC105 Music Theory I 3
MTC106 Aural Perception I 1
MTC155 Music Theory II 3
MTC156 Aural Perception II 1
MTC205 Music Theory III 3
MTC206 Aural Perception III 1
MTC255 Music Theory IV 3
MTC256 Aural Perception IV 1
MTC191 Electronic Music I 3
MTC192 Electronic Music II 3
MTC193 Computer-Based Sound Synthesis 3
MTC240 Composition (3) 6

# MTC291 <br> Electronic Music III <br> MUC195 Studio Music Recording I <br> MUC196 Studio Music Recording II (3) OR <br> MUC197 <br> Live Sound Reinforcement I (3) <br> Academic Certificate (AC) in Global Citizenship 

## Total Credits: 15-16 <br> Major Code: 6212N

## Description

The Academic Certificate (AC) in Global Citizenship is an interdisciplinary program intended to assist students in understanding the interconnectedness of peoples and societies, have them develop a general knowledge of history and world events, and accept and celebrate the richness of human diversity and different cultural values and attitudes. The certificate is designed to enhance students' understanding of the world around them and current social and cultural issues such as economic and social justice, human and civil rights, endangered indigenous populations, world and regional conflicts, environmental degradation and its impact on cultures, political change, and cultural diversity.

## 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
Credits: 7
GLO298AA Special Projects

Students can select two of the following courses ( 6 credit hours). These courses are broad survey classes. Classes with more specificity of topics will be in the elective category. The courses must have a Global Awareness (G) general education designation.

ASB100 Introduction to Global Health 3
ASB102 Introduction to Cultural Anthropology 3
COM263 Elements of Intercultural Communication 3
GCU102 Introduction to Human Geography 3
POS120 World Politics 3
PSY132 Psychology and Culture 3
REL100 World Religions 3
HES210 Cultural Aspects of Health and Illness 3
HIS102 History of Western Civilization, 1789 to Present 3
MHL143 Music in World Cultures 3
SUS100 Introduction to Sustainability 3

## Restricted Electives

Credits: 8-9
In addition to the two Required Courses, students must choose 8-9 Restricted Elective credits. Students should focus their selection on the following areas of emphasis, and take their electives within these areas.

## Specialization I:

## Impact of Diverse Cultures on American Life

Issues to be studied in this area include, but are not limited to immigration, communication, education, pluralism, cultural diversity, popular culture.
Courses that qualify in this area must have a Cultural Diversity [C] general education designation.

## Specialization II: Global Study of Cultures, Religions, Economics, and Politics

Issues to be studied in this area include, but are not limited to, women's rights, family planning, migration, religious diversity, human rights, origin and development of civilizations.
Courses that qualify in this area must have a Global
Awareness [G] general education designation.

## Specialization III: <br> Science, Technology, and the World

Issues to be studied in this area include, but are not limited to, climate change, sustainability, environmental degradation, use of natural resources.
Courses that qualify in this area must have a Natural Science [SG] or [SQ] general education designation and include the following:
ASM104 Bones, Stones, and Human Evolution 4
BIO105 Environmental Biology 4

## Academic Certificate (AC) in Language Studies

## Total Credits: 12-18 <br> 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. Students will have the opportunity to develop oral and written communication skills 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 each course in 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 or apply credits earned through the Advanced Placement (AP) or International Baccalaureate (IB) exams.

## Program Prerequisites

Credits: 0-4
201-level proficiency in a language other than
English as indicated by assessment or coursework.

## Required Courses

Credits: 6-8
SLC201 Introduction to Linguistics
AND
Students must choose 3-5 credits in 202 or higher-level coursework in the language used to satisfy the program prerequisites.

## Restricted Electives

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
AHU+++ Any AHU Arabic Humanities course(s)
ARB+++ Any ARB Arabic 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)
SLG+++ Any SLG Sign Language course(s)
SPA+++ Any SPA Spanish course(s)
SPH+++ Any SPH Spanish Humanities course(s)
TRS+++ Any TRS Translation and Interpretation course(s)

# Academic Certificate (AC) in Oral Communication Fluency for Non-Native English Speakers 

Total Credits: 15<br>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
Credits: 12
COM110 Interpersonal Communication 3
COM120 Pronunciation of American Speech 3
COM221 Oral Fluency in American Speech 3
COM282AC Service-Learning Experience in Communication 3
Restricted Electives
Credits: 3
Any approved General Education course in the cultural awareness [C] value.

## Academic Certificate (AC) in Spanish Language and Culture

## Total Credits: 25 <br> 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 each course in 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

Credits: 16
SPA101 Elementary Spanish I 4
SPA102 Elementary Spanish II 4
SPA201 Intermediate Spanish I 4
SPA202 Intermediate Spanish II 4
Restricted Electives
Credits: 9
Select six (6) credits taught in Spanish and three (3) credits taught in English.
FLA240 Foreign Language Teaching Methods 3
GCU223 Geography of Latin America 3
HIS145 History of Mexico 3
MHL156 Music in Latin America and the Caribbean 3

Introduction to Linguistics
SPA115 Beginning Spanish Conversation I
SPA116 Beginning Spanish Conversation II
SPA117
SPA118
SPA119
SPA120
SPA205
SPA206
SPA217
SPA225
SPA226
SPA235
SPA236
SPA241
SPA242
SPA251
SPA265
SPA266
Health Care Spanish I
Health Care Spanish II
Spanish for Educational Settings I 3
Spanish for Educational Settings II 3
Spanish for Medical Interpretation I
Spanish for Medical Interpretation II
Spanish for Business Communication
Intermediate Spanish Conversation I
Intermediate Spanish Conversation II
$\begin{array}{ll} & \text { Learning Experience (any suffixed course) } \\ \text { SPA298++ } & \text { 1-3 }\end{array}$
SPH245 Hispanic Heritage in the Southwest 3
SPH298++ Special Projects (any suffixed course) 1-3

## Academic Certificate (AC) in Sustainability

## Total Credits: 15-18 <br> Major Code: 6240N

## Description

The Academic Certificate (AC) in Sustainability is interdisciplinary and builds a strong academic expertise within a student's desired focus area of Sustainability. The focus areas are established within and among the foundational pillars of Sustainability (social - environmental - economic).

## 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 required within the program.

Required Courses
Credits: 6
SSH111 Sustainable Cities 3
SUS110 Sustainable World 3

## Restricted Electives

Credits: 9-12
Students must select three focus area classes:
ASM104 Bones, Stones, and Human Evolution 4
BIO105 Environmental Biology 4
CHM107 Chemistry and Society (3) and
CHM107LL Chemistry and Society Laboratory (1) 4
COM263 Elements of Intercultural Communication 3
FON135 Sustainable Cooking 3
ECN212 Microeconomic Principles 3
EPS150 Introduction to Entrepreneurship 3
ENV101 Introduction to Environmental Science 4
GLG110 Geological Disasters and the Environment (3) and
Geological Disasters and the Environment Lab (1)
GPH113 Introduction to Physical Geography 4
PHI216 Environmental Ethics 3
PSY132 Psychology and Culture 3
SBU200 Society and Business 3
SUS100 Introduction to Sustainability 3
$\begin{array}{lll}\text { SCT100 } & \text { Introduction to Sustainable Built } \\ & \text { Environments }\end{array}$

## Academic Certificate (AC) in Women and Gender Studies

## Total Credits: 15 <br> Major Code: 6225N

## Description

The Academic Certificate (AC) in Women and Gender Studies is an intensive interdisciplinary liberal arts certificate 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.

## 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 required within the program.

Required Courses Credits: 3
WST100 Introduction to Women's and Gender Studies 3

## Restricted Electives

Credits: 12
Students must complete 12 credits from the list below: ASB211 Women in Other Cultures 3
ENH/WST284 19th Century Women Writers 3
ENH/WST285 Contemporary Women Writers 3
HIS201 History of Women in America 3
HLRWST286 Women and Health: Body/Mind/Spirit/
Connection
HUMNST209Women and Films 3
PSY235 Psychology of Gender 3
RELWST290 Women and World Religion 3
SOC212 Gender and Society 3
WST120 Gender, Class, and Race 3
WST128 Law and Violence Against Women 3
WST160 Women and the Early American Experience 3
WST161 American Women Since 19203
WST200 Essential Feminist Writing 3

## Associate in Arts (AA)

## 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 the Program (Degree) Search at https://curriculum.maricopa.edu/ for credit minimums for individual degree programs by emphasis. A minimum grade point average of 2.0 and grades of " $C$ " or higher are required to earn the degree. The AA degree is governed by the MCCCD General Academic Policies for Associate Degrees Designed for University Transfer.

The Associate in Arts degree includes the following components:
I. Program Prerequisites (if applicable, for versions with an emphasis only)
II. Required Courses (for versions with an emphasis only)
III. Restricted Electives (for versions with an emphasis only)
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: www.aztransfer.com.

## Degree Requirements

The requirements for the Associate in Arts (AA) follow. No versions of the Associate in Arts require fewer than a minimum of 60 credits; however, minimum credits for the AA vary by specific emphasis. Refer to the Program (Degree) Search at https:// curriculum.maricopa.edu/ for credit minimums by emphasis. 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 http:// www.maricopa.edu/ and on each MCCCD college's website.

## Requirements

Credits
I. Program Prerequisites Number Varies

Program prerequisites for the Associate in Arts degree vary by specific emphasis, and are not required for the version of the degree without a specific emphasis. Refer to the Program (Degree) Search at https://curriculum.maricopa.edu/ for specific courses and credit minimums by emphasis.

## II. Required Courses

Number Varies
Required (major-specific) courses for the Associate in Arts degree vary by specific emphasis, and are not required for the version of the degree without a specific emphasis. Refer to the Program (Degree) Search at https://curriculum.maricopa.edu/ for specific courses and credit minimums by emphasis. for specific courses and credit minimums by emphasis.

## III. Restricted Electives

## Number Varies

Restricted electives for the Associate in Arts degree vary by specific emphasis, and are not required for version of the degree without a specific emphasis. Refer to the Program (Degree) Search at https://curriculum.maricopa for specific courses and credit minimums by emphasis.

## IV. Arizona General Education CurriculumArts (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 and credits count once toward the total 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.
A. Core Areas:

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 their respective Core Area, Required Course(s) or Restricted Elective(s). AGEC designations are subject to change. Courses may meet more than one requirement but are only counted once toward the total credits for the degree. See AGEC matrix for each course's value(s) in the semester it is taken.

1. First-Year Composition [FYC] ENG101 OR ENG107 6* AND ENG102 OR ENG108
2. Literacy and Critical Inquiry [L] 3
3. Mathematical Applications [MA] Requires a course in college mathematics (MAT140, MAT141, MAT142, MAT145, MAT146) or college algebra (MAT150, MAT151, MAT152, MAT155, MAT156) or pre-calculus (MAT187) or higher [MA]-approved general education course.
4. Computer/Statistics/Quantitative Applications [CS]3
5. Humanities, Arts and Design [HU]
6. Social-Behavioral Sciences [SB]

Students are encouraged to choose course work from more than one discipline.
7. Natural Sciences [SQ/SG]

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.
B. Awareness Areas:

Some courses may be used to satisfy both a Core Area 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]

## V. MCCCD Additional Requirements

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

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

Students may demonstrate proficiency through assessment.
CRE101 [L] Critical Reading OR equivalent as indicated by assessment

## VI. 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.
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: https:// aztransfer.com/, https://www.maricopa.edu/de-grees-certificates/transfer/pathways-partners, as well as those of individual universities. For appropriate course selection, students should consult with an academic advisor.

## TOTAL

60-64*

[^5]> Associate in Arts (AA), Emphasis in American Indian Studies

Total Credits: 60-64<br>Major Code: 8126

## Description

The Associate in Arts (AA), Emphasis in American Indian Studies degree 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 each course in 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.

Required Courses
Credits: 6-14
AIS/SOC105 Introduction to American Indian Studies 3
AIS/SOC160 American Indian Law
NAV101 Elementary Navajo I (4) OR
equivalent as indicated by assessment (0) 0-4
NAV102
Elementary Navajo II (4) OR
equivalent as indicated by assessment (0) 0-4
General Education Requirements Credits: 35-38 Arizona General Education Curriculum (AGEC) AGEC-A 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 Area ([C], [G] and/ or $[H]$ ) requirement(s). See the AGEC matrix for course designations.

## 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 |

Any approved general education course in the Mathe-
matical Applications [MA] area.

## Computer/Statistics/Quantitative Applications [CS]

Credits: 3
$\begin{array}{ll}\text { BPC110 } & \text { Computer Usage and Applications (3) OR } \\ \text { CIS105 } & \text { Survey of Computer Information Systems (3) }\end{array}$
Humanities, Arts and Design [HU] Credits: 6
Any approved general education courses in the Humanities, Arts and Design [HU] area.
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 So-cial-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

## Awareness Areas

Credits: 0
These requirements may be shared with Core Requirements.

## Cultural Diversity in the US [C] <br> Credits: 0 <br> Historical/Global Awareness [H]/[G] Credits: 0

Met by AIS/SOC160 in the Required Courses area.
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 transferable credits, it is recommended that courses be selected that meet more than one requirement wherever possible.

## 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 Critical Reading and Critical Thinking (3) OR Equivalent as indicated by assessment (0) 0-3

## Associate in Arts (AA), Emphasis in Anthropology

## Total Credits: 60-64

Major Code: 8109

## Description

The Associate in Arts (AA), Emphasis in Anthropology degree 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. 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, businesses, Non-Governmental Organizations (NGOs), and government agencies.

## Program Notes

Students must earn a grade of ' $C$ ' or better in each course in the program.

## Required Courses <br> Credits: 13

ASB102 Introduction to Cultural Anthropology 3
ASM104 Bones, Stones, and Human Evolution 4
ASB222 Buried Cities and Lost Tribes: Old World (3) OR
ASB223 Buried Cities and Lost Tribes: New World (3) 3
MAT206 Elements of Statistics (3) OR
PSY230 Introduction to Statistics (3) OR
SWU225 Statistics for Social Research/Justice and Government (3)

3
(MAT206 OR SWU225 required for ASU BA, MAT206 OR PSY230 required for $N A \cup$ and $U$ of $A$ )

## Restricted Electives <br> Credits: 0-23 <br> Transfer Plan 1: Arizona State University (College of Liberal Arts and Sciences), Anthropology, Bachelor of Arts <br> Foreign Language <br> Credits: 0-20

Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV with a ' C ' or better OR demonstrating proficiency through this level as indicated by assessment.
ARB+++++ Any ARB/Arabic course(s)
CHI+++++ Any CHI/Chinese course(s)
FRE+++++ Any FRE/French course(s)
GER+++++ Any GER/German course(s)
ITA+++++ Any ITA/Italian course(s)
JPN+++++ Any JPN/Japanese course(s)
SPA+++++ Any SPA/Spanish course(s)
SLG+++++ Any SLG/Sign Language course(s)
Transfer Plan 2: Arizona State University
(College of Liberal Arts and Sciences),
Anthropology, Bachelor of Science
ASB100 $\quad$ Introduction to Global Health (3) OR
ASM/FOR275 Forensic Anthropology (4) OR
GPH210 $\quad$ Society and Environment (3) OR

| GPH211 | Landform Processes (4) |
| :--- | :--- |
| (to partially fulfill the CLAS Science and |  |
|  | Society Elective requirement) |

Students must complete six (6) credits that transfer to ASU as an ASB or ASM direct equivalent or as an ASB or ASM departmental elective.

## Transfer Plan 3: Northern Arizona University, Anthropology, Bachelor of Arts

Select 16 to 20 credits of Foreign Language coursework with a 'C' or better through the 202 level OR demonstrate proficiency through this level as indicated by assessment.
ARB+++++ Any ARB/Arabic course(s)
CHI+++++ Any CHI/Chinese course(s)
FRE+++++ Any FRE/French course(s)
GER+++++ Any GER/German course(s)
ITA+++++ Any ITA/Italian course(s)
JPN+++++ Any JPN/Japanese course(s)
SPA+++++ Any SPA/Spanish course(s)
SLG+++++ Any SLG/Sign Language Courses(S)
Transfer Plan 4: University of Arizona, Anthropology, Bachelor of Arts
ASB230 Principles of Archaeology 3
Select 16 to 20 credits of Foreign Language coursework with a 'C' or better through the 202 level OR demonstrate proficiency through this level as indicated by assessment
ARB+++++ Any ARB/Arabic course(s)
CHI+++++ Any CHI/Chinese course(s)
FRE+++++ Any FRE/French course(s)
GER+++++ Any GER/German course(s)
ITA+++++ Any ITA/Italian course(s)
JPN+++++ Any JPN/Japanese course(s)
SPA+++++ Any SPA/Spanish course(s)
SLG+++++ Any SLG/Sign Language course(s)

Transfer Plan 5: University of Arizona, Anthropology, Bachelor of Science
ASB230 Principles of Archaeology 3
Select 8 to 10 credits of Foreign Language coursework with a 'C' or better through the 102 level OR demonstrate proficiency through this level as indicated by assessment.
ARB+++++ Any ARB/Arabic course(s)
CHI+++++ Any CHI/Chinese course(s)

| FRE+++++ | Any FRE/French course(s) |
| :--- | :--- |
| GER+++++ | Any GER/German course(s) |
| ITA+++++ | Any ITA/Italian course(s) |
| JPN++++++ | Any JPN/Japanese course(s) |
| SPA+++++ | Any SPA/Spanish course(s) |
| SLG+++++ | Any SLG/Sign Language course(s) |

General Education Requirements Credits: 22-33 Arizona General Education Curriculum (AGEC) AGEC-A A single course with an [HU], [SB], or [L] designation(s) may also be used to satisfy the Oral Communication, Critical Reading, or Awareness Area ([C], [G] and/or [H]) requirement(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

## Literacy and Critical Inquiry [L] <br> Credits: 3

Any approved general education course in the Literacy and Critical Inquiry [L] area.

3

## Mathematics [MA]

Credits: 3-5

| MAT140 | College Mathematics (5) OR |
| :--- | :--- |
| MAT141 | College Mathematics (4) OR |
| MAT142 | College Mathematics (3) OR |
| MAT220 | Calculus with Analytic Geometry I (5) OR |
| MAT221 | Calculus with Analytic Geometry I (4) 3-5 |
| (MAT140, or MAT141, or MAT142 required for ASU BA, NAU BA, and  <br> U of A BA)  <br> (MAT220 or MAT221 required for ASU BS and $\cup$ of A BS)  |  |

## Computer/Statistics/Quantitative

Applications [CS]

## Credits: 0

Met by ASB222 OR ASB223 in Required Courses AND
Any approved general education course in the Human-
ities, Arts, and Design [HU] area.
Humanities, Arts and Design [HU] Credits: 3
Met by ASB222 OR ASB223 in Required Courses AND Any approved general education course in the Humanities, Arts, and Design [HU] area.

3

## Social-Behavioral Sciences [SB]

Credits: 3
Met by ASB102 in Required Courses AND
Any approved general education course in the Social-Be-
havioral Sciences [SB] area
3
Recommend a course with the ASB prefix

| Natural Sciences [SG]/[SQ] | Credits: 4 |
| :--- | :--- |
| Met by ASM104 in Required Courses AND |  |
| Any approved general education course in the Natural |  |
| Sciences [SQ] quantitative area. | 4 |

## Awareness Areas

Credits: 0-3
These requirements may be shared with Core Requirements.
Cultural Diversity in the US [C] Credits: 0-3 Historical/Global Awareness [H]/[G] Credits: 0 Met by ASB102, ASB222, or ASB223 in Required Courses.
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 transferable credits, it is recommended that courses be selected that meet more than one requirement wherever possible.

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 Critical Reading and Critical Thinking (3)
OR Equivalent as indicated by assessment (0) 0-3

## Associate in Arts (AA), 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 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 in the program.

| Required | Courses | Credits: |
| :--- | :--- | :--- |
| COM100 | Introduction to Human Communication | 3 |
| COM110 | Interpersonal Communication | 3 |
| COM | 3 |  |
| COM207 | Introduction to Communication Inquiry | 3 |
| COM225 | Public Speaking | 3 |
| COM230 | Small Group Communication | 3 |
| COM263 | Elements of Intercultural Communication | 3 |

Restricted Electives
Credits: 0-23
Complete all courses in the transfer option that best aligns with your academic and professional goals. If your intended transfer institution is not listed, then select a combination of courses from the transfer options listed in order to meet the minimum credits required in the Restricted Electives section. Consult with an academic, faculty, or program advisor to prevent exceeding your university transfer program `s maximum transferable credits (typically 64).

## Transfer Plan 1: Arizona State University (College of Liberal Arts and Sciences), <br> Bachelor of Arts

Foreign Language
Credits: 0-20
Complete a language course at the intermediate level
(202 or equivalent), including American Sign Language IV with a 'C' or better OR demonstrate proficiency through this level as indicated by assessment.
ARB+++ Any ARB Arabic course(s)

| CHI+++ | Any CHI Chinese course(s) |  |
| :--- | :--- | :--- |
| FRE+++ | Any FRE French course(s) |  |
| GER+++ | Any GER German course(s) |  |
| ITA+++ | Any ITA Italian course(s) |  |
| JPN+++ | Any JPN Japanese course(s) |  |
| SPA+++ | Any SPA Spanish course(s) |  |
| SLG++++ | Any SLG Sign Language course(s) | $0-20$ |

Transfer Plan 2: Arizona State University (College of Integrative Sciences and Arts), Bachelor of Arts
Foreign Language
Credits: 0-20
Complete a language course at the intermediate level (202 or equivalent), including American Sign Language IV with a 'C' or better OR demonstrate proficiency through this level as indicated by assessment.
ARB+++ Any ARB Arabic course(s)
CHI+++ Any CHI Chinese course(s)
FRE+++ Any FRE French course(s)
GER+++ Any GER German course(s)
ITA+++ Any ITA Italian course(s)
JPN+++ Any JPN Japanese course(s)
SPA+++ Any SPA Spanish course(s)
SLG+++ Any SLG Sign Language course(s) 0-20

Transfer Plan 3: Northern Arizona University, Bachelor of Arts, and University of Arizona, Bachelor of Arts
Foreign Language
Credits: 0-20
Complete a language course at the intermediate level (202 or equivalent), including American Sign Language IV with a 'C' or better OR demonstrate proficiency through this level as indicated by assessment.
ARB+++ Any ARB Arabic course(s)
CHI+++ Any CHI Chinese course(s)
FRE+++ Any FRE French course(s)
GER+++ Any GER German course(s)
ITA+++ Any ITA Italian course(s)
JPN+++ Any JPN Japanese course(s)
SPA+++ Any SPA Spanish course(s)
SLG+++ Any SLG Sign Language course(s) 0-20

## Transfer Plan 4: Arizona State University (College of Liberal Arts and Sciences), Bachelor of Science

No additional coursework needed.

## Transfer Plan 5: Arizona State University (New College of Interdisciplinary Arts and Sciences), Bachelor of Science

Language and Cultures
Credits: 0-20
Complete a language course at the intermediate level (202 or equivalent), including American Sign Language IV with a 'C' or better OR demonstrate proficiency through this level as indicated by assessment. This requirement may also be satisfied after transfer to ASU though various upper division course options. Recommend students satisfy this requirement after transfer to ASU unless proficient at the elementary level (102 or equivalent).
ARB+++ Any ARB Arabic course(s)
CHI+++ Any CHI Chinese course(s)
FRE+++ Any FRE French course(s)
GER+++ Any GER German course(s)
ITA+++ Any ITA Italian course(s)
JPN+++ Any JPN Japanese course(s)
SPA+++ Any SPA Spanish course(s)
SLG+++ Any SLG Sign Language course(s) 0-20
GBS221 Business Statistics (3) OR
MAT206 Elements of Statistics (3) OR
PSY230 Introduction to Statistics (3) OR
SWU225 Statistics for Social Research/Justice and Government (3)
(GBS221, MAT206, or SWU225 recommended)

## Transfer Plan 6: Arizona State University (New College of Interdisciplinary Arts and Sciences), Bachelor of Arts

Language and Cultures
Credits: 0-20
Complete a language course at the intermediate level (202 or equivalent), including American Sign Language IV with a 'C' or better OR demonstrate proficiency through this level as indicated by assessment. This requirement may also be satisfied after transfer to ASU though various upper division course options. Recommend students satisfy this requirement after transfer to ASU unless proficient at the elementary level (102 or equivalent).
ARB+++ Any ARB Arabic course(s)
CHI+++ Any CHI Chinese course(s)
FRE+++ Any FRE French course(s)
GER+++ Any GER German course(s)
ITA+++ Any ITA Italian course(s)
JPN+++ Any JPN Japanese course(s)
SPA+++ Any SPA Spanish course(s)
SLG+++ Any SLG Sign Language course(s)

## Transfer Plan 7: Northern Arizona University, Bachelor of Science and Grand Canyon University, Bachelor of Arts <br> No additional coursework needed.

General Education Requirements Credits: 23-28 Arizona General Education Curriculum (AGEC) AGEC-A A single course with an [HU], [SB], or [L] designation may also be used to satisfy the Oral Communication, Critical Reading, or Awareness Area ([C], [G] and/or [H]) requirement(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)
(3) 6

Literacy and Critical Inquiry [L] Credits: 0
Met by COM225 in Required Courses area.
Mathematics [MA]
Credits: 3-5
$\begin{array}{ll}\text { MAT140 } & \text { College Mathematics (5) OR } \\ \text { MAT141 } & \text { College Mathematics (4) OR } \\ \text { MAT142 } & \text { College Mathematics (3) OR }\end{array}$
Any approved general education course in the
Mathematical Applications [MA] area (3-5).
Computer/Statistics/Quantitative
Applications [CS]
Credits: 0-3
Met by GBS221 or MAT206 or PSY230 or SWU225 in
Restricted Electives area OR
Any approved general education course in the Computer/Statistics/Quantitative Applications [CS] area. 0-3
Humanities, Arts and Design [HU] Credits: 6 Any approved general education courses in the Humanities, Arts and Design [HU] area.
(COM/THP241 Oral Interpretation of Literature 3 recommended)

## Social-Behavioral Sciences [SB]

Credits: 0 Met by COM100 or COM110 or COM230 or COM263 in 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).

## Awareness Areas

Credits: 0
These requirements may be shared with Core Requirements.

Cultural Diversity in the US [C]<br>Credits: 0

Historical/Global Awareness [H]/[G]
Credits: 0
Met by COM263 in Required Courses area.
MCCCD Additional Requirements Credits: 0-3
Courses in this area may also be applied to the AGEC Core Requirements. To minimize total credits required for degree and maximize transferable credits, it is recommended that courses be selected that meet more than one requirement wherever possible.
Oral Communication
Credits: 0
Met by COM100 or COM110 or COM225 or COM230 in
Required Courses area.
Critical Reading
Credits: 0-3
CRE101 Critical Reading and Critical Thinking (3)
OR Equivalent as indicated by assessment (0) 0-3

# Associate in Arts (AA), Emphasis in Counseling and Applied Psychological Science 

## Total Credits: 60 <br> 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 each course in the program.
This program aligns with the requirements of the Counseling and Applied Psychological Science (BS) Maricopa-ASU Pathways Program (MAPP) at Arizona State University (ASU), Polytechnic, College of Integrative Sciences and Arts.

## Required Courses

Credits: 12
CPD120 Introduction to Counseling 3
CPD220 The Counselor in a Multicultural Society 3
CPD240 Introduction to Counseling Skills 3
CPD260 Career and Professional Preparation for the Helping Professions

General Education Requirements Credits: 31-39 Arizona General Education Curriculum (AGEC) AGEC-A

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 Area ([C], [G] and/ or $[\mathrm{H}]$ ) requirement(s). See the AGEC matrix for course designations.

## 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
Met by CPD260 in the Required Courses area.

## Mathematics [MA]

Credits: 5-9
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
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)
4
Humanities, Arts and Design [HU] Credits: 6
Any approved general education courses in the Human-
ities, Arts and Design [HU] area.
6

## Social-Behavioral Sciences [SB]

Credits: 3
PSY101 Introduction to Psychology
3
Met by CPD120 in Required Courses area.
Natural Sciences [SG]/[SQ]
Credits: 8
Natural Sciences (General) [SG] area
4
PSY290AB Research Methods (4) OR
PSY290AC Research Methods (4)
4
BIO100 Biology Concepts (4) OR
BIO156 Introductory Biology for Allied Health (4) OR
BIO181 General Biology (Majors) I (4) OR
Any approved general education course in the Natural
Sciences (Quantitative) [SQ] area. (4)
4

## Awareness Areas <br> Credits: 0-3 <br> These requirements may be shared with Core Requirements. <br> Cultural Diversity in the US [C] <br> Credits: 0 <br> Historical/Global Awareness [H]/[G] Credits: 0-3 <br> Any approved general education course with the Historical $[H]$ or Global [G] awareness area designation. 0-3

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 transferable credits, it is recommended that courses be selected that meet more than one requirement wherever possible.

## 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 Critical Reading and Critical Thinking (3) OR Equivalent as indicated by assessment (0) 0-3

## Associate in Arts (AA), Emphasis in Early Childhood Education

## Total Credits: 60-65 <br> 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 educa-
tors 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 each course in the program.

## Required Courses

Credits: 19-20
CFS235 Developing Child: Theory into Practice, Prenatal - Age Eight (3) OR
EED205 The Developing Child: Prenatal to Age Eight (3) 3
EDU230 Cultural Diversity in Education 3
EED215 Early Learning: Health, Safety, Nutrition and Fitness (3) OR
Health and Nutrition in Early Childhood Settings (1) AND
Safety in Early Childhood Settings (1) 2-3
Foundations of Early Childhood Education 3 Investigating Quantity: Number, Operations, and Numerations Systems4

MAT257 Investigating Geometry, Probability, and Statistics

4
General Education Requirements Credits: 35-42 Arizona General Education Curriculum (AGEC) AGEC-A 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 Area ([C], [G] and/ or $[H]$ ) requirement(s). See the AGEC matrix for course designations.
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

| MAT141 | College Mathematics (4) OR |
| :--- | :--- |
| MAT1 122 | 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 |
| MAT187 | Precalculus (5) OR |
| Any 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 MCCCD prerequisites to take MAT256: Grade of 'C' or better in (MAT150, or MAT151, or MAT152), or [(MAT1 20, or MAT121, or MAT122) AND (MAT141, or MAT142, or MAT145, or MAT146)], or [(MAT141, or MAT142, or MAT145, or MAT146) with placement that permits enrollment in MAT150, or MAT151, or MAT152 or higher].

## Computer/Statistics/Quantitative

Applications [CS]

## Credits: 3-4

CIS105 Survey of Computer Information Systems (3) OR
BPC110 Computer Usage and Applications (3) 3 OR
CSC180AA Computer Literacy (3) OR
CSC180AB Computer Literacy (4)
3-4
Humanities, Arts and Design [HU]
Credits: 6
EDU/ENH291 Children's Literature (3) AND
Any approved general education courses in the Human-
ities, Arts and Design [HU] area (3)
Recommend:
EDU/HUM/STO292 The Art of Storytelling

## 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 certification.

HIS103 United States History to 1865 (3) OR
GCU/POS113 United States and Arizona Social Studies (3) 3
Students will be required to take POS221 if HIS103 was taken rather than GCU/POS113 for [SB] (1)

AND
EDU222 Introduction to the Exceptional Learner (3) OR
EED222 Introduction to the Exceptional Young Child:
Birth to Age Eight (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).

## Awareness Areas

Credits: 0-6
These requirements may be shared with Core Requirements.

## Cultural Diversity in the US [C] <br> Credits: 0

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 OR
May be met by HIS103 or GCU/POS113 in Social-Behavioral Sciences area.

MCCCD Additional Requirements Credits: 0-3
Courses in this area may also be applied to the AGEC Core Requirements. To minimize total credits required for degree and maximize transferable credits, it is recommended that courses be selected that meet more than one requirement wherever possible.
Oral Communication
Credits: 0
Met by COM225 in Literacy and Critical Inquiry area.

## Critical Reading

Credits: 0-3
$\begin{array}{ll}\text { CRE101 } & \text { Critical Reading and Critical Thinking (3) } \\ & \text { OR Equivalent as indicated by assessment (0) 0-3 }\end{array}$

## Associate in Arts (AA), Emphasis in Economics

## Total Credits: 60-64 <br> Major Code: 8111

## Description

The Associate in Arts (AA), Emphasis in Economics degree 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, controllers, urban and regional planners, economics teachers, and lawyers.

## Program Notes

Students must earn a grade of 'C' or better in each course in the program.
This transfer pathway is not designed for students planning to transfer to a business economics program at a university or four-year college. Students who plan to major in economics at a college of business should follow the Associate in Busi-ness-General Requirements (ABUS-GR) pathway.

## Required Courses <br> Credits: 9 <br> ECN211 Macroeconomic Principles <br> ECN212 Microeconomic Principles <br> GBS221 Business Statistics (3) OR <br> MAT206 Elements of Statistics (3) OR <br> SWU225 Statistics for Social Research/Justice and Government (3)

## Restricted Electives

Credits: 0-10
Complete all courses in the subplan that best aligns with academic and professional goals. If academic and professional goals do not align with any of the subplans below, select elective courses in consultation with an academic, faculty, or program advisor.

This transfer pathway is not designed for students planning to transfer to a business economics program at a university or four-year college. Students who plan to major in economics at a college of business should follow the Associate in Busi-ness-General Requirements (ABUS-GR) pathway.

\author{

Transfer Plan 1: Arizona State University (College of Liberal Arts and Sciences), Bachelor of Science, Economics <br> | MAT217 | Mathematical Analysis for Business (3) OR |
| :--- | :--- |
| MAT218 | Mathematical Analysis for Business (4) |
| 3-4 |  |

}

Transfer Plan 2: University of Arizona, Bachelor of Arts, Economics
Foreign Language Credits: 0-10
Complete a language course at the elementary level (102 or equivalent), including American Sign Language II with
a 'C' or better OR demonstrate proficiency through this level as indicated by assessment.
ARB+++ any ARB/Arabic course
CHI+++ any CHI/Chinese course
FRE+++ any FRE/French course
GER+++ any GER/German course
ITA+++ any ITA/Italian course
JPN+++ any JPN/Japanese course
SPA+++ any SPA/Spanish course
SLG+++ any SLG/Sign Language
0-10
General Education Requirements Credits: 26-39
Arizona General Education Curriculum (AGEC) AGEC-A
A single course with an [HU], [SB], or [L] designation(s)
may also be used to satisfy the Oral Communication, Critical Reading, or Awareness Area ([C], [G] and/or [H]) requirement(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

## Literacy and Critical Inquiry [L]

Credits: 3
Any approved general education course in the Literacy and Critical Inquiry [L] area.

## Mathematics [MA]

Credits: 3-4
MAT212 Brief Calculus (3) OR
MAT213 Brief Calculus (4)

## Computer/Statistics/Quantitative

Applications [CS]
Credits: 0
Met by MAT206, SWU225, or GBS221 in Required Courses Area.
Humanities, Arts and Design [HU]
Credits: 6
Any approved general education courses in the Humanities, Arts and Design $[\mathrm{HU}]$ area.

## Social-Behavioral Sciences [SB]

Credits: 0
Met by ECN211 and ECN212 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).

## Awareness Areas <br> Credits: 0-6

These requirements may be shared with Core Requirements.

## Cultural Diversity in the US [C] Credits: 0-3

Historical/Global Awareness [H]/[G] Credits: 0-3
Any approved general education course in the Historical [H] and Global Awareness [G] area.
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 transferable credits, it is recommended that courses be selected that meet more than one requirement wherever possible.

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 Critical Reading and Critical Thinking (3) OR Equivalent as indicated by assessment (0) 0-3

## Associate in Arts (AA), Emphasis in Educational Studies Early Childhood

## Total Credits: 60-65 <br> 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, Educa-
tional 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 each course in the program.

Required Courses
Credits: 5-6
EED215 Early Learning: Health, Safety, Nutrition and Fitness (3) OR
CFS123 Health and Nutrition in Early Childhood Settings (1) AND
CFS125 Safety in Early Childhood Settings (1) 2-3
EDU230 Cultural Diversity in Education 3

## Restricted Electives

Credits: 3-6
Students should select Educational Studies Track Courses in one of the emphases below:

Business Educational Studies:
ECN211 Macroeconomic Principles
Community Health Educational Studies:
HCR220 Introduction to Nursing and Health Care Systems

Family and Human Development Educational Studies:
CFS205 Human Development 3
CFS112 Personal Growth and Family Relations 3
Organizational Leadership Educational Studies:
HON201 Leadership Development: Historical and Contemporary Perspectives (3) OR
MGT229 Management and Leadership I (3) AND
MGT230 Management and Leadership II (3) 3-6
Personal Health Educational Studies:
FON100 Introductory Nutrition
Political Science Educational Studies:
POS110 American National Government 3
POS140 Comparative Government 3
Recreation Management Educational Studies:
REC120 Leisure and the Quality of Life

General Education Requirements Credits: 35-45 Arizona General Education Curriculum (AGEC) AGEC-A 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 Area ([C], [G] and/ or $[H]$ ) requirement(s). See the AGEC matrix for course designations.

## 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.

Recommended:
COM225 Public Speaking
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.

## Computer/Statistics/Quantitative

Applications [CS]
Credits: 3-4
CIS105 Survey of Computer Information Systems (3) OR
BPC110 Computer Usage and Applications (3) 3 OR
CSC180AA Computer Literacy (3) OR
CSC180AB Computer Literacy (4)
3-4
Humanities, Arts and Design [HU]
EDU/
ENH291 Children's Literature (3) AND
Any approved general education courses in the Human-
ities, Arts and Design [HU] area (3)
Recommended:
EDU292/ENH292/STO292 The Art of Storytelling

## Social-Behavioral Sciences [SB] <br> Credits: 6

EDU221 Introduction to Education (3) OR
EED200 Foundations of Early Childhood Education (3) 3 AND
EDU222 Introduction to the Exceptional Learner (3) OR
EED222 Introduction to the Exceptional Young Child: Birth to Age Eight (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: 0-6
These requirements may be shared with Core Requirements.
Cultural Diversity in the US [C]
Credits: 0
Historical/Global Awareness [H]/[G] Credits: 0-3
Any approved general education course with the Historical $[\mathrm{H}]$ or Global [G] awareness area designation. 0-3
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 transferable credits, it is recommended that courses be selected that meet more than one requirement wherever possible.

## Oral Communication

Credits: 0-3
COM100 Introduction to Human Communication (3) OR
COM110 Interpersonal Communication (3) OR
COM230 Small Group Communication (3) OR
May be met by COM225 Public Speaking in the Literacy and Critical Inquiry [L] area (3)

## Critical Reading

Credits: 0-3
CRE101 Critical Reading and Critical Thinking (3)
OR Equivalent as indicated by assessment (0) 0-3

# Associate in Arts (AA), Emphasis in English (Creative Writing) 

## Total Credits: 60-65 <br> 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 each course in the program.

| Required Courses | Credits: | 12-32 |
| :--- | :--- | ---: |
| CRW150 | Introduction to Creative Writing | 3 |
| CRW160 | Introduction to Writing Poetry | 3 |
| CRW170 | Introduction to Writing Fiction | 3 |
| ENG200 | Reading and Writing About Literature | 3 |
| Note: ENG200 may be used to satisfy an AGEC requirement simulta- |  |  |
| neously. |  |  |

## Foreign Language

Credits: 0-20
Complete a language course at the intermediate level (202 or equivalent), including American Sign Language IV with a ' C ' or better OR demonstrate proficiency through this level as indicated by assessment.
ARB+++ Any ARB Arabic course(s)
CHI+++ Any CHI Chinese course(s)
FRE+++ Any FRE French course(s)
GER+++ Any GER German course(s)
ITA+++ Any ITA Italian course(s)
JPN+++ Any JPN Japanese course(s)
SPA+++ Any SPA Spanish course(s)
SLG+++ Any SLG Sign Language course(s)

## Restricted Electives

Credits: 6
Complete all courses in the transfer plan that best aligns with academic and professional goals. If academic and professional goals do not align with any of the transfer plans below, select elective courses in consultation with an Academic, Faculty, or Program Director.

## Transfer Plan 1: Arizona State University (College of Liberal Arts and Sciences), English (Creative Writing), Bachelor of Arts

Select two (2) of the following American Literature courses for a total of six (6) credits. These courses may be used to fulfill any outstanding AGEC requirements simultaneously.
ENH190 Introduction to US Ethnic Literature 3
ENH241 American Literature Before 18603
ENH242 American Literature After 18603
ENH255 Contemporary U.S. Literature and Film 3
ENH260 Literature of the Southwest 3
ENH/WST284 19th Century Women Writers 3
ENH/WST285 Contemporary Women Writers 3
Transfer Plan 2: Northern Arizona University,
English (Creative Writing Emphasis),
Bachelor of Arts
CRW270 Intermediate Fiction Writing (3) OR
CRW271 Topics in Writing: Fiction (3)
Complete three (3) credits of coursework that transfer to NAU as ENG direct equivalencies or ENG departmental electives. These courses may be used to fulfill any outstanding AGEC requirements simultaneously.
CRW+++ Any CRW Creative Writing course
ENG+++ Any ENG English course
ENH+++ Any ENH English Humanities course
General Education Requirements Credits: 26-44
Arizona General Education Curriculum (AGEC) AGEC-A 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 Area ([C], [G] and/ or $[\mathrm{H}]$ ) requirement(s). See the AGEC matrix for course designations.

## 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
May be met by ENG200 in Required Courses area OR
Any approved general education course in the Literacy and Critical Inquiry [L] area.

## Mathematics [MA]

Credits: 3-6
MAT146 College Mathematics with Review (6) OR
MAT140 College Mathematics (5) OR
MAT141 College Mathematics (4) OR
MAT142 College Mathematics (3) 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.
Humanities, Arts and Design [HU] Credits: 0-6
Any approved general education courses in the Humanities, Arts and Design [HU] area.
May be met by ENH190, ENH241, ENH242, ENH255, ENH260, ENH/ WST284, and ENH/WST285 in Restricted Electives area or ENG200 in Required Courses area if not used to meet [L]

## Social-Behavioral Sciences [SB]

Credits: 6
Any approved general education courses in the So-cial-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).

## Awareness Areas

Credits: 0-6
These requirements may be shared with Core Requirements.
Cultural Diversity in the US [C]
Credits: 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 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 transferable credits, it is recommended that courses be selected that meet more than one requirement wherever possible.

## Oral Communication

Credits: 0-3
COM100 Introduction to Human Communication (3) OR
COM110 Interpersonal Communication (3) OR
COM230
Small Group Communication (3)

## Critical Reading

Credits: 0-3
CRE101 Critical Reading and Critical Thinking (3)
OR Equivalent as indicated by assessment (0)
0-3

# Associate in Arts (AA), Emphasis in English (Literature) 

## Total Credits: 60-87 <br> Major Code: 8110

## Description

The Associate in Arts (AA), Emphasis in English (Literature) provides the first two years of a fouryear curriculum for students who wish to specialize in literary and cultural studies. With a bachelors 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 each course in the program.

## Program Prerequisites None.

| Required Courses | Credits: 9 |  |
| :--- | :--- | :--- |
| ENG200 | Reading and Writing about Literature | 3 |
| ENH222 | Survey of English Literature After 1800 | 3 |
| ENH242 | American Literature After 1860 | 3 |

## Restricted Electives

Credits: 6-41
Complete all courses in the transfer plan that best aligns with academic and professional goals. If academic and professional goals do not align with any of the transfer plans below, select elective courses in consultation with an Academic, Faculty, or Program Director.

## Transfer Plan 1: Arizona State University (College of Liberal Arts and Sciences), Bachelor of Arts, English (Literature)

Complete one course from each of the concentration areas for a total of 6 credits. Courses cannot be from the same concentration area.

Related English Requirement Concentration 1:
ENH204 Introduction to Contemporary Literature 3
ENH206 Nature and Environmental Literature 3
ENH235 Survey of Gothic Literature 3
ENH254 Literature and Film 3
ENH255 Contemporary U.S. Literature and Film 3
ENH259 American Indian Literature 3
ENH260 Literature of the Southwest 3
ENH275 Modern Fiction 3
ENH280 Topics in American Literature 3
ENHMST284 19th Century Women Writers 3
ENH/WST285 Contemporary Women Writers 3
Related English Requirement Concentration 2:
ENH201 World Literature Through the Renaissance 3
ENH202 World Literature After the Renaissance 3
ENH221 Survey of English Literature before $1800 \quad 3$
ENH230 Introduction to Shakespeare 3
ENH231 Introduction to Shakespeare: The Early Plays 3
ENH232 Introduction to Shakespeare: The Late Plays 3
ENH241 American Literature Before 1860 3
ENH251 Mythology 3
ENH252 Biblical Backgrounds of Literature 3
Foreign Language
Credits: 0-20
Complete a language course at the intermediate level
(202 or equivalent), including American Sign Language IV with a 'C' or better OR demonstrate proficiency through this level as indicated by assessment.
ARB+++ any ARB Arabic courses
CHI+++ any CHI Chinese courses
FRE+++ any FRE French courses
GER+++ any GER German courses
ITA+++ any ITA Italian courses
JPN+++ any JPN Japanese courses
SPA+++ any SPA Spanish courses
SLG+++ any SLG Sign Language courses
Transfer Plan 2: Arizona State University (New College of Interdisciplinary Arts and Sciences), Bachelor of Arts, English
Satisfy one of the AGEC Humanities and Fine Arts [HU] from the following:
ENG213 Introduction to the Study of Language

Complete 3 credits in lower division requirements:
ENH221 Survey of English Literature Before 1800 (3) OR
ENH241 American Literature Before 1860 (3) 3
Select up to 5 ENG or ENH courses for a total of 15 credits that transfer as an ENG elective (see the Course Equivalency Guide for options).
Language and Cultures Credits: 0-20
Complete a language course at the intermediate level (202 or equivalent), including American Sign Language IV with a 'C' or better OR demonstrate proficiency through this level as indicated by assessment. This requirement may also be satisfied after transfer to ASU though various upper division course options. Recommend students satisfy this requirement after transfer to ASU unless proficient at the elementary level (102 or equivalent).
ARB+++ any ARB Arabic courses
CHI+++ any CHI Chinese courses
FRE+++ any FRE French courses
GER+++ any GER German courses
ITA+++ any ITA Italian courses
JPN+++ any JPN Japanese courses
SPA+++ any SPA Spanish courses
SLG+++ any SLG Sign Language courses
Transfer Plan 3: Arizona State University
(College of Integrative Sciences and Arts), Bachelor of Arts, English
Select 1 ENG or ENH course for a total of 3 credits that transfers as an ENG elective (see the Course Equivalency Guide for options).

Select 1 of the following Related Area courses (or another course equivalent to ASU ENG210; see the Course Equivalency Guide for options):
CRW160 Introduction to Writing Poetry 3
CRW170 Introduction to Writing Fiction 3
ENG215 Strategies of Academic Writing 3
ENG216 Persuasive Writing on Public Issues 3

## Transfer Plan 4: Northern Arizona University, Bachelor of Arts, English

Complete 12 credits of lower division ENG coursework, including at least 9 credits at the 200 level. Within these courses, take at least one course each of the following groups: Literature, Creative Writing, and Rhetoric.
Literature:
Met by ENG200, ENH222, and ENH242 in Required Courses.

Creative Writing:
ENG205 Nature of Poetry 3
Rhetoric:
ENG215 Strategies of Academic Writing
Foreign Language
Credits: 0-20
Complete a language course at the intermediate level (202 or equivalent), including American Sign Language IV with a 'C' or better OR demonstrate proficiency through this level as indicated by assessment.
ARB+++ any ARB Arabic courses
CHI+++ any CHI Chinese courses
FRE+++ any FRE French courses
GER+++ any GER German courses
ITA+++ any ITA Italian courses
JPN+++ any JPN Japanese courses
SPA+++ any SPA Spanish courses
SLG+++ any SLG Sign Language courses
General Education Requirements Credits: 26-31 Arizona General Education Curriculum (AGEC) AGEC-A 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 Area ([C], [G] and/ or $[H]$ ) requirement(s). See the AGEC matrix for course designations.

## 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
Met by ENG200 in Required Courses.

## Mathematics [MA]

Credits: 3-5

| MAT140 | College Mathematics (5) OR |
| :--- | :--- |
| MAT141 | College Mathematics (4) OR |
| MAT142 | College Mathematics (3) OR |

Any approved general education course in the Mathe-
matical Applications [MA] area (3-5)
Computer/Statistics/Quantitative Applications [CS]

Credits: 3
Any approved general education course in the Comput-
er/Statistics/Quantitative Applications [CS] area. 3
Humanities, Arts and Design [HU]
Credits: 0
Met by ENG200, ENH222, and ENH242 in Required
Courses.

## Social-Behavioral Sciences [SB]

Credits: 6
Any approved general education course in the Social-Behavioral Sciences [SB] 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).

## Awareness Areas

Credits: 0-3
These requirements may be shared with Core Requirements.
Cultural Diversity in the US [C]
Credits: 0-3
Historical/Global Awareness [H]/[G] Credits: 0 Historical [H] met by ENH222 in Required Courses.

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 transferable credits, it is recommended that courses be selected that meet more than one requirement wherever possible.

## 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 Critical Reading and Critical Thinking (3)
OR Equivalent as indicated by assessment (0) 0-3

# Associate in Arts (AA), Emphasis in Exercise Science: <br> Pre-Physical Therapy 

Total Credits: 60<br>Major Code: 8121

## Description

The Associate in Arts (AA), Emphasis in Exercise Science: Pre-Physical Therapy provides the first two years of a four-year curriculum for students who wish to specialize in Exercise Science/Kinesiology and are preparing for graduate programs in physical therapy and/or other health fields. With a bachelor degree, students may pursue a career as a fitness director 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, sports medicine and physician assistant.

## Program Notes

Students must earn a grade of 'C' or better in each course in the program.

Required Courses
Credits: 32
BIO181 General Biology (Majors)। 4
BIO201 Human Anatomy and Physiology I 4
BIO202 Human Anatomy and Physiology II 4
CHM151 General Chemistry I
CHM151LL General Chemistry I Laboratory 1
EXS101 Introduction to Exercise Science 3
EXS290 Introduction to Evidence Based Practice 3
PHY111 General Physics I 4
PSY101 Introduction to Psychology 3
MAT206 Elements of Statistics (3) OR
PSY230 Introduction to Statistics (3)
3

## Restricted Electives

Credits: 8-13
Transfer Plan: General Pre-Physical Therapy Pathway
EXS125 Introduction to Exercise Physiology
EXS210 Assessment and Program Design: Muscular Fitness (2) OR
EXS211 Assessment and Program Design: Flexibility and Balance (2) OR
EXS212 Assessment and Program Design: Cardiorespiratory Fitness (2)

2
EXS214 Instructional Competency: Flexibility and Mind Body Exercises (2) OR

EXS216 Instructional Competency: Muscular Strength \& Conditioning (2) OR
EXS218 Instructional Competency: Cardiorespiratory Exercises and Activities (2) 2
HES100 Healthful Living 3
HES210 Cultural Aspects of Health and IIIness (3) OR
FON241 Principles of Human Nutrition (3) 3
FON241 is recommended for NAU
$\begin{array}{lll}\text { Transfer Plan: Arizona State University } \\ \text { (College of Health Solutions), Kinesiology, } \\ \text { Bachelor of Science } \\ \text { CHM152 } & \text { General Chemistry II AND (3) } & \\ \text { CHM152LL } & \text { General Chemistry II Laboratory (1) } & 4 \\ \text { BIO182 } & \text { General Biology (Majors) II } & 4\end{array}$
General Education Requirements Credits: 20-30 Arizona General Education Curriculum (AGEC) AGEC-A A single course with an [HU], [SB], or [L] designation may also be used to satisfy the Oral Communication, Critical Reading, or Awareness Area ([C], [G] and/or [H]) requirement(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

## Literacy and Critical Inquiry [L] <br> Credits: 0

Met by EXS290 in the Required Courses Area.

## Mathematics [MA]

Credits: 5-9
MAT187 Precalculus (5) OR
MAT182 Plane Trigonometry (3) ;AND
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) 5-9
Computer/Statistics/Quantitative
Applications [CS]
Credits: 0
Met by MAT206 or PSY230 in the Required Courses 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: 0-3

Any approved general education course in the Social-Behavioral Sciences [SB] area OR
May be met by HES100 in the General Pre-Physical Therapy subplan.

## Natural Sciences [SG]/[SQ] <br> Credits: 0 <br> Met by BIO181 and BIO201 in the Required Courses Area.

## Awareness Areas

Credits: 0-6
These requirements may be shared with Core Requirements.

## Cultural Diversity in the US [C] <br> Credits: 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.

Recommend HES210 or any approved general education course in the Humanities, Arts and Design area or SocialBehavioral Sciences area with this designation.
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 transferable credits, it is recommended that courses be selected that meet more than one requirement wherever possible.

## 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 Critical Reading and Critical Thinking (3)
OR Equivalent as indicated by assessment (0) 0-3

## Associate in Arts (AA), Emphasis <br> in Family Life Education

Total Credits: 60-73
Major Code: 8139

## Description

The Associate in Arts (AA), Emphasis in Family Life Education provides the first two years of a fouryear 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 each course in 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 program replaces: AAS/3044 Family Life Education.

## Required Courses

Credits: 3
CFS210 Family Life Education
3

## Restricted Electives

Credits: 0-25
Complete all courses in the transfer option that best aligns with your academic and professional goals. If your intended transfer institution is not listed, then select a combination of courses from the transfer options listed in order to meet the minimum credits required in the Restricted Electives section. Consult with an academic, faculty, or program advisor to prevent exceeding your university transfer program's maximum transferable credits (typically 64).

## Transfer Plan 1: Arizona State University (College of Liberal Arts and Sciences), Bachelor of Science in Family and Human Development <br> PSY+++++ Any PSY Psychology course <br> SOC+++++ Any SOC Sociology course

## Transfer Plan 2: University of Arizona, Bachelor of Science in Family Studies and

 Human Development| PSY101 | Introduction to Psychology | 3 |
| :--- | :--- | :--- |
| SOC101 | Introduction to Sociology | 3 |
| CFS157 | Marriage and Family Life | 3 |

Foreign Language
Credits: 0-10
Complete two semesters of language courses within the same prefix, including American Sign Language IV with a 'C' or better OR demonstrate proficiency through this level as indicated by assessment.

```
ARB+++++ Any ARB Arabic course(s)
CHI+++++ Any CHI Chinese course(s)
FRE+++++ Any FRE French course(s)
GER+++++ Any GER German course(s)
ITA+++++ Any ITA Italian course(s)
JPN+++++ Any JPN Japanese course(s)
SPA+++++ Any SPA Spanish course(s)
SLG+++++ Any SLG Sign Language course(s) 0-10
```


## Transfer Plan 3: Northern Arizona University, Bachelor of Interdisciplinary Studies in Applied Human Behavior - Language Track (90/30 Program)

Foreign Language
Credits: 0-20
Complete a language course at the intermediate level (202 or equivalent), including American Sign Language IV with a 'C' or better OR demonstrate proficiency through this level as indicated by assessment.
ARB+++++ Any ARB Arabic course(s)
CHI+++++ Any CHI Chinese course(s)
FRE+++++ Any FRE French course(s)
GER+++++ Any GER German course(s)
ITA+++++ Any ITA Italian course(s)
JPN+++++ Any JPN Japanese course(s)
SPA+++++ Any SPA Spanish course(s)
SLG+++++ Any SLG Sign Language course(s) 0-20
NOTE: This pathway represents the 60 credits required to complete
the Associate of Arts at MCCCD. Students in the NAU 90/30 program should consult with their NAU advisor to determine the additional 30 credits they should complete.

## Transfer Plan 4: Northern Arizona University, Bachelor of Interdisciplinary Studies in Applied Human Behavior - Science Track (90/30 Program)

Natural Science Credits: 8
Any two (2) approved general education courses in the Natural Sciences (Quantitative) [SQ] area or the Natural Sciences (General) [SG] area.
Note: Courses selected must be different from those used to fulfill the AGEC-A Natural Sciences [SG]/[SQ] area.
NOTE: This pathway represents the 60 credits required to complete the Associate of Arts at MCCCD. Students in the NAU 90/30 program should consult with their NAU advisor to determine the additional 30 credits they should complete.

## Transfer Plan 5: Arizona Christian University, Bachelor of Arts in Family Studies - Emphasis in Child Life

CFS177 Parent-Child Interaction 3
CFS243 Cross-Cultural Parenting 3
CFS250 Social Policy and Families 3
PSY101 Introduction to Psychology 3
Foreign Language Credits: 0-10
Complete two semesters of language courses within the same prefix, including American Sign Language IV with a 'C' or better OR demonstrate proficiency through this level as indicated by assessment.
ARB+++++ Any ARB Arabic course(s)
CHI+++++ Any CHI Chinese course(s)
FRE+++++ Any FRE French course(s)
GER+++++ Any GER German course(s)
ITA+++++ Any ITA Italian course(s)
JPN+++++ Any JPN Japanese course(s)
SPA+++++ Any SPA Spanish course(s)
SLG+++++ Any SLG Sign Language course(s) 0-10
Transfer Plan 6: Arizona Christian University, Bachelor of Arts in Family Studies - Emphasis in Early Childhood
CFS177 Parent-Child Interaction 3
CFS243 Cross-Cultural Parenting 3
CFS250 Social Policy and Families 3
PSY101 Introduction to Psychology 3
Foreign Language Credits: 0-10
Complete two semesters of language courses within the same prefix, including American Sign Language IV with a 'C' or better OR demonstrate proficiency through this level as indicated by assessment.

ARB+++++ Any ARB Arabic course(s)
CHI+++++ Any CHI Chinese course(s)
FRE+++++ Any FRE French course(s)
GER+++++ Any GER German course(s)
ITA+++++ Any ITA Italian course(s)
JPN+++++ Any JPN Japanese course(s)
SPA+++++ Any SPA Spanish course(s)
SLG+++++ Any SLG Sign Language course(s) 0-10
Transfer Plan 7: Arizona Christian University, Bachelor of Arts in Family Studies - Emphasis in Marriage and Family
CFS177 Parent-Child Interaction 3
CFS243 Cross-Cultural Parenting 3
CFS250 Social Policy and Families 3
CFS259 Sexuality over the Lifespan 3
PSY101 Introduction to Psychology 3
Foreign Language Credits: 0-10
Complete two semesters of language courses within the same prefix, including American Sign Language IV with a 'C' or better OR demonstrate proficiency through this level as indicated by assessment.
ARB+++++ Any ARB Arabic course(s)
CHI+++++ Any CHI Chinese course(s)
FRE+++++ Any FRE French course(s)
GER+++++ Any GER German course(s)
ITA+++++ Any ITA Italian course(s)
JPN+++++ Any JPN Japanese course(s)
SPA+++++ Any SPA Spanish course(s)
SLG+++++ Any SLG Sign Language course(s) 0-10
General Education Requirements Credits: 35-45 Arizona General Education Curriculum (AGEC) AGEC-A 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 Area ([C], [G] and/ or $[H]$ ) requirement(s). See the AGEC matrix for course designations.

## 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)
Literacy and Critical Inquiry [L] Credits: 3
Any approved general education course in the Literacy and Critical Inquiry [L] area.
PSY290AB OR PSY290AC Research Methods recommended for
students intending to transfer to University of Arizona.
COM225 Public Speaking recommended for students intending to transfer to Arizona Christian University.


Humanities, Arts and Design [HU] Credits: 6
Any approved general education courses in the Human-
ities, Arts and Design [HU] area.
6
Social-Behavioral Sciences [SB] Credits: 6
CFS112 Personal Growth and Family Relations 3
CFS205 Human Development 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).
(BIO156 OR BIO181) and [(BIO160, or BIO201, or (FON241 and FON241LL)] recommended for students intending to transfer to University of Arizona.

## Awareness Areas

Credits: 0-6
These requirements may be shared with Core Requirements.

## Cultural Diversity in the US [C]

Credits: 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 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 transferable credits, it is recommended that courses be selected that meet more than one requirement wherever possible.

## 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)

## Critical Reading

Credits: 0-3
CRE101 Critical Reading and Critical Thinking (3)
OR Equivalent as indicated by assessment (0) 0-3

## Associate in Arts (AA), Emphasis in Food Science and Technology

## Total Credits: 60-71 <br> Major Code: 8136

Description
The Associate in Arts (AA), Emphasis in Food Science and Technology covers many specializations within the realm of food science. The coursework for this program is interdisciplinary and provides students a choice of food science courses from the food science specializations of food biochemistry, fermentation, protein science, the analysis of foods using analytical techniques, and research and product development. Academic food science certificates aid students in chemistry, biology, and engineering fields to gain enough academic knowledge to enter the workforce in food science. Certificates of Completion (CCL) in Food Science Technology I and II are also available.

## Program Notes

Students must earn a grade of 'C' or better in all courses required within the program.

## Required Courses

Credits: 28-32
BIO156 Introductory Biology for Allied Health (4) OR
BIO181 General Biology (Majors)I (4) 4
CHM130 Fundamental Chemistry (3) AND
CHM130LL Fundamental Chemistry Laboratory (1) AND
CHM230 Fundamental Organic Chemistry (3) AND
CHM230LL Fundamental Organic Chemistry Laboratory (1) OR
CHM151 General Chemistry I (3) AND
CHM151LL General Chemistry I Laboratory (1) AND
CHM230 Fundamental Organic Chemistry (3) AND
CHM230LL Fundamental Organic Chemistry Laboratory (1) OR
CHM151 General Chemistry I (3) AND
CHM151LL General Chemistry I Laboratory (1) AND
CHM152 General Chemistry II (3) AND
CHM152LL General Chemistry II Laboratory (1) AND
CHM235 General Organic Chemistry I (3) AND
CHM235LL General Organic Chemistry I Laboratory (1) 8-12
CUL101 Culinary Basics (3) OR
FST175 Food Science Product Development I (3) 3
FON104 Certification in Food Service Safety and Sanitation
FST263 Principles of Food Science 4
FST264 Protein Science 4
FST265 Microbiology of Foods 4
Restricted Electives
Credits: 1-4
FON241 Principles of Human Nutrition (3) AND
FON241LL Principles of Human Nutrition Laboratory (1) 4
FST266 Fermentation in Food Science 4
FST267 Analysis of Food 4
FST275 Food Science Product Development II 3
FST298AA Special Projects 1
FST298AB Special Projects 2
FST298AC Special Projects 3
General Education Requirements Credits: 27-35
Arizona General Education Curriculum (AGEC) AGEC-A 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 Area ([C], [G] and/or [H]) requirement(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

Literacy and Critical Inquiry [L] Credits: 3
Any approved general education course in the Literacy
Any approved general education course in the Literacy
and Critical Inquiry [L] area.

## Mathematics [MA]

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) OR
Any approved general education course in the Mathematical Applications [MA] area for which MAT22+ is a prerequisite.

Credits: 3-5

## Computer/Statistics/Quantitative

## Applications [CS] <br> Credits: 3

Any approved general education courses in the Computers, Any approved general education course 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. 6

## Social-Behavioral Sciences [SB]

Credits: 6
Any approved general education courses in the So-cial-Behavioral Sciences [SB] area.

## Natural Sciences [SG]/[SQ]

Credits: 0
Met by (CHM130 and CHM130LL) and (CHM230 and CHM230LL) or (CHM151 and CHM151 LL) and (CHM230 and CHM230LL) or (CHM151 and CHM151LL) and (CHM152 and CHM152LL) in the Required Courses area.

## Awareness Areas

Credits: 0-6
These requirements may be shared with Core Requirements.
Cultural Diversity in the US [C]
Credits: 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 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 transferable credits, it is recommended that courses be selected that meet more than one requirement wherever possible.

## 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 Critical Reading and Critical Thinking (3)
OR Equivalent as indicated by assessment (0) 0-3

# Associate in Arts (AA), Emphasis in Geography 

Total Credits: 60-64<br>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 each course in the program.

## Required Courses

Credits: 20
GPH113 Introduction to Physical Geography (4) OR GPH111 Introduction to Physical Geography (3) AND GPH112 Introduction to Physical Geography Lab (1) 4 GCU102 Introduction to Human Geography 3 GCU121 World Geography I: Eastern Hemisphere 3 GCU122 World Geography II: Western Hemisphere 3 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) | 4 |
| GIS205 | Geographic Information Technology | 3 |

## Restricted Electives

Credits: 0-20
Complete all courses in the subplan that best aligns with academic and professional goals. If academic and professional goals do not align with any of the subplans below, select elective courses in consultation with an academic, faculty, or program advisor.

## Transfer Plan 1: Arizona State University (College of Liberal Arts and Sciences), Bachelor of Science, Geography (no emphasis)

Select 0-6 credits of courses that transfer to ASU as direct equivalencies or departmental electives in the following ASU course prefixes: GCU, GIS, GPH, or PUP.
Transfer Plan 2: Arizona State University
(College of Liberal Arts and Sciences), Bachelor
of Science, Geography (Urban Studies
emphasis)

| CIS105 | Survey of Computer Information Systems (3) OR |
| :--- | :--- |
| CSC180 | Computer Literacy (3) |
| GIS211 | Geographic Information Science I |

Select 0-6 credits of courses that transfer to ASU as direct equivalencies or departmental electives in the following ASU course prefixes: GCU, GIS, GPH, or PUP.

Transfer Plan 3: Arizona State University (College of Liberal Arts and Sciences), Bachelor of Arts, Geography Credits: 0-20
Foreign Language
Credits: 0-20
Complete a language course at the intermediate level (202 or equivalent), including American Sign Language IV with a 'C' or better OR demonstrate proficiency through this level as indicated by assessment.
ARB+++ any ARB/Arabic course
CHI+++ any CHI/Chinese course
FRE+++ any FRE/French course
GER+++ any GER/German course
ITA+++ any ITA/Italian course
JPN+++ any JPN/Japanese course

| SPA+++ | any SPA/Spanish course |  |
| :--- | :--- | :--- |
| SLG+++ | any SLG/Sign Language | $0-20$ |

## Transfer Plan 4: Northern Arizona University, Bachelor of Science, Geographic Science and Community Planning <br> CIS105 Survey of Computer Information Systems (3) OR <br> CSC180 Computer Literacy (3) <br> GIS211 Geographic Information Science I 4 <br> MAT206 Elements of Statistics 3

## Transfer Plan 5: University of Arizona, Bachelor of Science, Geography and Bachelor of Science, Urban and Regional Development

Foreign Language
Credits: 0-10
Complete a language course at the elementary level (102 or equivalent), including American Sign Language II with a 'C' or better OR demonstrate proficiency through this level as indicated by assessment.
ARB+++ any ARB/Arabic course
CHI+++ any CHI/Chinese course
FRE+++ any FRE/French course
GER+++ any GER/German course
ITA+++ any ITA/Italian course
JPN+++ any JPN/Japanese course
SPA+++ any SPA/Spanish course
SLG+++ any SLG/Sign Language
0-10

## Transfer Plan 6: University of Arizona, Bachelor of Arts, Geography

Foreign Language
Credits: 0-20
Complete a language course at the intermediate level
(202 or equivalent), including American Sign Language IV
with a 'C' or better OR demonstrate proficiency through
this level as indicated by assessment.
ARB+++ any ARB/Arabic course
CHI+++ any CHI/Chinese course
FRE+++ any FRE/French course
GER+++ any GER/German course
ITA+++ any ITA/Italian course
JPN+++ any JPN/Japanese course
SPA+++ any SPA/Spanish course
SLG+++ any SLG/Sign Language
0-20
General Education Requirements Credits: 18-29
Arizona General Education Curriculum (AGEC) AGEC-A
A single course with an [HU], [SB], or [L] designation(s)
may also be used to satisfy the Oral Communication, Critical Reading, or Awareness Area ([C], [G] and/or [H]) requirement(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)

## Literacy and Critical Inquiry [L]

Credits: 3
Any approved general education course in the Literacy and Critical Inquiry [L] area.

## Mathematics [MA]

Credits: 3-5

| MAT140 | College Mathematics (5) OR |
| :--- | :--- |
| MAT141 | College Mathematics (4) OR |
| MAT142 | College Mathematics (3) |

Computer/Statistics/Quantitative
Applications [CS]
Credits: 0
Met by GIS205 in the Required Courses 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: 0
Met by GCU121 and GCU122 in the Required Courses Area.

## Natural Sciences [SG]/[SQ]

Credits: 0
Met by (GPH212 and GPH214 or GPH213 and GPH215 or GPH211) AND (GPH113 or GPH11 and GPH112) in the Required Courses Area.

## Awareness Areas

Credits: 0-3
These requirements may be shared with Core Requirements.

Cultural Diversity in the US [C]
Credits: 0-3
Historical/Global Awareness [H]/[G] Credits: 0 Met by GCU121 and GCU122 in the Required Courses Area.

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 transferable credits, it is recommended that courses be selected that meet more than one requirement wherever possible.

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 Critical Reading and Critical Thinking (3) OR Equivalent as indicated by assessment (0) 0-3

## Associate in Arts (AA), Emphasis in History

## Total Credits: 60-64 <br> 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 each course in the program.

Required Courses
Credits: 6
HIS103 United States History to 1865 (3) AND
HIS104 United States History 1865 to Present (3) OR
HIS110 World History to 1500 (3) AND
HIS111 World History 1500 to the Present (3) 6

## Restricted Electives

Credits: 0-38
Complete all courses in the transfer plan that best aligns with academic and professional goals. If academic and professional goals do not align with any of the transfer plans below, select elective courses in consultation with an Academic, Faculty, or Program Director.

## Transfer Plan 1: Arizona State University (College of Liberal Arts and Sciences), History, Bachelor of Arts

Related Area Course
Credits: 0-6
Complete 0 to 6 credits of coursework that transfer to ASU as either direct equivalencies or departmental electives in the following ASU course prefixes: AFR, AIS, APA, APH, ARS, ASB, ASM, ECN, ENG, GCU, HON, HPS, HUM, JUS, PHI, POS, REL, SGS, SOC, TCL, and WST. These courses may be used to fulfill any outstanding Humanities [HU] and Social-Behavioral Sciences [SB] requirements simultaneously.
AFR+++ Any AFR African American Studies course(s)
AIS+++ Any AIS American Indian Studies course(s)
ASB+++ Any ASB Anthropology course(s)
ARH+++ Any ARH Art Humanities course(s)
ASM+++ Any ASM Anthropology course(s)
ECN+++ Any ECN Economics course(s)
ENG+++ Any ENG English course(s)
GCU+++ Any GCU Cultural Geography course(s)
PHI+++ Any PHI Philosophy course(s)
POS+++ Any POS Political Science course(s)
REL+++ Any REL Religious Studies course(s)
SOC+++ Any SOC Sociology course(s)
WST+++ Any WST Women's Studies course(s)
Foreign Language
Credits: 0-20
Complete a language course at the intermediate level (202 or equivalent), including American Sign Language IV with a 'C' or better OR demonstrate proficiency through this level as indicated by assessment.
ARB+++ Any ARB Arabic course(s)
CHI+++ Any CHI Chinese course(s)
FRE+++ Any FRE French course(s)
GER+++ Any GER German course(s)
ITA+++ Any ITA Italian course(s)
JPN+++ Any JPN Japanese course(s)
SPA+++ Any SPA Spanish course(s)
SLG+++ Any SLG Sign Language course(s)

## Transfer Plan 2: Arizona State University (College of Integrative Sciences and Arts), History, Bachelor of Arts

Related Area Course
Credits: 9
Select one course for a total of 3 credits (except courses used to satisfy Required Courses area) which transfers to ASU as either a direct equivalency or departmental elective in the following ASU course prefix: HST.
HIS+++ Any HIS History course
Complete 6 credits of coursework that transfers to ASU as either direct equivalencies or departmental electives in the following ASU course prefixes: AIS, ENG, POS, REL, STS, and TCL.
AIS+++ Any AIS American Indian Studies course(s)
ENG+++ Any ENG English course(s)
POS+++ Any POS Political Science course(s)
REL+++ Any REL Religious Studies course(s)

## Transfer Plan 3: Arizona State University (New College of Interdisciplinary Arts and Sciences), History, Bachelor of Arts

Related Area Course
Credits: 9
Select one course for a total of 3 credits (except courses used to satisfy Required Courses area) which transfers to ASU as either a direct equivalency or departmental elective in the following ASU course prefix: HST.
HIS+++ Any HIS History course
Complete 6 credits of coursework that transfers to ASU as either direct equivalencies or departmental electives in the following ASU course prefixes: AMS, ENG, HST, PHI, REL.
ENG+++ Any ENG English course(s)
HST+++ Any HIS History course(s)
PHI+++ Any PHI Philosophy course(s)
REL+++ Any REL Religious Studies course(s)
Language and Cultures
Credits: 0-20
Complete a language course at the intermediate level (202 or equivalent), including American Sign Language IV with a 'C' or better OR demonstrate proficiency through this level as indicated by assessment. This requirement may also be satisfied after transfer to ASU though various upper division course options. Recommend students satisfy this requirement after transfer to ASU unless proficient at the elementary level (102 or equivalent).
ARB+++ Any ARB Arabic course(s)
CHI+++ Any CHI Chinese course(s)
FRE+++ Any FRE French course(s)

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GER+++ Any GER German course(s)
ITA+++ Any ITA Italian course(s)
JPN+++ Any JPN Japanese course(s)
SPA+++ Any SPA Spanish course(s)
SLG+++ Any SLG Sign Language course(s)
```


## Transfer Plan 4: Grand Canyon University: History, Bachelor of Arts

Select two courses from the following except courses used to satisfy Required Courses area:

| 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 |

## Transfer Plan 5: Northern Arizona University: History, Bachelor of Arts

Select one course from the following except courses used to satisfy Required Courses area:
AIS/HIS140 American Indian History
HIS101 History of Western Civilization Middles Ages to 1789
HIS102 History of Western Civilization 1789 to Present 3
HIS103 United States History to 18653
HIS104 United States History 1865 to Present 3
HIS110 World History to 1500
HIS111 World History 1500 to the Present
Select one course from the following except courses used to satisfy Required Courses area:
HIS110 World History to 1500
HIS111 World History 1500 to the Present 3
HIS240 History of Islamic Civilization from the 6th Century to 1800
HIS241 Latin American Civilization in the Colonial Period
HIS242 Latin American Civilization in the Post-Colonial Period

## Foreign Language

Credits: 0-20
Complete a language course at the intermediate level (202 or equivalent), including American Sign Language IV with a 'C' or better OR demonstrate proficiency through this level as indicated by assessment.
ARB+++ Any ARB Arabic course(s)
CHI+++ Any CHI Chinese course(s)
FRE+++ Any FRE French course(s)
GER+++ Any GER German course(s)
ITA+++ Any ITA Italian course(s)
JPN+++ Any JPN Japanese course(s)
SPA+++ Any SPA Spanish course(s)

SLG+++ Any SLG Sign Language course(s)

## Transfer Plan 6: Northern Arizona University: History, Bachelor of Science

Select one course from the following except courses used to satisfy Required Courses area:

AIS/HIS140 American Indian History
3
HIS101 History of Western Civilization Middles Ages to 1789
HIS102 History of Western Civilization 1789 to Present 3
HIS103 United States History to 18653
HIS104 United States History 1865 to Present 3
HIS110 World History to 15003
HIS111 World History 1500 to the Present 3
Select one course from the following except courses used to satisfy Required Courses area:
HIS110 World History to 1500
HIS111 World History 1500 to the Present 3
HIS240 History of Islamic Civilization from the 6th Century to 1800
HIS241 Latin American Civilization in the Colonial Period
HIS242 Latin American Civilization in the Post-Colonial Period

## Transfer Plan 7: University of Arizona: History, Bachelor of Arts

Complete 9 credits of coursework that transfers to $U$ of A as either direct equivalencies or departmental electives in the following $U$ of A course prefixes: HIST AND HSTV. HIS+++ Any HIS History course(s)

Foreign Language
Credits: 0-20
Complete a language course at the intermediate level
(202 or equivalent), including American Sign Language IV with a 'C' or better OR demonstrate proficiency through this level as indicated by assessment.
ARB+++ Any ARB Arabic course(s)
CHI+++ Any CHI Chinese course(s)
FRE+++ Any FRE French course(s)
GER+++ Any GER German course(s)
ITA+++ Any ITA Italian course(s)
JPN+++ Any JPN Japanese course(s)
SPA+++ Any SPA Spanish course(s)
SLG+++ Any SLG Sign Language(s)
General Education Requirements Credits: 23-40
Arizona General Education Curriculum (AGEC) AGEC-A
A single course with an [HU], [SB], [L], or [SG/SQ] desig-
nation may also be used to satisfy the Oral Communication, Critical Reading, or Awareness Area ([C], [G] and/or [H]) requirement(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)
Literacy and Critical Inquiry [L] Credits: 3
Any approved general education course in the Literacy and Critical Inquiry [L] area.

## Mathematics [MA]

Credits: 3-5
$\begin{array}{ll}\text { MAT140 } & \text { College Mathematics (5) OR } \\ \text { MAT141 } & \text { College Mathematics (4) OR } \\ \text { MAT142 } & \text { College Mathematics (3) OR }\end{array}$
Any approved general education course in the Mathematical Applications [MA] area.

## 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: 0-6 Met by HIS110 and HIS111 in the Required Courses area or any approved general education courses from the Humanities, Arts and Design [HU] area.

0-6
Social-Behavioral Sciences [SB]
Credits: 0-6
Met by HIS103 and HIS104 in the Required Courses area or any approved general education courses from the
Social-Behavioral Sciences [SB] area.
0-6
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 Core Requirements.

## Cultural Diversity in the US [C]

Credits: 0-3
Historical/Global Awareness [H]/[G] Credits: 0 Met by HIS103 or HIS104 or HIS110 or HIS111 in the Required Courses Area.

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 transferable credits, it is recommended that courses be selected that meet more than one requirement wherever possible.
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 Critical Reading and Critical Thinking (3) OR Equivalent as indicated by assessment (0) 0-3

# Associate in Arts (AA) Emphasis in Information Studies and eSociety 

Total Credits: 60-64<br>Major Code: 8131

## Description

The Associate in Arts (AA), Emphasis in Information Studies and eSociety degree 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 'C' or better in all courses within the program.

| Required Courses | Credits: 12 |  |
| :--- | :--- | :--- |
| COM263 | Elements of Intercultural Communication (3) OR |  |
| EDU/HUM/ |  |  |
| STO292 | The Art of Storytelling (3) OR |  |
| IFS215 | Cultural Context of Health Information (3) OR |  |
| MCO220 | Cultural Diversity and the Media (3) | 3 |
| IFS201 | Information in a Post-Truth World | 3 |
| IFS210 | Research in a Global Society | 3 |
| IFS213 | Hacking and Open Source Culture | 3 |

## Restricted Electives

Credits: 9-29
Complete all courses in the transfer option that best aligns with your academic and professional goals. If your intended transfer institution is not listed, then select a combination of courses from the transfer options listed in order to meet the minimum credits required in the Restricted Electives section. Consult with an academic, faculty, or program advisor to prevent exceeding your university transfer program's maximum transferable credits (typically 64).

## University of Arizona, Information Studies and eSociety, Bachelor of Arts

Foreign Language Credits:
Complete a language course at the intermediate level (202 or equivalent), including American Sign Language IV with a 'C' or better OR demonstrate proficiency through this level as indicated by assessment.
ARB+++ any ARB Arabic course
CHI+++ any CHI Chinese course
FRE+++ any FRE French course
GER+++ any GER German course
ITA+++ any ITA Italian course
JPN+++ any JPN Japanese course
SPA+++ any SPA Spanish course
SLG+++ any SLG Sign Language
Students must select 9 credits from the following:
ECN212 Microeconomics Principles
MCO120 Media and Society
MKT110 Marketing and Social Networking 3
PHI105 Introduction to Ethics 3
PSY132 Psychology and Culture 3
POS210 Political Ideologies 3

General Education Requirements Credits: 20-29 Arizona General Education Curriculum (AGEC) AGEC-A

First-Year Composition [FYC]
Credits: 6
$\begin{array}{ll}\text { ENG101 } & \text { First-Year Composition (3) OR } \\ \text { ENG107 } & \text { First-Year Composition for ESL (3) AND } \\ \text { ENG102 } & \text { First-Year Composition (3) OR } \\ \text { ENG108 } & \text { First-Year Composition for ESL (3) }\end{array}$
Literacy and Critical Inquiry [L]
Credits: 0
Met by IFS201 In Required Courses

## Mathematics [MA]

Credits: 3-6
$\begin{array}{ll}\text { MAT140 } & \text { College Mathematics (5) OR } \\ \text { MAT141 } & \text { College Mathematics (4) OR } \\ \text { MAT142 } & \text { College Mathematics (3) OR } \\ \text { MAT145 } & \text { College Mathematics with Review (5) OR } \\ \text { MAT146 } & \text { College Mathematics with Review (6) OR }\end{array}$
Any approved general education course in the Mathematical Applications [MA] area (3-6)

## Computer/Statistics/Quantitative

## Applications [CS]

Credits: 3

| BPC110 | Computer Usage and Applications (3) OR |
| :--- | :--- |
| CIS105 | Survey of Computer Information Systems (3) OR |
| CSC180 | Computer Literacy (3) |

Humanities, Arts and Design [HU] Credits: 0-6
Any approved general education courses from the Humanities, Arts and Design [HU] area.
May be met by EDU/HUM/STO292 in Required Courses and PHI105 in Restricted Electives.
Recommended for students who intend to transfer to University of Arizona:
EDU/HUM/
STO292 The Art of Storytelling (3) OR
ENH295 Banned Books and Censorship (3) OR
HUM/THF210 Contemporary Cinema (3)

## Social-Behavioral Sciences [SB]

Credits: 0
Met by IFS210 in Required Courses AND
Met by ECN212, MCO120, PSY132, or POS210 in Restricted Electives

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).
Recommended for students who intend to transfer to University of Arizona:

| BIO100 | Biology Concepts (4) OR |  |
| :--- | :--- | :--- |
| CHM107 | Chemistry and Society (3) AND |  |
| CHM107LL | Chemistry and Society Laboratory (1) | 4 |
| AND |  |  |
| AST101 | Survey of Astronomy (4) OR |  |
| GPH213 | Climate and Weather (3) AND GPH215 |  |
|  | Climate and Weather Laboratory (1) OR |  |
| GLG105 | Introduction to Planetary Science (4) | 4 |

Awareness Areas
Credits: 0
These requirements may be shared with Core Requirements.

Cultural Diversity in the US [C]
Credits: 0
Historical/Global Awareness [H]/[G]
Credits: 0
Met by IFS210 in Required Courses.
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 transferable credits, it is recommended that courses be selected that meet more than one requirement wherever possible.

## 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) 3

Critical Reading
Credits: 0-3
CRE101 Critical Reading and Critical Thinking (3)
OR Equivalent as indicated by assessment (0) 0-3

## Associate in Arts (AA), Emphasis in Japanese

## Total Credits: 60-64 <br> 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 each course in 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.

## Required Courses

Credits: 6-26
CPD160 Introduction to Multiculturalism 3
ENG213 Introduction to the Study of Language (3) OR
SLC201 Introduction to Linguistics (3) 3
JPN101 Elementary Japanese I (5) OR
Equivalent as indicated by assessment 0-5
JPN102 Elementary Japanese II (5) OR
Equivalent as indicated by assessment 0-5
JPN201 Intermediate Japanese I (5) OR
Equivalent as indicated by assessment 0-5
JPN202 Intermediate Japanese II (5) OR
Equivalent as indicated by assessment 0-5
General Education Requirements Credits: 29-35
Arizona General Education Curriculum (AGEC) AGEC-A
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 Area ([C], [G] and/ or $[H]$ ) requirement(s). See the AGEC matrix for course designations.

## 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] <br> Credits: 0

Met by CPD160 in Required Courses.

## Mathematics [MA]

Credits: 3-6
$\begin{array}{ll}\text { MAT140 } & \text { College Mathematics (5) OR } \\ \text { MAT141 } & \text { College Mathematics (4) OR } \\ \text { MAT142 } & \text { College Mathematics (3) OR }\end{array}$
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

## Humanities, Arts and Design [HU] Credits: 3-6

Any approved general education courses in the Humanities, Arts and Design [HU] area
May be met by ENG213 OR SLC201 in Required Courses unless used to meet Social-Behavioral Sciences [SB]

## Social-Behavioral Sciences [SB]

Credits: 3-6
Any approved general education courses in the So-cial-Behavioral Sciences [SB] area

6
May be met by ENG213 OR SLC201 in Required Courses unless used to meet Humanities, Arts and Design [HU]

## 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)

## Awareness Areas

Credits: 0-3
These requirements may be shared with Core Requirements.

## Cultural Diversity in the US [C] Credits: 0

Historical/Global Awareness [H]/[G] Credits: 0-3
Any approved general education course with the Histori$\mathrm{cal}[\mathrm{H}]$ or Global [G] awareness area designation May be met by JPN101, JPN102, JPN201, or JPN202 in Required Courses

## 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 transferable credits, it is recommended that courses be selected that meet more than one requirement wherever possible.

## 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 Critical Reading and Critical Thinking (3) OR Equivalent as indicated by assessment (0) 0-3

# Associate in Arts (AA), Emphasis in Mathematics 

Total Credits: 60-64<br>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 each course in the program.

## Required Courses

Credits: 11-14
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) 3-4 For all ASU Tempe and West BS degrees, choose CSC110 OR CSC110AA OR CSC110AB.
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
Restricted Electives
Credits: 0-29
Complete all courses in the transfer option that
best aligns with your academic and professional goals. If your intended transfer institution is not listed, then select a combination of courses from the transfer options listed in order to meet the minimum credits required in the Restricted Electives section. Consult with an academic, faculty, or program advisor to prevent exceeding your university transfer program's maximum transferable credits (typically 64). Courses in the Restricted Electives area may be used to fulfill AGEC requirements simultaneously.

## Transfer Plan 1: Arizona State University (College of Liberal Arts and Sciences), Bachelor of Science, Mathematics

| CSC205 | Object Oriented Programming and <br> Data Structures (3) OR |  |
| :--- | :--- | ---: |
| CSC205++ | Object Oriented Programming and Data |  |
| MAT227 | Structures (3-4) | $3-4$ |
| Discrete Mathematical Structures | 3 |  |
| MAT262 | Differential Equations (3) OR |  |
| MAT276 | Modern Differential Equations (4) OR |  |
| MAT277 | Modern Differential Equations (3) | $3-4$ |

Complete one of the following options.
PHY115 University Physics I (5) OR
PHY121 University Physics I: Mechanics (4) 4-5
$\begin{array}{ll}\text { Transfer Plan 2: Arizona State University } \\ \text { (College of Liberal Arts and Sciences), } & \\ \text { Bachelor of Science, Mathematics (Statistics) } \\ \text { CSC205 } & \begin{array}{l}\text { Object Oriented Programming and Data } \\ \text { Structures (3) OR }\end{array} \\ \text { CSC205+++ } & \begin{array}{ll}\text { Object Oriented Programming and Data }\end{array} \\ \text { MAT262 } & \begin{array}{l}\text { Structures (3-4) }\end{array} \\ \text { Differential Equations (3) OR } & 3-4 \\ \text { MAT276 } & \begin{array}{l}\text { Modern Differential Equations (4) OR }\end{array} \\ \text { MAT277 } & \text { Modern Differential Equations (3) }\end{array}$
Physics
Credits: 8-10
Complete two semesters of university physics coursework.
PHY115 University Physics I (5) OR
PHY121 University Physics I: Mechanics (4) 4-5
PHY116 University Physics II (5) OR
PHY131 University Physics II: Electricity and Magnetism (4)4-5

| Transfer Plan 3: Arizona State University (College of Liberal Arts and Sciences), Bachelor of Science, Computational Mathematical |  |
| :---: | :---: |
| Sciences |  |
| CSC205 | Object Oriented Programming and Data Structures (3) OR |
| CSC205++ | Object Oriented Programming and Data Structures (3-4) |
| CSC240 | Introduction to Different Programming Languages (3) OR |
| CSC240AA | Introduction to Different Programming Languages (4) 3-4 |
| MAT262 | Differential Equations (3) OR |
| MAT276 | Modern Differential Equations (4) OR |
| MAT277 | Modern Differential Equations (3) 3-4 |

## Lecture/Lab Science

Option 1: Astronomy
AST111 Introduction to Solar System Astronomy 3
AST113 Introduction to Solar System Astronomy Laboratory 1
AST112 Introduction to Stars, Galaxies, and Cosmology 3
$\begin{array}{lll}\text { AST114 } & \text { Introduction to Stars, Galaxies, \& } \\ & \text { Cosmology Laboratory }\end{array}$
Option 2: Biology
BIO181 General Biology (Majors)। 4
BIO182 General Biology (Majors) II 4
Option 3: Chemistry
CHM150 General Chemistry I (4) AND
CHM151LL General Chemistry I Laboratory (1) OR
CHM150AA General Chemistry I (5) OR
CHM151AA General Chemistry I (4) OR
CHM151 General Chemistry I (3) AND
CHM151LL General Chemistry I Laboratory (1) 4-5
CHM152 General Chemistry II (3) AND
CHM152LL General Chemistry II Laboratory (1) OR
CHM152AA General Chemistry II (4)
Option 4: Geology
GLG101 Introduction to Geology I Physical Lecture (3) AND
GLG103 Introduction to Geology I Physical Lab (1) OR
GLG101IN Introduction to Geology I Physical (4)

4
GLG102 Introduction to Geology II Historical Lecture (3) AND
GLG104 Introduction to Geology II Historical Lab (1) OR

GLG102IN Introduction to Geology II Historical (4)
Option 5: Physics

| PHY115 | University Physics I (5) OR |
| :--- | :--- |
| PHY121 | University Physics I: Mechanics (4) |
| PHY116 | University Physics II (5) OR |
| PHY131 | University Physics II: |
|  | Electricity and Magnetism (4) |

PHY116 University Physics II (5) OR
PHY131 University Physics II:
Electricity and Magnetism (4)

## Transfer Plan 4: Arizona State University (College of Liberal Arts and Sciences), Bachelor of Arts, Mathematics

| MAT227 | Discrete Mathematical Structures (3) OR |  |
| :--- | :--- | :--- |
| MAT262 | Differential Equations (3) OR |  |
| MAT276 | Modern Differential Equations (4) OR |  |
| MAT277 | Modern Differential Equations (3) | $3-4$ |

Complete one of the following options.
PHY115 University Physics I (5) OR
PHY121 University Physics I: Mechanics (4) 4-5
Foreign Language Credits: 0-20
Complete a language course at the intermediate level (202 or equivalent), including American Sign Language IV with a ' $C$ ' or better OR demonstrate proficiency through this level as indicated by assessment.
ARB+++++ Any ARB Arabic course(s)
CHI+++++ Any CHI Chinese course(s)
FRE+++++ Any FRE French course(s)
GER+++++ Any GER German course(s)
ITA+++++ Any ITA Italian course(s)
JPN+++++ Any JPN Japanese course(s)
SPA+++++ Any SPA Spanish course(s)
SLG+++++ Any SLG Sign Language course(s)
Transfer Plan 5: Arizona State University (College of Integrative Sciences and Arts), Bachelor of Science, Applied Mathematics

| MAT227 | Discrete Mathematical Structures | 3 |
| :--- | :--- | ---: |
| MAT276 | Modern Differential Equations (4) OR |  |
| MAT277 | Modern Differential Equations (3) | $3-4$ |

Natural Sciences Credits:
Students must complete eight (8) credits of General Chemistry, University Physics, or General Biology for
Majors. Students must select a sequence of the same science.

Option 1: General Biology

| BIO181 | General Biology (Majors) I | 4 |
| :--- | :--- | :--- |
| BIO182 | General Biology (Majors) II | 4 |

Option 2: General Chemistry

| CHM150 | General Chemistry I (4) AND |  |
| :--- | :--- | :--- |
| CHM151LL | General Chemistry I Laboratory (1) OR |  |
| CHM151 | General Chemistry I (3) AND |  |
| CHM151LL | General Chemistry I Laboratory (1) OR |  |
| CHM150AA | General Chemistry I (5) OR | $4-5$ |
| CHM151AA | General Chemistry I (4) |  |
| CHM152 | General Chemistry II (3) AND |  |
| CHM152LL | General Chemistry II Laboratory (1) OR |  |
| CHM152AA | General Chemistry II (4) | 4 |
| Option 3: University Physics |  |  |
| PHY115 | University Physics I (5) OR |  |
| PHY121 | University Physics I: Mechanics (4) | $4-5$ |
| PHY116 | University Physics II (5) OR |  |
| PHY131 | University Physics II: |  |
|  | Electricity and Magnetism (4) | $4-5$ |

Transfer Plan 6: Arizona State University (New College of Interdisciplinary Arts and Sciences), Bachelor of Science, Applied Mathematics

| CSC200 | Principles of Computer Science (Java) (3) OR |  |
| :--- | :--- | :--- |
| CSC200AA | Principles of Computer Science (Java) (3) OR |  |
| CSC200AB | Principles of Computer Science (Java) (4) OR |  |
| CSC205 | Object Oriented Programming and Data |  |
|  | Structures (3) OR |  |
| CSC205++ | Object Oriented Programming and |  |
|  | Data Structures (3-4) | $3-4$ |
| MAT276 | Modern Differential Equations (4) OR |  |
| MAT277 | Modern Differential Equations (3) | $3-4$ |

Transfer Plan 7: Northern Arizona University, Bachelor of Science, Mathematics

| CSC120 | Digital Design Fundamentals | 4 |
| :--- | :--- | ---: |
| CSC205 | Object Oriented Programming and Data |  |
|  | Structures (3) OR |  |
| CSC205++ | Object Oriented Programming and Data |  |
|  | Structures (3-4) | $3-4$ |
| CSC/EEE220 | Programming for Computer Engineering | 3 |
| MAT206 | Elements of Statistics | 3 |
| MAT227 | Discrete Mathematical Structures | 3 |
| MAT262 | Differential Equations (3) OR |  |
| MAT276 | Modern Differential Equations (4) OR |  |
| MAT277 | Modern Differential Equations (3) | $3-4$ |

## Transfer Plan 8: University of Arizona, Bachelor of Arts, Mathematics (Any Emphasis)

 Foreign Language Credits:Complete a language course at the intermediate level
(202 or equivalent), including American Sign Language IV
with a 'C' or better OR demonstrate proficiency through this level as indicated by assessment.

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ARB+++++ Any ARB Arabic course(s)
CHI+++++ Any CHI Chinese course(s)
FRE+++++ Any FRE French course(s)
GER+++++ Any GER German course(s)
ITA+++++ Any ITA Italian course(s)
JPN+++++ Any JPN Japanese course(s)
SPA+++++ Any SPA Spanish course(s)
SLG+++++ Any SLG Sign Language course(s)
```


## Transfer Plan 9: University of Arizona, Bachelor of Science, Mathematics (Any Emphasis)

Mathematics Supporting Laboratory Science Credits: 4-10
Complete one of the following options:
Option 1: Chemistry
CHM150 General Chemistry I (4) AND
CHM151LL General Chemistry I Laboratory (1) OR
CHM150AA General Chemistry I (5) OR
CHM151AA General Chemistry I (4) OR
CHM151 General Chemistry I (3) AND
CHM151LL General Chemistry I Laboratory (1) 4-5
CHM152 General Chemistry II (3) AND
CHM152LL General Chemistry II Laboratory (1) OR
CHM152AA General Chemistry II (4)
Option 2: Geosciences

| GLG101 | Introduction to Geology I - Physical Lecture (3) |
| :--- | :--- |
|  | AND |
| GLG103 | Introduction to Geology I - Physical Lab (1)OR |
| GLG101IN | Introduction to Geology I - Physical (4) 4 |

Option 3: Biology
BlO181 General Biology (Majors)I 4
BIO182 General Biology (Majors) II
Option 4: Physiology
$\begin{array}{lll}\text { BIO201 } & \text { Human Anatomy and Physiology I } & 4 \\ \text { BIO202 } & \text { Human Anatomy and Physiology II } & 4\end{array}$
Option 5: Physics
PHY115 University Physics I (5) OR
PHY121 University Physics I: Mechanics (4) 4-5
PHY116 University Physics II (5) OR
PHY131 University Physics II: Electricity and Magnetism (4)

4-5
Foreign Language
Credits: 0-10
Complete a language course at the elementary level (102 or equivalent), including American Sign Language IV with a 'C' or better OR demonstrate proficiency through this level as indicated by assessment.

ARB+++++ Any ARB Arabic course(s)
CHI+++++ Any CHI Chinese course(s)
FRE+++++ Any FRE French course(s)
GER+++++ Any GER German course(s)
ITA+++++ Any ITA Italian course(s)
JPN+++++ Any JPN Japanese course(s)
SPA+++++ Any SPA Spanish course(s)
SLG+++++ Any SLG Sign Language course(s)
General Education Requirements Credits: 29-48
Arizona General Education Curriculum (AGEC) AGEC-A 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 Area ([C], [G] and/ or $[H]$ ) requirement(s). See the AGEC matrix for course designations.

## 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
$\begin{array}{ll}\text { MAT220 } & \text { Calculus with Analytic Geometry I (5) OR } \\ \text { MAT221 } & \text { Calculus with Analytic Geometry I (4) OR } \\ \text { Any approved general education course in the } \\ \text { Mathematical Applications [MA] area for which } \\ \text { MAT22+ is a prerequisite. (4-5) } & 4-5\end{array}$
Computer/Statistics/Quantitative
Applications [CS]
Credits: 0
Met by CSC100, CSC100AA, CSC110, CSC110AA, or CS-
C110AB in Required Courses.
Humanities, Arts and Design [HU]
Credits: 6
Any approved general education courses in the Human-
ities, Arts and Design [HU] area.
6

## Social-Behavioral Sciences [SB]

Credits: 6
Any approved general education courses in the So-cial-Behavioral Sciences [SB] area.

6

## Natural Sciences [SG]/[SQ]

Credits: 0-8
Any approved general education course in the Natural Sciences.

4
Any approved general education course in the Natural
Sciences (Quantitative) [SQ] area or the Natural Sciences
(General) [SG] area.
May be met by courses in Restricted Electives.
PHY115 and PHY116 recommended for students intending to transfer to $U$ of $A$ to earn a BA or BS in Mathematics.

## Awareness Areas

Credits: 0-6
These requirements may be shared with Core Requirements.

Cultural Diversity in the US [C]
Credits: 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 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 transferable credits, it is recommended that courses be selected that meet more than one requirement wherever possible.

## 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) |

Critical Reading
Credits: 0-3
CRE101 Critical Reading and Critical Thinking (3) OR Equivalent as indicated by assessment (0) 0-3

## Associate in Arts (AA), Emphasis in Nutritional Science

Total Credits: 60-64 Major Code: 8115

## Description

The Associate in Arts (AA), Emphasis in Nutrition 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 subplan. 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 Human Nutrition subplan provides foundational nutrition principles that can be applied to other careers in healthcare. Students may choose to major in Human Nutrition, 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 each course in the program.

| Required | Courses | Credits: 27 |
| :--- | :--- | ---: |
| BIO201 | Human Anatomy and Physiology I | 4 |
| BIO202 | Human Anatomy and Physiology II | 4 |
| CHM130 | Fundamental Chemistry (3) AND |  |
| CHM130LL | Fundamental Chemistry Laboratory (1) OR |  |
| CHM151 | General Chemistry I (3) AND |  |
| CHM151LL | General Chemistry I Laboratory (1) | 4 |
| EXS290 | Introduction to Evidence Based Practice | 3 |
| FON100 | Introductory Nutrition | 3 |
| FON142AB | Science of Food | 3 |
| FON241 | Principles of Human Nutrition | 3 |
| MAT206 | Elements of Statistics (3) OR |  |
| PSY230 | Introduction to Statistics (3) | 3 |

## Restricted Electives

Credits: 8-21
Complete all courses in the transfer option that best aligns with your academic and professional goals. If your intended transfer institution is not listed, then select a combination of courses from the transfer options listed in order to meet the minimum credits required in the Restricted Electives section. Consult with an academic, faculty, or program advisor to prevent exceeding your university transfer program's maximum transferable credits (typically 64).

## Transfer Plan 1: Dietetics

BIO156 Introductory Biology for Allied Health (4) OR
BIO181 General Biology (Majors)I (4) 4
BIO205 Microbiology 4
CHM230 Fundamental Organic Chemistry 3
CHM230LL Fundamental Organic Chemistry Laboratory 1
FON125 Introduction to Professions in Food, Nutrition, and Dietetics

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PSY101 Introduction to Psychology

Transfer Plan 2: Human Nutrition
BIO181 General Biology (Majors)I 4

CHM152 General Chemistry II (3) AND
CHM152LL General Chemistry II Laboratory (1)

\section*{Transfer Plan 3: Arizona State University (College of Health Solutions), Nutrition} (Dietetics), Bachelor of Science
BIO156 Introductory Biology for Allied Health (4) OR BIO156XT Introductory Biology for Allied Health (4) OR BIO181 General Biology (Majors) I (4) OR BIO181XT General Biology (Majors)I (4)
BIO205 Microbiology
CHM230 Fundamental Organic Chemistry
CHM230LL Fundamental Organic Chemistry Laboratory 1
FON125 Introduction to Professions in Food, Nutrition, and Dietetics
PSY101 Introduction to Psychology 3
\(\begin{array}{llr}\text { Transfer Plan 4: Arizona State University } \\ \text { (College of Health Solutions), Nutrition } \\ \text { (Human Nutrition), Bachelor of Science } & \\ \text { BIO181 } & \text { General Biology (Majors) I } & 4 \\ \text { BIO182 } & \text { General Biology (Majors) II } & 4 \\ \text { CHM152 } & \text { General Chemistry II } & 3 \\ \text { CHM152LL } & \text { General Chemistry II Laboratory } & 1 \\ \text { CHM235 } & \text { General Organic Chemistry I (3) AND } & \\ \text { CHM235LL } & \text { General Organic Chemistry I Laboratory (1) } & \\ & \text { OR } & \\ \text { CHM230 } & \text { Fundamental Organic Chemistry (3) AND } \\ \text { CHM230LL } & \text { Fundamental Organic Chemistry Laboratory (1) } 4 \\ \text { Note: Students who wish to apply to medical school or dental school } \\ \text { should take } 8 \text { semester hours of organic chemistry. These students } \\ \text { should enroll in CHM235 and CHM235LL. }\end{array}\)

CHM236 General Organic Chemistry IIA (3) AND
CHM236LL General Organic Chemistry IIA Laboratory (1) OR
CHM238 General Organic Chemistry IIB (3) AND
CHM238LL General Organic Chemistry IIB Laboratory (2) 0-5 Note: Students who wish to apply to medical school or dental school should take 8 semester hours of organic chemistry these student should enroll in CHM236 and CHM236LL. This can be taken after transfer.

General Education Requirements Credits: 18-33
Arizona General Education Curriculum (AGEC) AGEC-A A single course with an [HU], [SB], or [L] designation may also be used to satisfy the Oral Communication, Critical Reading, or Awareness Area ([C], [G] and/or [H]) requirement(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

\section*{Literacy and Critical Inquiry [L]}

Credits: 0
Met by EXS290 in Required Courses area.

\section*{Mathematics [MA]}

Credits: 3-9
Transfer Plan 1 Dietetics and Transfer Plan 3 Arizona State University (College of Health Solutions), Nutrition (Dietetics), Bachelor of Science
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 with the Mathe-
matical Applications [MA] designation.
Transfer Plan 2 Human Nutrition and Transfer Plan 4 Arizona State University (College of Health Solutions), Nutrition (Human Nutrition), Bachelor of Science
MAT187 Precalculus (5) OR
MAT150 College Algebra / Functions (5) AND
MAT182 Plane Trigonometry (3) OR
MAT151 College Algebra / Functions (5) AND
MAT182 Plane Trigonometry (3) OR
MAT152 College Algebra / Functions (5) 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) 5-9

\section*{Computer/Statistics/Quantitative \\ Applications [CS] \\ Credits: 0}

Met by MAT206 or PSY230 in Required Courses area.

\section*{Humanities, Arts and Design [HU]}

Credits: 6
Any approved general education course in the Humanities, Arts and Design [HU] area.
(Recommended: PHI216 Environmental Ethics 3 OR PHI213 Medical and Bio-Ethics 3)

\section*{Social-Behavioral Sciences [SB]}

Credits: 3-6
Any approved general education course in the Social-Behavioral Sciences [SB] area unless met by PSY101 in Restricted Electives. 3-6
May be partially met by PSY101 in Restricted Electives.

\section*{Natural Sciences [SG]/[SQ]}

Credits: 0
Met by (CHM130AA, CHM130 AND CHM130LL) OR (CHM151AA, CHM151 AND CHM151LL) in Required Courses area AND
Met by BIO201 or BIO201XT in Required Courses area.

\section*{Awareness Areas}

Credits: 0-6
These requirements may be shared with Core Requirements.

Cultural Diversity in the US [C]
Credits: 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.
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 transferable credits, it is recommended that courses be selected that meet more than one requirement wherever possible.

\section*{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 Critical Reading and Critical Thinking (3) OR
Equivalent as indicated by assessment (0) 0-3

\title{
Associate in Arts (AA), Emphasis in Philosophy
}

\section*{Total Credits: 60-64 \\ Major Code: 8135}

\section*{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.

\section*{Program Notes}

Students must earn a grade of 'C' or better in each course in the program.
\begin{tabular}{lr} 
Required Courses & Credits: 3 \\
PHI101 Introduction to Philosophy & 3
\end{tabular}

Restricted Electives
Credits: 0-41
Complete all courses in the transfer option that best aligns with your academic and professional goals. If your intended transfer institution is not listed, then select a combination of courses from the transfer options listed in order to meet the minimum credits required in the Restricted Electives section. Consult with an academic, faculty, or program advisor to prevent exceeding your uni-
versity transfer program's maximum transferable credits (typically 64).

\section*{Transfer Plan 1: Arizona State University (College of Liberal Arts and Sciences), Bachelor of Arts, Philosophy (no emphasis) \\ PHI103 Introduction to Logic}

Foreign Language
Credits: 0-20
Complete a language course at the intermediate level (202 or equivalent), including American Sign Language IV with a 'C' or better OR demonstrate proficiency through this level as indicated by assessment.
ARB+++ Any ARB Arabic course
CHI+++ Any CHI Chinese course
FRE+++ Any FRE French course
GER+++ Any GER German course
ITA+++ Any ITA Italian course
JPN+++ Any JPN Japanese course
SPA+++ Any SPA Spanish course
SLG+++ Any SLG Sign Language
0-20
Transfer Plan 2: Arizona State University (College of Liberal Arts and Sciences), Bachelor of Arts, Philosophy (Morality, Politics and Law) Foreign Language

Credits: 0-20
Complete a language course at the intermediate level (202 or equivalent), including American Sign Language IV with a 'C' or better OR demonstrate proficiency through this level as indicated by assessment.
ARB+++ Any ARB Arabic course
CHI+++ Any CHI Chinese course
FRE+++ Any FRE French course
GER+++ Any GER German course
ITA+++ Any ITA Italian course
JPN+++ Any JPN Japanese course
SPA+++ Any SPA Spanish course
SLG+++ Any SLG Sign Language
0-20
Transfer Plan 3: Arizona State University (New College of Interdisciplinary Arts and Sciences), Bachelor of Arts, Philosophy, Religion and Society
PHI103
Introduction to Logic (3) OR
PHI105 Introduction to Ethics (3)
REL100
World Religions
Complete two (2) courses for a total of six (6) credits that transfer to ASU as direct equivalents or departmental elective credit (DEC) in the following ASU prefixes: ENG, ETH, HST, IAP, IAS, PHY, REL, SPA, or WST.

Language and Cultures
Credits: 0-20
Complete a language course at the intermediate level (202 or equivalent), including American Sign Language IV with a 'C' or better OR demonstrate proficiency through this level as indicated by assessment. This requirement may also be satisfied after transfer to ASU though various upper division course options. Recommend students satisfy this requirement after transfer to ASU unless proficient at the elementary level (102 or equivalent).
ARB+++ any ARB Arabic course
CHI+++ any CHI Chinese course
FRE+++ any FRE French course
GER+++ any GER German course
ITA+++ any ITA Italian course
JPN+++ any JPN Japanese course
SPA+++ any SPA Spanish course
SLG+++ any SLG Sign Language
Transfer Plan 4: Northern Arizona University, Bachelor of Arts, Philosophy (no emphasis)
PHI201 History of Ancient Philosophy 3
Foreign Language
Credits: 0-20
Complete a language course at the intermediate level
(202 or equivalent), including American Sign Language IV
with a ' \(C\) ' or better OR demonstrate proficiency through
this level as indicated by assessment.
ARB+++ Any ARB Arabic course
CHI+++ Any CHI Chinese course
FRE+++ Any FRE French course
GER+++ Any GER German course
ITA+++ Any ITA Italian course
JPN+++ Any JPN Japanese course
SPA+++ Any SPA Spanish course
SLG+++ Any SLG Sign Language
0-20
Transfer Plan 5: Northern Arizona University, Bachelor of Arts, Philosophy, Politics and Law
HIS100 History of Western Civilization to Middle Ages (3) OR
HIS101 History of Western Civilization Middle Ages to 1789 (3) OR
HIS103 United States History to 1865 (3) OR
HIS110 World History to 1500 (3)
3
HIS102 History of Western Civilization 1789 to Present (3) OR
HIS104 United States History 1865 to Present (3) OR
HIS111 World History 1500 to the Present (3) 3
PHI105 Introduction to Ethics 3
ECN211 Macroeconomic Principles 3

ECN212 Microeconomic Principles 3
MAT206 Elements of Statistics 3
POS285 Political Issues and Public Policy
Credits: 0-20
Foreign Language
Complete a language course at the intermediate level (202 or equivalent), including American Sign Language IV with a 'C' or better OR demonstrate proficiency through this level as indicated by assessment.
ARB+++ Any ARB Arabic course
CHI+++ Any CHI Chinese course
FRE+++ Any FRE French course
GER+++ Any GER German course
ITA+++ Any ITA Italian course
JPN+++ Any JPN Japanese course
SPA+++ Any SPA Spanish course
SLG+++ Any SLG Sign Language
0-20
Transfer Plan 6: University of Arizona, Bachelor
of Arts, Philosophy (General Emphasis and
Ethics Emphasis)
PHI103 Introduction to Logic
PHI113 Introduction to Mathematical Logic 3
PHI201 History of Ancient Philosophy
Foreign Language
Credits: 0-20
Complete a language course at the intermediate level (202 or equivalent), including American Sign Language IV with a 'C' or better OR demonstrate proficiency through this level as indicated by assessment.
ARB+++ Any ARB Arabic course
CHI+++ Any CHI Chinese course
FRE+++ Any FRE French course
GER+++ Any GER German course
ITA+++ Any ITA Italian course
JPN+++ Any JPN Japanese course
SPA+++ Any SPA Spanish course
SLG+++ Any SLG Sign Language
0-20
Transfer Plan 7: Grand Canyon University, Bachelor of Arts, Christian Studies (Philosophy emphasis)
COM263 Elements of Intercultural Communication 3
PHI105 Introduction to Ethics
PSY101 Introduction to Psychology (3) OR
REL100 World Religions (3)
REL211 Introduction to the Old Testament (Hebrew Bible)
REL27
Introduction to the New Testament

General Education Requirements Credits: 17-41 Arizona General Education Curriculum (AGEC) AGEC-A 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 Area ([C], [G] and/ or \([\mathrm{H}]\) ) requirement(s). See the AGEC matrix for course designations.

\section*{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)
(3)

6
Literacy and Critical Inquiry [L] Credits: 0-3
Any approved general education course in the Literacy and Critical Inquiry area [L]
May be met by PHI103 in Restricted Electives 0-3
PHI103 recommended

\section*{Mathematics [MA]}

Credits: 3-6
\(\begin{array}{ll}\text { MAT140 } & \text { College Mathematics (5) OR } \\ \text { MAT141 } & \text { College Mathematics (4) OR } \\ \text { MAT142 } & \text { College Mathematics (3) OR } \\ \text { MAT145 } & \text { College Mathematics with Review (5) OR } \\ \text { MAT146 } & \text { College Mathematics with Review (6) OR }\end{array}\)
Any approved general education course in the
Mathematical Applications [MA] area (3-6)
3-6

\section*{Computer/Statistics/Quantitative}

Applications [CS]
Credits: 0-3
Any approved general education course in the Comput-
er/Statistics/Quantitative Applications [CS] area
May be met by MAT206 in Restricted Electives
0-3
Humanities, Arts and Design [HU] Credits: 0-3
Met by PHI101 in Required Courses AND
Any approved general education courses in the Humanities, Arts and Design [HU] area.
May be met by HIS101, HIS102, HIS103, HIS110, HIS111, PHI103, PHI105, PHI201, REL100, or REL271 in Restricted Electives

0-3
PHI105 recommended. PHI103 recommended if not used to meet Literacy and Critical Inquiry [L]
Social-Behavioral Sciences [SB] Credits: 0-6
Any approved general education courses in the So-
cial-Behavioral Sciences [SB] area
May be met by COM263, ECN211, ECN212, HIS100, HIS101, HIS102, HIS103, HIS104, and/or PSY101 in Restricted Electives
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 Quantita-
tive [SQ\} area or the Science General [SG] area (4).

Awareness Areas Credits: 0-6
These requirements may be shared with Core Requirements.
Cultural Diversity in the US [C] Credits: 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.
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 transferable credits, it is recommended that courses be selected that meet more than one requirement wherever possible.
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 Critical Reading and Critical Thinking (3) OR Equivalent as indicated by assessment (0) 0-3

\section*{Associate in Arts (AA), Emphasis in Political Science}

\section*{Total Credits: 60-64}

Major Code: 8120

\section*{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 plan-
ning 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.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better in each course in the program.
\begin{tabular}{llr} 
Required Courses & \multicolumn{1}{c}{ Credits: } & 12 \\
POS110 & American National Government & 3 \\
POS120 & World Politics (3) OR \\
POS140 & Comparative Government (3) & 3 \\
& \begin{tabular}{ll} 
(POS140 Recommended for students intending to \\
transfer to Grand Canyon University)
\end{tabular} & \\
POS210 & Political Ideologies & 3 \\
COM225 & Public Speaking & 3
\end{tabular}

\section*{Restricted Electives}

Credits: 0-35
Complete all courses in the transfer option that best aligns with your academic and professional goals. If your intended transfer institution is not listed, then select a combination of courses from the transfer options listed in order to meet the minimum credits required in the Restricted Electives section. Consult with an academic, faculty, or program advisor to prevent exceeding your university transfer program's maximum transferable credits (typically 64). Courses selected in the Required Courses area cannot be used to satisfy Restricted Electives.
\begin{tabular}{|c|c|}
\hline \multicolumn{2}{|l|}{Transfer Plan 1: Arizona State University (College of Liberal Arts and Sciences), Political} \\
\hline \multicolumn{2}{|l|}{Science, Bachelor of Science and Arizona State} \\
\hline \multicolumn{2}{|l|}{University (College of Integrative Sciences and} \\
\hline \multicolumn{2}{|l|}{Arts), Political Science, Bachelor of Science} \\
\hline Political Science Elective Cou & \\
\hline \multicolumn{2}{|l|}{\multirow[t]{3}{*}{Select 6 credits of coursework that transfer to ASU as direct equivalencies or departmental electives in the POS prefix.}} \\
\hline & \\
\hline & \\
\hline
\end{tabular}

Recommended that students take
\begin{tabular}{lll} 
POS130 & State and Local Government & 3 \\
POS120 & World Politics (3) OR & \\
POS140 & Comparative Government (3) & 3
\end{tabular}

Related Area Course
Credits: 0-12
Complete 0 to 12 credits of coursework that transfer to ASU as direct equivalencies or departmental electives in the following ASU course prefixes: AES, AFR, AIS, APA, ASB, ASM, COM, ECN, FAS, GCU, GPH, HST, JUS, MIS, PHI, PSY, REL, SGS, SOC, TCL, or WST. These courses may be used to fulfill any outstanding AGEC requirements simultaneously.

\section*{Transfer Plan 2: Arizona State University (College of Liberal Arts and Sciences), Political Science, Bachelor of Arts}

Political Science Elective Course
Credits: 3
Select 3 credits of coursework that transfer to ASU as direct equivalencies or departmental electives in the POS prefix.
POS+++ Any Political Science course
Recommended that students take
POS130 State and Local Government
POS120 World Politics (3) OR
POS140 Comparative Government (3)

\section*{Foreign Language}

Credits: 0-20
Complete a language course at the intermediate level (202 or equivalent), including American Sign Language IV with a 'C' or better OR demonstrate proficiency through this level as indicated by assessment.
ARB+++ any ARB/Arabic course OR
CHI+++ any CHI/Chinese course OR
FRE+++ any FRE/French course OR
GER+++ any GER/German course OR
ITA+++ any ITA/Italian course OR
JPN+++ anyJPN/Japanese course OR
SPA+++ any SPA/Spanish course OR
SLG+++ any SLG/Sign Language 0-20
Related Area Course
Credits: 0-12
Select 0 to 12 credits of coursework that transfer to ASU as direct equivalencies or departmental electives in the following ASU course prefixes: AES, AFR, AIS, APA, ASB, ASM, COM, ECN, FAS, GCU, GPH, HST, JUS, MIS, PHI, PSY, REL, SGS, SOC, TCL, or WST. These courses may be used to fulfill any outstanding AGEC requirements simultaneously.

\section*{Transfer Plan 3: Arizona State University (New College of Interdisciplinary Arts and Sciences), Political Science, Bachelor of Arts \\ Related Area Course \\ Credits: 9}

Select 9 credits of coursework that transfer to ASU as direct equivalencies or departmental electives in the following ASU course prefixes: ASB, COM, ECN, GCU, HST, JHR, POS, PSY, SBS, SOC, or WST.

Language and Cultures
Credits: 0-20
Complete a language course at the intermediate level (202 or equivalent), including American Sign Language IV with a 'C' or better OR demonstrate proficiency through this level as indicated by assessment. This requirement may also be satisfied after transfer to ASU though various upper division course options. Recommend students satisfy this requirement after transfer to ASU unless proficient at the elementary level (102 or equivalent).
ARB+++ Any ARB Arabic course(s)
CHI+++ Any CHI Chinese course(s)
FRE+++ Any FRE French course(s)
GER+++ Any GER German course(s)
ITA+++ Any ITA Italian course(s)
JPN+++ Any JPN Japanese course(s)
SPA+++ Any SPA Spanish course(s)
SLG+++ Any SLG Sign Language course(s)

\section*{Transfer Plan 4: Arizona State University (New College of Interdisciplinary Arts and Sciences), Political Science, Bachelor of Science}

\section*{Related Area Course}

Credits: 6-9
Select 6 to 9 credits of coursework that transfer to ASU as direct equivalencies or departmental electives in the following ASU course prefixes: ASB, COM, ECN, GCU, HST, JHR, POS, PSY, SBS, SOC, or WST.

\section*{Transfer Plan 5: Northern Arizona University:} Political Science, Bachelor of Science
Select 0-15 credits of coursework that transfer to NAU as POS electives.

\section*{Transfer Plan 6: Northern Arizona University: Political Science, Bachelor of Arts}

Foreign Language
Credits: 0-20
Complete a language course at the intermediate level
(202 or equivalent), including American Sign Language IV with a 'C' or better OR demonstrate proficiency through this level as indicated by assessment.
ARB+++ any ARB/Arabic course OR

CHI+++ any CHI/Chinese course OR
FRE+++ any FRE/French course OR
GER+++ any GER/German course OR
ITA+++ any ITA/Italian course OR
JPN+++ any JPN/Japanese course OR
SPA+++ any SPA/Spanish course OR
SLG+++ any SLG/Sign Language 0-20
Select 0 to 15 credits of coursework that transfer to NAU as POS electives.

Transfer Plan 7: University of Arizona: Political Science, Bachelor of Arts (any emphasis) Foreign Language Credits: 0-20
Complete a language course at the intermediate level (202 or equivalent), including American Sign Language IV with a 'C' or better OR demonstrate proficiency through this level as indicated by assessment.
ARB+++ any ARB/Arabic course OR
CHI+++ any CHI/Chinese course OR
FRE+++ any FRE/French course OR
GER+++ any GER/German course OR
ITA+++ any ITA/Italian course OR
JPN+++ any JPN/Japanese course OR
SPA+++ any SPA/Spanish course OR
SLG+++ any SLG/Sign Language
Transfer Plan 8: Grand Canyon University: Government (State and Local Public Policy Emphasis), Bachelor of Arts Credits: 6
POS130 State and Local Government 3
POS285 Public Policy
Transfer Plan 9: Grand Canyon University: Government (Legal Studies Emphasis), Bachelor of Arts
POS285 Public Policy
General Education Requirements Credits: 26-34 Arizona General Education Curriculum (AGEC) AGEC-A A single course with an [HU], [SB], or [L] designation(s) may also be used to satisfy the Oral Communication, Critical Reading, or Awareness Area ([C], [G] and/or [H]) requirement(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)

Literacy and Critical Inquiry [L]
Met by COM225 in Required Courses Area.

\section*{Mathematics [MA]}

Credits: 3-5
\begin{tabular}{ll} 
MAT140 & College Mathematics (5) OR \\
MAT141 & College Mathematics (4) OR \\
MAT142 & College Mathematics (3)
\end{tabular}

\section*{Computer/Statistics/Quantitative}

Applications [CS]
Credits: 3
Any approved general education courses in the Computer/Statistics/Quantitative Applications [CS] area.

\section*{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: 0 Met by POS110, POS120, POS140, and/or POS210 in 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

\section*{Awareness Areas}

Credits: 0-3
These requirements may be shared with Core Requirements.

\section*{Cultural Diversity in the US [C] \\ Credits: 0-3}

Historical/Global Awareness [H]/[G] Credits: 0 Met by POS120 or POS140 in the Required Courses Area.

\section*{MCCCD Additional Requirements Credits: 0-3}

Courses in this area may also be applied to the AGEC Core Requirements. To minimize total credits required for degree and maximize transferable credits, it is recommended that courses be selected that meet more than one requirement wherever possible.

\section*{Oral Communication}

Credits: 0
Met by COM225 in the Required Courses Area.

\section*{Critical Reading}

Credits: 0-3
CRE101 Critical Reading and Critical Thinking (3) OR
Equivalent as indicated by assessment (0) 0-3

\section*{Associate in Arts (AA) Emphasis in Psychology}

\author{
Total Credits: 60-64 \\ Major Code: 8122
}

\section*{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.

\section*{Program Notes}

Students must earn a grade of ' C ' or better in all courses in the program.

\section*{Required Courses}

Credits: 13-15
PSY101 Introduction to Psychology
PSY230 Introduction to Statistics (3) OR
PSY230 Introduction to Statistics (3) AND
PSY231 Laboratory for Statistics (1)
PSY290AB Research Methods (4) OR
PSY290AC Research Methods (4)
Select one of the following PSY Electives:
PSY132 Psychology and Culture (3)
PSY157 African/Black Psychology (3)
PSY215 Introduction to Sport Psychology (3)

PSY218 Health Psychology (3)
PSY225 Psychology of Religion (3)
PSY235 Psychology of Gender (3)
PSY240 Developmental Psychology (3)
PSY241 Understanding and Changing Behavior (3)
PSY248 Psychology of Adolescent Development (3)
PSY250 Social Psychology (3)
PSY260 Psychology of Personality (3)
PSY262 Positive Psychology (3)
PSY266 Abnormal Psychology (3)
PSY275 Biopsychology (4)
PSY277 Psychology of Human Sexuality (3)
PSY280 Industrial/Organizational Psychology (3) 3-4

\section*{Restricted Electives}

Credits: 3-35
Complete all courses in the transfer option that best aligns with your academic and professional goals. If your intended transfer institution is not listed, then select a combination of courses from the transfer options listed in order to meet the minimum credits required in the Restricted Electives section. Consult with an academic, faculty, or program advisor to prevent exceeding your university transfer program's maximum transferable credits (typically 64). If academic and professional goals do not align with any of the transfer plans below, select elective courses in consultation with an academic, faculty, or program advisor.

\section*{Transfer Plan 1: Arizona State University (College of Integrative Sciences and Arts), Psychology, Bachelor of Arts}
\begin{tabular}{ll} 
CIS105 & Survey of Computer Information Systems (3) OR \\
CSC180 & Computer Literacy (3) OR \\
CSC180AA & Computer Literacy (3) OR \\
CSC180AB & Computer Literacy (4)
\end{tabular}

Related Area Course
Credits: 6
Students must select 2 courses ( 6 credits) that transfer to ASU as direct equivalencies or departmental electives in the following ASU course prefixes: ASB, COM, POS, PSY, SOC. These courses may be used to fulfill any outstanding AGEC requirements simultaneously.

\footnotetext{
Transfer Plan 2: Arizona State University (College of Integrative Sciences and Arts), Psychology, Bachelor of Science
}

CIS105 Survey of Computer Information Systems (3) OR
CSC180 Computer Literacy (3) OR
CSC180AA Computer Literacy (3) OR
CSC180AB Computer Literacy (4)
3-4
Life Science Lab Course
Credits: 4
Select a Life Science lecture/lab course that transfers to ASU in one of the following prefixes: BIO, MIC. This is required in addition to PSY290++ [SG] and the Natural Science (SQ) General Studies requirement.
Physical Science Lab Course
Credits: 4
Select a Physical Science lecture/lab course that transfers to ASU in one of the following prefixes: AST, CHM, GLG, PHY. This is required in addition to PSY290++ [SG] and the Natural Science (SQ) General Studies requirement.

\section*{Related Area Course}

Credits: 3
Select a course that transfers as a direct equivalent or departmental elective credit (DEC) in the following ASU prefixes: ASB, COM, POS, PSY, SOC.

\section*{Transfer Plan 3: Arizona State University (College of Liberal Arts and Sciences), Psychology, Bachelor of Arts}

Foreign Language
Credits: 0-20
Complete a language course at the intermediate level (202 or equivalent), including American Sign Language IV with a 'C' or better OR demonstrate proficiency through this level as indicated by assessment.
ARB+++ Any ARB Arabic course(s)
CHI+++ Any CHI Chinese course(s)
FRE+++ Any FRE French course(s)
GER+++ Any GER German course(s)
ITA+++ Any ITA Italian course(s)
JPN+++ Any JPN Japanese course(s)
SPA+++ Any SPA Spanish course(s)
SLG+++ Any SLG Sign Language course(s) 0-20

\section*{Related Area}

Credits: 0-9
Select up to 3 additional courses (0-9 credits) that transfer as either Direct Equivalency or Departmental Elective (DEC) to courses in the following ASU prefixes: ASB, ASM, BIO, GCU.

\section*{Transfer Plan 4: Arizona State University (College of Liberal Arts and Sciences), Psychology, Bachelor of Science}

Related Area
Credits: 0-9
Select up to 3 additional courses (0-9 credits) that transfer as either Direct Equivalency or Departmental Elective
(DEC) to courses in the following ASU prefixes: ASB, ASM, BIO, GCU.

Transfer Plan 5: Arizona State University
(New College of Interdisciplinary Arts and Sciences), Psychology, Bachelor of Arts
CIS105 Survey of Computer Information Systems (3) OR
CSC180 Computer Literacy (3) OR
CSC180AA Computer Literacy (3) OR
CSC180AB Computer Literacy (4)
Related Area Course
Credits: 6
Students must select two courses that transfer as direct equivalents or departmental electives in the following ASU prefixes: ASB, COM, POS, PSY, SOC.
(Recommend selecting one course in the Social-Behavioral Sciences [SB] area)

Language and Cultures
Credits: 0-20
Complete a language course at the intermediate level
(202 or equivalent), including American Sign Language IV with a 'C' or better OR demonstrate proficiency through this level as indicated by assessment. This requirement may also be satisfied after transfer to ASU though various upper division course options. Recommend students satisfy this requirement after transfer to ASU unless proficient at the elementary level (102 or equivalent).
ARB+++ Any ARB Arabic course(s)
CHI+++ Any CHI Chinese course(s)
FRE+++ Any FRE French course(s)
GER+++ Any GER German course(s)
ITA+++ Any ITA Italian course(s)
JPN+++ Any JPN Japanese course(s)
SPA+++ Any SPA Spanish course(s)
SLG+++ Any SLG Sign Language course(s)
Transfer Plan 6: Arizona State University (New College of Interdisciplinary Arts and Sciences), Psychology, Bachelor of Science
CIS105 Survey of Computer Information Systems (3) OR
CSC180 Computer Literacy (3) OR
CSC180AA Computer Literacy (3) OR
CSC180AB Computer Literacy (4)
Related Area Course
Credits: 3
Students must select 1 course (3 credits) that transfers as a direct equivalent or departmental elective in the following ASU prefixes: ASB, COM, POS, PSY, SOC.

Life Science Lab Course
Credits: 4
Select a Life Science lecture/lab course that transfers to ASU in one of the following prefixes: \(\mathrm{BIO}, \mathrm{MIC}\). This is
required in addition to PSY290++ [SG] and the Natural Science (SQ) General Studies requirement.

\section*{Physical Science Lab Course}

Credits: 4
Select a Physical Science lecture/lab course that transfers to ASU in one of the following prefixes: AST, CHM, GLG, PHY. This is required in addition to PSY290++ [SG] and the Natural Science (SQ) General Studies requirement.

\section*{Language and Cultures}

Credits: 0-20
Complete a language course at the intermediate level (202 or equivalent), including American Sign Language IV with a 'C' or better OR demonstrate proficiency through this level as indicated by assessment. This requirement may also be satisfied after transfer to ASU though various upper division course options. Recommend students satisfy this requirement after transfer to ASU unless proficient at the elementary level (102 or equivalent).
ARB+++ Any ARB Arabic course(s)
CHI+++ Any CHI Chinese course(s)
FRE+++ Any FRE French course(s)
GER+++ Any GER German course(s)
ITA+++ Any ITA Italian course(s)
JPN+++ Any JPN Japanese course(s)
SPA+++ Any SPA Spanish course(s)
SLG+++ Any SLG Sign Language course(s) 0-20
Transfer Plan 7: Arizona State University (New
College of Interdisciplinary Arts and Sciences),
Psychology (Forensic Psychology), Bachelor of
Arts
\(\begin{array}{ll}\text { CIS105 } & \text { Survey of Computer Information Systems (3) OR } \\ \text { CSC180 } & \text { Computer Literacy (3) OR } \\ \text { CSC180AA } & \text { Computer Literacy (3) OR } \\ \text { CSC180AB } & \text { Computer Literacy (4) }\end{array}\)

\section*{Related Area Course}

Credits: 0-6
Select up to 2 courses ( \(0-6\) credits) that transfer as a direct equivalent or departmental elective credit (DEC) in the following ASU prefixes: ASB, COM, POS, PSY, SOC. These courses may be used to fulfill any outstanding AGEC requirements simultaneously.

\section*{Language and Cultures}

Credits: 0-20
Complete a language course at the intermediate level (202 or equivalent), including American Sign Language IV with a 'C' or better OR demonstrate proficiency through this level as indicated by assessment. This requirement may also be satisfied after transfer to ASU though various upper division course options. Recommend students satisfy this requirement after transfer to ASU unless
proficient at the elementary level (102 or equivalent).
ARB+++ Any ARB Arabic course(s)
CHI+++ Any CHI Chinese course(s)
FRE+++ Any FRE French course(s)
GER+++ Any GER German course(s)
ITA+++ Any ITA Italian course(s)
JPN+++ Any JPN Japanese course(s)
SPA+++ Any SPA Spanish course(s)
SLG+++ Any SLG Sign Language course(s)

\section*{Transfer Plan 8: Arizona State University (New College of Interdisciplinary Arts and Sciences), Psychology (Forensic Psychology), Bachelor of Science \\ \begin{tabular}{llr} 
CIS105 & Survey of Computer Information Systems (3) OR \\
CSC180 & Computer Literacy (3) OR \\
CSC180AA & Computer Literacy (3) OR \\
CSC180AB & Computer Literacy (4) & \(3-4\)
\end{tabular}}

Life Science Lab Course
Credits: 0-4
Select a Life Science lecture/lab course that transfers to ASU in one of the following prefixes: \(\mathrm{BCH}, \mathrm{BIO}, \mathrm{FOR}, \mathrm{LSC}\), MIC. This is required in addition to PSY290++ [SG] and the Natural Science (SQ) General Studies requirement. May be completed after transfer to ASU.
Physical Science Lab Course
Credits: 0-4
Select a Physical Science lecture/lab course that transfers to ASU in one of the following prefixes: AST, CHM, ENV, GLG, PHY. This is required in addition to PSY290++ [SG] and the Natural Science (SQ) General Studies requirement. May be completed after transfer to ASU.
Language and Cultures
Credits: 0-20
Complete a language course at the intermediate level
(202 or equivalent), including American Sign Language IV with a 'C' or better OR demonstrate proficiency through this level as indicated by assessment. This requirement may also be satisfied after transfer to ASU though various upper division course options. Recommend students satisfy this requirement after transfer to ASU unless proficient at the elementary level (102 or equivalent).
ARB+++ Any ARB Arabic course(s)
CHI+++ Any CHI Chinese course(s)
FRE+++ Any FRE French course(s)
GER+++ Any GER German course(s)
ITA+++ Any ITA Italian course(s)
JPN+++ Any JPN Japanese course(s)
SPA+++ Any SPA Spanish course(s)
SLG+++ Any SLG Sign Language course(s)

General Education Requirements Credits: 13-41 Arizona General Education Curriculum (AGEC) AGEC-A A single course with an [HU], [SB], or [L] designation(S) may also be used to satisfy the Oral Communication, Critical Reading, or Awareness Area ([C], [G] and/or [H]) requirement(s).

\section*{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) OR
May be met by PSY290AB or PSY290AC in Required Courses area (0) 0-3
Note: PSY290AB or PSY290AC may be applied as Natural Science [SG] or Literacy and Critical Inquiry [L], but not both.

\section*{Mathematics [MA]}

Credits: 3-9
For Arizona State University, College of Integrative Sciences and Arts, Psychology, Bachelor of Science; Arizona State University, College of Integrative Sciences and Arts, Psychology, Bachelor of Arts; Arizona State University, College of Liberal Arts and Sciences, Psychology, Bachelor of Arts; Arizona State University, College of Liberal Arts and Sciences, Psychology, Bachelor of Science; Arizona State University, New College of Interdisciplinary Arts and Sciences, Psychology, Bachelor of Arts; and Arizona State University, New College of Interdisciplinary Arts and Sciences, Psychology (Forensic Psychology), Bachelor of Arts:
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
MAT172 Finite Mathematics (3) OR
MAT187 Precalculus (5) OR
Higher level course that meets [MA] requirement. 3-9
For Arizona State University, New College of Interdisciplinary Arts and Sciences, Psychology, Bachelor of Science and Arizona State University, New College of Interdisciplinary Arts and Sciences, Psychology (Forensic Psychology), Bachelor of 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
Higher level course that meets [MA] requirement. 5-9
Computer/Statistics/Quantitative
Applications [CS] Credits: 0
Met by PSY230 in Required Course area.
Humanities, Arts and Design [HU] Credits: 0-6
Any approved general education courses in the Humanities, Arts and Design [HU] area.

0-6
Social-Behavioral Sciences [SB]
Credits: 0-3
Met by PSY101 AND
Any approved general education courses in the So-cial-Behavioral Sciences [SB] area. 0-3
(May be met by any of the PSY Electives in Required Courses except PSY262 and PSY275 or Related Area Coursework)
Natural Sciences [SG]/[SQ]
Credits: 4-8
Any approved general education course in the Natural Sciences (Quantitative) [SQ] area (4)

\section*{AND}

Any approved general education course in the Natural Sciences (Quantitative) [SQ] area or the Natural Sciences (General) [SG] area unless met by PSY290AB OR PSY290AC in Required Courses (0-4) 4-8
Note: PSY290AB or PSY290AC may be applied as Natural Science [SG] or Literacy and Critical Inquiry [L], but not both.

\footnotetext{
Awareness Areas
Credits: 0-6
Cultural Diversity in the US [C]
Credits: 0-3
Historical/Global Awareness [H]/[G] Credits: 0-3
Any approved general education course in the Historical [H] or Global [G] area.

MCCCD Additional Requirements Credits: 0-6
Additional Requirements Notes: Courses in this area may also be applied to the AGEC Core Requirements. To minimize total credits required for degree and maximize transferable credits, it is recommended that courses be selected that meet more than one requirement wherever possible.
}
\begin{tabular}{lll} 
Oral Comunication & \multicolumn{1}{c}{ 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) & \(0-3\)
\end{tabular}

\section*{Critical Reading}

Credits: 0-3
CRE101 Critical Reading and Critical Thinking (3) OR Equivalent as indicated by assessment (0) 0-3

\section*{Associate in Arts (AA), Emphasis in Religious Studies}

\section*{Total Credits: 60-64 Major Code: 8138}

\section*{Description}

The Associate in Arts (AA), Emphasis in Religious Studies program 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.

\section*{Program Notes}

Students must earn a grade of ' C ' or better in each course in the program.

Required Courses Credits: 3-23
REL100 World Religions
3
Complete 16 to 20 credits of Foreign Language
coursework through the intermediate level (202 or equivalent) OR demonstrate proficiency through this level as indicated by assessment.
ARB+++ any ARB Arabic course(s)
CHI+++ any CHI Chinese course(s)
FRE+++ any FRE French course(s)
GER+++ any GER German course(s)
ITA+++ any ITA Italian course(s)
JPN+++ any JPN Japanese course(s)
SPA+++ any SPA Spanish course(s)
SLG+++ any SLG Sign Language course(s)
Restricted Electives
Credits: 6-18
Complete all courses in the transfer option that best aligns with your academic and professional goals. If your intended transfer institution is not listed, then select a combination of courses from the transfer options listed in order to meet the minimum credits required in the Restricted Electives section. Consult with an academic, faculty, or program advisor to prevent exceeding your university transfer program's maximum transferable credits (generally 64).

Information regarding the articulation of MCCCD courses at the Arizona public universities can be accessed via the following website:
www.aztransfer.com.
Transfer Plan 1: Arizona State University (College of Liberal Arts and Sciences), Religious Studies (Religion, Culture, and Public Life), Bachelor of Arts (BA)
\begin{tabular}{lll} 
REL207 & Ritual, Symbol, and Myth & 3 \\
REL270 & Introduction to Christianity & 3
\end{tabular}

Complete 0-6 credits of coursework (except courses used to satisfy other requirements) that transfer to ASU as direct equivalencies or departmental electives in the following ASU course prefixes: AFR, AIS, AMS, APA, ARS, ASB, GCU, HST, JUS, PHI, SGS, SOC, WST.

Transfer Plan 2: Arizona State University
 (College of Liberal Arts and Sciences), Religious
 Studies (Religion, Politics, and Global Affairs),
 Bachelor of Arts (BA)

REL205 Religion and the Modern World 3 REL225 African-American Religions 3

Complete 0-6 credits of coursework (except courses used to satisfy other requirements) that transfer to ASU as direct equivalencies or departmental electives in the following ASU course prefixes: AFR, AIS, AMS, APA, ARS, ASB, GCU, HST, JUS, PHI, SGS, SOC, WST.

Transfer Plan 3: Northern Arizona University (NAU), Comparative Cultural Studies, Bachelor of Arts (BA)
HUM245 Introduction to Holocaust Studies 3
Complete 0-9 credits of REL coursework that transfers to NAU as REL direct equivalents or REL departmental electives.
Complete 6 credits of coursework (except courses used to satisfy other requirements) from two different course prefixes that transfer to NAU as direct equivalencies or departmental electives in the following NAU course prefixes: ACM, ARH, CINE, HUM, LAS.

Transfer Plan 4: University of Arizona (UA), Religious Studies, Bachelor of Arts (BA) AIS213/
REL203 American Indian Religions (3) OR
REL151 Religion in the Hispanic World (3)
RELWST292 Goddess Religions (3) OR
PHI/REL244 Philosophy of Religion (3)
AIS213/
REL203 American Indian Religions (3) OR
REL206 Religion in America (3) OR
REL151
Religion in the Hispanic World (3)
General Education Requirements Credits: 26-35 Arizona General Education Curriculum (AGEC) AGEC-A 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 Area ([C], [G] and/ or \([H]\) ) requirement(s). See the AGEC matrix for course designations.

\section*{First-Year Composition [FYC]}

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 unless met by CRE101 or COM225 or AIS213/REL203.

\section*{Mathematics [MA]}

Credits: 3-6
\begin{tabular}{ll} 
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 &
\end{tabular}

\section*{Computer/Statistics/Quantitative} Applications [CS]

Credits: 3
Any approved general education course in the Comput-
er/Statistics/Quantitative Applications [CS] area
Humanities, Arts and Design [HU] Credits: 0 Met by REL100 in Required Courses AND
AIS213/REL203 or HUM245 or PHI/REL244 or REL151 or REL205 or REL206 or REL207 or REL225 or REL270 in Restricted Electives.

Social-Behavioral Sciences [SB]
Credits: 6
Any approved general education course in the Social-Behavioral Sciences [SB] area

6

\section*{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)

\section*{Awareness Areas}

Credits: 0-3
These requirements may be shared with Core Requirements.

Cultural Diversity in the US [C]
Credits: 0-3
Historical/Global Awareness [H]/[G] Credits: 0 Met by REL100 in Required Courses.
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 transferable credits, it is recommended that courses be selected that meet more than one requirement wherever possible.

\section*{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 Critical Reading and Critical Thinking (3) OR
Equivalent as indicated by assessment (0) 0-3

\title{
Associate in Arts (AA), Emphasis in Secondary Education
}

\author{
Total Credits: 60-64 \\ Major Code: 8140
}

\section*{Description}

The Associate in Arts (AA), Emphasis in Secondary Education provides the first two years of a fouryear 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 Earth and Space Science, English, History/Social Studies, Mathematics, Physical Education, Political Science, 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.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better in each course to transfer.
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, 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.

Required Courses
Credits: 6-52
Complete all courses in the transfer option that best aligns with your academic and professional goals. Students should work with an advisor to determine the appropriate coursework and transfer institution for their intended area of study. If your intended transfer institution is not listed, then select a combination of courses from the transfer options listed in order to meet the minimum credits required in the Required Courses section. Consult with an academic, faculty, or program advisor to prevent exceeding your university transfer program's maximum transferable credits (typically 64).

\section*{Transfer Plan 1: Arizona State University (Mary Lou Fulton Teachers College), Bachelor of Arts in Education, Secondary Education (Earth and Space Sciences)}

AST111 Introduction to Solar System Astronomy 4
AST112 Introduction to Stars, Galaxies, and Cosmology (4) OR
GLG102 Introduction to Geology II Historical Lecture (3) AND
GLG104 Introduction to Geology II Historical Lab (1) OR
GLG102IN Introduction to Geology II - Historical (4) OR
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 Note that these courses may be used to satisfy the [SG] or [SQ] requirement.
\begin{tabular}{|c|c|}
\hline \multicolumn{2}{|l|}{CFS/ECH176 Child Development} \\
\hline CHM150 & General Chemistry I (4) AND \\
\hline CHM151LL & General Chemistry I Laboratory (1) OR \\
\hline CHM150AA & General Chemistry I (5) OR \\
\hline CHM151 & General Chemistry I (3) AND \\
\hline CHM151LL & General Chemistry I Laboratory (1) OR \\
\hline \multirow[t]{2}{*}{CHM151AA} & General Chemistry I (4) 4-5 \\
\hline & Note that this course may be used to satisfy the [SQ] requirement. \\
\hline \multirow[t]{2}{*}{EDU221} & Introduction to Education 3 \\
\hline & Note that this course may be used to satisfy the [SB] requirement. \\
\hline \multirow[t]{2}{*}{EDU222} & Introduction to the Exceptional Learner 3 \\
\hline & Note that this course may be used to satisfy the [SB] requirement \\
\hline EDU230 & Cultural Diversity in Education 3 \\
\hline \multicolumn{2}{|l|}{GCU/POS113 United States and Arizona Social Studies (3) OR} \\
\hline HIS103 & United States History to 1865 (3) AND \\
\hline POS221 & Arizona Constitution (1) 3-4 \\
\hline \multirow[t]{2}{*}{GLG101} & Introduction to Geology I - \\
\hline & Physical Lecture (3) AND \\
\hline GLG103 & Introduction to Geology I - Physical Lab (1) OR \\
\hline \multirow[t]{2}{*}{GLG101IN} & Introduction to Geology I - Physical (4) 4 \\
\hline & Note that this course may be used to satisfy the [SQ] requirement. \\
\hline PHY101 & Introduction to Physics (4) OR \\
\hline PHY101AA & Introduction to Physics (5) OR \\
\hline PHY111 & General Physics I (4) OR \\
\hline PHY111AA & General Physics I (5) 4-5 \\
\hline \multicolumn{2}{|l|}{Note that this course may be used to satisfy the [SQ] requirement.} \\
\hline \multicolumn{2}{|l|}{Transfer Plan 2: Northern Arizona University,} \\
\hline \multicolumn{2}{|l|}{Bachelor of Science in Education, Secondary} \\
\hline \multicolumn{2}{|l|}{Education - Earth Science} \\
\hline BIO181 & General Biology (Majors) I (4) OR \\
\hline BIO181XT & General Biology (Majors) I (4) 4 \\
\hline BIO182 & General Biology (Majors) II \\
\hline CHM150 & General Chemistry I (4) AND \\
\hline CHM151LL & General Chemistry I Laboratory (1) OR \\
\hline CHM150AA & General Chemistry I (5) OR \\
\hline CHM151 & General Chemistry I (3) AND \\
\hline CHM151LL & General Chemistry I Laboratory (1) OR \\
\hline CHM151AA & General Chemistry I (4) 4-5 \\
\hline EDU221 & Introduction to Education (3) OR \\
\hline \multirow[t]{2}{*}{EDU222} & Introduction to the Exceptional Learner (3)3 \\
\hline & Note that this course may be used to satisfy the [SB] requirement. \\
\hline
\end{tabular}

CFS/ECH176 Child Development
CHM150 General Chemistry I (4) AND
CHM151LL General Chemistry I Laboratory (1) OR
CHM150AA General Chemistry I (5) OR
CHM151 General Chemistry I (3) AND
CHM151LL General Chemistry I Laboratory (1) OR
Note that this course may be used to satisfy the [SQ] requirement.
\(\begin{array}{lll}\text { EDU221 } & \begin{array}{l}\text { Introduction to Education } \\ \\ \text { Note that this course may be used to satisfy the }\end{array} & 3 \\ \text { [SB] requirement. }\end{array}\)
Note that this course may be used to satisfy the [SQ] requirement.
Transfer Plan 2: Northern Arizona University, Bachelor of Science in Education, Secondary Education - Earth Science
BIO181 General Biology (Majors) I (4) OR
BIO181XT General Biology (Majors)I (4)
4
BIO182 General Biology (Majors) II

CHM151LL General Chemistry I Laboratory (1) OR
CHM150AA General Chemistry I (5) OR
CHM151 General Chemistry I (3) AND
CHM151LL General Chemistry I Laboratory (1) OR
CHM151AA General Chemistry I (4)
4-5
EDU221 Introduction to Education (3) OR
EDU222 Introduction to the Exceptional Learner (3)
Note that this course may be used to satisfy the
[SB] requirement.

GCU/POS113, AND HIS103 may be used to fulfill outstanding AGEC requirements simultaneously.
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
Note: Students must petition NAU to accept GCUI POS113 OR (HIS103 and POS221) for POS220.
GLG101 Introduction to Geology I -
Physical Lecture (3) AND
GLG103 Introduction to Geology I - Physical Lab (1) OR
GLG101IN Introduction to Geology I - Physical (4) 4
Note that this course may be used to satisfy the
[SQ] requirement.
GLG102 Introduction to Geology II -
Historical Lecture (3) AND
GLG104 Introduction to Geology |I - Historical Lab (1) OR
GLG102IN Introduction to Geology II - Historical (4) 4
Note that this course may be used to satisfy the [SG] requirement.
GLG105 Introduction to Planetary Science 4
PHY111 General Physics I (4) OR
PHY111AA General Physics I (5)

\section*{Transfer Plan 3: Arizona State University (Mary Lou Fulton Teachers College), Bachelor of Arts in Education, Secondary Education (English)}

Take one of the following courses. This course may be used to fulfill the [CS] requirement.
BPC110 Computer Usage and Applications (3) OR
CIS1 05 Survey of Computer Information Systems (3) OR
CSC180 Computer Literacy (3) OR
CSC180AA Computer Literacy (3) OR
CSC180AB Computer Literacy (4) 3-4
CFS/ECH176 Child Development
Note that this course may be used to satisfy the [SB] requirement.
EDU221 Introduction to Education 3
Note that this course may be used to satisfy the [SB] requirement.
EDU222 Introduction to the Exceptional Learner 3
EDU230 Cultural Diversity in Education 3
ENG200 Reading and Writing about Literature 3
Note that this course may be used to satisfy the [L] requirement.
ENG215 Strategies of Academic Writing (3) OR
ENG216 Persuasive Writing on Public Issues (3) OR
ENG217 Personal and Exploratory Writing (3) 3

ENH221 Survey of English Literature Before 18003
Note that this course may be used to satisfy the [HU] requirement.
ENH222 Survey of English Literature After 1800
Note that this course may be used to satisfy the [HU] requirement.
ENH241 American Literature Before 18603
ENH242 American Literature After 18603
GCU/POS113 United States and Arizona Social Studies (3) OR HIS103 United States History to 1865 (3) AND
POS221 Arizona Constitution (1)
3-4
Related Area Course
Credits: 6
Students should select six (6) credits of Related Area Courses that transfer as ENG direct equivalencies or department electives: You may select specific courses from the Course Equivalency Guide that satisfy these criteria. Determination is made based on the semester and year the course is taken.
CRW+++++ Any CRW Creative Writing course(s)
ENG+++++ Any ENG English course(s)
ENH+++++ Any ENH English Humanities course(s)

\section*{Transfer Plan 4: Arizona State University (College of Liberal Arts and Sciences), Bachelor of Arts, English (Secondary Education)}

Take one of the following courses. This course may be used to fulfill the [CS] requirement.
BPC110 Computer Usage and Applications (3) OR
CIS105 Survey of Computer Information Systems (3) OR
CSC180 Computer Literacy (3) OR
CSC180AA Computer Literacy (3) OR
CSC180AB Computer Literacy (4) 3-4
EDU222 Introduction to the Exceptional Learner 3
Note that this course may be used to satisfy the [SB] requirement.
ENG200 Reading and Writing about Literature 3
Note that this course may be used to satisfy the [L] requirement.
ENG213 Introduction to the Study of Language (3) OR
SLC201 Introduction to Linguistics (3)
Note that this course may be used to satisfy the [SB] requirement.
ENG215 Strategies of Academic Writing (3) OR
ENG216 Persuasive Writing on Public Issues (3) OR
ENG217 Personal and Exploratory Writing (3) 3
ENH221 Survey of English Literature Before 18003 Note that this course may be used to satisfy the [HU] requirement.

ENH222 Survey of English Literature After 18003
Note that this course may be used to satisfy the [HU] requirement.
ENH241 American Literature Before 18603
ENH242 American Literature After 18603
GCU/POS113 United States and Arizona Social Studies (3) OR
HIS103 United States History to 1865 (3) AND
POS221 Arizona Constitution (1) OR
POS110 American National Government (3) AND
POS221 Arizona Constitution (1) OR
POS220 U.S. and Arizona Constitution (3) OR
POS221 Arizona Constitution (1) AND
POS222 U.S. Constitution (2) 3-4
Foreign Language
Credits: 0-20
Complete a language course at the intermediate level (202 or equivalent), including American Sign Language IV with a 'C' or better OR demonstrate proficiency through this level as indicated by assessment.
ARB+++++ Any ARB Arabic course(s)
\(\mathrm{CHI}+++++\quad\) Any CHI Chinese course(s)
FRE +++++ Any FRE French course(s)
GER+++++ Any GER German course(s)
ITA+++++ Any ITA Italian course(s)
JPN+++++ Any JPN Japanese course(s)
SPA+++++ Any SPA Spanish course(s)
SLG+++++ Any SLG Sign Language course(s)

\section*{Transfer Plan 5: Arizona State University (New College of Interdisciplinary Arts and Sciences), Bachelor of Arts, English (Secondary Education)}

Take one of the following courses. This course may be used to fulfill the [CS] requirement.
BPC110 Computer Usage and Applications (3) OR
CIS105 Survey of Computer Information Systems (3) OR
CSC180 Computer Literacy (3) OR
CSC180AA Computer Literacy (3) OR
CSC180AB Computer Literacy (4) 3-4
EDU222 Introduction to the Exceptional Learner 3
Note that this course may be used to satisfy the [SB] requirement.
ENG200 Reading and Writing about Literature 3
Note that this course may be used to satisfy the [L] requirement.
ENG213 Introduction to the Study of Language (3) OR
SLC201
Introduction to Linguistics (3)
3
Note that this course may be used to satisfy the [SB] or [HU] requirement.
GCUIPOS113 AND HIS103 may be used to fulfill outstanding AGEC requirements simultaneously.

GCU/POS113 United States and Arizona Social Studies (3) OR
HIS103 United States History to 1865 (3) AND POS221 Arizona Constitution (1) 3-4

Literature and Culture
Credits: 9
Select three (3) of the four (4) courses listed below. Courses may be used to simultaneously fulfill any outstanding AGEC requirements.
ENH221 Survey of English Literature Before 18003
ENH222 Survey of English Literature After 18003
ENH241 American Literature Before 1860 3
ENH242 American Literature After 18603
ENH221 Survey of English Literature Before 1800 (3) OR
ENH241 American Literature Before 1860 (3) 3
ENH222 Survey of English Literature After 1800 (3) OR
ENH242 American Literature After 1860 (3) 3
English Electives
Credits: 0-6
Select up to (2) courses that transfer to ASU as 200-level direct equivalents or departmental electives with the ENG prefix. Courses may be used to simultaneously fulfill any outstanding AGEC requirements.

\section*{Transfer Plan 6: Northern Arizona University, Bachelor of Science in Education, Secondary Education - English}

EDU221 Introduction to Education 3
Note that this course may be used to satisfy the [SB] requirement.
ENG205 Nature of Poetry 3
ENH190 Introduction to US Ethnic Literature 3
ENH221 Survey of English Literature Before 1800 (3) OR
ENH222 Survey of English Literature After 1800 (3) 3
Note that this course may be used to satisfy the [HU] requirement.
ENH241 American Literature Before 1860 (3) OR
ENH242
American Literature After 1860 (3)
Note that this course may be used to satisfy the [HU] requirement.

GCUIPOS113 AND HIS103 may be used to fulfill outstanding AGEC requirements simultaneously.
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
Note: Students must petition NAU to accept GCUIPOS113 OR (HIS103 and POS221) for POS220.

Foreign Language
Credits: 0-10
Complete a language course at the elementary level (102 or equivalent), including American Sign Language II with a 'C' or better OR demonstrate proficiency through this level as indicated by assessment.
ARB+++++ Any ARB Arabic course(s)
CHI+++++ Any CHI Chinese course(s)
FRE+++++ Any FRE French course(s)
GER+++++ Any GER German course(s)
ITA+++++ Any ITA Italian course(s)
JPN+++++ Any JPN Japanese course(s)
SPA+++++ Any SPA Spanish course(s)
SLG+++++ Any SLG Sign Language course(s)

\section*{Transfer Plan 7: Arizona State University (Mary Lou Fulton Teachers College), Bachelor of Arts in Education, Secondary Education (History)}

Take one of the following courses. This course may be used to fulfill the [CS] requirement.
BPC110 Computer Usage and Applications (3) OR
CIS105 Survey of Computer Information Systems (3) OR
CSC180 Computer Literacy (3) 3
CFS/ECH176 Child Development 3
EDU221 Introduction to Education 3
Note that this course may be used to satisfy the [SB] requirement.
EDU222 Introduction to the Exceptional Learner 3
EDU230 Cultural Diversity in Education 3
HIS103 United States History to 18653
Note that this course may be used to satisfy the [HU] requirement.
HIS104 United States History 1865 to Present 3
Note that this course may be used to satisfy the [SB]
requirement.
POS221 Arizona Constitution
History Elective
Credits: 6
Students should select two (2) courses for a total of six
(6) credits from the following:

HIS100 History of Western Civilization to Middle Ages
HIS101 History of Western Civilization Middle Ages to 1789
HIS102 History of Western Civilization 1789 to Present
HIS110 World History to 15003
HIS111 World History 1500 to the Present 3
HIS253 History of Ireland to 16033
HIS254 History of Ireland 1603 to the Present 3

Related Area Course
Credits: 6
Complete six (6) credits of coursework that transfer to ASU as direct equivalencies or departmental electives in the following ASU course prefixes: ECN, GCU, POS. These courses may be used to fulfill any outstanding AGEC requirements simultaneously.

\section*{Transfer Plan 8: Arizona State University (College of Liberal Arts and Sciences), Bachelor of Arts, History (Secondary Education)}

Take one of the following courses.
This course may be used to fulfill the [CS] requirement.
BPC110 Computer Usage and Applications (3) OR
CIS105 Survey of Computer Information Systems (3) OR
CSC180 Computer Literacy (3) OR
CSC180AA Computer Literacy (3) OR
CSC180AB Computer Literacy (4) 3-4
EDU222 Introduction to the Exceptional Learner 3 Note that this course may be used to satisfy the [SB] requirement.
HIS103 United States History to 18653 Note that this course may be used to satisfy the [HU] requirement.
HIS104 United States History 1865 to Present 3 Note that this course may be used to satisfy the [SB] requirement.
HIS110 World History to 15003
HIS111 World History 1500 to the Present 3
Note that this course may be used to satisfy the [HU] requirement.
POS221 Arizona Constitution

\section*{Foreign Language}

Credits: 0-20
Complete a language course at the intermediate level (202 or equivalent), including American Sign Language IV with a 'C' or better OR demonstrate proficiency through this level as indicated by assessment.
ARB+++++ Any ARB Arabic course(s)
CHI+++++ Any CHI Chinese course(s)
FRE+++++ Any FRE French course(s)
GER+++++ Any GER German course(s)
ITA+++++ Any ITA Italian course(s)
JPN+++++ Any JPN Japanese course(s)
SPA+++++ Any SPA Spanish course(s)
SLG+++++ Any SLG Sign Language course(s)
Transfer Plan 9: Arizona State University (New College of Interdisciplinary Arts and Sciences), Bachelor of Arts, History (Secondary Education)
Take one of the following courses.
\begin{tabular}{|c|c|}
\hline BPC110 & Computer Usage and Applications (3) OR \\
\hline CIS105 & Survey of Computer Information Systems (3) OR \\
\hline CSC180 & Computer Literacy (3) OR \\
\hline CSC180AA & Computer Literacy (3) OR \\
\hline CSC180AB & Computer Literacy (4) 3-4 \\
\hline EDU221 & Introduction to Education (3) OR \\
\hline EDU222 & Introduction to the Exceptional Learner (3)3 Note that this course may be used to satisfy the [SB] requirement. \\
\hline HIS103 & \begin{tabular}{l}
United States History to 1865 \\
Note that this course may be used to satisfy the [HU] or [SB] requirement.
\end{tabular} \\
\hline HIS104 & United States History 1865 to Present Note that this course may be used to satisfy the [SB] requirement. \\
\hline HIS110 & \begin{tabular}{l}
World History to 1500 \\
Note that this course may be used to satisfy the [HU] requirement.
\end{tabular} \\
\hline HIS111 & World History 1500 to the Present Note that this course may be used to satisfy the [HU] requirement. \\
\hline OS221 & Arizona Constitution \\
\hline
\end{tabular}

\section*{Related Area Course}

Credits: 0-6
Complete up to six (6) credits of coursework that transfer to ASU as direct equivalencies or departmental electives in the following ASU course prefixes: AMS, ENG, ETH, HRC, HST, JHR, LAS, PAX, PHI, REL, SPA. These courses may be used to fulfill any outstanding AGEC requirements simultaneously.

\section*{Transfer Plan 10: Northern Arizona University, Bachelor of Science in Education, Secondary Education - History and Social Studies}

EDU221 Introduction to Education 3
Note that this course may be used to satisfy the [SB] requirement.
GCU121 World Geography I: Eastern Hemisphere (3) OR
GCU122 World Geography II: Western Hemisphere (3) 3
HIS103 United States History to 18653
Note that this course may be used to satisfy the [HU] requirement.
HIS104 United States History 1865 to Present 3
Note that this course may be used to satisfy the [SB] requirement.
HIS110 World History to 15003
HIS111 World History 1500 to the Present 3
Note that this course may be used to satisfy the [HU] requirement.
\(\left.\begin{array}{lll}\text { POS221 } & \begin{array}{l}\text { Arizona Constitution } \\ \text { Note: Students must petition NAU to accept GCUI }\end{array} & 1 \\ & \begin{array}{ll}\text { POS113, OR (HIS103 and POS221) for POS220. }\end{array} \\ \text { GPH111 } & \text { Introduction to Physical Geography Lecture (3) }\end{array}\right]\)

Transfer Plan 11: Arizona State University (Mary Lou Fulton Teachers College), Bachelor of Arts in Education, Secondary Education
(Mathematics)
CFS/ECH176 Child Development
CIS163AA Java Programming: Level I (3)
CSC100 Introduction to Computer Science (C++) (3) OR
CSC100AB 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
CSC150 Programming in C/C++ (3) OR
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)
This course may be used to fulfill the [CS] requirement.
EDU221 Introduction to Education Note that this course may be used to satisfy the [SB] requirement.
EDU222 Introduction to the Exceptional Learner
Note that this course may be used to satisfy the [SB] requirement.
EDU230 Cultural Diversity in Education 3
GCU/POS113 United States and Arizona Social Studies (3) OR
HIS103 United States History to 1865 (3) AND
POS221 Arizona Constitution (1) 3-4
Course(s) may be used to fulfill outstanding AGEC requirements simultaneously.
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
MAT276 Modern Differential Equations (4) OR
MAT277
Modern Differential Equations (3)
3-4
Transfer Plan 12: Arizona State University (College of Liberal Arts and Sciences), Bachelor of Science, Mathematics (Secondary Education)
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) 3-4

This course may be used to fulfill the [CS] requirement.
EDU222 Introduction to the Exceptional Learner 3
Note that this course may be used to satisfy the [SB] requirement.
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) OR
POS221 Arizona Constitution (1) AND
POS222 U.S. Constitution (2) 3-4
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
MAT262 Differential Equations (3) OR
MAT276 Modern Differential Equations (4) OR
MAT277 Modern Differential Equations (3)

\section*{Transfer Plan 13: Northern Arizona University, Bachelor of Science in Education, Secondary Education - Mathematics}

Take one of the following courses. This course may be used to fulfill the [CS] requirement.
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) 3-4
CSC120 Digital Design Fundamentals 4
CSC205 Object Oriented Programming and Data Structures (3) OR
CSC205++ Object Oriented Programming and Data Structures (3-4)

3-4

CSC/EEE220 Programming for Computer Engineering 3
EDU221 Introduction to Education (3) OR
EDU222 Introduction to the Exceptional Learner (3)3
Note that this course may be used to satisfy the [SB] requirement.
GCU/POS113 AND HIS103 may be used to fulfill outstanding AGEC
requirements simultaneously.
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
Note: Students must petition NAU to accept GCU/POS113 OR (HIS103 and POS221) for POS220.
MAT206 Elements of Statistics 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
MAT262 Differential Equations (3) OR
MAT276 Modern Differential Equations (4) OR
MAT277 Modern Differential Equations (3) 3-4
Transfer Plan 14: Arizona State University (Mary Lou Fulton Teachers College), Bachelor of Arts in Education, Secondary Education (Physical Education)
BIO181 General Biology (Majors)। 4
Note that this course may be used to satisfy the [SQ] requirement.
BIO201 Human Anatomy and Physiology I 4
Note that this course may be used to satisfy the [SG] requirement.
BIO202 Human Anatomy and Physiology II 4
CFS/ECH176 Child Development
Take one of the following courses.
This course may be used to fulfill the [CS] requirement.
CIS105 Survey of Computer Information Systems (3) OR
CSC180 Computer Literacy (3) OR
CSC180AA Computer Literacy (3) OR
CSC180AB Computer Literacy (4) 3-4
EDU221 Introduction to Education 3
Note that this course may be used to satisfy the [SB] requirement.
EDU222 Introduction to the Exceptional Learner 3 Note that this course may be used to satisfy the [SB] requirement.
EDU230
Cultural Diversity in Education

EXS101 Introduction to Exercise Science 3
EXS125 Introduction to Exercise Physiology 3
EXS214 Instructional Competency: Flexibility and Mind-Body Exercises

2
EXS216 Instructional Competency: Muscular Strength and Conditioning 2
EXS218 Instructional Competency:
Cardiorespiratory Exercises and Activities 2
GCU/POS113 United States and Arizona Social Studies (3) OR
HIS103 United States History to 1865 (3) AND
POS221 Arizona Constitution (1) 3-4
HES100 Healthful Living 3

\section*{Transfer Plan 15: Northern Arizona University, Bachelor of Science in Education, Health Sciences - Physical Education}
\begin{tabular}{llr} 
BIO181 & \begin{tabular}{l} 
General Biology (Majors) I \\
Note that this course may be used to satisfy the [SQ] \\
requirement.
\end{tabular} \\
BIO201 & \begin{tabular}{l} 
Human Anatomy and Physiology I \\
Note that this course may be used to satisfy the [SG]
\end{tabular} \\
EDU221 & \begin{tabular}{l} 
requirement. \\
Introduction to Education
\end{tabular} \\
& \begin{tabular}{l} 
Note that this course may be used to satisfy the [SB] \\
requirement.
\end{tabular} \\
EXS101 & \begin{tabular}{l} 
Introduction to Exercise Science
\end{tabular} \\
FON241 & \begin{tabular}{l} 
Principles of Human Nutrition
\end{tabular} & 3
\end{tabular}

> GCU/POS113 AND HIS103 may be used to fulfill outstanding AGEC \(\begin{array}{lll}\text { requirements simultaneously. } \\ \text { GCU/POS113 United States and Arizona Social Studies (3) OR } \\ \text { HIS103 } & \text { United States History to } 1865 \text { (3) AND } & \\ \text { POS221 } & \text { Arizona Constitution (1) OR } & \\ \text { POS220 } & \text { U.S. and Arizona Constitution (3) } & 3-4 \\ \text { Note: Students must petition NAU to accept GCU/POS113 OR } & \\ \text { (HIS103 and POS221) for POS220. }\end{array}\)

HES100 Healthful Living 3
Note that this course may be used to satisfy the [SB] requirement.
Transfer Plan 16: Arizona State University (Mary
Lou Fulton Teachers College), Bachelor of Arts
in Education, Secondary Education (Political
Science)
Take one of the following courses.
This course may be used to fulfill the [CS] requirement.
BPC110 Computer Usage and Applications (3) OR
CIS105 Survey of Computer Information Systems (3) OR
\begin{tabular}{|c|c|}
\hline CSC180 & Computer Literacy (3) OR \\
\hline CSC180AA & Computer Literacy (3) \\
\hline \multicolumn{2}{|l|}{CFS/ECH176 Child Development} \\
\hline EDU221 & Introduction to Education \\
\hline & Note that this course may be used to satisfy the [SB] requirement. \\
\hline \multirow[t]{3}{*}{EDU222} & Introduction to the Exceptional Learner 3 \\
\hline & Note that this course may be used to satisfy the [SB] \\
\hline & requirement. \\
\hline EDU230 & Cultural Diversity in Education \\
\hline GCU/POS113 & United States and Arizona Social Studies (3) OR \\
\hline HIS103 & United States History to 1865 (3) AND \\
\hline POS221 & Arizona Constitution (1) OR \\
\hline POS220 & U.S. and Arizona Constitution (3) 3-4 \\
\hline POS110 & American National Government \\
\hline POS120 & World Politics (3) OR \\
\hline POS140 & Comparative Government (3) \\
\hline POS210 & Political Ideologies \\
\hline
\end{tabular}

History Elective
Credits: 3
Select one (1) course that transfers to ASU as HST Direct Equivalency or Department Elective with HU General Studies designation. This course will count towards the 12 total credit hours for Related Area requirement.
HIS+++ Any History course

\section*{Political Science Elective}

Credits: 6
Select six (6) credits of coursework that transfer to ASU as direct equivalencies or departmental electives in the POS prefix.
POS+++++ Any POS Political Science course(s)
Transfer Plan 17: Arizona State University (Mary Lou Fulton Teachers College), Bachelor of Arts in Education, Secondary Education (Spanish)
Take one of the following courses.
This course may be used to fulfill the [CS] requirement.
BPC110 Computer Usage and Applications (3) OR
CIS105 Survey of Computer Information Systems (3) OR
CSC180 Computer Literacy (3) OR
CSC180AA Computer Literacy (3) 3
CFS/ECH176 Child Development 3
EDU221 Introduction to Education 3
Note that this course may be used to satisfy the [SB] requirement.
EDU222 Introduction to the Exceptional Learner 3
Note that this course may be used to satisfy the [SB] requirement.
EDU230
Cultural Diversity in Education

ENG213 Introduction to the Study of Language (3) OR
SLC201 Introduction to Linguistics (3) 3
Note that this course may be used to satisfy the [HU] requirement.
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
SPA201 Intermediate Spanish I (4) OR
SPA203 Spanish for Spanish Speaking Students I (4) 4
SPA202 Intermediate Spanish II (4) OR
SPA204 Spanish for Spanish Speaking Students II (4) 4

\section*{Transfer Plan 18: Northern Arizona University, Bachelor of Science in Education, Secondary Education-Spanish}

EDU221 Introduction to Education 3
Note that this course may be used to satisfy the [SB] requirement.
GCU/POS113 AND HIS103 may be used to fulfill outstanding AGEC requirements simultaneously.
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
Note: Students must petition NAU to accept GCU/POS113 OR (HIS103 and POS221) for POS220.
SPA202 Intermediate Spanish II (4) OR
Proficiency as indicated by assessment (0)
General Education Requirements Credits: 9-46
Arizona General Education Curriculum (AGEC) AGEC-A 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 Area ([C], [G] and/ or \([\mathrm{H}]\) ) requirement(s). See the AGEC matrix for course designations.

\section*{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

\section*{Literacy and Critical Inquiry [L] Credits: 0-3}

May be met by specific subplan option selections.
Any approved general education course in the Literacy and Critical Inquiry [L] area.

0-3

\section*{Mathematics [MA]}

Credits: 3-8
Required for English, History, Physical Education, Political Science, and Spanish Transfer Plan:
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)
Required for NAU Earth Science Transfer Plan:
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
MAT1 55 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
Any approved general education course in the Mathematical Applications [MA] area for which MAT187 is a prerequisite. (4-5)
Required for ASU Earth Science Transfer Plan:
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) OR
Any approved general education course in the Mathematical Applications [MA] area for which MAT22+ is a prerequisite. (4-5)
Required for Mathematics Transfer Plan:
MAT220 Calculus with Analytic Geometry I (5) OR
MAT221 Calculus with Analytic Geometry I (4) OR
Any approved general education course in the Mathematical Applications [MA] area for which MAT22+ is a prerequisite. (4-5)

Computer/Statistics/Quantitative
Applications [CS]
Credits: 0-3
May be met by specific Transfer Plan option selections.
Any approved general education course in the Computer/Statistics/Quantitative Applications [CS] area. 0-3
Humanities, Arts and Design [HU] Credits: 0-6 May be met by specific Transfer Plan option selections.

Any approved general education courses in the Human-
ities, Arts and Design [HU] area.
0-6
Social-Behavioral Sciences [SB] Credits: 0-6
May be met by specific Transfer Plan option selections. Any approved general education courses in the So-
cial-Behavioral Sciences [SB] area.
0-6

\section*{Natural Sciences [SG]/[SQ] \\ Credits: 0-8}

May be met by specific Transfer Plan option selections.
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).

0-8

\section*{Awareness Areas}

Credits: 0-6
These requirements may be shared with Core Requirements.

\section*{Cultural Diversity in the US [C] \\ Credits: 0-3}

Historical/Global Awareness [H]/[G] Credits: 0-3
Any approved general education course with the Historical \([\mathrm{H}]\) or Global [G] awareness area designation. 0-3
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 transferable credits, it is recommended that courses be selected that meet more than one requirement wherever possible.

\section*{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

\section*{Critical Reading}

Credits: 0-3
\(\begin{array}{ll}\text { CRE101 } & \text { Critical Reading and Critical Thinking (3) OR } \\ & \text { Equivalent as indicated by assessment (0) } 0-3\end{array}\)

\title{
Associate in Arts (AA), Emphasis in Social Work
}

\author{
Total Credits: 60-75 \\ Major Code: 8117
}

\section*{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.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better in each course in the program.

\section*{Required Courses \\ Credits: 21 \\ SWU171 Introduction to Social Welfare 3}

SWU291 Social Service Delivery Systems 3
SWU295 Effective Helping in a Diverse World 3
SWU181 Economics: A Social Issues Perspective (3) OR
ECN211 Macroeconomic Principles (3) 3
PSY101 Introduction to Psychology (3) OR
SOC101 Introduction to Sociology (3)
SWU182 A Social Services Perspective of Government (3) OR
POS110 American National Government (3)
3
SWU183 Introductory Ethics: A Social Service Perspective (3) OR
PHI101 Introduction to Philosophy (3) OR
PHI105 Introduction to Ethics (3)

\section*{Restricted Electives}

Credits: 0-20
Complete all courses in the subplan that best aligns with academic and professional goals. If academic and professional goals do not align with any of the subplans below, select elective courses in consultation with an academic, faculty, or program advisor.

\section*{Arizona State University Culture or Language Requirement}

Students must complete three courses in cultural diversity OR completion of language courses at intermediate level (202 or equivalent). College Level Examination Program (CLEP) will satisfy language requirement, if 202 level
language proficiency is met. Credits must be transferred to ASU Admissions. Cultural Diversity courses can be found in the Course Equivalency Guide.
Complete nine approved general education credits in the Cultural Diversity in the US [C] area. 9
OR
Requirement can be satisfied with fewer than 9 credits ONLY if 202 level language proficiency is met (prior to transfer) through coursework, College Level Examination Program (CLEP), or ASU proficiency exams.
ARB++++++ any ARB/Arabic course
CHI+++++ any CHI/Chinese course
FRE+++++ any FRE/French course
GER+++++ any GER/German course
ITA+++++ any ITA/Italian course
JPN+++++ any JPN/Japanese course
SPA+++++ any SPA/Spanish course
SLG+++++ any SLG/Sign Language
General Education Requirements Credits: 26-34
Arizona General Education Curriculum (AGEC) AGEC-A
A single course with an [HU], [SB], or [L] designation(s) may also be used to satisfy the Oral Communication, Critical Reading, or Awareness Area ([C], [G] and/or [H]) requirement(s).

\section*{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.

\section*{Mathematics [MA]}

Credits: 3-5
\(\begin{array}{ll}\text { MAT140 } & \text { College Mathematics (5) OR } \\ \text { MAT141 } & \text { College Mathematics (4) OR } \\ \text { MAT142 } & \text { College Mathematics (3) }\end{array}\)
3-5

\section*{Computer/Statistics/Quantitative Applications [CS]}

\section*{Credits: 3}

Any approved general education course in the Computer, Statistics, and Quantitative Applications [CS] area.
(Recommend SWU225 Statistics for Social Research/Justice and Government 3)

Humanities, Arts and Design [HU]
Credits: 3
Met by SWU183, PHI101, or PHI105 in Required Courses Area AND

Any approved general education course in the Humanities, Arts, and Design [HU] area.

\section*{Social-Behavioral Sciences [SB] \\ Credits: 0}

Met by (SWU182 OR POS110) AND (PSY101 OR SOC101) in the Required Courses Area.

\section*{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).

\section*{Awareness Areas}

Credits: 0
These requirements may be shared with Core Requirements.

\section*{Cultural Diversity in the US [C]}

Credits: 0
Historical/Global Awareness [H]/[G] Credits: 0
Met by SWU171 in the Required Courses Area.
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 transferable credits, it is recommended that courses be selected that meet more than one requirement wherever possible.

\section*{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 Critical Reading and Critical Thinking (3) OR
Equivalent as indicated by assessment (0) 0-3

\section*{Associate in Arts (AA), Emphasis in Spanish}

\section*{Total Credits: 60-64 \\ Major Code: 8129}

\section*{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 and Spanish Culture are also available.

\section*{Program Notes}

Students must earn a grade of 'C' or better in each course in 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
Credits: 3-19
ENG213 Introduction to the Study of Language (3) OR
SLC201 Introduction to Linguistics (3) 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 Intermediate Spanish I (4) OR Proficiency as indicated by assessment (0) 0-4 Intermediate Spanish II (4) OR Proficiency as indicated by assessment (0) 0-4

Restricted Electives
Credits: 6-10
Complete all courses in the subplan that best aligns with academic and professional goals. If academic and professional goals do not align with any of the subplans below, select elective courses in consultation with an Academic, Faculty, or Program Director.
Subplan 1: Academic Certificate in Spanish and
Spanish 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
GCU223 Geography of Latin America 3
HIS145 History of Mexico 3
MHL156 Music in Latin America and the Caribbean 3
SLC201 Introduction to Linguistics 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
SPA217 Spanish for Business Communication 4
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
\(\begin{array}{lll}\text { SPA282++ } & \text { Volunteerism for Spanish: A Service } \\ & \text { Learning Experience (any suffixed course) } & 1-3\end{array}\)
SPA298++ Special Projects (any suffixed course) 1-3
SPH245 Hispanic Heritage in the Southwest 3
SPH298++ Special Projects (any suffixed course) 1-3

\section*{Subplan 2: Academic Certificate in Language Studies (6237N)}
*Note: This certificate may/may not be offered at each college. Select six to ten credits from the list 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
AHU+++ Any AHU Arabic Humanities course(s)
ARB+++ Any ARB Arabic 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)
SLG+++ Any SLG Sign Language 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 Credits: 32-41
Arizona General Education Curriculum (AGEC) AGEC-A 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 Area ([C], [G] and/ or \([\mathrm{H}]\) ) requirement(s). See the AGEC matrix for course designations.
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

\section*{Literacy and Critical Inquiry [L]}

Credits: 3
Any approved general education course in the Literacy and Critical Inquiry [L] area.
COM225 recommended for students who are CRE101 exempt.

\section*{Mathematics [MA]}

Credits: 3-6
\(\begin{array}{ll}\text { MAT140 } & \text { College Mathematics (5) OR } \\ \text { MAT141 } & \text { College Mathematics (4) OR } \\ \text { MAT142 } & \text { College Mathematics (3) OR }\end{array}\)
Any approved general education course in the Mathematical Applications [MA] area (3-6)

\section*{Computer/Statistics/Quantitative}

Applications [CS]
Credits: 3
Any approved general education course in the Computer/Statistics/Quantitative Applications [CS] area.

\section*{Humanities, Arts and Design [HU] Credits: 3-6}

Any approved general education courses in the Humanities, Arts and Design [HU] area
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

\section*{Social-Behavioral Sciences [SB] \\ Credits: 3-6}

Any approved general education course in the Social-Behavioral Sciences [SB] area 6

May be met by ENG213 OR SLC201 in Required Courses 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).

\section*{Awareness Areas}

Credits: 0-6
These requirements may be shared with Core Requirements.

\section*{Cultural Diversity in the US [C]}

Credits: 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 May be met by SPA201 or SPA202 in Required Courses
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 transferable credits, it is recommended that courses be selected that meet more than one requirement wherever possible.

\section*{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 Critical Reading and Critical Thinking (3) OR Equivalent as indicated by assessment (0) 0-3

\title{
Associate in Arts (AA), Emphasis in Sustainability and Environmental Studies
}

\author{
Total Credits: 60-64 \\ Major Code: 8123
}

\section*{Description}

The Associate in Arts (AA), Emphasis in Sustainability and Environmental Studies program 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.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better in all courses in 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 in Sustainability are noted.

Required Courses Credits: 10-15
Note: Required Courses may be used to fulfill AGEC requirements simultaneously.
SSH111 Sustainable Cities

Students must also select a transfer area below that best aligns with academic and professional goals.

Transfer Area: Sustainability
\begin{tabular}{llr} 
SUS110 & Sustainable World & 3 \\
SUS231 & Careers in Sustainability & 1 \\
SUS232 & Professional Skills in Sustainability Practice3
\end{tabular}

SUS232 Professional Skills in Sustainability Practice 3
Transfer Area: Environmental Science or Natural Resources
CHM150 General Chemistry I (4) AND
CHM151LL General Chemistry I Laboratory (1) OR
CHM150AA General Chemistry I (5) OR
CHM151 General Chemistry I (3) AND
CHM151LL General Chemistry I Laboratory (1) OR
CHM151AA General ChemistryI (4) 4-5
CHM152 General Chemistry II (3) AND
CHM152LL General Chemistry II Laboratory (1) OR
CHM152AA General Chemistry II (4)
GBS221 Business Statistics (3) OR
MAT206 Elements of Statistics (3) OR
PSY230 Introduction to Statistics (3)
Note: For students transferring to ASU, select MAT206 or GBS221; for students transferring to NAU, select MAT206; for students transferring to \(U\) of A, select MAT206 or PSY230.

\section*{Restricted Electives}

Credits: 0-33
Complete all courses in the transfer option that best aligns with your academic and professional goals. If your intended transfer institution is not listed, then select a combination of courses from the transfer options listed in order to meet the minimum credits required in the Restricted Electives section. Consult with an academic, faculty, or program advisor to prevent exceeding your university transfer program's maximum transferable credits (typically 64).

\section*{Transfer Plan 1: Arizona State University (School of Sustainability), Bachelor of Science, Sustainability}

Foreign Language
Credits: 0-10
Complete a language course at the elementary level (102 or equivalent), including American Sign Language IV with a 'C' or better OR demonstrate proficiency through this level as indicated by assessment.
ARB+++++ Any ARB Arabic course(s)

CHI+++++ Any CHI Chinese course(s)
FRE+++++ Any FRE French course(s)
GER+++++ Any GER German course(s)
ITA+++++ Any ITA Italian course(s)
JPN+++++ Any JPN Japanese course(s)
SPA+++++ Any SPA Spanish course(s)
SLG+++++ Any SLG Sign Language course(s)

\section*{Transfer Plan 2: Arizona State University (School of Sustainability), Bachelor of Arts, Sustainability}

Statistics Course
Credits: 3
These courses may be used to fulfill any outstanding
AGEC requirements simultaneously.
GBS221 Business Statistics (3) OR
MAT206 Elements of Statistics (3) OR
PSY230 Introduction to Statistics (3) OR
SWU225 Statistics for Social Research/Justice and Government (3)

3
Foreign Language
Credits: 0-20
Complete a language course at the intermediate level
(202 or equivalent), including American Sign Language IV with a 'C' or better OR demonstrate proficiency through this level as indicated by assessment.
ARB+++++ Any ARB Arabic course(s)
CHI+++++ Any CHI Chinese course(s)
FRE+++++ Any FRE French course(s)
GER+++++ Any GER German course(s)
ITA+++++ Any ITA Italian course(s)
JPN+++++ Any JPN Japanese course(s)
SPA+++++ Any SPA Spanish course(s)
SLG+++++ Any SLG Sign Language course(s)
\begin{tabular}{llr} 
Transfer Plan 3: Arizona State University (New \\
College of Interdisciplinary Arts and Sciences), \\
Environmental Science, Bachelor of Arts & \\
BIO181 & General Biology (Majors) I (4) OR & \\
BIO181XT & General Biology (Majors) I (5) & \(4-5\) \\
BIO182 & General Biology (Majors) II & 4 \\
CHM230 & Fundamental Organic Chemistry & 3 \\
CHM230LL & Fundamental Organic Chemistry Laboratory & 1 \\
ECN212 & Microeconomic Principles & 3 \\
& Note that this course may be used to fulfill any out \\
& standing AGEC requirements simultaneously. & \\
GLG101 & Introduction to Geology I - Physical Lecture (3) & \\
& AND & \\
GLG103 & Introduction to Geology I - Physical Lab (1) OR & \\
GLG101IN & Introduction to Geology I - Physical (4) & 4
\end{tabular}

Transfer Plan 3: Arizona State University (New College of Interdisciplinary Arts and Sciences), Environmental Science, Bachelor of Arts

GPH210 Society and Environment 3
MGT246 Principles of Project Management (3) OR
TQM240 Project Management in Quality Organizations (3)3
PHY101 Introduction to Physics (4) OR
PHY101AA Introduction to Physics (5) 4-5
Social Science and Humanities Elective Credits: 1-3 Select one course to fulfill ASU's Social Science and Humanities Electives. The course may be used to fulfill any outstanding AGEC requirements simultaneously.
ECN211 Macroeconomic Principles
HON201 Leadership Development: Historical Contemporary Perspectives
MGT229 Management and Leadership I
POS110 American National Government
SUS230 Practical Skills for Sustainability Problem Solving
Transfer Plan 4: Arizona State University (New College of Interdisciplinary Arts and Sciences), Environmental Science, Bachelor of Science
BIO181 General Biology (Majors) I (4) OR
BIO181XT General Biology (Majors)I (5) 4-5
BlO182 General Biology (Majors)II 4
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)
GLG101 Introduction to Geology I -
Physical Lecture (3) AND
GLG103 Introduction to Geology I Physical Lab (1) OR
GLG101IN Introduction to Geology I Physical (4)
PHY101 Introduction to Physics (4) OR
PHY101AA Introduction to Physics (5)
4-5
Track Focus Elective Course
Credits: 1-4
Select one to four (1-4) credits of coursework to fulfill
ASU's Track Focus Elective Course requirement. Course(s)
may be used to fulfill any outstanding AGEC require-
ments simultaneously.
Business/Leadership Focus Area:
HON201 Leadership Development: Historical Contemporary Perspectives
MGT229 Management and Leadership I 3
MGT246 Principles of Project Management 3
TQM240 Project Management in Quality Organizations

SUS230 Practical Skills for Sustainability
 Problem Solving

Ecosystem/Global Change Focus Area:
SUS110 Sustainable World
Chemistry/Toxicology Focus Area:
CHM236 General Organic Chemistry IIA (3) AND
CHM236LL General Organic Chemistry IIA Laboratory (1) 4
Transfer Plan 5: Northern Arizona University,
Environmental Sciences (Environmental Geology), Bachelor of Science
CIS105 Survey of Computer Information Systems (3) OR
CSC180 Computer Literacy (3) 3
GIS211 Geographic Information Science I 4
GLG101 Introduction to Geology I - Physical Lecture (3) AND
GLG103 Introduction to Geology I - Physical Lab (1) OR
GLG101IN Introduction to Geology I - Physical (4) 4
GLG102 Introduction to Geology II Historical Lecture (3) AND
GLG104 Introduction to Geology || - Historical Lab (1) OR
GLG102IN Introduction to Geology II - Historical (4) 4
MAT230 Calculus with Analytic Geometry II (5) OR
MAT231 Calculus with Analytic Geometry II (4) 4-5
PHY115 University Physics I (5) OR
PHY121 University Physics I: Mechanics (4) 4-5

\section*{Transfer Plan 6: Northern Arizona University, Environmental Sciences (Applied Statistics), Bachelor of Science}

BIO181 General Biology (Majors) I (4) OR
BIO181XT General Biology (Majors)I (5) 4-5
BIO182 General Biology (Majors) II 4
BIO205 Microbiology 4
CSC110AB Introduction to Computer Science (Java) 4
CIS105 Survey of Computer Information Systems (3) OR
CSC180 Computer Literacy (3) 3
GIS211 Geographic Information Science I 4
MAT230 Calculus with Analytic Geometry II (5) OR
MAT231 Calculus with Analytic Geometry II (4) 4-5
\(\begin{array}{llr}\text { Transfer Plan 7: Northern Arizona University, } \\ \text { Environmental Sciences (Biology), Bachelor of } \\ \text { Science } & \\ \text { BIO181 } & \text { General Biology (Majors) I (4) OR } \\ \text { BIO181XT } & \text { General Biology (Majors) I (5) } & 4-5 \\ \text { BIO182 } & \text { General Biology (Majors) II } & 4 \\ \text { BIO205 } & \text { Microbiology } & 4\end{array}\)
\begin{tabular}{ll} 
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) 4
\end{tabular}

Select zero to seven (0-7) credits from the list below (excluding \(\mathrm{BIO} 100, \mathrm{BIO} 101, \mathrm{BIO102}, \mathrm{BIO108}, \mathrm{BIO} 56\), BIO156XT, CHM130, and ENV101).
BIO+++++ Any BIO Biology course(s)
CHM+++++ Any CHM Chemistry course(s)
ENV+++++ Any ENV Environmental Science course(s)
GLG+++++ Any GLG Geology course(s)
Transfer Plan 8: Northern Arizona University, Environmental Sciences (Chemistry), Bachelor of Science
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) 4
MAT230 Calculus with Analytic Geometry II (5) OR
MAT231 Calculus with Analytic Geometry II (4) 4-5
PHY115 University Physics I (5) OR
PHY121 University Physics I: Mechanics (4) 4-5
PHY116 University Physics II (5) OR
PHY131 University Physics II: Electricity and Magnetism (4)

Transfer Plan 9: Northern Arizona University, Environmental Sciences (Environmental
Administration and Policy), Bachelor of Science
BIO181 General Biology (Majors) I (4) OR
BIO181XT General Biology (Majors)I (5) 4-5
BIO182 General Biology (Majors) II
GLG101 Introduction to Geology I Physical Lecture (3) AND
GLG103 Introduction to Geology I Physical Lab (1) OR
GLG101IN Introduction to Geology I - Physical (4) 4
POS140 Comparative Government 3
Note that this course may be used to fulfill any outstanding AGEC requirements simultaneously. POS285 Political Issues and Public Policy 3

Transfer Plan 10: Northern Arizona University, Environmental Sciences (Environmental Communication), Bachelor of Science
BIO181 General Biology (Majors) I (4) OR
\begin{tabular}{llr} 
BIO181XT & General Biology (Majors) I (5) & \(4-5\) \\
BIO182 & General Biology (Majors) II & 4 \\
GLG101 & Introduction to Geology I - & \\
& Physical Lecture (3) AND \\
GLG103 & \begin{tabular}{l} 
Introduction to Geology I - \\
\\
GLG101IN \\
\\
\\
Physical Lab (1) OR \\
Physical (4)
\end{tabular} \\
JRN201 & News Writing (3) OR & \\
JRN215 & News Production (3) & 4 \\
COM225 & Public Speaking & 3 \\
\end{tabular}
\begin{tabular}{llr} 
Transfer Plan 11: Northern Arizona University, \\
Environmental Sciences (Environmental & \\
Management), Bachelor of Science & \\
BIO181 & General Biology (Majors) I (4) OR & \\
BIO181XT & General Biology (Majors) I (5) & \(4-5\) \\
BIO182 & General Biology (Majors) II & 4 \\
CIS105 & Survey of Computer Information Systems (3) OR \\
CSC180 & Computer Literacy (3) & 3 \\
ECN212 & Microeconomic Principles & 3 \\
GIS211 & Geographic Information Science I & 4
\end{tabular}

Environmental Management Emphasis Elective Credits: 9 Select three (3) of the following courses for a total of up to nine (9) credits. Course(s) may be used to fulfill any outstanding AGEC requirements credits simultaneously. COM230 Small Group Communication 3 ECN211 Macroeconomic Principles 3
PHI105 Introduction to Ethics 3
POS285 Political Issues and Public Policy 3

\section*{Transfer Plan 12: University of Arizona, Natural Resources, Bachelor of Science: Conservation Biology Emphasis or Ecology, Management, and Restoration of Rangelands Emphasis \\ \begin{tabular}{llr} 
BIO181 & General Biology (Majors)I (4) OR & \\
BIO181XT & General Biology (Majors)I (5) & \(4-5\) \\
BIO182 & General Biology (Majors) II & 4
\end{tabular}}

Foreign Language Credits: 0-10
Complete a language course at the elementary level (102 or equivalent), including American Sign Language IV with a 'C' or better OR demonstrate proficiency through this level as indicated by assessment.
ARB+++++ Any ARB Arabic course(s)
CHI+++++ Any CHI Chinese course(s)
FRE+++++ Any FRE French course(s)
GER+++++ Any GER German course(s)
ITA+++++ Any ITA Italian course(s)
\begin{tabular}{ll} 
JPN++++++ & Any JPN Japanese course(s) \\
SPA+++++ & Any SPA Spanish course(s) \\
SLG+++++ & Any SLG Sign Language course(s)
\end{tabular}

Transfer Plan 13: University of Arizona, Natural Resources, Bachelor of Science: Fisheries Conservation and Management Emphasis or Wildlife Conservation and Management Emphasis
\begin{tabular}{llr} 
BIO181 & General Biology (Majors) I (4) OR & \\
BIO181XT & General Biology (Majors) I (5) & \(4-5\) \\
BIO182 & General Biology (Majors) II & 4 \\
CHM235 & General Organic Chemistry I (3) AND & \\
CHM235LL & General Organic Chemistry I Laboratory (1) & \\
& OR \\
GLG101 & Introduction to Geology I - \\
& Physical Lecture (3) AND \\
GLG103 & Introduction to Geology I - Physical Lab (1) & \\
& OR & \\
GLG101 IN & Introduction to Geology I - Physical (4) OR \\
PHY111 & General Physics I (4) OR \\
PHY115 & University Physics I (5) OR & \\
PHY121 & University Physics I: Mechanics (4) & 4-5
\end{tabular}

Foreign Language
Credits: 0-10
Complete a language course at the elementary level (102 or equivalent), including American Sign Language IV with a 'C' or better OR demonstrate proficiency through this level as indicated by assessment.
ARB+++++ Any ARB Arabic course(s)
CHI+++++ Any CHI Chinese course(s)
FRE+++++ Any FRE French course(s)
GER+++++ Any GER German course(s)
ITA+++++ Any ITA Italian course(s)
JPN+++++ Any JPN Japanese course(s)
SPA+++++ Any SPA Spanish course(s)
SLG+++++ Any SLG Sign Language course(s)
Transfer Plan 14: University of Arizona, Natural
Resources, Bachelor of Science: Global Change
Ecology and Management Emphasis
BIO181 General Biology (Majors) I (4) OR
BIO181XT General Biology (Majors)I (5) 4-5
BIO182 General Biology (Majors)II 4
PHY111 General Physics I (4) OR
PHY115 University Physics I (5) OR
PHY121 University Physics I: Mechanics (4) 4-5
Foreign Language
Credits: 0-10
Complete a language course at the elementary level (102
or equivalent), including American Sign Language IV with a 'C' or better OR demonstrate proficiency through this level as indicated by assessment.
ARB+++++ Any ARB Arabic course(s)
CHI+++++ Any CHI Chinese course(s)
FRE+++++ Any FRE French course(s)
GER+++++ Any GER German course(s)
ITA+++++ Any ITA Italian course(s)
JPN+++++ Any JPN Japanese course(s)
SPA+++++ Any SPA Spanish course(s)
SLG+++++ Any SLG Sign Language course(s)

\section*{Transfer Plan 15: University of Arizona, \\ Natural Resources, Bachelor of Science: \\ Watershed Hydrology and Management Emphasis \\ BIO181 General Biology (Majors) I (4) OR \\ BIO181XT General Biology (Majors)I (5) 4-5 \\ BIO182 General Biology (Majors) II 4 \\ MAT230 Calculus with Analytic Geometry II (5) OR \\ MAT231 Calculus with Analytic Geometry II (4) 4-5 \\ PHY111 General Physics I (4) OR \\ PHY115 University Physics I (5) OR \\ PHY121 University Physics I: Mechanics (4) 4-5 \\ PHY112 General Physics II 4}

Foreign Language
Credits: 0-10
Complete a language course at the elementary level (102 or equivalent), including American Sign Language IV with a 'C' or better OR demonstrate proficiency through this
level as indicated by assessment.
ARB+++++ Any ARB Arabic course(s)
CHI+++++ Any CHI Chinese course(s)
FRE+++++ Any FRE French course(s)
GER+++++ Any GER German course(s)
ITA+++++ Any ITA Italian course(s)
JPN+++++ Any JPN Japanese course(s)
SPA+++++ Any SPA Spanish course(s)
SLG+++++ Any SLG Sign Language course(s)
General Education Requirements Credits: 12-41
Arizona General Education Curriculum (AGEC) AGEC-A
A single course with an [HU], [SB], or [L] designation may also be used to satisfy the Oral Communication, Critical Reading, or Awareness Area ([C], [G] and/or [H]) requirement(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) (3) 6

\section*{Literacy and Critical Inquiry [L]}

Credits: 3
Any approved general education course in the Literacy and Critical Inquiry [L] area.

\section*{Mathematics [MA]}

Credits: 3-9
Required for NAU, BS Environmental Sciences (Environmental Administration and Policy and Environmental Communication emphases):
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
Required for ASU, BS Sustainability; ASU, BA
Sustainability; U of A, BS Natural Resources (Fisheries
Conservation Management emphasis and Wildlife
Conservation and Management emphasis):
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
Any approved general education course in the
Mathematical Applications [MA] area for which
MAT15+ is a prerequisite (3-5)
Required for ASU, BS Environmental Science; ASU, BA Environmental Science; NAU, BS Environmental Sciences (Environmental Management emphasis):
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
Any approved general education course in the Mathematical Applications [MA] area for which MAT187 is a prerequisite. (4-5)

Required for U of A, BS Natural Resources (Biology; Ecology, Management, and Restoration of Rangelands; Fisheries Conservation Management; and Wildlife Conservation and Management emphases)
MAT212 Brief Calculus (3) OR
MAT213 Brief Calculus (4)
Required for NAU, BS Environmental Sciences (Environmental Geology, Applied Statistics, Biology, and Chemistry emphases); U of A, BS Natural Resources (Watershed Hydrology and Management emphasis):
MAT220 Calculus with Analytic Geometry I (5) OR
MAT221 Calculus with Analytic Geometry I (4) OR
Any approved general education course in the
Mathematical Applications [MA] area for which MAT22+ is a prerequisite. (4-5)

\section*{Computer/Statistics/Quantitative}

Applications [CS]
Credits: 0-3
May be met by CIS105, CSC110AB, CSC180, GBS221, GIS211, MAT206, PSY230, or SWU225 if taken in Required Courses or Restricted Electives area OR
Any approved general education course in the Computer/Statistics/Quantitative Applications [CS] area.

Humanities, Arts and Design [HU]
Credits: 0-3
Met by SSH111 in Required Courses area
AND
May be met by PHI105 in Restricted Electives area OR
Any approved general education course in the Humanities, Arts, and Design [HU] area.
Recommended for students intending to complete the Academic Certificate in Sustainability:
PHI216 Environmental Ethics
Social-Behavioral Sciences [SB]
Credits: 0-6
May be met by COM230, ECN211, ECN212, HON201,
MGT229, POS110, or SUS110 in Required Courses or Restricted Electives area
OR
Any approved general education courses in the So-cial-Behavioral Sciences [SB] area.

6
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)

\section*{Natural Sciences [SG]/[SQ] \\ Credits: 0-8}

May be met by [(CHM150 AND CHM151LL), or CHM150AA, or (CHM151 and CHM151 LL), or CHM151AA] AND [(CHM152 and CHM152LL) or CHM152AA] if taken in Required Courses area.
OR
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).

Recommended for students intending to complete the Academic Certificate in Sustainability:
BIO105 Environmental Biology (4) OR
CHM107 Chemistry and Society (3) AND
CHM107LL Chemistry and Society Laboratory (1) OR
GPH113 Introduction to Physical Geography (4) 4 AND
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 Core Requirements.

\section*{Cultural Diversity in the US [C]}

Credits: 0-3
Historical/Global Awareness [H]/[G] Credits: 0
Met by SSH111 in Required Courses area.
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 transferable credits, it is recommended that courses be selected that meet more than one requirement wherever possible.

\section*{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

\section*{Critical Reading}

Credits: 0-3
CRE101 Critical Reading and Critical Thinking (3) OR Equivalent as indicated by assessment (0) 0-3

\title{
Associate in Arts (AA), Emphasis in \\ Women in Gender Studies
}

\author{
Total Credits: 60-64 \\ Major Code: 8128
}

\section*{Description}

The Associate in Arts (AA), Emphasis in Women and Gender Studies degree 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.

\section*{Program Notes}

Students must earn a grade of ' C ' or better in each course in the program.

Required Courses
Credits: 3
WST100 Introduction to Women's and Gender Studies 3

\section*{Restricted Electives}

Credits: 0-36
Complete all courses in the transfer option that best aligns with your academic and professional goals. If your intended transfer institution is not listed, then select a combination of courses from the transfer options listed in order to meet the minimum credits required in the Restricted Electives section. Consult with an academic, faculty, or program advisor to prevent exceeding your uni-
versity transfer program's maximum transferable credits (typically 64).

\section*{Transfer Plan 1: Arizona State University (The College of Liberal Arts and Sciences), Bachelor of Arts, Women and Gender Studies}

Select one course that transfers to ASU as a direct equivalency or a departmental elective (DEC) in the WST prefix: Check Course Equivalency Guide on aztransfer.com to ensure course transfers as WST prefix at ASU the semester it is taken.

Humanities [HU] Requirement
ASB211 recommended, satisfies [HU] [G] and related area Women Studies Cours.
Select one related Women Studies course (3 credits) from the following:
ENHWST284 19th Century Women Writers
ENHWST285 Contemporary Women Writers
HIS201 History of Women in America
HUM/WST209Women and Films
PSY235 Psychology of Gender
REL/WST290 Women and World Religions
SOC212 Gender and Society
WST+++ Any WST Women's studies course
Foreign Language
Credits: 0-20
Complete a language course at the intermediate level (202 or equivalent), including American Sign Language IV with a 'C' or better OR demonstrate proficiency through this level as indicated by assessment.
ARB+++ any ARB Arabic course
ASL+++ any ASL American Sign Language
CHI+++ any CHI Chinese course
FRE+++ any FRE French course
GER+++ any GER German course
ITA+++ any ITA Italian course
JPN+++ any JPN Japanese course
SPA+++ any SPA Spanish course
Transfer Plan 2: Arizona State University (New
College of Interdisciplinary Arts \& Sciences),
Bachelor of Arts, Social and Cultural Analysis
(Women and Gender Studies) (Women and Gender Studies)
Language and Cultures
Credits: 0-20
Complete one of the following options before transferring to ASU: Non-English language course at the intermediate level (202 or equivalent), including American Sign Language IV OR two (2) semesters of a current computer language (CSC110 and [CSC200 or CSC205]). Alternative-
ly, students can meet ASU`s Languages and Cultures Requirement after transferring by completing an additional 6 credits of upper-division Global or Cultural courses once at ASU.
\begin{tabular}{ll} 
ARB+++ & any ARB Arabic course \\
ASL++++ & any ASL American Sign Language \\
CHII+++ & any CHI Chinese course \\
FRE+++ & any FRE French course \\
GER+++ & any GER German course \\
ITA+++ & any ITA Italian course \\
JPN+++ & any JPN Japanese course \\
SPA+++ & any SPA Spanish course
\end{tabular}

\section*{Transfer Plan 3: Arizona State University (New College of Interdisciplinary Arts \& Sciences), Bachelor of Science, Women and Gender Studies}

PSY101 Introduction to Psychology 3
PSY230 Introduction to Statistics 3
PSY290AB Research Methods (4) OR
PSY290AC Research Methods (4)
4
Select two courses (6 credits) that transfer to ASU as a direct equivalency or a departmental elective (DEC) in the WST prefix:
Check Course Equivalency Guide on aztransfer.com to ensure course transfers as WST prefix at ASU the semester it is taken.

\section*{Language and Cultures}

Credits: 0-20
Within these elective credits, the New College of Interdisciplinary Arts and Sciences Languages and Cultures Requirement may be fulfilled by completing one of the following options before transferring to ASU: Non-English language course at the intermediate level (202 or equivalent), including American Sign Language IV OR two (2) semesters of a current computer language (CSC110 and [CSC200 or CSC205]). Alternatively, students can meet ASU's Languages and Cultures Requirement after transferring by completing an additional 6 credits of upper-division Global or Cultural courses once at ASU.
ARB+++ any ARB Arabic course
ASL+++ any ASL American Sign Language
CHI+++ any CHI Chinese course
FRE+++ any FRE French course
GER+++ any GER German course
ITA+++ any ITA Italian course
JPN+++ any JPN Japanese course
SPA+++ any SPA Spanish course
Additional courses recommended as lower division electives (if
needed to reach minimum total for degree) include ENH285, HIS201,

PSY235, REL/WST290, SOC212, WST110, WST161, WST200, HUMI WST209, ENH/WST284, and/or WST286.

\section*{Transfer Plan 4: Northern Arizona University, Bachelor of Science, Women's and Gender Studies}

Select six (6) credits that transfer to NAU as direct equivalencies or departmental electives in the WGS prefix. 6
Select 0 to 12 credits from the following:
ENH190 Introduction to US Ethnic Literature 3
ENH202 World Literature After the Renaissance 3
ENHWST285 Contemporary Women Writers 3
HIS201 History of Women in America (3) OR
WST160 Women and the Early American Experience (3) OR
WST161 American Women Since 1920 (3) 3
PSY277 Psychology of Human Sexuality 3
SOC212 Gender and Society 3
The following courses are recommended for students intending to
earn an Academic Certificate (AC) in Women and Gender Studies:
ENH/WST285 OR (HIS201 OR WST1 60 OR WST161) OR SOC212.

\section*{Transfer Plan 5: University of Arizona,} Bachelor of Arts, Women's Studies
\begin{tabular}{|c|c|}
\hline HIS201 & History of Women in America 3 \\
\hline \multicolumn{2}{|l|}{REL/WST292 Goddess Religions (3) OR} \\
\hline WST244 & Women in Muslim Societies (3) 3 \\
\hline AFRWST207 & Black Women (3) OR \\
\hline \multicolumn{2}{|l|}{HLRMST286 Women and Health:} \\
\hline & Body/Mind/Spirit/Connection (3) OR \\
\hline WST160 & Women and the Early American Experience (3) OR \\
\hline WST161 & American Women Since 1920 (3) OR \\
\hline WST206 & La Mujer (3) \\
\hline \multicolumn{2}{|l|}{The following courses are recommended for students intending to} \\
\hline \multicolumn{2}{|l|}{earn an Academic Certificate (AC) in Women and Gender Studies:} \\
\hline 1 OR H & WST286 OR WST1 60 OR WST161 \\
\hline
\end{tabular}

\section*{Foreign Language}

Credits: 0-20
Complete a language course at the intermediate level (202 or equivalent), including American Sign Language IV with a 'C' or better OR demonstrate proficiency through this level as indicated by assessment.
ARB+++ any ARB Arabic course
ASL+++ any ASL American Sign Language
CHI+++ any CHI Chinese course
FRE+++ any FRE French course
GER+++ any GER German course
ITA+++ any ITA Italian course
JPN+++ any JPN Japanese course
SPA+++ any SPA Spanish course

General Education Requirements Credits: 17-38 Arizona General Education Curriculum (AGEC) AGEC-A 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 Area ([C], [G] and/ or \([\mathrm{H}]\) ) requirement(s). See the AGEC matrix for course designations.

\section*{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
May be met by PSY290AB or PSY290AC in the Restricted Electives OR
Any approved general education course in the Literacy and Critical Inquiry [L] area.

\section*{Mathematics [MA]}

Credits: 3-6
\begin{tabular}{ll} 
MAT1 40 & College Mathematics (5) OR \\
MAT141 & College Mathematics (4) OR \\
MAT142 & College Mathematics (3) OR
\end{tabular}

Any approved general education course in the Mathe-
matical Applications [MA] area.
3-6

\section*{Computer/Statistics/Quantitative}

Applications [CS]
Credits: 0-3
Any approved general education course in the Computer/Statistics/Quantitative Applications [CS] area
OR
Met by PSY230 in Restricted Electives
0-3
Humanities, Arts and Design [HU] Credits: 0-6
Any approved general education courses in the Human-
ities, Arts and Design [HU] area
OR
Met by ENH190, ENH202, ENH/WST284, ENH/WST285, HUM/WST209, or REL/WST290 in Restricted Electives. 0-6 ASB211 recommended for the ASU BA in Women and Gender Studies Transfer Plan
Social-Behavioral Sciences [SB] Credits: 0-3
Met by WST100 in Required Courses AND
Any approved general education courses in the So-
cial-Behavioral Sciences [SB] area (3) OR
Met by HIS201, PSY101, PSY235, PSY277, SOC212, or WST161 in Restricted Electives.

0-3
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).

\section*{Awareness Areas}

Credits: 0-3
These requirements may be shared with Core Requirements.

\section*{Cultural Diversity in the US [C] \\ Credits: 0}

Historical/Global Awareness [H]/[G] Credits: 0-3
Any approved general education course with the Historical [H] or Global [G] awareness area designation
OR
Met by ENH190, ENH202, HIS201, REL/WST209, WST160, or WST161 in Restricted Electives.

0-3

\section*{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 transferable credits, it is recommended that courses be selected that meet more than one requirement wherever possible.

\section*{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 Critical Reading and Critical Thinking (3) OR Equivalent as indicated by assessment (0) 0-3

\section*{Associate in Arts, Fine Arts (AAFA) Degree}

\section*{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 (Art, Dance, Music, Musical Theatre, Theatre). Refer to the Program (Degree) Search at https://curriculum.maricopa.edu/ for credit minimums for individual degree programs by
emphasis. A minimum grade point average of 2.0 and grades of "C" or higher are required to earn the degree. The AA-FA degree is governed by the MCCCD General Academic Policies for Transfer Degrees.
The Associate in Arts, Fine 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 and Critical Reading)
VI. General Electives (if needed to reach minimum credits for degree)

\section*{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, which may require a portfolio or performance requirement.
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:
www.aztransfer.com.

\section*{Degree Requirements}

The requirements for the Associate in Arts, Fine Arts (AAFA) follow. No versions of the AAFA require fewer than a minimum of 60 credits; however, minimum total credits for the AAFA vary by specific emphasis (Art, Dance, Music, Musical Theatre, Theatre). Refer to the Program (Degree) Search at https://curriculum.maricopa.edu/ for credit minimums by emphasis. 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.

\section*{Requirements}

\section*{I. Program Prerequisites}

Number Varies
Program prerequisites for the Associate in Arts, Fine Arts degree vary by specific emphasis (Art, Dance, Music, Musical Theatre, Theatre). Refer to the Program (Degree) Search at https://curriculum.maricopa.edu/ for specific courses and credit minimums by emphasis.
II. Required Courses

Number Varies
Required (major-specific) courses for the Associate in Arts, Fine Arts degree vary by specific emphasis (Art, Dance, Music, Musical Theatre, Theatre). Refer to the Program (Degree) Search at https://curriculum. maricopa.edu/ for specific courses and credit minimums by emphasis. for specific courses and credit minimums by emphasis.

\section*{III. Restricted Electives}

Number Varies
Restricted electives for the Associate in Arts, Fine Arts degree vary by specific emphasis (Art, Dance, Music, Musical Theatre, Theatre). Refer to the Program (Degree) Search at https://curriculum.maricopa for specific courses and credit minimums by emphasis.

\section*{IV. Arizona General Education CurriculumArts (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 and credits count once toward the total 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.
A. Core Areas:

Courses required to meet Core Areas vary by emphasis (Art, Dance, Music, Musical Theatre, Theatre). Refer to the Program (Degree) Search at https://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 Area designations and can be used to satisfy [C], [G] and/or [H] requirement(s) as well as their respective Core Area, Required Course(s) or Restricted Elective(s). AGEC designations are subject to change. Courses may meet more than one requirement but are only counted once toward the total credits for the degree. See AGEC matrix for each course's value(s) in the semester it is taken.
1. First-Year Composition [FYC] ENG101 OR ENG107 AND ENG102 OR ENG108
2. Literacy and Critical Inquiry [L] 3
3. Mathematical Applications [MA] Requires a course in college mathematics (MAT140, MAT141, MAT142, MAT145, MAT146) or college algebra (MAT150, MAT151, MAT152, MAT155, MAT156) or pre-calculus (MAT187) or higher [MA]-approved general education course.
4. Computer/Statistics/Quantitative Applications [CS]3
5. Humanities, Arts and Design [HU]
6. Social-Behavioral Sciences [SB] 6 Students are encouraged to choose course work from more than one discipline.
7. Natural Sciences [SQ/SG]

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.
B. Awareness Areas:

Some courses may be used to satisfy both a Core Area 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]
V. MCCCD Additional Requirements 0-6
As noted below, courses in this area may also be applied toward AGEC-A Core Area requirements.
A. Oral Communication

Refer to emphasis area (Art, Dance, Music, Musical Theatre, Theatre) for specific COM course required from the following:
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

Students may demonstrate proficiency through assessment.
CRE101 [L] Critical Reading OR equivalent as indicated by assessment

\section*{VI. 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.

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: https:// aztransfer.com/, https://www.maricopa.edu/de-grees-certificates/transfer/pathways-partners, as well as those of individual universities. For appropriate course selection, students should consult with an academic advisor.

\section*{MINIMUM TOTAL CREDITS REQUIRED*}

AAFA, Emphasis in Art 60
AAFA, Emphasis in Dance 62
AAFA, Emphasis in Music 64
AAFA, Emphasis in Musical Theatre 65
AAFA, Emphasis in Theatre 60
* 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 pathways.

\title{
Associate in Arts, Fine Arts (AAFA), Emphasis in Art
}

\author{
Total Credits: 60-69 \\ Major Code: 8105
}

\section*{Description}

The Associate in Arts, Fine Arts (AAFA), Emphasis in Art degree provides the first two years of a fouryear 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 or graduate degree in fine arts, students may also pursue a career in museums, galleries, communi-ty-based art organizations, or art instruction.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better in all courses in the program.
Students who wish to transfer to an art school should contact an art faculty member at their institution for more information.

Required Courses Credits: 13-15
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 recom-
mended for marketing and professional development)

\section*{Restricted Electives}

Credits: 12
Complete all courses in the transfer option that best aligns with your academic and professional
goals. If your intended transfer institution is not listed, then select a combination of courses from the transfer options listed in order to meet the minimum credits required in the Restricted Electives section. Consult with an academic, faculty, or program advisor to prevent exceeding your university transfer program's maximum transferable credits (typically 64).
Choose any combination from the following list of courses totaling a minimum of twelve (12) credits of additional coursework. Courses that are required for a particular transfer pathway are noted in the transfer plans that follow. Courses cannot be shared with Required or other Restricted electives.
\begin{tabular}{ll} 
ART116 & Life Drawing I (3) \\
ART122 & Drawing and Composition II (3) \\
ART131 & Photography I (3) \\
ART132 & Photography II (3) \\
ART151 & Sculpture I (3) \\
ART161 & Ceramics I (3) \\
ART165 & Watercolor Painting I (3) \\
ART167 & Painting I (3) \\
ART250 & Introduction to Printmaking (3) \\
ART277 & Textiles I (3)
\end{tabular}

Transfer Plan 1: Arizona State University
 (Herberger Institute for Design and the Arts),
 Bachelor of Fine Arts, Art (Ceramics)

ART161 Ceramics I
Choose one of the following 2D Art courses:
ART116 Life Drawing I (3)
ART122 Drawing and Composition II (3)
ART131 Photography I (3)
ART132 Photography II (3)
ART165 Watercolor Painting I (3)
ART167 Painting I (3)
ART250 Introduction to Printmaking (3) 3
Choose one of the following 3D Art courses:
ART151 Sculpture I (3)
ART277 Textiles I (3)
Choose one of the following 2D or 3D Art courses (except any course already taken):
ART116 Life Drawing I (3)
ART122 Drawing and Composition II (3)
\begin{tabular}{ll} 
ART131 & Photography I (3) \\
ART132 & Photography II (3) \\
ART151 & Sculpture I (3) \\
ART165 & Watercolor Painting I (3) \\
ART167 & Painting I (3) \\
ART250 & Introduction to Printmaking (3) \\
ART277 & Textiles I (3)
\end{tabular}

Transfer Plan 2: Arizona State University (Herberger Institute for Design and the Arts), Bachelor of Fine Arts, Art (Drawing)
\begin{tabular}{lll} 
ART116 & Life Drawing I & 3 \\
ART122 & Drawing and Composition II & 3 \\
Choose one of the following 3D Art courses: & \\
ART151 & Sculpture I (3) & \\
ART161 & Ceramics I (3) & 3 \\
ART277 & Textiles I (3) & \\
Choose one of the following 2D or 3D Art courses: & \\
ART131 & Photography I (3) & \\
ART132 & Photography II (3) & \\
ART151 & Sculpture I (3) & \\
ART161 & Ceramics I (3) \\
ART165 & Watercolor Painting I (3) & \\
ART167 & Painting I (3) & \\
ART250 & Introduction to Printmaking (3) & \\
ART277 & Textiles I (3) & 3
\end{tabular}

Transfer Plan 3: Arizona State University (Herberger Institute for Design and the Arts), Bachelor of Fine Arts, Art (Fibers)
ART277 Textiles I
Choose one of the following 2D Art courses:
ART116 Life Drawing I (3)
ART122 Drawing and Composition II (3)
ART131 Photography I (3)
ART132 Photography II (3)
ART165 Watercolor Painting I (3)
ART167 Painting I (3)
ART250 Introduction to Printmaking (3)
Choose one of the following 3D Art courses:
ART151 Sculpture I (3)
ART161 Ceramics I (3)

ART116 Life Drawing I (3)
ART122 Drawing and Composition II (3)
ART131 Photography I (3)
\begin{tabular}{ll} 
ART132 & Photography II (3) \\
ART151 & Sculpture I (3) \\
ART161 & Ceramics I (3) \\
ART165 & Watercolor Painting I (3) \\
ART167 & Painting I (3) \\
ART250 & Introduction to Printmaking (3)
\end{tabular}

ART161 Ceramics I (3)
ART165 Watercolor Painting I (3)
ART167 Painting I (3)
ART277 Textiles I (3)

Transfer Plan 4: Arizona State University (Herberger Institute for Design and the Arts), Bachelor of Fine Arts, Art (Painting)
ART116 Life Drawing I 3

ART165 Watercolor Painting I 3
ART167 Painting I 3
Choose one of the following 2D or 3D Art courses:
ART122 Drawing and Composition II (3)
ART131 Photography I (3)
ART132 Photography II (3)
ART151 Sculpture I (3)
ART161 Ceramics I (3)
ART250 Introduction to Printmaking (3)
ART277 Textiles I (3)
Transfer Plan 5: Arizona State University
(Herberger Institute for Design and the Arts), Bachelor of Fine Arts, Art (Printmaking)
ART250 Introduction to Printmaking
Choose one of the following 2D Art courses:
ART116 Life Drawing I (3)
ART122 Drawing and Composition II (3)
ART131 Photography I (3)
ART132 Photography II (3)
ART165 Watercolor Painting I (3)
ART167 Painting I (3)
3
Choose one of the following 3D Art courses:
\(\begin{array}{ll}\text { ART151 } & \text { Sculpture I (3) } \\ \text { ART161 } & \text { Ceramics I (3) } \\ \text { ART277 } & \text { Textiles I (3) }\end{array}\)
Choose one of the following 2D or 3D Art courses:
ART116 Life Drawing I (3)
ART122 Drawing and Composition II (3)
ART131 Photography I (3)
ART132 Photography II (3)
3
\begin{tabular}{|c|c|}
\hline \multicolumn{2}{|l|}{Transfer Plan 6: Arizona State University (Herberger Institute for Design and the Arts), Bachelor of Fine Arts, Art (Sculpture)} \\
\hline ART151 & Sculpture I \\
\hline \multicolumn{2}{|l|}{Choose one of the following 2D Art courses:} \\
\hline ART116 & Life Drawing I (3) \\
\hline ART122 & Drawing and Composition II (3) \\
\hline ART131 & Photography I (3) \\
\hline ART132 & Photography II (3) \\
\hline ART165 & Watercolor Painting I (3) \\
\hline ART167 & Painting I (3) \\
\hline ART250 & Introduction to Printmaking (3) \\
\hline \multicolumn{2}{|l|}{Choose two of the following 2D or 3D Art cours} \\
\hline ART116 & Life Drawing I (3) \\
\hline ART122 & Drawing and Composition II (3) \\
\hline ART131 & Photography I (3) \\
\hline ART132 & Photography II (3) \\
\hline ART151 & Sculpture I (3) \\
\hline ART161 & Ceramics I (3) \\
\hline ART165 & Watercolor Painting I (3) \\
\hline ART167 & Painting I (3) \\
\hline ART250 & Introduction to Printmaking (3) \\
\hline ART277 & Textiles I (3) \\
\hline \multicolumn{2}{|l|}{Transfer Plan 7: Arizona State University (Herberger Institute for Design and the Arts),} \\
\hline \multicolumn{2}{|l|}{Bachelor of Arts, Art (Art Studies)} \\
\hline \multicolumn{2}{|l|}{Choose one of the following 2D Art courses:} \\
\hline ART116 & Life Drawing I (3) \\
\hline ART122 & Drawing and Composition II (3) \\
\hline ART131 & Photography I (3) \\
\hline ART132 & Photography II (3) \\
\hline ART165 & Watercolor Painting I (3) \\
\hline ART167 & Painting I (3) \\
\hline ART250 & Introduction to Printmaking (3) \\
\hline \multicolumn{2}{|l|}{Choose one of the following 3D Art courses:} \\
\hline ART151 & Sculpture I (3) \\
\hline ART161 & Ceramics I (3) \\
\hline ART277 & Textiles I (3) \\
\hline \multicolumn{2}{|l|}{Choose two of the following 2D or 3D Art courses:} \\
\hline ART116 & Life Drawing I (3) \\
\hline ART122 & Drawing and Composition II (3) \\
\hline ART131 & Photography I (3) \\
\hline ART132 & Photography II (3) \\
\hline ART151 & Sculpture I (3) \\
\hline ART161 & Ceramics I (3) \\
\hline ART165 & Watercolor Painting I (3) \\
\hline
\end{tabular}

Choose two of the following 2D or 3D Art courses:
ART116 Life Drawing I (3)
ART122 Drawing and Composition II (3)
ART131 Photography I (3)
ART132 Photography II (3)
ART151 Sculpture I (3)

ART165 Watercolor Painting I (3)
\begin{tabular}{ll} 
ART167 & Painting I (3) \\
ART250 & Introduction to Printmaking (3) \\
ART277 & Textiles I (3)
\end{tabular}

\section*{Transfer Plan 8: Northern Arizona University, Bachelor of Fine Arts, Studio Art}
ART122 Drawing and Composition II 3

Choose one of the following courses to partially fulfill the lower division Emphasis course requirements at NAU:
\begin{tabular}{ll} 
ART151 & \begin{tabular}{l} 
Sculpture I (3) \\
(required for Sculpture emphasis at NAU)
\end{tabular} \\
ART161 & \begin{tabular}{l} 
Ceramics I (3) \\
(required for Ceramics emphasis at NAU)
\end{tabular} \\
ART167 & \begin{tabular}{l} 
Painting I (3) \\
(required for Painting emphasis at NAU)
\end{tabular} \\
ART250 & \begin{tabular}{l} 
Introduction to Printmaking (3) \\
(required for Printmaking emphasis at NAU)
\end{tabular}
\end{tabular}

Choose two of the following courses to partially fulfill the lower division elective track requirements at NAU. Select two tracks that are different than the track selected above:
\begin{tabular}{ll} 
ART151 & \begin{tabular}{l} 
Sculpture I (3) \\
(required for Sculpture elective track at NAU)
\end{tabular} \\
ART161 & \begin{tabular}{l} 
Ceramics I (3) \\
(required for Ceramics elective track at NAU)
\end{tabular} \\
ART167 & \begin{tabular}{l} 
Painting I (3)
\end{tabular} \\
(required for Painting elective track at NAU) \\
ART250 & \begin{tabular}{l} 
Introduction to Printmaking (3) \\
(required for Printmaking elective track at NAU)
\end{tabular}
\end{tabular}

Transfer Plan 9: University of Arizona, Bachelor of Fine Arts, Studio Art (All Emphases)
ART151 Sculpture I 3
ART161 Ceramics I 3
ART165 Watercolor Painting I 3
ART167 Painting I 3

General Education Requirements Credits: 35-40 Arizona General Education Curriculum (AGEC) AGEC-A A single course with an [HU], [SB], or [L] designation(S) may also be used to satisfy the Oral Communication, Critical Reading, or Awareness Area ([C], [G] and/or [H]) requirement(s).

\section*{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

\section*{Literacy and Critical Inquiry [L]}

Credits: 3
Any approved general education course in the Literacy and Critical Inquiry [L] area.

\section*{Mathematics [MA]}
\begin{tabular}{ll} 
MAT140 & College Mathematics (5) OR \\
MAT141 & College Mathematics (4) OR \\
MAT142 & College Mathematics (3) OR
\end{tabular}

Credits: 3-5

Any approved general education course in the Mathematical Applications [MA] area.

\section*{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
ARH1 01 Prehistoric through Gothic Art
ARH1 02 Renaissance through Contemporary Art 3

\section*{Social-Behavioral Sciences [SB]}

Credits: 6
Any approved general education courses in the So-cial-Behavioral Sciences [SB] area.
(Recommend selecting a course that fuffills both the Social-Behavioral Sciences [SB] area and Cultural Diversity in the U.S. [C] designation)

\section*{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).

\section*{Awareness Areas}

Credits: 0-3
These requirements may be shared with Core Requirements.

\section*{Cultural Diversity in the US [C]}

Credits: 0-3
Historical/Global Awareness [H]/[G] Credits: 0 Met by ARH101 and ARH102 in AGEC [HU] requirements.

\section*{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 transferable credits, it is recommended that courses be selected that meet more than one requirement wherever possible.

\section*{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

\section*{Critical Reading \\ Credits: 0-3 \\ CRE101 Critical Reading and Critical Thinking (3) OR}

Equivalent as indicated by assessment (0) 0-3

\title{
Associate in Arts, Fine Arts (AAFA), Emphasis in Dance
}

\section*{Total Credits: 62-76 \\ Major Code: 8103}

\section*{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, dance studio instruction, and fitness instruction. Upon completion of a bachelor's degree, students may pursue a career in several areas including a dance education at the secondary level, artistic direction, and stage management. Upon completion of a graduate degree, students may pursue a career in dance education at the post-secondary level.

\section*{Program Notes}

Students must earn a grade of 'C' or better in each course in the program.
Students should meet with a residential dance faculty member each semester prior to enrollment for the following semester.
Students must attain a level III competency in Ballet (DAN 231++) and Modern (DAN 232++) before they can graduate. Placement into these classes and Level III competency is determined by the Dance Residential Faculty.

Students should enroll in two DAN technique courses each semester.
Enrollment in some courses may require an audition and/or permission of instructor.
All DAN technique courses can be repeated for credit.

\section*{Required Courses}

Credits: 19-34
\begin{tabular}{ll} 
Fine Arts Requirements - Dance \\
DAN150 & Dance Performance I \\
DAN210 & Dance Production I \\
DAN221 & Rhythmic Awareness I \\
DAN264 & Choreography I \\
DAN280 & Dance Practicum
\end{tabular}

Select from the following options to complete a minimum of three (3) and a maximum of eight (8) semester credits. Students must attain Level III competency in Ballet (DAN231 or DAN231AA). Courses may be repeated for credit:
\begin{tabular}{ll} 
DAN131 & Ballet I \\
DAN134 & Ballet II \\
DAN231 & Ballet III \\
DAN231AA & Ballet II: Intensive \\
DAN234 & Ballet IV \\
DAN234AA & Ballet IV: Intensive
\end{tabular}
\(\begin{array}{ll}\text { DAN234 } & \text { Ballet IV } \\ \text { DAN234AA } & \text { Ballet IV: Intensive }\end{array}\)
Select from the following options to complete a minimum of three (3) and a maximum of eight (8) semester credits. Students must attain Level III competency in Modern (DAN232 or DAN232AA). Courses may be repeated for credit:
\begin{tabular}{lll} 
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
\end{tabular}

Select from the following options to complete a minimum of one (1) and a maximum of six (6) semester credits.
Courses may be repeated for credit:
\begin{tabular}{lll} 
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
\end{tabular}

\section*{Restricted Electivxes}

Credits: 8-14
Select a minimum of two (2) and a maximum of five (5) semester credits of coursework from the following:
DAN102++ Any Hip Hop Course 1

DAN104++ Any Ballroom Course 1
DAN105++ Any Swing Course 1
DAN106++ Any Latin Course
DAN108++ Any Tango Course
DAN120++ Any World Dance Course
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
DAN141 Dance Workshop 1
DAN145 Tap Dance II 1
DAN146 Tap Dance Ensemble 1
DAN150 Dance Performance I 1
DAN155 Dance Performance II 1
DAN164 Improvisation 1
DAN201++ Special Topics: Dance 1-3
DAN202++ Any Hip Hip Course 1
DAN204++ Any Ballroom Course 1
DAN229 Musical Theatre Dance III 1
DAN230 Musical Theatre Dance IV 1
DAN231 Ballet III 1
DAN231AA Ballet III: Intensive 2
DAN232 Modern Dance III 1
DAN232AA Modern Dance III: Intensive 2
DAN233 Jazz Dance III 1
DAN233AA Jazz Dance III: Intensive 2
DAN234 Ballet IV 1
DAN234AA Ballet IV: Intensive 2
DAN235 Modern Dance IV 1
DAN235AA Modern Dance IV: Intensive 2
DAN236 Jazz Dance IV 1
DAN236AA Jazz Dance IV: Intensive 2
DAN237 Ballet Pointe I 1
DAN240 Tap Dance III 1
DAN245 Tap Dance IV 1
DAN250 Dance Performance III 1
DAN255 Dance Performance IV 1
DAN290++ Dance Conservatory I-3
DAN291++ Dance Conservatory II 1-3
\begin{tabular}{lll} 
DAN292++ & Dance Conservatory III & \(1-3\) \\
DAN298++ & Special Projects & \(1-3\)
\end{tabular}

DAN298++ Special Projects

Dance Theory Electives
Consult with Residential Dance Faculty to select a minimum of six (6) and a maximum of nine (9) semester credits of coursework from the following except those courses used to fulfill a requirement in the Humanities, Arts and Design [HU] area.

DAH100 Introduction to Dance 3
DAH110 Dance in Film 3
DAH190 Discovering Dance Careers 1
DAH201 World Dance Studies
DAH250 Dance in Popular Culture
DAH255 Hip Hop Arts, Aesthetic and Culture 3
DAN170 Dance Kinesiology 3
DAN201++ Special Topics: Dance 1-3
DAN220 Dance Career Preparation 3
DAN222 Rhythmic Awareness II 3
DAN265 Choreographyll 3
DAN272 Dance Technology 3
DAN282++ Service-Learning Experience in Dance 1-3
DAN293 Teaching Dance in Elementary Education 3
DAN294 Teaching Dance in Secondary Education 3
DAN295 Teaching and Management of Studio Dance 3
DAN298++ Special Projects 1-3
General Education Requirements Credits: 35-43
Arizona General Education Curriculum (AGEC) AGEC-A
A single course with an [HU], [SB], or [L] designation may also be used to satisfy the Oral Communication, Critical Reading, or Awareness Area ([C], [G] and/or [H]) requirement(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
Literacy and Critical Inquiry [L] Credits: 3
Any approved general education course in the Literacy and Critical Inquiry [L] area.

\section*{Mathematics [MA]}

Credits: 3-6
\(\begin{array}{ll}\text { MAT140 } & \text { College Mathematics (5) OR } \\ \text { MAT141 } & \text { College Mathematics (4) OR } \\ \text { MAT142 } & \text { College Mathematics (3) OR }\end{array}\)
Any approved general education course in the Mathe-
matical Applications [MA] area (3-6).
3-6

\section*{Computer/Statistics/Quantitative}

Applications [CS]
Credits: 3
Any approved general education course in the Comput-
er/Statistics/Quantitative Applications [CS] area.
Humanities, Arts and Design [HU]
Credits: 6
DAH100 Introduction to Dance (3) OR
DAH201 World Dance Studies (3) AND
Any approved general education course in the
Humanities, Arts and Design [HU] area. (3) 6
The following courses are recommended:
DAH100 Introduction to Dance 3
DAH201 World Dance Studies 3
DAH250 Dance in Popular Culture 3
DAH255 Hip Hop: Arts, Aesthetic and Culture 3

\section*{Social-Behavioral Sciences [SB] \\ Credits: 6}

Any approved general education courses in the So-cial-Behavioral Sciences [SB] area.
Students are encouraged to choose coursework from more than one discipline.

\section*{Natural Sciences [SG]/[SQ]}

Credits: 8
Any approved general education course in the Natural
Sciences (Quantitative) [SQ] area (4) AND
BIO160 Introduction to Human Anatomy and Physiology (4) OR
BIO201 Human Anatomy and Physiology I (4) 8

\section*{Awareness Areas}

Credits: 0-6
These requirements may be shared with Core Requirements.

\section*{Cultural Diversity in the US [C]}

Credits: 0-3
Historical/Global Awareness [H]/[G] Credits: 0-3
Any approved general education course with the Histori-
cal [H] or Global [G] awareness area designation.
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 transferable credits, it is recommended that courses be selected that meet more than one requirement wherever possible.

\section*{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

\author{
CRE101 Critical Reading and Critical Thinking (3) OR Equivalent as indicated by assessment (0) 0-3
}

\section*{Associate in Arts, Fine Arts (AAFA), Emphasis in Music}

\section*{Total Credits: 61-80 \\ Major Code: 8104}

\section*{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.

\section*{Program Notes}

In most cases, courses used to satisfy the AAFAMusic 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.
Students must earn a grade of ' \(C\) ' or better for all courses required within the program.

Required Courses
Credits: 8
MTC1 05 Music Theory I
3
MTC106 Aural Perception I 1
MTC155 Music Theory II 3
MTC156 Aural Perception II 1

\section*{Restricted Electives}

\section*{SPECIALIZATION 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 EnsemblesCredits: 4
Choose any four (4) credits from the following list ofMusical Ensemble courses based on area of emphasis.Any substitutions require official approval of programdirector.

MUP153 is recommended for Choral students (or, if unavailable, MUP150), MUP160 for Strings students (or, if unavailable, MUP159), MUP162 for Instrumental students (or, if unavailable, MUP161), MUP163 (limited to Jazz Big Bands) for Jazz students, MUP169 for students interested in transfer to Ottawa University for Guitar (or, if unavailable, any other approved ensemble), and MUP181 (limited to Piano Ensembles only) for Piano majors. Ensemble courses can be taken multiple times for credit.
\begin{tabular}{lll} 
MUP150 & Community Chorus & 1 \\
MUP153 & Concert Choir & 1 \\
MUP159 & Community Orchestra & 1 \\
MUP160 & Orchestra & 1 \\
MUP161 & Community Band & 1 \\
MUP162 & Band \\
MUP163 & Jazz Ensemble 1 (Jazz Big Bands only) & \\
MUP169 & Guitar Ensemble \\
MUP181 & Chamber Music Ensembles 1 & 1 \\
& (Piano Ensemble only) & \\
MUP217 & Music Theatre: Broadway Solos & 1 \\
MUP273 & Musical Theater Production & 1
\end{tabular}

MUP153
159

NUP160
MUP162
Band
1

MUP273 Musical Theater Production 1

\section*{Related Area}

Credits: 4
Students should choose four (4) credits from the following list of options that best align with their academic and professional goals. Courses should be selected in consultation with an academic, faculty, or program advisor. Any MUE course(s) listed are recommended for Guitar and Instrumental students.
MUP250++ Survey of Diction 1
MUE107 Woodwinds Methods I 1
MUE207 Woodwinds Methods II 1
MUE108 Percussion Methods I 1
MUE208 Percussion Methods II 1
MUE109 Brass Methods I 1
MUE209 Brass Methods II 1
MUE110 Strings Methods I 1
MUE210 Strings Methods II 1
MUE111 Guitar Methods 1
MTC+++ Any additional Music Theory course(s) not counted in Required Courses Area 3
MHL+++ Any additional Music Humanities course not counted in General Education courses area 3

\section*{SPECIALIZATION 2:}

\section*{Popular Performance}
\(\begin{array}{llr}\text { MUC109 } & \text { Music Business: Content Creation and Copyright3 } \\ \text { MUC195 } & \text { Studio Music Recording I (3) OR } \\ \text { MUC195AAA } & \text { Studio Music Recording I (3) OR } \\ \text { MUC197 } & \text { Live Sound Reinforcement I (3) } & 3 \\ \text { MUP101++ } & \text { Private Instruction (1) } \\ & \text { (Must be completed for credit twice.) OR }\end{array}\)
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)
MUP251++ Private Instructions (1) (Must be completed for credit twice.) OR
MUP252++ Private Instruction (2)

\section*{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. Select courses in consultation with an academic, faculty, or program advisor.
MUP150 Community Chorus
MUP153 Concert Choir
MUP154AA Jazz Vocal Ensemble 1

MUP154AB Jazz Vocal Ensemble 2
MUP158 Rock Band 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
General Education Requirements Credits: 35-44
Arizona General Education Curriculum (AGEC) AGEC-A
A single course with an [HU], [SB], or [L] designation may also be used to satisfy the Oral Communication, Critical Reading, or Awareness Area ([C], [G] and/or [H]) requirement(s).

\section*{First-Year Composition [FYC]}

Credits: 6
\begin{tabular}{ll} 
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)
\end{tabular} 6

\section*{Literacy and Critical Inquiry [L]}

Credits: 3
Any approved general education course in the Literacy and Critical Inquiry [L] area.

\section*{Mathematics [MA]}

Credits: 3-6
\begin{tabular}{ll} 
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 & \(3-6\)
\end{tabular}

\section*{Computer/Statistics/Quantitative}

Applications [CS]

\section*{Credits: 3}

\section*{SPECIALIZATION 1: \\ Classical Music Performance and}

Music Education:
Any approved general education course in the Computer/Statistics/Quantitative Applications [CS] area.
(Recommended: MTC180 Computer Literacy for Musicians 3)

\section*{SPECIALIZATION 2:}

Popular Performance
MTC180 Computer Literacy for Musicians
3

Humanities, Arts and Design [HU] Credits: 6
MHL194 Music and Culture (3) (Recommended for students transferring to ASU) OR
MHL241 Music History and Literature to 1750 (3) (Recommended for students transferring to Ottawa/NAU) AND
Any additional MHL+++ Music: History/ Literature course with [HU] designation (3)6

\section*{Social-Behavioral Sciences [SB] Credits: 6}

Any approved general education courses in the So-cial-Behavioral Sciences [SB] 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

\section*{Awareness Areas}

Credits: 0-6
These requirements may be shared with Core Requirements.

\section*{Cultural Diversity in the US [C]}

Credits: 0-3
Historical/Global Awareness [H]/[G] Credits: 0-3
Any approved general education course in the Global Awareness [G] or Historical Awareness [H] area.
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 transferable credits, it is recommended that courses be selected that meet more than one requirement wherever possible.
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 Critical Reading and Critical Thinking (3) OR Equivalent as indicated by assessment (0) 0-3

\title{
Associate in Arts, Fine Arts (AAFA), Emphasis in Musical Theater
}

\author{
Total Credits: 65-81 \\ Major Code: 8127
}

\section*{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.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better in each course in 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.

\section*{Required Courses}

Credits: 29-34

\section*{Music Theory}

MTC101 Introduction to Music Theory OR
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
\begin{tabular}{ll} 
MTC206 & Aural Perception III (1) \\
& OR \\
MTC255 & Music Theory IV (3) AND \\
MTC256 & Aural Perception IV (1)
\end{tabular}3-4

Private Voice Instruction
MUP101AA Private Instruction: Voice (1) OR
MUP102AA Private Instruction: Voice (2)1-2

MUP151AA Private Instruction: Voice (1) OR
MUP152++ Private Instruction: Voice (2)
MUP202AA++ Private Instruction: Voice
MUP252AA++ Private Instruction: Voice
Class Piano
\begin{tabular}{ll} 
MUP131 & Class Piano I (1) OR \\
MUP132 & Class Piano II (1) OR \\
MUP231 & Class Piano III (1) OR \\
MUP232 & Class Piano IV (1)
\end{tabular}

Music Theatre Workshop and Production
Students must complete at least one credit of MUP/THP273.
MUP/THP273 Music Theatre Workshop Production 1 (may be completed for credit twice)
MUP/THP270 Musical Theatre Workshop (2) OR
MUP/
THP270AA Musical Theatre Workshop (1)
(may be completed for credit twice) 1-2
Acting
THP112 Acting I
THP212 Acting II
Technical Theatre
THP213 Introduction to Technical Theatre (3) OR
DAN210 Dance Production I (3) AND
THP201AA Theatre Production I (1) OR
THP202AA Theatre Production I Scene Shop (1) 3-4

\section*{Movement and Voice}

COM/THP271 Voice and Diction (3) OR
THP131 Stage Movement(3)

\section*{Dance}

Select a total of five credits from the following list. No more than two courses can be selected from each of the following areas.

\section*{Music Theatre}

DAN129 Musical Theatre Dance I
DAN130 Musical Theatre Dance II
DAN229 Musical Theatre Dance III
DAN230 Musical Theatre Dance IV

\section*{Ballroom}
\begin{tabular}{|c|c|c|}
\hline DAN104++ & Any Ballroom Course & 1 \\
\hline DAN204++ & Any Ballroom Course & 1 \\
\hline DAN106AA & Latin I & 1 \\
\hline DAN106AB & Latin II & 1 \\
\hline DAN206AA & Latin III & 1 \\
\hline DAN206AB & Latin IV & 1 \\
\hline Jazz & & \\
\hline DAN133 & Jazz Dance I & 1 \\
\hline DAN136 & Jazz Dance II & 1 \\
\hline DAN233 & Jazz Dance III & 1 \\
\hline DAN233AA & Jazz Dance III: Intensive & 2 \\
\hline DAN236 & Jazz Dance IV & 1 \\
\hline DAN236AA & Jazz Dance IV: Intensive & 2 \\
\hline Ballet & & \\
\hline DAN131 & Ballet I & 1 \\
\hline DAN134 & Ballet II & 1 \\
\hline DAN231 & Ballet III & 1 \\
\hline DAN231AA & Ballet III: Intensive & 2 \\
\hline DAN234 & Ballet IV & 1 \\
\hline DAN234AA & Ballet IV: Intensive & 2 \\
\hline Modern & & \\
\hline DAN132 & Modern Dance I & 1 \\
\hline DAN135 & Modern Dance II & 1 \\
\hline DAN232 & Modern Dance III & 1 \\
\hline DAN232AA & Modern Dance III: Intensive & 2 \\
\hline DAN235 & Modern Dance IV & 1 \\
\hline DAN235AA & Modern Dance IV: Intensive & 2 \\
\hline Tap & & \\
\hline DAN140 & Tap Dance I & 1 \\
\hline DAN145 & Tap Dance II & 1 \\
\hline DAN240 & Tap Dance III & 1 \\
\hline DAN245 & Tap Dance IV & 1 \\
\hline Hip Hop & & \\
\hline DAN102++ & Any Hip Hop Course & 1 \\
\hline DAN202++ & Any Hip Hop Course & 1 \\
\hline
\end{tabular}

\section*{Restricted Electives}

Credits: 1-3
Select an elective course within the area of Dance, Music and Theatre in consultation with that Faculty Program advisor and/or the Visual and Performing Arts student success analyst. Courses cannot be used to satisfy Required Courses.
DAN+++++ Any Dance Course
MUP+++++ Any Music Course
THP+++++ Any Theatre Course

\section*{General Education Requirements Credits: 35-44} Arizona General Education Curriculum (AGEC) AGEC-A 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 Area ([C], [G] and/ or \([H]\) ) requirement(s). See the AGEC matrix for course designations.

\section*{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
Mathematics [MA]
Credits: 3-6
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
Humanities, Arts and Design [HU] Credits: 6
MHL146 Survey of Broadway Musicals
DAH100 Introduction to Dance (3) OR
DAH250 Dance in Popular Culture (3) OR
THE111 Introduction to Theatre (3)
Social-Behavioral Sciences [SB] Credits: 6
COM100 Introduction to Human Communication 3 Any approved general education courses in the So-cial-Behavioral Sciences [SB] area.

\section*{Natural Sciences [SG]/[SQ]}

Credits: 8
Any approved general education course in the Natural Sciences (Quantitative) [SQ] area
Any approved general education course in the Natural Sciences (Quantitative) [SQ] area or the Natural Sciences (General) [SG] area

4

\section*{Awareness Areas}

Credits: 0-6
Recommend sharing these requirements with Core Requirements.

Cultural Diversity in the US [C] Credits: 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 Credits: 0-3
Courses in this area may also be applied to the AGEC Core Requirements. To minimize total credits required for degree and maximize transferable credits, it is recommended that courses be selected that meet more than one requirement wherever possible.
Oral Communication
Credits: 0
Met by COM100 Introduction to Human Communication in Social and Behavioral Sciences Area.
Critical Reading
Credits: 0-3
CRE101 Critical Reading and Critical Thinking (3) OR
Equivalent as indicated by assessment (0) 0-3

\title{
Associate in Arts, Fine Arts (AAFA), Emphasis in Theater
}

\section*{Total Credits: 60-93 \\ Major Code: 8107}

\section*{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 degree program.

\section*{Program Notes}

Students must earn a grade of 'C' or better in all courses in 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.

\section*{Required Courses}

Credits: 16-17
THF115 Makeup for Stage and Screen 3
THP112 Acting I 3
THP201++ any Theatre Production course (1-2) OR
THP202++ any Theatre Production course (1) 1-2
THP213 Introduction to Technical Theatre 3
THP214 Directing Techniques 3
THP217 Introduction to Design Scenography 3

\section*{Restricted Electives \\ Credits: 9-32}

For students intending to transfer to a four-year institution in Arizona, complete all courses in the transfer plan that best aligns with academic and professional goals. If academic and professional goals do not align with any of the transfer plans below, select courses in consultation with a theatre advisor to reach a minimum of 9 credits. Up to 4 credits in a related discipline can be substituted with the permission of a theatre advisor. Consult with an academic, faculty, or program advisor to prevent exceeding your university transfer program's maximum transferable credits (typically 64).

\section*{Transfer Plan 1: Arizona State University (Herberger Institute for Design and the Arts), Theatre, Bachelor of Arts (BA)}

Complete 6 credits of Related Theatre Elective coursework from the following:
COM/THP271 Voice and Diction 3
THP131 Stage Movement 3
THP212 Acting II 3
Complete 3 credits of lower division elective coursework (except those used to fulfill other requirements) from the following:
COM/THP241 Oral Interpretation of Literature 3
COM/THP271 Voice and Diction 3
MUP/THP270 Musical Theatre Workshop 2

STO/THP285 Creating/Performing Solo/Collaborative Works 3
THE118 Playwriting 3
THF+++ Any THF Theatre and Film course(s) 1-3
THP131 Stage Movement 3
THP151 Theatre for Youth 3
THP203 Technical Theatre Production 3
THP206 Introduction to Costume Construction for Theatre

THP211

Creative Drama

THP212 Acting II 3
THP216 Beginning Stage Lighting 3
THP219 Introduction to Puppetry 3
THP226 Theatrical Design: Costuming 3
THP261 Previsualization Modeling 2
THP262 Entertainment Industry Design Drafting 3
THP267 Painting Techniques for Film, TV and Theatre 3
THP268 Opportunities in Production 3
THP269 Technical Theatre Portfolio Development 1
THP281 Production and Acting I 3
THP282 Production and Acting II 3
THP298AA Special Projects 1
THP298AB Special Projects 2
THP298AC Special Projects 3

\section*{Transfer Plan 2: Arizona State University (Herberger Institute for Design and the Arts), Theatre (Acting), Bachelor of Arts (BA)}

Complete the following Lower Division Theatre
Requirements:
COM/THP271 Voice and Diction 3
THP131 Stage Movement 3
THP212 Acting II 3
Complete a minimum of 3 additional credits of lower division elective coursework (except those used to fulfill other requirements) from the following:
COM/THP241 Oral Interpretation of Literature 3
MUP/THP270 Musical Theatre Workshop 2
STO/THP285 Creating/Performing Solo/Collaborative Works 3
THE118 Playwriting 3
THF+++ Any THF Theatre and Film course(s) 1-3
THP151 Theatre for Youth 3
THP203 Technical Theatre Production 3
THP206 Introduction to Costume Construction for Theatre
THP211 Creative Drama 3
THP216 Beginning Stage Lighting 3
THP219 Introduction to Puppetry 3
THP226 Theatrical Design: Costuming 3THP282Painting Techniques for Film, TV and Theatre3
Opportunities in Production ..... 3THP298AATechnical Theatre Portfolio Development13
THP298AB Special Projects ..... 2
THP298AC Special Projects ..... 3
Transfer Plan 3: Arizona State University (Herberger Institute for Design and the Arts), Theatre (Design and Production), Bachelor of Arts (BA)

Complete the following Lower Division Theatre Requirements:
THP206 Introduction to Costume Construction for Theatre

Complete an additional 6 credits of coursework (except those used to fulfill other requirements) from the following:
COM/THP241 Oral Interpretation of Literature 3
COM/THP271 Voice and Diction
MUP/THP270 Musical Theatre Workshop
STO/THP285 Creating/Performing Solo/ Collaborative Works
THE118 Playwriting
THF+++ Any THF Theatre and Film course(s) 1-3
THP131 Stage Movement
THP151 Theatre for Youth
THP203 Technical Theatre Production
THP211 Creative Drama
THP212 Acting II
THP216 Beginning Stage Lighting
THP219 Introduction to Puppetry
THP226 Theatrical Design: Costuming
THP261 Previsualization Modeling
2
- Entertainment Industry Design Drafting

THP267 Painting Techniques for Film, TV and Theatre
THP268 Opportunities in Production 3
THP269 Technical Theatre Portfolio Development
THP281 Production and Acting I 3
THP282 Production and Acting II 3
THP298AA Special Projects 1
THP298AB Special Projects 2

THP298AC Special Projects
3
Transfer Plan 4: Grand Canyon University (GCU),
Theatre and Drama, Bachelor of Arts (BA)
Complete the following Restricted Electives:
\begin{tabular}{lll} 
THP151 & Theatre for Youth & 3 \\
THP212 & Acting II & 3 \\
THP216 & Beginning Stage Lighting & 3
\end{tabular}

Transfer Plan 5: Northern Arizona University
(NAU), Theatre (Design and Technology Emphasis), Bachelor of Arts (BA)or Bachelor of Science (BS)
Complete 9 credits of the following Core or Emphasis Requirements:
THF216 Wig and Hair Production for Theatre and Film 3
THF260 Theatrical Design: Rendering 2
THP203 Technical Theatre Production 3
THP206 Introduction to Costume Construction for Theatre
THP212 Acting II 3
THP261 Previsualization Modeling 2
For students transferring to NAU to earn a BA in Theatre, complete a language course at the intermediate level (202 or equivalent), including American Sign Language IV with a ' \(C\) ' or better OR demonstrate proficiency through this level as indicated by assessment.

\section*{Foreign Language}

Credits: 0-20
\begin{tabular}{ll} 
ARB+++ & any ARB Arabic course(s) \\
CHI+++ & any CHI Chinese course(s) \\
FRE+++ & any FRE French course(s) \\
GER+++ & any GER German course(s) \\
ITA+++ & any ITA Italian course(s) \\
JPN+++ & any JPN Japanese course(s) \\
SPA+++ & any SPA Spanish course(s) \\
SLG+++ & any SLG Sign Language course(s)
\end{tabular}
\begin{tabular}{ll} 
Transfer Plan 6: Northern Arizona University \\
(NAU), Theatre (Performance Emphasis), \\
Bachelor of Arts or Bachelor (BA) of Science (BS) \\
Complete 9 credits following Core or Emphasis Require- \\
ments: & \\
COM/HP271 Voice and Diction & 3 \\
THF216 & Wig and Hair Production for Theatre and Film \\
THP203 & Technical Theatre Production \\
THP206 & Introduction to Costume Construction \\
& for Theatre
\end{tabular}

For students transferring to NAU to earn a BA in Theatre, complete a language course at the intermediate level (202 or equivalent), including American Sign Language IV with a 'C' or better OR demonstrate proficiency through this level as indicated by assessment.
Foreign Language
Credits: 0-20
\begin{tabular}{ll} 
ARB+++ & any ARB Arabic course(s) \\
CHII+++ & any CHI Chinese course(s) \\
FRE+++ & any FRE French course(s) \\
GER+++ & any GER German course(s) \\
ITA+++ & any ITA Italian course(s) \\
JPN+++ & any JPN Japanese course(s) \\
SPA+++ & any SPA Spanish course(s) \\
SLG+++ & any SLG Sign Language course(s)
\end{tabular}

Transfer Plan 7: Northern Arizona University (NAU), Theatre (Theatre Studies Emphasis), Bachelor of Arts (BA) or Bachelor of Science (BS)
Complete 9 credits of the following Core or Emphasis Requirements:
COM/THP271 Voice and Diction
THF216 Wig and Hair Production for Theatre and Film
THF260 Theatrical Design: Rendering
THP203 Technical Theatre Production
THP206 Introduction to Costume Construction for Theatre
THP212 Acting II
For students transferring to NAU to earn a BA in Theatre, complete a language course at the intermediate level (202 or equivalent), including American Sign Language IV with a 'C' or better OR demonstrate proficiency through this level as indicated by assessment.

Foreign Language
Credits: 0-20
\begin{tabular}{ll} 
ARB+++ & any ARB Arabic course(s) \\
CHI+++ & any CHI Chinese course(s) \\
FRE++++ & any FRE French course(s) \\
GER+++ & any GER German course(s) \\
ITA+++ & any ITA Italian course(s) \\
JPN+++ & any JPN Japanese course(s) \\
SPA+++ & any SPA Spanish course(s) \\
SLG+++ & any SLG Sign Language course(s)
\end{tabular}

Transfer Plan 8: University of Arizona (UA), Theatre Arts, Bachelor of Arts (BA)
Complete the following Lower Division Theatre Requirements:
THP212 Acting II

Complete 6 credits of Lower Division Theatre Elective coursework (except those used to fulfill other requirements) from the following:
COM/THP241 Oral Interpretation of Literature 3
COM/THP271 Voice and Diction 3
MUP/THP270 Musical Theatre Workshop 2
STO/THP285 Creating/Performing Solo/Collaborative Works 3
THE118 Playwriting 3
THF+++ Any THF Theatre and Film course(s) 1-3
THP131 Stage Movement 3
THP151 Theatre for Youth 3
THP203 Technical Theatre Production 3
THP211 Creative Drama 3
THP216 Beginning Stage Lighting 3
THP219 Introduction to Puppetry 3
THP226 Theatrical Design: Costuming 3
THP261 Previsualization Modeling 2
THP262 Entertainment Industry Design Drafting 3
THP267 Painting Techniques for Film, TV and Theatre 3
THP268 Opportunities in Production 3
THP269 Technical Theatre Portfolio Development 1
THP281 Production and Acting I 3
THP282 Production and Acting II 3
THP298AA Special Projects 1
THP298AB Special Projects 2
THP298AC Special Projects 3
For students transferring to UA to earn a BA in Theatre
Arts, complete a language course at the intermediate
level (202 or equivalent), including American Sign Lan-
guage IV with a 'C' or better OR demonstrate proficiency through this level as indicated by assessment.

\section*{Foreign Language}

Credits: 0-20
\begin{tabular}{ll} 
ARB+++ & any ARB Arabic course(s) \\
CHI+++ & any CHI Chinese course(s) \\
FRE+++ & any FRE French course(s) \\
GER+++ & any GER German course(s) \\
ITA+++ & any ITA Italian course(s) \\
JPN+++ & any JPN Japanese course(s) \\
SPA+++ & any SPA Spanish course(s) \\
SLG+++ & any SLG Sign Language course(s)
\end{tabular}

Transfer Plan 9: University of Arizona, Theatre Production: Professional Actors Training Program Emphasis, Bachelor of Fine Arts (BFA)
MUP133 Class Voice I 1
MUP134 Class Voice II 1
THP212 Acting II 3
With permission of the theatre advisor, complete two of
the following courses for a total of 2 credits (except those used to fulfill other requirements):
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
DAN146 Tap Dance Ensemble 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
Complete an additional 5 credits of coursework from the following (except those used to fulfill other requirements):
COM/THP241 Oral Interpretation of Literature 3
COM/THP271 Voice and Diction
MUP/THP270 Musical Theatre Workshop 2
STO/THP285 Creating/Performing Solo/Collaborative Works 3
THE118 Playwriting 3
THF+++ Any THF Theatre and Film course(s) 1-3
THP131 Stage Movement 3
THP151 Theatre for Youth 3
THP203 Technical Theatre Production 3
THP211 Creative Drama 3
THP216 Beginning Stage Lighting 3
THP219 Introduction to Puppetry 3
THP226 Theatrical Design: Costuming 3
THP261 Previsualization Modeling 2
THP262 Entertainment Industry Design Drafting 3
THP267 Painting Techniques for Film, TV and Theatre 3
THP268 Opportunities in Production 3
THP269 Technical Theatre Portfolio Development 1
THP281 Production and Acting I 3
THP282 Production and Acting II 3
THP298AA Special Projects 1
THP298AB Special Projects 2
THP298AC Special Projects 3
Complete a language course at the intermediate level (202 or equivalent), including American Sign Language IV with a 'C' or better OR demonstrate proficiency through
this level as indicated by assessment.
Foreign Language
Credits: 0-20
ARB+++ any ARB Arabic course(s)
CHI+++ any CHI Chinese course(s)
FRE+++ any FRE French course(s)
GER+++ any GER German course(s)
ITA+++ any ITA Italian course(s)
JPN+++ any JPN Japanese course(s)
SPA+++ any SPA Spanish course(s)
SLG+++ any SLG Sign Language course(s)
General Education Requirements Credits: 35-44
Arizona General Education Curriculum (AGEC) AGEC-A Some courses with an [HU], [SB], or [L] designation may also be used to satisfy the Oral Communication, Critical Reading, or Awareness Area ([C], [G] and/or [H]) requirement(s).

First-Year Composition [FYC]
Credits: 6
\(\begin{array}{ll}\text { ENG101 } & \text { First-Year Composition (3) OR } \\ \text { ENG107 } & \text { First-Year Composition for ESL (3) AND } \\ \text { ENG102 } & \text { First-Year Composition (3) OR } \\ \text { ENG108 } & \text { First-Year Composition for ESL (3) }\end{array}\)

\section*{Literacy and Critical Inquiry [L] \\ Credits: 3}

THE220 Modern Drama

\section*{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 Mathe-
matical Applications [MA] area
Computer/Statistics/Quantitative Applications [CS]

Credits: 3
Any approved general education course in the Comput-
er/Statistics/Quantitative Applications [CS] area
3

Humanities, Arts and Design [HU]
Credits: 6
HUM/THF205 Introduction to Cinema (3) OR
HUM/THF210 Contemporary Cinema (3) AND
THE111 Introduction to Theatre (3)
6

\section*{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 So-cial-Behavioral Sciences [SB] area.

\section*{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).

Awareness Areas
Credits: 0-6
These requirements may be shared with Core Requirements.
Cultural Diversity in the US [C]
Credits: 0-3
Historical/Global Awareness [H]/[G] Credits: 0-3
Any approved general education course with the Historical \([\mathrm{H}]\) and/or Global [G] awareness area designation.

\section*{MCCCD Additional Requirements Credits: 0-3}

Courses in this area may also be applied to the AGEC Core Requirements. To minimize total credits required for degree and maximize transferable credits, it is recommended that courses be selected that meet more than one requirement wherever possible.

\section*{Oral Communication}

Credits: 0
Met by COM100 OR COM110 OR COM230 in Social-Behavioral Sciences area.

Critical Reading
Credits: 0-3
CRE101 Critical Reading and Critical Thinking (3) OR Equivalent as indicated by assessment (0) 0-3

\section*{Associate in Business, General Requirements (ABUS-GR)}

\section*{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 and grades of 'C' or higher are required to earn the degree. The Associate in Business-General Requirements de-
gree is governed by the MCCCD General Academic Policies for Transfer Degrees.

This degree provides the first two years of a fouryear curriculum for students who wish to specialize 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)

\section*{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 degree transfers as a block without loss of credit to Arizona's public universities and other institutions with district-wide articulation agreements.

\section*{Special Academic Policies that Govern the}

\section*{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.)
- A single course can be used to satisfy multiple areas within the degree simultaneously simultaneously (AGEC-B Core Area and/or Awareness Area(s), Required Courses (Common Lower Division Requirements), and/ or Restricted Electives (Business Electives)). Credits are counted once toward the total for the degree.

\section*{Degree Requirements}

The 62-72 semester credits required for the Associate in Business General 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 each MCCCD college's website.

\section*{I. Required Courses}

Credits: 21-25
Accounting
(6-9)
ACC111 Accounting Principles I 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 AGEC-B Core Area. 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
GBS205 Legal, Ethical, and Regulatory Issues in Business(3)
GBS221 Business Statistics
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 attend ASU W. P. Carey School of Busi-
ness will be required to take MAT217 or MAT218.

\section*{II. Restricted Electives}

Credits: 0-6
Select two courses ( 6 credits) from the following options: Some courses may be used to satisfy both Restricted Elective and Arizona General Education Curriculum (AGEC) requirements, as indicated in [brackets] below, but two courses must be completed. AGEC designations are subject to change. See AGEC matrix for each course's value(s) in the semester it is taken:
GBS151 Introduction to Business
(Recommended)
CIS114DE Excel Spreadsheet
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)
GBS233 [L] Business Communication
GBS220 Quantitative Methods in Business Quantitative Methods in Business (If course used to satisfy Required Courses, it cannot be used to satisfy Restricted Electives.)
IBS101 [G] Introduction to International Business (3)
MGT253 Owning and Operating a Small Business (3)
REA179 Real Estate Principles I (3)
REA180 Real Estate Principles II
MKT271 Principles of Marketing
PAD100 21st Century Public Policy and Service
(3)

SBU200 [SB,G] Society and Business
(3)

\section*{III. Arizona General Education Curriculum- \\ (AGEC-B) Requirements Credits: 29-37*}

The AGEC-B requires a minimum of 35 credits ( 32 if FYC is met by single transfer course)*, however, Required and Restricted elective courses may also meet AGEC-B requirements and credits count once toward the total for the degree. Therefore, the

AGEC-B may be met with fewer than 35 (fewer than 32 if FYC is met by single transfer course)* credits as long as all requirements listed in this section (III) are completed.

\section*{A. Core Areas:}

29-37*
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 their respective Core Area, Required Course(s) or Restricted Elective(s). AGEC designations are subject to change. Courses may meet more than one requirement but are only counted once toward the total credits for the degree. See AGEC matrix for each course's value(s) in the semester it is taken.
1. First-Year Composition [FYC] ENG101 OR ENG107 6*

AND
ENG102 OR ENG108
2. Literacy and Critical Inquiry [L]
(Note: Students planning to attend ASU W.P. Carey will be required to take COM225.)
3. Mathematical Applications [MA]

MAT212 Brief Calculus OR
MAT213 Brief Calculus OR
Higher [MA] designated course
4. Computer/Statistics/Quantitative Applications [CS] 3 CIS105 Survey of Computer Information Systems
5. Humanities, Arts and Design [HU]

Students are encouraged to choose course work from more than one discipline.
6. Social-Behavioral Sciences [SB] 0

Met by Required Courses ECN211 AND ECN212
7. Natural Sciences [SQ/SG]

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.

\section*{B. Awareness Areas}

0-6
Some courses may be used to satisfy both
a Core Area and one or more Awareness Area(s). (See
AGEC matrix for current course values.)
1. Cultural Diversity in the United States [C]
2. Global Awareness [G] OR Historical Awareness [H] (0-3) Note: Students transferring to ASU in Accountancy should take two of the following courses: Sociology with [SB] value, Psychology with [SB] value, and COM230 or COM225. If students do not take these prior to transfer, they may need to take additional hours to meet ASU requirements.

\section*{IV. General Electives \\ Credits: 0-12}

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.

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 advisement information is accessible on the following websites: \(\underline{\text { aztransfer. }}\)
com, https://curriculum.maricopa.edu/, as well as those of individual universities. For appropriate course selection, students should consult with an academic advisor.

TOTAL
62-72*
* 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.
* 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.

\section*{Associate in Business, General Requirements (ABUS-SR)}

\section*{Description}

The Maricopa County Community College District Associate in Business, Special Requirements (ABUSSR) degree requires a minimum of 62 semester credits for the program of study. A minimum grade point average of 2.0 and grades of ' C ' or higher are required to earn the degree. 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 is governed by the MCCCD General Academic Policies for Transfer Degrees.

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)

\section*{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 Business' 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 degree transfers as a block without loss of credit to Arizona's public universities and other institutions with district-wide articulation agreements.

\section*{Special Academic Policies that Govern the}

\section*{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.)
- A single course can be used to satisfy multiple areas within the degree simultaneously (AGEC-B Core Area and/or Awareness Area(s), Required Courses (Common Lower Division Requirements), and/or Restricted Electives (Business Electives)). Credits are counted once toward the total for the degree.

\section*{Degree Requirements}

The 62-71 semester credits 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 each MCCCD college's website.

\section*{I. Required Courses}

Credits: 27-31
Accounting
ACC111 Accounting Principles I 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 AGEC-B Core Area. 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
ECN212[SB] Microeconomic Principles
GBS205 Legal, Ethical, and Regulatory Issues in Business(3)
GBS221 Business Statistics
CIS162AD C\#: Level 1
CIS250 Management of Information Systems
GBS220 Quantitative Methods in Business OR MAT217 or MAT218 Mathematical Analysis for Business (3-4)
Note: Students planning to attend ASU W. P. Carey School of Business will be required to take MAT217 or MAT218.

\section*{II. Arizona General Education Curriculum-} Business (AGEC-B) Requirements Credits: 27-31*
The AGEC-B requires a minimum of 35 credits ( 32 if FYC is met by single transfer course)*, however, Required and Restricted elective courses may also meet AGEC-B requirements and credits count once toward the total for the degree. Therefore, the AGEC-B may be met with fewer than 35 cred-
its (fewer than 32 if FYC is met by single transfer course)* as long as all requirements listed in this section (II) are completed.

\section*{A. Core Areas:}

29-37*
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 their respective Core Area, Required Course(s) or Restricted Elective(s). AGEC designations are subject to change. Courses may meet more than one requirement but are only counted once toward the total credits for the degree. See AGEC matrix for each course's value(s) in the semester it is taken.
1. First-Year Composition [FYC]

ENG101 OR ENG107
AND
ENG102 OR ENG108
2. Literacy and Critical Inquiry [L] 3
(Note: Students planning to attend ASU W.P. Carey will be required to take COM225.)
3. Mathematical Applications [MA]

3-5
MAT212 Brief Calculus OR
MAT213 Brief Calculus OR
Higher [MA] designated course
(3)
4. Computer/Statistics/Quantitative Applications [CS] 3 CIS105 Survey of Computer Information Systems
5. Humanities, Arts and Design [HU]

Students are encouraged to choose course work from more than one discipline.
6. Social-Behavioral Sciences [SB]

Met by Required Courses ECN211 AND ECN212
7. 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.

\section*{B. Awareness Areas}

Some courses may be used to satisfy both
a Core Area and one or more Awareness Area(s). (See
AGEC matrix for current course values.)
1. Cultural Diversity in the United States [C]
2. Global Awareness [G] OR Historical Awareness [H] (0-3) Note: Students transferring to ASU in Accountancy should take two of the following courses: Sociology with [SB] value, Psychology with [SB] value, and COM230 or COM225. If students do not take these prior to transfer, they may need to take additional hours to meet ASU requirements.

\section*{III. General Electives}

Credits: 0-6
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.
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 advisement information is accessible on the following websites: aztransfer. com, https://curriculum.maricopa.edu/, as well as those of individual universities. For appropriate course selection, students should consult with an academic advisor.

\section*{TOTAL}

62-71*
* 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.
* 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.

\title{
Associate in \\ General Studies (AGS)
}

\section*{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. General Education (minimum of 38 credits Core curriculum (requires a grade of 'C' or better)
Distribution courses (requires a grade of 'D' or better)
II. 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)

\section*{Purpose of the Degree}

The Associate in General Studies (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 Business, Associate in Science, and all major-specific pathway map versions of these degrees) by the Maricopa Community Colleges.

\section*{Academic Policies that Govern the}

\section*{Associate in General Studies Degree:}
- The graduation policies within the general catalog must be satisfied.
- A single course can simultaneously count towards a Core Area and a Distribution 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 [L] of 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 at 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.
- Completion of the AGS with a minimum Grade Point Average of at least 2.0 on a 4.0 scale 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 bachelors degrees, not all credits may be transferable and students may have deficiencies in lower division (100- and 200-level) courses for a particular major.

\section*{Summary of Degree Requirements:}

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

\section*{I. MCCCD General Education}

Core Areas
1. First-Year Composition 6*

ENG101 OR ENG107 AND
ENG102 OR ENG108
2. Mathematics

ENG101 OR ENG107 AND
ENG102 OR ENG108
3. Computer Usage 1

ENG101 OR ENG107 AND
ENG102 OR ENG108
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. 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 on prior page). The credits are only counted once, but may be applied to meet Oral Communication and Social-Behavioral Science requirements.
3. Natural Sciences

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

Associate in General Studies Total Credits: 60-64

\section*{I. General Education Requirements}

All courses listed meet AGS requirements as specified. Courses in Purple Italic Underline also meet Arizona General Education Curriculum AGEC requirements.

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

\section*{Degree Requirements}

GENERAL EDUCATION CORE
(16 credits - grade of 'C' or better)*

\section*{First-Year Composition}

Credits: 6*
ENG101 English [101, 107] \& [102, 108\(]\)

\section*{Oral Communication}

Credits: 3
COM Communication 100, 100AA \& 100AB \& \(100 A C, 110,110 A A\) \& \(110 A B\) \& \(110 A C\), 225, 230

\section*{Critical Reading}

\section*{Credits: 3}

CRE Critical Reading 101 or Equivalent as indicated by assessment

\section*{Mathematics [MA]}

Credits: 3
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, 206,212, 213, 217, 218, 220, 221, 225, 227, 230, 231, 240, 241, 256, 257, 261, 262, 276, 277, Equivalent course / Satisfactory completion of a higher level Mathematics course.

\section*{Computer Usage}

Credits: 1
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
ADA Advertising Arts 169, 175, 177, 183, 283, 283AA, 289
AJS
AMS
ARC
ART
BIO
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, 162AC, 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, 283 (and except 200, 200AA, 200AB, 210, 210AA, 210AB)
\begin{tabular}{|c|c|c|}
\hline CTR & Court Reporting 101, 102 & ENH \\
\hline \multirow[t]{2}{*}{DFT} & \begin{tabular}{l}
Drafting Technology 105AA**, 251, 254AA, 256AA \\
**Must be taken with CSC100AA or AB to
\end{tabular} & \\
\hline & meet AGEC value & \\
\hline ECH & Early Childhood Education 238 & \\
\hline EEE & Electrical Engineering 120 & \\
\hline ELE & Electronic 131, 181, 241, 243, 245 & FRE \\
\hline ELT & Electronic Technology 131, 241, 243 & GST \\
\hline ENG & English 100AE & HCR \\
\hline FON & Food \& Nutrition 100 & HIS \\
\hline GBS & General Business 221 & \\
\hline GIS & Geographic Information Science 205, 211 & HON \\
\hline GPH & Physical Geography 220 & HUM \\
\hline HRM & Hotel Restaurant Management 126 & \\
\hline JRN & Journalism 133 & \\
\hline LAS & Paralegal Studies 229 & \\
\hline MAT & Mathematics 206 & \\
\hline MET & Manufacturing Technology 264 & \\
\hline MTC & Music Theory/Composition 180, 191 & \\
\hline NET & Networking Technology 181 & INT \\
\hline \multirow[t]{2}{*}{OAS} & Office Automation Systems & LAT \\
\hline & 111AA/111AB/113/119/130DK & MHL \\
\hline PSY & Psychology 230 & \\
\hline SBS & Small Business 211 & PHI \\
\hline SWU & Social Work 225 & \\
\hline TVL & Travel Agent Technology 203 & \\
\hline VPT & Video Production Technology 106 & \\
\hline \multicolumn{2}{|l|}{GENERAL EDUCATION DISTRIBUTION AREAS ( \(28-29\) credits - grade of 'D' or better)} & REL \\
\hline \multicolumn{3}{|l|}{\multirow[t]{2}{*}{\begin{tabular}{l}
Humanities, Arts and Design [HU] Credits: 9 \\
Students are encouraged to choose courses from more than one discipline.
\end{tabular}}} \\
\hline & & \\
\hline AHU & Arabic Humanities 245 & SLC \\
\hline AIS & American Indian Studies \(\underline{213}\) & SPA \\
\hline AJS & Administration of Justice Studies 123 & SPH \\
\hline \multirow[t]{2}{*}{ARH} & Art Humanities Any ARH Course(s), including \(100,101,102,109,110,112,115,118,145\), & SSH \\
\hline & 201, 203, 204, 217, 216, 240, 250 & STO \\
\hline ART & Art 131 & SWU \\
\hline ASB & Anthropology 211, 214, 220, 222, 223, 253 & TCM \\
\hline CCS & Chicana and Chicano Studies 101 & TEC \\
\hline COM & Communication 241 & THE \\
\hline CON & Construction 101 (formerly CNS101) & THF \\
\hline DAH & Dance Humanities 100, 101, 201, 250, 255 & THP \\
\hline EDU & Education 291, 292, 294 & WST \\
\hline ENG & English 200, 213, 218 & \\
\hline
\end{tabular}
CTR Court Reporting 101, 102
DFT Drafting Technology 105AA**, 251, 254AA,
        256AA
        **Must be taken with CSC100AA or AB to
        meet AGEC value
        ECH Early Childhood Education 238
        Electrical Engineering 120
        Eectronic 131, 181, 241, 243, 245
        ENG
        FON
        GBS
        GIS
        GPH
        HRM
        JRN
        LAS
        Mathematics 206
        Manufacturing Technology 264
        Networking Technology 181
        111AA/111AB/113/119/130DK
        Psychology 230
        Small Business 211
        Social Work 225
        Travel Agent Technology 203
        VPT Video Production Technology 106

\section*{GENERAL EDUCATION DISTRIBUTION AREAS}

Humanities, Arts and Design [HU] Credits: 9
Students are encouraged to choose courses from more than one discipline

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, 203, 204, 217, 216, 240, 250
ART Art 131
ASB Anthropology 211, 214, 220, 222, 223, 253
CCS Chicana and Chicano Studies \(\underline{101}\)
COM Communication 241
CON Construction 101 (formerly CNS101)

EDU Education 291, 292, 294
ENG English 200, 213, 218

Humanities Any HUM course(s), including 100, 101, 107, 108, 190AA, 190AB, 190AC, 190AD, 190AE, 190AF, 190AG, 190AH, 190Al, 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)

Interior Design 115, 120
Latin 201, 202
Music: History/Literature 140, 143, 145, 146, 153, 155, 194, 204, 241, 242, 295
Philosophy Any PHI Course(s), including 101, 102, 103, 104, 105, 106, 113, 201, 212, 213, 214, 215, 233AC, 216, 218, 224, 233AA, 233AB, 234AC, 244, 245, 250, 251, 282AA-AC
Religious Studies Any REL Course(s), 100, 101, 151, 200, 202, 203, 205, 206, 207, 210,
\(211,212,213,214,218,223,225,230,240\), 244, 245, 248, 250, 251, 270, 271, 277, 292, 294, 295, 282AA-AC, 290, 291
Studies in Language \& Culture 201, 202
Spanish 241, 242, 265, 266
Spanish Humanities 241, 245
Sustainability/Social Sciences and Humanities 111
Storytelling 292, 294
Social Work 183
Telecommunications \(\underline{107}\)
Textiles and Clothing \(\underline{105}\)
Theater 111, 220
Theatre and Film 205, 206, 210
Theater/Performance/Production \(\underline{241}\)
Women's Studies 209, 284, 285, 290

\section*{Social-Behavioral Sciences [SB] Credits: 6-9}

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 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, 259, 270
ASB Anthropology 100, 102, 202, 211, 222, 223, 226, 230, 235, 252
Anthropology 104/275
ASM
BHS
CCS
Behavioral Health Services Technology 150
Chicana and Chicano Studies \(\underline{202}\)
CFS Child/Family Studies 112, 157, 159, 176, 205, 235, 259
COM Communication 100, 100AA \& 100AB \& \(100 A C, 110,110 A A \& 110 A B\) \& \(110 A C, 163\), 230, 250, 263
ECH Early Childhood Education 176
ECN Economics 160, 211, 212, 213, 250
EDU Education 221,222
EED Early Education 200, 205, 222
EMT Emergency Medical Technology 258
ENG English 213
FOR Forensic Science \(\underline{275}\)
FSC Fire Science Technology 258
GCU Cultural Geography 102, 113, 121, 122, 141, 221
HES Health Science 100
HIS History any HIS Course(s), including 100, \(101,102,103,104,105,106,108,109,113\), 114, 140, 145, 173, 190, 201, 203, 204, 209, 240, 241, 242, 273, 277, 282AA-AC (and except 111, 170, 251, 252, 253, 254) Honors 201
International Business 109
Information Studies 201, 210
IBS
IFS
MCO
MGT
PAD
Mass Communications 120
Management 229, 230
Public Administration \(\underline{200}\)
POS
Political Science Any POS course(s),

PSY

REC
SBU
SLC
SOC

SSH
SUS
SWU
TEC
WED
WST
YAQ

\section*{Natural Sciences [SG]/[SQ]}

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, 145, 149AF, 149AH, 149AK, 149AL, 149AM, 149AN, 156, 156XT, 160, 181, 181XT, 182, 182XT, 201, 201XT, 202, 205, 241, 245
CHM Chemistry 107\&107LL, 130\&130LL, 130AA, 150\&151LL, 150AA, 151\&151LL, 151AA, 152\&152LL, 152AA, 154\&154LL, 230\&230LL Construction 106 (formerly CNS106)
CON
ENV
FON
FOR
GLG

GPH
PHS
PHY Physics 101, 101AA, 111, 111AA, 112, 115, 116, 121, 131
PSY Psychology 275, 290AB, 290AC
Psychology 101, 123, 132, 156, 157, 215, \(218,225,235,240,241,243,250,260,266\), 277, 280, 292
Recreation \(\underline{120}\)
Society and Business \(\underline{200}\)
Studies in Language \& Culture 201
Sociology Any SOC course(s), including 101, \(110,130,141,157,180,212,220,241251\),
266, 270 (and except 143, 245, 253, 265)
Sustainability/Social Sciences and Humanities 111
Sustainability/Natural Sciences 110
Social Work 102, 171, 182, 250, 258, 295
Textiles and Clothing 105
Wellness Education 110
Women's Studies 100, 161
Yaqui Indian History and Culture \(\underline{100}\)

Environmental Sciences 101
Food and Nutrition 241\&241LL
Forensic Science 105, 106, 275
Geology \(101 \& 103,101 \mathrm{IN}, 102 \& 104,102 \mathrm{IN}\), 105, 106, 110\&111, 110IN, 121, 140, 229AB-AC, 230AA-AC, 231AA-AD, 280, 281, 282AA
Physical Geography \(111 \& 112,113,211\), 212\&214, 213\&215 including \(100,101,110,113,114,115,120\), 125, 130, 140, 180, 210, 212, 221, 222, 223, 230, 270, 281AB, 282AA-AC, 285

\section*{Literacy and Critical Inquiry}

Credits: 0-3
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
COM Communication 222,225,241
CPD Counseling and Personal Development 160
CRE Critical Reading 101, 201
CUL Culinary Arts \(\underline{223}\)
DAH Dance Humanities 255
EDU Education 282AC
ENG English 111, 200, 215, 216, 217, 218
ENH English Humanities 241, 254, 255
EXS Exercise Science \(\underline{290}\)
GBS General Business \(\underline{233}\)
GPH Physical Geography 267
HUM Humanities 225, 250, 251
IFS Information Studies \(\underline{201}\)
JRN Journalism 201, 215, 234
MCO Mass Communications 220
MHL Music: History/Literature 204
PHI Philosophy 103, 106, 218, 224, 244
POS Political Science 115
PSY Psychology 290AB, 290AC
REL Religious Studies 203, 205, 207, 244
SLC Studies in Language \& Culture \(\underline{202}\)
THE Theatre 220
THP Theatre Performance/Production 241

\section*{II. Elective Courses}

Credits: 15-22
May select courses from prefixes already chosen for General Education Distribution requirements in order to develop depth in one or more subject areas.

\footnotetext{
* 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.
}

\section*{Associate in Science (AS)}

\begin{abstract}
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 for vary by specific emphasis (for example, Associate in Science, Emphasis in Physics). Refer to the Program (Degree) Search at curriculum.maricopa.edu for credit minimums for individual degree programs by emphasis. A minimum grade point average of 2.0 is required to earn the degree.The AS degree is governed by the MCCCD General Academic Policies for Transfer Degrees.
\end{abstract}

The Associate in Science degree includes the following components:
I. Program Prerequisites (if applicable, for versions with an emphasis only)
II. Required Courses (for versions with an emphasis only)
III. Restricted Electives (for versions with an emphasis only)
IV. Arizona General Education Curriculum for Science (AGEC-S)
V. MCCCD Additional Requirements (Oral Communication and Critical Reading)
VI. General Electives (if needed to reach minimum credits for degree)

\section*{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.

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 tAS 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.

\section*{Special Academic Policies that Govern the}

\section*{Associate in Science Degree}
- 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.

\section*{Degree Requirements}

The requirements for the Associate in Science follow. All versions of the Associate in Science require at least 60 credits; for major-specific pathways within the degree, prescribed courses and minimum credits for categories within the degree, as well as the total, vary. Refer to the Program (De-
gree) Search at curriculum.maricopa.edu for credit minimums for major-specific pathways within the degree. The following websites identify the courses that apply to the different General Education Core and Awareness Areas: 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 each MCCCD college's website.

\section*{Requirements}

Credits

\section*{I. Program Prerequisites}

\section*{Number Varies}

Program prerequisites for the Associate in Science degree vary by specific emphasis, and are not required for the version of the degree without a specific emphasis. Refer to the Program (Degree) Search at https://curriculum.maricopa.edu/ for specific courses and credit minimums by emphasis.

\section*{II. Required Courses}

Number Varies
Required (major-specific) courses for the Associate in Science degree vary by specific emphasis, and are not required for the version of the degree without a specific emphasis. Refer to the Program (Degree) Search at https://curriculum.maricopa.edu/for specific courses and credit minimums by emphasis.

\section*{III. Restricted Electives}

Number Varies
Restricted electives for the Associate in Science degree vary by specific emphasis, and are not required for version of the degree without a specific emphasis. Refer to the Program (Degree) Search at https://curriculum.maricopa for specific courses and credit minimums by emphasis.
IV. Arizona General Education CurriculumScience (AGEC-S)
up to 56
The AGEC-S requires a minimum of 36 credits (33 if FYC is met by single transfer course) \({ }^{\star}\), 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.

\section*{A. Core Areas:}

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 their respective Core Area, Required Course(s) or Restricted Elective(s). AGEC designations are subject to change. Courses may meet more than one requirement but are only counted once toward the total credits for the degree. See AGEC matrix for each course's value(s) in the semester it is taken.
1. First-Year Composition [FYC] ENG101 OR ENG107 6*

AND ENG102 OR ENG108
2. Literacy and Critical Inquiry [L]
(0 only if shared with HU or SB)
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 for each course's value(s) in the semester it is taken.)
3. Mathematical Applications [MA]

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 pre-requisite.
4. Humanities, Arts and Design [HU]

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 AGEC matrix for each course's value(s) in the semester it is taken.)
5. Social-Behavioral Sciences [SB]

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 AGEC matrix for each course's value(s) in the semester it is taken.)
6. Natural Sciences [SQ/SG]

8
Students must complete eight (8) credits of General Chemistry, University Physics or General Biology for Majors. Consult specific requirements of university transfer major for guidance.
[(CHM150 or CHM151) \& CHM151LL] or CHM150AA or CHM151AA General Chemistry I
AND
[CHM152 \& CHM152LL] or CHM152AA General Chemistry II

\section*{OR}

PHY115 or PHY121 University Physics I AND
PHY116 or PHY131 University Physics II
OR
BIO181 or BIO181XT General Biology (Majors) I
AND
BIO182 or BIO182XT General Biology (Majors) II
7. Subject Options - Math/Science 6-10 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 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 (except BIO174), CHM, ECE, EEE, ENV, GLG, GPH, and/or PHY)
B. Awareness Areas:

Some courses may be used to satisfy both a Core Area 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]

\section*{V. MCCCD Additional Requirements}

As noted below, courses in this area may be used to satisfy both an MCCCD requirement and an AGEC-S Core Area requirement.
A. Oral Communication

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

Students may demonstrate proficiency through assessment.
CRE101 [L] Critical Reading OR equivalent as indicated by assessment

\section*{VI. General Electives}

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.
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: https://aztransfer. com/, maricopa.edu/transfer/partners, as well as those of individual universities. For appropriate course selection, students should consult with an academic advisor.

\section*{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 pathways.

\section*{Associate in Science (AS), Emphasis in Astronomy}

\section*{Total Credits: 60-68 \\ Major Code: 8605}

\section*{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.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better in all courses in the program.

\section*{Required Courses}

Credits: 35-40
AST106 Life in the Universe 4
AST111 Introduction to Solar System Astronomy 4
AST112 Introduction to Stars, Galaxies \& Cosmology 4
\begin{tabular}{|c|c|}
\hline MAT230 & Calculus with Analytic Geometry II (5) OR \\
\hline MAT231 & Calculus with Analytic Geometry II (4) 4-5 \\
\hline MAT240 & Calculus with Analytic Geometry III (5) OR \\
\hline MAT241 & Calculus with Analytic Geometry III (4) 4-5 \\
\hline MAT261 & Differential Equations (4) OR \\
\hline MAT262 & Differential Equations (3) OR \\
\hline MAT276 & Modern Differential Equations (4) OR \\
\hline MAT277 & Modern Differential Equations (3) \\
\hline PHY115 & University Physics I (5) OR \\
\hline PHY121 & University Physics I: Mechanics (4) \\
\hline PHY116 & University Physics II (5) OR \\
\hline PHY131 & University Physics II: Electricity and Magnetism (4) \\
\hline PHY241 & University Physics III: Thermodynamics, Optics, and Wave Phenomena \\
\hline
\end{tabular}

General Education Requirements Credits: 22-32 Arizona General Education Curriculum (AGEC) AGEC-S A single course with an [HU], [SB], or [L] designation may also be used to satisfy the Oral Communication, Critical Reading, or Awareness Area ([C], [G] and/or [H]) requirement(s).

\section*{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.

0-3
Recommend selecting a course that satisfies [L] Literacy and Critical Inquiry and [SB] Social-Behavioral Sciences or [L] Literacy and Critical Inquiry and [HU] Humanities, Arts \& Design or [L] Literacy and Critical Inquiry and (COM) Oral Communications or [L] Literacy and Critical Inquiry and CRE101 requirements simultaneously.

\section*{Mathematics [MA]}

Credits: 4-5
MAT220 Calculus with Analytic Geometry I (5) OR
MAT221 Calculus with Analytic Geometry I (4) OR
Any approved general education course in the
Mathematical Applications [MA] area for which
MAT22+ is a prerequisite.
4-5
Humanities, Arts and Design [HU]
Credits: 6
Any approved general education courses in the Human-
ities, Arts and Design [HU] area.
6

\section*{Social-Behavioral Sciences [SB]}

Credits: 6
Any approved general education courses in the So-
cial-Behavioral Sciences [SB] area.

\author{
Natural Sciences [SG]/[SQ] \\ Credits: 0 \\ Met by (PHY115 OR PHY121) AND (PHY116 OR PHY131) in Required Courses. \\ \section*{Awareness Areas} \\ Credits: 0-6 \\ These requirements may be shared with Core Requirements. \\ Cultural Diversity in the US [C] Credits: 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.
}

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 transferable credits, it is recommended that courses be selected that meet more than one requirement wherever possible.

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

\section*{Critical Reading}

Credits: 0-3
CRE101 College Critical Reading and Critical Thinking (3) OR Equivalent as indicated by assessment (0)

\title{
Associate in Science (AS), Emphasis in Biochemistry
}

\author{
Total Credits: 60 \\ Major Code: 8610
}

\section*{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.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better in each course in the program.
\begin{tabular}{llr} 
Required Courses & Credits: 36-38 \\
BIO181 & General Biology (Majors) I & 4 \\
BIO182 & General Biology (Majors) II & 4 \\
CHM150 & General Chemistry I (4) AND & \\
CHM151LL & General Chemistry I Laboratory (1) & \\
& OR & \\
CHM150AA & General Chemistry I (5) & \\
& OR & \\
CHM151 & General Chemistry I (3) AND & \\
CHM151LL & General Chemistry I Laboratory (1) & \\
& OR & \\
CHM151AA & General Chemistry I (4) & \\
CHM152 & General Chemistry II (3) AND & \\
CHM152LL & General Chemistry II Laboratory (1) OR & \\
CHM152AA & General Chemistry II (4) & 4 \\
CHM235 & General Organic Chemistry I (3) AND & \\
CHM235LL & General Organic Chemistry I Laboratory (1) & 4 \\
CHM236 & General Organic Chemistry IIA (3) AND & \\
CHM236LL & General Organic Chemistry IIA Laboratory (1) & 4 \\
MAT230 & Calculus with Analytic Geometry II (5) OR & \\
MAT231 & Calculus with Analytic Geometry II (4) & \(4-5\) \\
PHY111 & General Physics I & 4 \\
PHY112 & General Physics II
\end{tabular}

General Education Requirements Credits: 22-32 Arizona General Education Curriculum (AGEC) AGEC-S A single course with an [HU], [SB], or [L] designation may also be used to satisfy the Oral Communication, Critical Reading, or Awareness Area ([C], [G] and/or [H]) requirement(s).
A single course with both the [HU] and [L] designations may be used to satisfy both of these areas.
A single course with both the [SB] and [L] designations may be used to satisfy both of these areas.

\section*{First-Year Composition [FYC]}

Credits: 6
ENG101 First-Year Composition (3) OR
ENG107 First-Year Composition for ESL (3) AND
\begin{tabular}{ll} 
ENG102 & First-Year Composition (3) OR \\
ENG108 & First-Year Composition for ESL (3)
\end{tabular}

Literacy and Critical Inquiry [L] Credits: 0-3
Any approved general education course in the Literacy and Critical Inquiry [L] area.

0-3
Recommend selecting a course that satisfies [L] and [SB] or [L] and [HU] or [L] and (COM) or [L] and CRE101 requirements simultaneously.

\section*{Mathematics [MA]}

Credits: 4-5
\(\begin{array}{ll}\text { MAT220 } & \text { Calculus with Analytic Geometry I (5) OR } \\ \text { MAT221 } & \text { Calculus with Analytic Geometry I (4) OR }\end{array}\)
Any 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.

\section*{Social-Behavioral Sciences [SB]}

Credits: 6
Any approved general education courses in the So-cial-Behavioral Sciences [SB] area.

6

\section*{Natural Sciences [SG]/[SQ]}

Credits: 0
Met by [(CHM151 and CHM151LL) or (CHM150 and CHM\(151 \mathrm{LL})\) or CHM150AA or CHM151AA] AND [(CHM152 and CHM152LL) or CHM152AA] in Required Courses area.

\section*{Awareness Areas}

Credits: 0-6
These requirements may be shared with Core Requirements.

\section*{Cultural Diversity in the US [C]}

Credits: 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 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 transferable credits, it is recommended that courses be selected that meet more than one requirement wherever possible.

\section*{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)

\author{
Critical Reading \\ Credits: 0-3 \\ CRE101 College Critical Reading and Critical Thinking (3)OR Equivalent as indicated by assessment (0) 0-3
}

\section*{Associate in Science (AS), Emphasis in Biological Sciences}

\section*{Total Credits: 60-74 \\ Major Code: 8602}

\section*{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 biological sciences 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.

\section*{Program Notes}

Students must earn a grade of 'C' or better in each course in 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 MCAT, DAT, PCAT and GRE that are generally weighted in admissions rankings.
\begin{tabular}{|c|c|c|}
\hline Require & Courses Credits: & Credits: 24-25 \\
\hline BIO181 & General Biology (Majors) I & ) 4 \\
\hline BIO182 & General Biology (Majors) II & ) 4 \\
\hline BlO205 & Microbiology (4) OR & \\
\hline BIO220 & Biology of Microorganisms (4) & ms (4) \\
\hline CHM151 & General Chemistry I (3) AND & AND \\
\hline CHM151LL & General Chemistry I Laboratory (1) OR & oratory (1) \\
\hline CHM150 & General Chemistry I (4) AND & AND \\
\hline CHM151LL & General Chemistry I Laboratory (1) OR & oratory (1) \\
\hline CHM150AA & General Chemistry (5) OR & \\
\hline CHM151AA & General Chemistry (4) & 4-5 \\
\hline CHM152 & General Chemistry II (3) AND & AND \\
\hline CHM152LL & General Chemistry II Laboratory (1) OR & oratory (1) \\
\hline CHM152AA & General Chemistry II (4) & 4 \\
\hline PHY111 & General Physics I & 4 \\
\hline
\end{tabular}

\section*{Restricted Electives}

Credits: 12-20
Complete all courses in the transfer option that best aligns with your academic and professional goals. If your intended transfer institution is not listed, then select a combination of courses from the transfer options listed in order to meet the minimum credits required in the Restricted Electives section. Consult with an academic, faculty, or program advisor to prevent exceeding your university transfer program's maximum transferable credits (typically 64).
Sub-plan 1: Biology major and Pre-Professional (Transfer to ASU, NAU, UA for bachelor's degree)
Total Credits: ..... 12
PHY112 General Physics II ..... 4
CHM235 General Organic Chemistry I (3) AND
CHM235LL General Organic Chemistry I Laboratory (1) ..... 4
CHM236LL General Organic Chemistry IIA Laboratory (1) ..... 4
Sub-plan 2: Pre-Med, Pre-Vet, and Pre-Pharmacy sub-plan (Transfer to GCU)
PHY112 General Physics II ..... 4
CHM235 General Organic Chemistry I (3) AND
CHM235LL General Organic Chemistry I Laboratory (1) ..... 4

CHM236LL General Organic Chemistry IIA Laboratory (1) 4
BIO201 Human Anatomy and Physiology I 4
BIO202 Human Anatomy and Physiology II 4
Sub-plan 3: Pre-Physician's Assistant
BlO201 Human Anatomy and Physiology I 4
BIO202 Human Anatomy and Physiology II 4
MAT206 Elements of Statistics (3) OR
PSY230 Introduction to Statistics (4) 3-4
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)4
General Education Requirements Credits: 22-38
Arizona General Education Curriculum (AGEC) AGEC-S A single course with an [HU], [SB], or [L] designation may also be used to satisfy the Oral Communication, Critical
Reading, or Awareness Area ([C], [G] and/or [H]) requirement(s).
A single course with both the [HU] and [L] designations may be used to satisfy both of these areas.
A single course with both the [SB] and [L] designations may be used to satisfy both of these areas.

\section*{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.
Recommend selecting a course that satisfies [L] and [SB] or [L] and [HU] or [L] and (COM) or [L] and CRE101 requirements simultaneously.

\section*{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.
Social-Behavioral Sciences [SB]
Credits: 6
Any approved general education courses in the So-cial-Behavioral Sciences [SB] area.
Natural Sciences [SG]/[SQ]
Credits: 0
Met by BIO181 and BIO182 in Required Courses Area.

\section*{Awareness Areas}
Credits: 0-6
These requirements may be shared with Core Requirements.

\section*{Cultural Diversity in the US [C] Credits: 0-3}
Historical/Global Awareness [H]/[G] Credits: 0-3
Any approved general education in the Historical [H] or Global [G] area.

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 transferable credits, it is recommended that courses be selected that meet more than one requirement wherever possible.

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

\section*{Critical Reading}

Credits: 0-3
CRE101 College Critical Reading and Critical Thinking (3) OR Equivalent as indicated by assessment (0) 0-3

\section*{Associate in Science (AS), Emphasis in Chemistry}

\section*{Total Credits: 60-71 \\ Major Code: 8603}

\section*{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.

\section*{Program Notes}

Students must earn a grade of 'C' or better in each course in the program.

\section*{Required Courses}

Credits: 35-41
CHM150 General Chemistry I (4) AND
CHM151LL General Chemistry I Laboratory (1) OR
CHM150AA General Chemistry I (5) OR
CHM151 General Chemistry I (3) AND
CHM151LL General Chemistry I Laboratory (1) OR
CHM151AA General Chemistry (4) 4-5
CHM152 General Chemistry II (3) AND
CHM152LL General Chemistry II Laboratory (1) OR
CHM152AA General Chemistry II (4)
4
CHM235 General Organic Chemistry I (3) AND
CHM235LL General Organic Chemistry I Laboratory (1) 4
CHM236 General Organic Chemistry IIA (3) AND
CHM236LL General Organic Chemistry IIA Laboratory (1) 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
PHY115 University Physics I (5) OR
PHY121 University Physics I: Mechanics (4) 4-5
PHY116 University Physics II (5) OR
PHY131 University Physics II: Electricity and Magnetism (4)

\section*{Restricted Electives}

Credits: 0-3
Complete all courses in the transfer option that best aligns with your academic and professional goals. If your intended transfer institution is not listed, then select a combination of courses from the transfer options listed in order to meet the minimum credits required in the Restricted Electives section. Consult with an academic, faculty, or program advisor to prevent exceeding your university transfer program's maximum transferable credits (typically 64).
Transfer Plan 1: Arizona State University (College of Liberal Arts and Sciences), Chemistry, Bachelor of Science

\section*{Transfer Plan 2: Northern Arizona University, Chemistry (Chemistry or Advanced Chemistry Emphasis), Bachelor of Science}

No additional coursework needed for this subplan.
Transfer Plan 3: Grand Canyon University, Chemistry, Bachelor of Science
No additional coursework needed for this subplan
General Education Requirements Credits: 22-38
Arizona General Education Curriculum (AGEC) AGEC-S
A single course with an [HU], [SB], or [L] designation may also be used to satisfy the Oral Communication, Critical Reading, or Awareness Area ([C], [G] and/or [H]) requirement(s).
A single course with both the [HU] and [L] designations may be used to satisfy both of these areas.
A single course with both the [SB] and [L] designations may be used to satisfy both of these areas.

\section*{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

\section*{Literacy and Critical Inquiry [L] Credits: 0-3}

Any approved general education course in the Literacy and Critical Inquiry [L] area.
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 (4) OR
MAT221 Calculus with Analytic Geometry I (5) 4-5
Humanities, Arts and Design [HU] Credits: 6
Any approved general education courses in the Humanities, Arts and Design [HU] area.

\section*{Social-Behavioral Sciences [SB]}

Credits: 6
Any approved general education courses in the So-cial-Behavioral Sciences [SB] area.

Natural Sciences [SG]/[SQ]
Credits: 0
Met by (CHM151 AND CHM151LL) OR (CHM150 AND CHM151LL) OR CHM150AA OR CHM151AA AND (CHM152 AND CHM152LL) OR CHM152AA in Required Courses area.

\section*{Awareness Areas \\ Credits: 0-6}

These requirements may be shared with Core Requirements.

\section*{Cultural Diversity in the US [C] Credits: 0-3}

Historical/Global Awareness [H]/[G] Credits: 0-3
Any approved general education course in the Historical [H] or Global Awareness [G] area.

\section*{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 transferable credits, it is recommended that courses be selected that meet more than one requirement wherever possible.

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
(COM230 Small Group Communication
Recommended)

\section*{Critical Reading}

Credits: 0-3
CRE101 College Critical Reading and Critical Thinking (3) OR Equivalent as indicated by assessment (0) 0-3

\section*{Associate in Science (AS), Emphasis in Computer Science}

\section*{Total Credits: 60-64 Major Code: 8601}

\section*{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 net-
work 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.

\section*{Program Notes}

Students must earn a grade of 'C' or better in each course in the program.

Required Courses
Credits: 21-24
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
Students intending to transfer to NAU should take CSC110AB.
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
Students intending to transfer to NAU should take CSC205AB OR CSC205AC OR CSC205AD.
CSC/EEE230 Computer Organization and Assembly Language (4)
MAT227 Discrete Mathematical Structures 3
MAT230 Calculus with Analytic Geometry II (5) OR
MAT231 Calculus with Analytic Geometry II (4) 4-5

\section*{Restricted Electives}

Credits: 0-13
Complete all courses in the transfer option that best aligns with your academic and professional goals. If your intended transfer institution is not listed, then select a combination of courses from the transfer options listed in order to meet the minimum credits required in the Restricted Electives section. Consult with an academic, faculty, or program advisor to prevent exceeding your uni-
versity transfer program's maximum transferable credits (typically 64).

Transfer Plan 1: Arizona State University (Ira
A. Fulton Schools of Engineering), Computer Science, Bachelor of Science (any emphasis)
CSC240 Introduction to Different Programming Languages (3) OR
CSC240AA Introduction to Different Programming Languages (4) 3-4
ECE102 Engineering Analysis Tools and Techniques 2
ECE103 Engineering Problem Solving and Design 2
MAT240 Calculus with Analytic Geometry III (5) OR
MAT241 Calculus with Analytic Geometry III (4) 4-5
Transfer Plan 2: Northern Arizona University, Computer Science, Bachelor of Science in Computer Science
MAT206 Elements of Statistics
Transfer Plan 3: University of Arizona, Computer Science, Bachelor of Science
Foreign Language
Credits: 0-10
Complete a language course at the elementary level (102 or equivalent), including American Sign Language II with a 'C' or better OR demonstrate proficiency through this level as indicated by assessment.
ARB+++ any ARB/Arabic course OR
CHI+++ any CHI/Chinese course OR
FRE+++ any FRE/French course OR
GER+++ any GER/German course OR
ITA+++ any ITA/Italian course OR
JPN+++ any JPN/Japanese course OR
SPA+++ any SPA/Spanish course OR
SLG+++ any SLG/Sign Language 0-10
General Education Requirements Credits: 30-46
Arizona General Education Curriculum (AGEC) AGEC-S A single course with an [HU], [SB], or [L] designation may also be used to satisfy the Oral Communication, Critical Reading, or Awareness Area ([C], [G] and/or [H]) requirement(s).
A single course with both the [HU] and [L] designations may be used to satisfy both of these areas.
A single course with both the [SB] and [L] designations may be used to satisfy both of these areas.

First-Year Composition [FYC]
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

\section*{Literacy and Critical Inquiry [L] Credits: 0-3}

Any approved general education course in the Literacy and Critical Inquiry [L] area.
Recommend selecting a course that satisfies [L] and [SB] or [L] and [HU] or [L] and [COM] or [L] and CRE101 requirements simultaneously.

\section*{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.

\section*{Social-Behavioral Sciences [SB]}

Credits: 6
Any approved general education courses in the So-cial-Behavioral Sciences [SB] area.

\section*{Natural Sciences [SG]/[SQ]}

Credits: 8
Students must complete eight (8-10) credits of General Chemistry, University Physics or General Biology for Majors.
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)
OR
PHY115 University Physics I (5) AND
PHY116 University Physics II (5) OR
PHY121 University Physics I: Mechanics (4) AND
PHY131 University Physics II: Electricity and Magnetism (4)
OR
BIO181 General Biology (Majors) I (4) AND
BIO182 General Biology (Majors) II (4)
8

Awareness Areas
Credits: 0-6
These requirements may be shared with Core Requirements.

Cultural Diversity in the US [C]
Credits: 0-3

Historical/Global Awareness [H]/[G] Credits: 0-3
Any approved general education course in the Historical \([\mathrm{H}]\) or Global awareness [G] area.
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 transferable credits, it is recommended that courses be selected that meet more than one requirement wherever possible.

\section*{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

\section*{Associate in Science (AS), Emphasis in Engineering}

Total Credits: 60-79
Major Code: 8607

\section*{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, and mechanical engineering.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better in each course in the program.
\begin{tabular}{|c|c|}
\hline Require & rses Credits: 23-28 \\
\hline ECE102 & Engineering Analysis Tools and Techniques 2 \\
\hline ECE103 & Engineering Problem Solving and Design \\
\hline MAT230 & Calculus with Analytic Geometry II (5) OR \\
\hline MAT231 & Calculus with Analytic Geometry II (4) \\
\hline MAT240 & Calculus with Analytic Geometry III (5) OR \\
\hline MAT241 & Calculus with Analytic Geometry III (4) 4-5 \\
\hline MAT276 & Modern Differential Equations (4) OR \\
\hline MAT277 & Modern Differential Equations (3) 3-4 \\
\hline PHY115 & University Physics I (5) OR \\
\hline PHY121 & University Physics I: Mechanics (4) 4-5 \\
\hline PHY116 & University Physics II (5) OR \\
\hline PHY131 & University Physics II: Electricity and \\
\hline & Magnetism (4) 4-5 \\
\hline
\end{tabular}

\section*{Restricted Electives} Credits: 11-28
Complete all courses in the transfer plan that best aligns with your transfer and academic/professional goals. If your intended transfer institution is not listed, meet with a discipline faculty advisor to establish a program of study to meet credits required in the Restricted Electives section.
\begin{tabular}{llr} 
Transfer Plan 1: Arizona State University & \\
(Ira A. Fulton Schools of Engineering), BSE, & \\
Aerospace Engineering (Aeronautics) & \\
ECE105 & MATLAB Programming (1) OR & \\
CSC110 & Introduction to Computer Science (Java) (3) & \(1-3\) \\
ECE211 & Engineering Mechanics-Statics & 3 \\
ECE212 & Engineering Mechanics-Dynamics & 3 \\
ECE215 & Mechanics of Materials & 3 \\
ECE216 & Computer-Aided Engineering & 2 \\
ECE216LL & Computer-Aided Engineering Laboratory & 1 \\
EEE202 & Circuits and Devices & 5 \\
MAT225 & Elementary Linear Algebra & 3
\end{tabular}

Transfer Plan 2: Arizona State University (Ira A. Fulton Schools of Engineering), BSE, Aerospace Engineering (Astronautics)
ECE105 MATLAB Programming (1) OR
CSC110 Introduction to Computer Science (Java) (3) 1-3
ECE211 Engineering Mechanics-Statics 3
ECE212 Engineering Mechanics-Dynamics 3
ECE215 Mechanics of Materials 3
ECE216 Computer-Aided Engineering 2
ECE216LL Computer-Aided Engineering Laboratory 1
EEE202 Circuits and Devices 5
MAT225 Elementary Linear Algebra 3
\begin{tabular}{llr} 
Transfer Plan 3: Arizona State University (Ira A. \\
Fulton Schools of Engineering), BSE, Aerospace \\
Engineering (Autonomous Vehicle Systems) \\
ECE105 & MATLAB Programming (1) OR & \\
CSC110 & Introduction to Computer Science (Java)(3) & \(1-3\) \\
ECE211 & Engineering Mechanics-Statics & 3 \\
ECE212 & Engineering Mechanics-Dynamics & 3 \\
ECE215 & Mechanics of Materials & 3 \\
ECE216 & Computer-Aided Engineering & 2 \\
ECE216LL & Computer-Aided Engineering Laboratory & 1 \\
EEE202 & Circuits and Devices & 5 \\
MAT225 & Elementary Linear Algebra & 3
\end{tabular}

\section*{Transfer Plan 4: Arizona State University}
(Ira A. Fulton Schools of Engineering), BSE, Biomedical Engineering
\begin{tabular}{lll} 
BIO181 & General Biology (Majors) I (4) OR & \\
BIO181XT & General Biology (Majors) I (4) & 4 \\
BIO182 & General Biology (Majors) II & 4
\end{tabular}

CHM150 General Chemistry I (4) AND
CHM151LL General Chemistry I Laboratory (1)
OR
CHM150AA General Chemistry I (5)
OR
CHM151 General Chemistry I (3) AND
CHM151LL General Chemistry I Laboratory (1) OR
CHM151AA General Chemistry I (4)
CHM152 General Chemistry II (3) AND
CHM152LL General Chemistry II Laboratory (1) OR
CHM152AA General Chemistry II (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
ECE105 MATLAB Programming 1
EEE202 Circuits and Devices
Transfer Plan 5: Arizona State University
(Ira A. Fulton Schools of Engineering), BSE, Chemical Engineering
BIO181 General Biology (Majors) I (4) OR
BIO181XT General Biology (Majors) I (4) OR
BIO182 General Biology (Majors) II (4) OR
BIO201 Human Anatomy and Physiology I (4) OR
BIO201XT Human Anatomy and Physiology I (4) OR
BIO205 Microbiology (4) OR
BIO220 Biology of Microorganisms (4) OR
ECE111 Bioengineering Systems (3)

CHM150 General Chemistry I (4) AND
CHM151LL General Chemistry I Laboratory (1) OR
CHM150AA General Chemistry I (5) OR
CHM151 General Chemistry I (3) AND
CHM151LL General Chemistry I Laboratory (1) OR
CHM151AA General ChemistryI (4) 4-5
CHM152 General Chemistry II (3) AND
CHM152LL General Chemistry II Laboratory (1) OR
CHM152AA General Chemistry II (4) 4
CHM235 General Organic Chemistry I 3
CHM235LL General Organic Chemistry I Laboratory 1
CHM236 General Organic Chemistry IIA 3
MAT225 Elementary Linear Algebra 3

\section*{Transfer Plan 6: Arizona State University}
(Ira A. Fulton Schools of Engineering), BSE, Civil Engineering
BIO181 General Biology (Majors) I (4) OR
BIO181XT General Biology (Majors) I (4) OR
BIO182 General Biology (Majors) II (4) OR
CHM230 Fundamental Organic Chemistry (3) OR
GLG101 Introduction to Geology I - Physical Lecture (3) 3-4
ECE211 Engineering Mechanics-Statics 3
ECE212 Engineering Mechanics-Dynamics 3
ECE215 Mechanics of Materials 3
MAT225 Elementary Linear Algebra 3
Transfer Plan 7: Arizona State University
(Ira A. Fulton Schools of Engineering), BSE,
Civil Engineering (Sustainable Engineering)
BIO181 General Biology (Majors) I (4) OR
BIO181XT General Biology (Majors) I (4) OR
BIO182 General Biology (Majors) II (4) OR
CHM230 Fundamental Organic Chemistry (3) OR
GLG101 Introduction to Geology I - Physical Lecture (3) 3-4
ECE211 Engineering Mechanics-Statics 3
ECE212 Engineering Mechanics-Dynamics 3
ECE215 Mechanics of Materials 3
MAT225 Elementary Linear Algebra 3
\(\begin{array}{ll}\text { Transfer Plan 8: Arizona State University } \\ \text { (Ira A. Fulton Schools of Engineering), BSE, } \\ \text { Computer Systems Engineering } \\ \text { CSC110 } & \text { Introduction to Computer Science (Java) (3) OR } \\ \text { CSC110AA } & \text { Introduction to Computer Science (Java) (3) OR } \\ \text { CSC110AB } & \text { Introduction to Computer Science (Java) (4) 3-4 }\end{array}\)
\begin{tabular}{|c|c|}
\hline \multicolumn{2}{|l|}{CSC/EEE120 Digital Design Fundamentals 4} \\
\hline CSC205 & Object-Oriented Programming and Data Structures (3) OR \\
\hline CSC205AA & Object-Oriented Programming and Data Structures (3) OR \\
\hline CSC205AB & \begin{tabular}{l}
Object-Oriented Programming and \\
Data Structures (4) 3-4
\end{tabular} \\
\hline CSC/EEE220 & Programming for Computer Engineering 3 \\
\hline CSC/EEE230 & Computer Organization and Assembly Language4 \\
\hline EEE202 & Circuits and Devices 5 \\
\hline MAT227 & Discrete Mathematical Structures \\
\hline \multicolumn{2}{|l|}{Transfer Plan 9: Arizona State University} \\
\hline Comput & Systems Engineering (Cybersecurity) \\
\hline CSC110 & Introduction to Computer Science (Java) (3) OR \\
\hline CSC110AA & Introduction to Computer Science (Java) (3) OR \\
\hline CSC110AB & Introduction to Computer Science (Java) (4) 3-4 \\
\hline CSC/EEE120 & Digital Design Fundamentals \\
\hline CSC205 & Object-Oriented Programming and Data Structures (3) OR \\
\hline CSC205AA & Object-Oriented Programming and Data Structures (3) OR \\
\hline CSC205AB & Object-Oriented Programming and Data \\
\hline & Structures (4) 3-4 \\
\hline CSC/ & Programming for Computer Engineering \\
\hline SC/EEE230 & Computer Organization and Assembly Language \\
\hline EE & Circuits and Devices \\
\hline MAT227 & Discrete Mathematical Structures \\
\hline \multicolumn{2}{|l|}{Transfer Plan 10: Arizona State University (Ira A. Fulton Schools of Engineering), BSE,} \\
\hline \multicolumn{2}{|l|}{Construction Engineering} \\
\hline CON271 & Construction Safety \\
\hline ECE111 & Bioengineering Systems (3) OR \\
\hline GLG101 & Introduction to Geology I - Physical Lecture (3) OR \\
\hline BIO181 & General Biology (Majors) I (4) OR \\
\hline BIO181XT & General Biology (Majors) I (4) OR \\
\hline BIO182 & General Biology (Majors) II (4) 3-4 \\
\hline ECE211 & Engineering Mechanics-Statics 3 \\
\hline ECE212 & Engineering Mechanics-Dynamics \\
\hline ECE215 & Mechanics of Materials 3 \\
\hline EEE202 & Circuits and Devices 5 \\
\hline MAT225 & Elementary Linear Algebra \\
\hline
\end{tabular}

CSC/EEE120 Digital Design Fundamentals
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) 3-4
CSC/EEE220 Programming for Computer Engineering 3
and Assembly Language

MAT227 Discrete Mathematical Structures 3
Transfer Plan 9: Arizona State University (Ira A. Fulton Schools of Engineering), BSE,
Computer Systems Engineering (Cybersecurity)
CSC110 Introduction to Computer Science (Java) (3) OR
(110AB (J) OR
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) 3-4
CSC/EEE220 Programming for Computer Engineering 3
CSC/EEE230 Computer Organization and Assembly Language
EEE202 Circuits and Devices 5
MAT227 Discrete Mathematical Structures 3
Transfer Plan 10: Arizona State University
(Ira A. Fulton Schools of Engineering), BSE,
Construction Engineering
CON271 Construction Safety

GLG101 Introduction to Geology I - Physical Lecture (3) OR
BIO181 General Biology (Majors) I (4) OR
BIO181XT General Biology (Majors) I (4) OR
ECF211 Engineering Mechanics-Statics
ECE212 Engineering Mechanics-Dynamics 3
ECE215 Mechanics of Materials 3
EEE202 Circuits and Devices 5
MAT225 Elementary Linear Algebra 3
\begin{tabular}{llr} 
Transfer Plan 11: Arizona State University & \\
(Ira A. Fulton Schools of Engineering), BSE, & \\
Electrical Engineering & \\
CSC100 & Introduction to Computer Science (C++)(3) OR \\
CSC100AA & Introduction to Computer Science (C++)(3) OR \\
CSC100AB & Introduction to Computer Science (C++)(4) & \(3-4\) \\
CSC/EEE120 Digital Design Fundamentals & 4 \\
CSC/EEE230 Computer Organization and Assembly & \\
& \begin{tabular}{l} 
Language
\end{tabular} \\
\begin{tabular}{ll} 
EEE202 & Circuits and Devices \\
PHY241 & University Physics III: Thermodynamics,
\end{tabular} & 4 \\
& Optics, and Wave Phenomena & 4
\end{tabular}

Transfer Plan 12: Arizona State University (Ira A. Fulton Schools of Engineering), BSE, Electrical Engineering (Electric Power and Energy Systems)
CSC100 Introduction to Computer Science (C++) (3) OR
CSC100AA Introduction to Computer Science ( \((++\) )(3) OR
CSC100AB Introduction to Computer Science (C++)(4) 3-4
CSC/EEE120 Digital Design Fundamentals 4
CSC/EEE230 Computer Organization and Assembly Language4
EEE202 Circuits and Devices 5
PHY241 University Physics III: Thermodynamics, Optics, and Wave Phenomena

\section*{Transfer Plan 13: Arizona State University (Ira A. Fulton Schools of Engineering), BSE, Engineering}
\begin{tabular}{lll} 
CHM150 & General Chemistry I (4) AND \\
CHM151LL & General Chemistry I Laboratory (1) & \\
& OR & \\
CHM150AA & General Chemistry I (5) & \\
& OR \\
CHM151 & General Chemistry I (3) AND \\
CHM151LL & General Chemistry I Laboratory (1) & \\
& OR & \\
CHM151AA & General Chemistry I (4) & \\
CIS162AD & C\#: Level I (3) OR \\
CSC100 & Introduction to Computer Science (C++) (3) OR \\
CSC100AA & Introduction to Computer Science (C++)(3) OR \\
CSC100AB & 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) & \(3-4\) \\
ECE216 & Computer-Aided Engineering & 2 \\
ECE216LL & Computer-Aided Engineering Laboratory & 1 \\
EEE202 & Circuits and Devices & 5
\end{tabular}

CHM151LL General Chemistry I Laboratory (1) OR
CHM150AA General Chemistry I (5) OR
CHM151 General Chemistry I (3) AND
CHM151LL General Chemistry I Laboratory (1) OR
CHM151AA General Chemistry I (4)

Introduction to Computer Science (C++)(3) OR
Introduction to Computer Science (C++)(3) OR
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
ECE216 Computer-Aided Engineering 2
EEE202 Circuits and Devices 5

Lower Division Secondary Focus Area Credits: 0-6 The secondary focus area includes up to six (6) lower division credits that form a coherent theme. Students must take two courses from the same or similar subjects, as students will take two upper division classes of the same subject at ASU. Recommended Maricopa prefixes: CAD, CNS, ECE, EEE, MET, MIT, or MNT.
CAD+++ Any CAD Computer-Aided Drafting course
CNS+++ Any CNS Construction course
ECE+++ Any ECE Engineering Science course
EEE+++ Any EEE Electrical Engineering course
MET+++ Any MET Manufacturing Technology course
MIT+++ Any MIT Manufacturing Industrial Technology course
MNT+++ Any MNT Micro and Nanotechnology course

Transfer Plan 14: Arizona State University (Ira A. Fulton Schools of Engineering), BSE, Engineering (Automotive Systems)
CHM150 General Chemistry I (4) AND
CHM151LL General Chemistry I Laboratory (1) OR
CHM150AA General Chemistry I (5)
OR
CHM151 General Chemistry I (3) AND
CHM151LL General Chemistry I Laboratory (1) OR
CHM151AA General Chemistry I (4) 4-5
CIS162AD C\#: Level I (3) OR
CSC100 Introduction to Computer Science (C++) (3) OR
CSC100AA Introduction to Computer Science ( \((++\) ) (3) OR
CSC100AB 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) 3-4
ECE216 Computer-Aided Engineering 2
ECE216LL Computer-Aided Engineering Laboratory 1
EEE202 Circuits and Devices 5
Lower Division Secondary Focus Area Credits: 0-6 The secondary focus area includes up to six (6) lower division credits that form a coherent theme. Students must take two courses from the same or similar subjects, as students will take two upper division classes of the same subject at ASU. Recommended Maricopa prefixes: CAD, CNS, ECE, EEE, MET, MIT, or MNT.
CAD+++ Any CAD Computer-Aided Drafting course
CNS+++ Any CNS Construction course
ECE+++ Any ECE Engineering Science course

EEE+++
MET+++ Any MET Manufacturing Technology course
MIT+++ Any MIT Manufacturing Industrial Technology course
MNT+++ Any MNT Micro and Nanotechnology course

\section*{Transfer Plan 15: Arizona State University \\ (Ira A. Fulton Schools of Engineering), BSE, Engineering (Electrical Systems)}

CHM150 General Chemistry I (4) AND
CHM151LL General Chemistry I Laboratory (1) OR
CHM150AA General Chemistry I (5) OR
CHM151 General Chemistry I (3) AND
CHM151LL General Chemistry I Laboratory (1) OR
CHM151AA General Chemistry I (4) 4-5
CIS162AD C\#: Levell (3) OR
CSC100 Introduction to Computer Science (C++) (3) OR
CSC100AA Introduction to Computer Science (C++)(3) OR
CSC100AB 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) 3-4
ECE216 Computer-Aided Engineering 2
ECE216LL Computer-Aided Engineering Laboratory 1
EEE202 Circuits and Devices 5
Lower Division Secondary Focus Area Credits: 0-6
The secondary focus area includes up to six (6) lower division credits that form a coherent theme. Students must take two courses from the same or similar subjects, as students will take two upper division classes of the same subject at ASU. Recommended Maricopa prefixes: CAD,
CNS, ECE, EEE, MET, MIT, or MNT.
CAD+++ Any CAD Computer-Aided Drafting course
CNS+++ Any CNS Construction course
ECE+++ Any ECE Engineering Science course
EEE+++ Any EEE Electrical Engineering course
MET+++ Any MET Manufacturing Technology course
MIT+++ Any MIT Manufacturing Industrial Technology course
MNT+++ Any MNT Micro and Nanotechnology course

\author{
Transfer Plan 16: Arizona State University (Ira A. Fulton Schools of Engineering), BSE, Engineering (Mechanical Engineering Systems) \\ CHM150 General Chemistry I (4) AND
}

CHM151LL General Chemistry I Laboratory (1) OR
CHM150AA General Chemistry I (5) OR
CHM151 General Chemistry I (3) AND
CHM151LL General Chemistry I Laboratory (1) OR
CHM151AA General Chemistry I (4)
CIS162AD C\#: Level I (3) OR
CSC100 Introduction to Computer Science (C++) (3) OR
CSC100AA Introduction to Computer Science (C++) (3) OR
CSC100AB Introduction to Computer Science ( \((++\) )(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) 3-4
ECE216 Computer-Aided Engineering 2
ECE216LL Computer-Aided Engineering Laboratory 1
EEE202 Circuits and Devices
Lower Division Secondary Focus Area Credits: 0-6 The secondary focus area includes up to six (6) lower division credits that form a coherent theme. Students must take two courses from the same or similar subjects, as students will take two upper division classes of the same subject at ASU. Recommended Maricopa prefixes: CAD, CNS, ECE, EEE, MET, MIT, or MNT.
CAD+++ Any CAD Computer-Aided Drafting course
CNS+++ Any CNS Construction course
ECE+++ Any ECE Engineering Science course
EEE+++ Any EEE Electrical Engineering course
MET+++ Any MET Manufacturing Technology course
MIT+++ Any MIT Manufacturing Industrial Technology course
MNT+++ Any MNT Micro and Nanotechnology course

\section*{Transfer Plan 17: Arizona State University (Ira A. Fulton Schools of Engineering), BSE, Engineering (Robotics)}

CHM150 General Chemistry I (4) AND
CHM151LL General Chemistry I Laboratory (1) OR
CHM150AA General Chemistry I (5) OR
CHM151 General Chemistry I (3) AND
CHM151LL General Chemistry I Laboratory (1) OR
CHM151AA General Chemistry I (4) 4-5
CIS162AD C\#: Level I (3) OR
CSC100 Introduction to Computer Science (C++) (3) OR
CSC100AA Introduction to Computer Science (C++) (3) OR

CSC100AB 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) 3-4 ECE216 Computer-Aided Engineering 2
ECE216LL Computer-Aided Engineering Laboratory 1 EEE202 Circuits and Devices 5

Lower Division Secondary Focus Area Credits: 0-6
The secondary focus area includes up to six (6) lower division credits that form a coherent theme. Students must take two courses from the same or similar subjects, as students will take two upper division classes of the same subject at ASU. Recommended Maricopa prefixes: CAD,
CNS, ECE, EEE, MET, MIT, or MNT.
CAD+++ Any CAD Computer-Aided Drafting course
CNS+++ Any CNS Construction course
ECE+++ Any ECE Engineering Science course
EEE+++ Any EEE Electrical Engineering course
MET+++ Any MET Manufacturing Technology course
MIT+++ Any MIT Manufacturing Industrial Technology course
MNT+++ Any MNT Micro and Nanotechnology course


Transfer Plan 19: Arizona State University
(Ira A. Fulton Schools of Engineering), BSE,
Materials Science and Engineering
CHM150 General Chemistry I (4) AND
CHM151LL General Chemistry I Laboratory (1) OR
CHM150AA General Chemistry I (5) OR

CHM151 General Chemistry I (3) AND
CHM151LL General Chemistry I Laboratory (1)
OR
CHM151AA General Chemistry I (4) 4-5
CHM152 General Chemistry II (3) AND
CHM152LL General Chemistry II Laboratory (1) OR
CHM152AA General Chemistry II (5) 4-5
ECE211 Engineering Mechanics-Statics (3) OR
ECE214 Engineering Mechanics (4) 3-4
ECE215 Mechanics of Materials 3
MAT225 Elementary Linear Algebra 3
Transfer Plan 20: Arizona State University (Ira A. Fulton Schools of Engineering), BSE, Mechanical Engineering
ECE105 MATLAB Programming (1) OR
CSC110 Introduction to Computer Science (Java) (3) 1-3
ECE211 Engineering Mechanics-Statics 3
ECE212 Engineering Mechanics-Dynamics 3
ECE215 Mechanics of Materials 3
ECE216 Computer-Aided Engineering 2
ECE216LL Computer-Aided Engineering Laboratory 1
EEE202 Circuits and Devices 5
MAT225 Elementary Linear Algebra 3
Transfer Plan 21: Arizona State University (Ira A. Fulton Schools of Engineering), BSE, Mechanical Engineering (Computational Mechanics)
ECE105 MATLAB Programming (1) OR
CSC110 Introduction to Computer Science (Java) (3) 1-3
ECE211 Engineering Mechanics-Statics 3
ECE212 Engineering Mechanics-Dynamics 3
ECE215 Mechanics of Materials 3
ECE216 Computer-Aided Engineering 2
ECE216LL Computer-Aided Engineering Laboratory 1
EEE202 Circuits and Devices 5
MAT225 Elementary Linear Algebra 3
Transfer Plan 22: Arizona State University (Ira A. Fulton Schools of Engineering), BSE, Mechanical Engineering (Energy and Environment)
ECE105 MATLAB Programming (1) OR
CSC110 Introduction to Computer Science (Java) (3) 1-3
ECE211 Engineering Mechanics-Statics 3
ECE212 Engineering Mechanics-Dynamics 3
ECE215 Mechanics of Materials 3
ECE216 Computer-Aided Engineering 2
ECE216LL Computer-Aided Engineering Laboratory 1
EEE202 Circuits and Devices 5
MAT225 Elementary Linear Algebra 3
\begin{tabular}{|c|c|}
\hline \multicolumn{2}{|l|}{Transfer Plan 23: Northern Arizona University,} \\
\hline CHM150 & General Chemistry I (4) AND \\
\hline CHM151LL & General Chemistry I Laboratory (1) OR \\
\hline CHM150AA & General Chemistry I (5) OR \\
\hline CHM151 & General Chemistry I (3) AND \\
\hline CHM151LL & General Chemistry I Laboratory (1) OR \\
\hline CHM151AA & General Chemistry I (4) 4-5 \\
\hline CON241 & Surveying 3 \\
\hline ECE211 & Engineering Mechanics-Statics 3 \\
\hline ECE212 & Engineering Mechanics-Dynamics 3 \\
\hline ECE215 & Mechanics of Materials 3 \\
\hline GLG101 & \begin{tabular}{l}
Introduction to Geology I - \\
Physical Lecture (3) AND
\end{tabular} \\
\hline GLG103 & Introduction to Geology I - Physical Lab (1) OR \\
\hline GLG101IN & Introduction to Geology I - Physical (4) OR \\
\hline GLG110 & Geological Disasters and the Environment (3) AND \\
\hline GLG111 & Geological Disasters and the Environment
\(\qquad\) \\
\hline
\end{tabular}
Transfer Plan 24: Northern Arizona University,
 BS, Computer Engineering

AST101 Survey of Astronomy (4) OR
AST111 Introduction to Solar System Astronomy (4 OR
AST112 Introduction to Stars, Galaxies, and Cosmology (4) OR
BIO181 General Biology (Majors) I (4) OR
BIO181XT General Biology (Majors) I (4) OR
CHM150 General Chemistry I (4) AND
CHM151LL General Chemistry I Laboratory (1) OR
CHM150AA General Chemistry I (5) OR
CHM151 General Chemistry I (3) AND
CHM151LL General Chemistry I Laboratory (1) OR
CHM151AA General Chemistry I (4) OR
GLG101 Introduction to Geology I Physical Lecture (3) AND
GLG103 Introduction to Geology I Physical Lab (1) OR
GLG101IN Introduction to Geology I Physical (4) 4-5
CSC110AB Introduction to Computer Science (Java) 4
CSC/EEE120 Digital Design Fundamentals 4
CSC205AB Object Oriented Programming and Data Structures

CSC/EEE220 Programming for Computer Engineering 3
EEE202 Circuits and Devices 5
MAT227 Discrete Mathematical Structures 3
Transfer Plan 25: Northern Arizona University, BS, Electrical Engineering
AST101 Survey of Astronomy (4) OR
AST111 Introduction to Solar System Astronomy (4) OR
AST112 Introduction to Stars, Galaxies, and Cosmology (4) OR
BIO181 General Biology (Majors) I (4) OR
BIO181XT General Biology (Majors) I (4) OR
CHM150 General Chemistry I (4) AND
CHM151LL General Chemistry I Laboratory (1) OR
CHM150AA General Chemistry I (5) OR
CHM151 General Chemistry I (3) AND
CHM151LL General Chemistry I Laboratory (1) OR
CHM151AA General Chemistry I (4) OR
GLG101 Introduction to Geology I Physical Lecture (3) AND
GLG103 Introduction to Geology I - Physical Lab (1) OR GLG101IN Introduction to Geology I - Physical (4) 4-5
EEE202 Circuits and Devices
5
PHY241 University Physics III: Thermodynamics, Optics, and Wave Phenomena
Transfer Plan 26: Northern Arizona University, BS, Mechanical Engineering
CHM150 General Chemistry I (4) AND
CHM151LL General Chemistry I Laboratory (1) OR
CHM150AA General Chemistry I (5) OR
CHM151 General Chemistry I (3) AND
CHM151LL General Chemistry I Laboratory (1) OR
CHM151AA General Chemistry I (4)
ECE211 Engineering Mechanics-Statics
ECE212 Engineering Mechanics-Dynamics 3
ECE215 Mechanics of Materials
ECE216 Computer-Aided Engineering 2
ECE216LL Computer-Aided Engineering Laboratory
EEE202 Circuits and Devices 5
Transfer Plan 27: University of Arizona, BS, Aerospace Engineering
CHM150 General Chemistry I (4) AND
CHM151LL General Chemistry I Laboratory (1) OR
CHM150AA General Chemistry I (5) OR

CHM151 General Chemistry I (3) AND
CHM151LL General Chemistry I Laboratory (1) OR
CHM151AA General ChemistryI (4) 4-5
ECE105 MATLAB Programming 1
ECE211 Engineering Mechanics-Statics 3
ECE212 Engineering Mechanics-Dynamics 3
Transfer Plan 28: University of Arizona, BS, Biomedical Engineering
BIO181 General Biology (Majors) I (4) OR
BIO181XT General Biology (Majors) I (4) 4
BIO201 Human Anatomy and Physiology I (4) OR
BIO201XT Human Anatomy and Physiology I (4) 4
CHM150 General Chemistry I (4) AND
CHM151LL General Chemistry I Laboratory (1) OR
CHM150AA General Chemistry I (5) OR
CHM151 General Chemistry I (3) AND
CHM151LL General Chemistry I Laboratory (1) OR
CHM151AA General Chemistry I (4) 4-5
CHM152 General Chemistry II (3) AND
CHM152LL General Chemistry II Laboratory (1) OR
CHM152AA General Chemistry II (5) 4-5
ECE211 Engineering Mechanics-Statics

\section*{Transfer Plan 29: University of Arizona, BS, Chemical Engineering}

CHM150 General Chemistry I (4) AND
CHM151LL General Chemistry I Laboratory (1) OR
CHM150AA General Chemistry I (5) OR
CHM151 General Chemistry I (3) AND
CHM151LL General Chemistry I Laboratory (1) OR
CHM151AA General Chemistry I (4) 4-5
CHM152 General Chemistry II (3) AND
CHM152LL General Chemistry II Laboratory (1) OR
CHM152AA General Chemistry II (5) 4-5
CHM235 General Organic Chemistry I 3
CHM235LL General Organic Chemistry I Laboratory 1
CHM236 General Organic Chemistry IIA 3
Transfer Plan 30: University of Arizona, BS, Civil Engineering
BIO181 General Biology (Majors) I (4) OR
BIO181XT General Biology (Majors) I (4) OR
\begin{tabular}{llr} 
GLG101 & \begin{tabular}{l} 
Introduction to Geology I - \\
\\
\\
Physical Lecture (3) AND
\end{tabular} & \\
GLG103 & Introduction to Geology I - Physical Lab (1) OR & \\
GLG101IN & Introduction to Geology I - Physical (4) & 4 \\
CHM150 & General Chemistry I (4) AND & \\
CHM151LL & General Chemistry I Laboratory (1) OR & \\
CHM150AA & General Chemistry I (5) OR & \\
CHM151 & General Chemistry I (3) AND & \\
CHM151LL & General Chemistry I Laboratory (1) OR & \\
CHM151AA & General Chemistry I (4) & \(4-5\) \\
CON241 & Surveying & 3 \\
ECE211 & Engineering Mechanics-Statics & 3 \\
ECE215 & Mechanics of Materials & 3
\end{tabular}

\section*{Transfer Plan 31: University of Arizona, BS, Electrical and Computer Engineering (either emphasis)}

CHM150 General Chemistry I (4) AND
CHM151LL General Chemistry I Laboratory (1)
OR
CHM150AA General Chemistry I (5)
OR
CHM151 General Chemistry I (3) AND
CHM151LL General Chemistry I Laboratory (1)
OR
CHM151AA General Chemistry I (4) 4-5
EEE202 Circuits and Devices
MAT227 Discrete Mathematical Structures
Transfer Plan 32: University of Arizona, BS, Industrial Engineering
CHM150 General Chemistry I (4) AND
CHM151LL General Chemistry I Laboratory (1) OR
CHM150AA General Chemistry I (5) OR
CHM151 General Chemistry I (3) AND
CHM151LL General Chemistry I Laboratory (1) OR
CHM151AA General Chemistry I (4)
CHM152 General Chemistry II (3) AND
CHM152LL General Chemistry II Laboratory (1) OR
CHM152AA General Chemistry II (5)
CSC100 Introduction to Computer Science (C++)(3)OR
CSC100AA Introduction to Computer Science (C++) (3) OR
CSC100AB 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) 3-4
Transfer Plan 33: University of Arizona, BS,Mechanical Engineering
CHM150 General Chemistry I (4) ANDCHM151LL General Chemistry I Laboratory (1)ORCHM150AA General Chemistry I (5)
            OR
CHM151 General Chemistry I (3) AND
CHM151LL General Chemistry I Laboratory (1)
    OR
CHM151AA General Chemistryl(4) 4-5
ECE105 MATLAB Programming 1
ECE211 Engineering Mechanics-Statics 3
ECE212 Engineering Mechanics-Dynamics 3
ECE216 Computer-Aided Engineering 2
ECE216LL Computer-Aided Engineering Laboratory 1

General Education Requirements Credits: 22-32 Arizona General Education Curriculum (AGEC) AGEC-S A single course with an [HU], [SB], or [L] designation may also be used to satisfy the Oral Communication, Critical Reading, or Awareness Area ([C], [G] and/or [H]) requirement(s).
A single course with both the [HU] and [L] designations may be used to satisfy both of these areas.
A single course with both the [SB] and [L] designations may be used to satisfy both of these areas.

\section*{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.
AIS213 or COM241 or DAH255 or ENG200 or ENG218 or ENH241 or ENH254 or ENH255 or ENH277AE or HUM250 or HUM251 or MHL204 or PHI103 or PHI218 or PHI224 or REL203 or REL205 or REL207 or SLC202 or THE220 or THP241 or any course with both the [HU] and [L] designations recommended.

\section*{Mathematics [MA]}

Credits: 4-5
MAT220 Calculus with Analytic Geometry I (5) OR MAT221 Calculus with Analytic Geometry I (4) OR Any approved general education course in the Mathematical Applications [MA] area for which MAT22+ is a prerequisite. (4-5)

Humanities, Arts and Design [HU]
Credits: 6
Any approved general education courses in the Humanities, Arts and Design [HU] area.

Any approved general education courses in the Humanities, Arts and Design [HU] area.
PHI105Introduction to Ethics 3 recommended for students intending to transfer to NAU to earn a BS in Civil Engineering.

A/S213 or COM241 or DAH255 or ENG200 or ENG218 or ENH241 or ENH254 or ENH255 or ENH277AE or HUM250 or HUM251 or MHL204 or PHI103 or PHI218 or PHI224 or REL203 or REL205 or REL207 or SLC202 or THE220 or THP241 or any course with both the \([\mathrm{HU}]\) and [L] designations recommended.

AIS213 or ARH145 or CCS101 or DAH250 or DAH255 or EDU/HUM/ STO292 or EDU/ENH/STO294 or ENH110 or ENH112 or ENH114 or ENH190 or ENH241 or ENH255 or ENH259 or ENH260 or ENH280 or ENH/WST284 or ENH/WST285 or ENH295 or HIS203 or HUM209 or HUM214 or HUM260 or MHL145 or MHL155 or MHL204 or REL203 or REL225 or SPH245 or WST209 or any course with the [HU] and [C] designations recommended.

\section*{Social-Behavioral Sciences [SB] Credits: 6}

Any approved general education courses in the So-cial-Behavioral Sciences [SB] area.

Any approved general education courses in the Social-Behavioral Sciences [SB] area. 6

ECN211 recommended for students intending to transfer to ASU to earn a BSE in Industrial Engineering.
ECN211 OR ECN212 recommended for students intending to transfer to ASU to earn a BSE in Biomedical Engineering, Civil Engineering, Construction Engineering, or Electrical Engineering. COM100, COM110, or COM230 recommended.
AFR/ASB/CCS202 or AFR203 or AFR204 or AIS/HIS140 or AIS/ SOC141 or ASB100 or ASB102 or ASB211 or ASB222 or ASB223 or ASB226 or ASB235 or ASB252 or BHS150 or COM163 or COM263 or ECN160 or ECN213 or ECN250 or GCU102 or GCU/POS113 or GCU121 or GCU122 or GCU141 or GCU221 or HIS100 or HIS101 or HIS102 or HIS103 or HIS104 or HIS105 or HIS106 or HIS109 or HIS113 or HIS114 or HIS145 or HIS173 or HIS201 or HIS203 or HIS204 or HIS209 or HIS241 or HIS242 or HIS273 or HIS277 or IBS109 or IFS210 or POS114 or POS120 or POS125 or POS140 or PSY132 or PSY225 or SBU200 or SOC241 or SOC270 or SSH111 or SWU271 or WST161 or any course with the [SB] and ([G] or [H]) designations recommended.
Natural Sciences [SG]/[SQ]
Credits: 0
Met by PHY115 and PHY116 OR PHY121 and PHY131 in Required Courses.

\section*{Awareness Areas}

Credits: 0-6
These requirements may be shared with Core Requirements.

\section*{Cultural Diversity in the US [C] \\ Credits: 0-3}

\section*{Historical/Global Awareness [H]/[G] Credits: 0-3}

Any approved general education course with the Historical \([\mathrm{H}]\) or Global [G] awareness area designation. 0-3
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 transferable credits, it is recommended that courses be selected that meet more than one requirement wherever possible.

\section*{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.

\section*{Critical Reading}

Credits: 0-3
\(\begin{array}{ll}\text { CRE101 } & \text { College Critical Reading and Critical Thinking (3) } \\ \text { OR Equivalent as indicated by assessment (0) 0-3 }\end{array}\)

\section*{Associate in Science (AS), Emphasis in Geography Meteorology}

\section*{Total Credits: 60-64 Major Code: 8604}

\section*{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.

\section*{Program Notes}

Students must earn a grade of 'C' or better in all courses in the program.

\section*{Required Courses}

Credits: 34-38
GPH111 Introduction to Physical Geography (3) AND
GPH112 Introduction to Physical Geography Lab (1) OR
GPH113 Introduction to Physical Geography (4) 4
GCU102 Introduction to Human Geography 3
GPH212 Introduction to Meteorology I (3) AND
GPH214 Introduction to Meteorology Laboratory I (1) 4
GPH213 Climate and Weather (3) AND
GPH215 Climate and Weather Laboratory (1) 4
GIS205 Geographic Information Technology 3
PHY115 University Physics I (5) OR
PHY121 University Physics I: Mechanics (4) 4-5
PHY116 University Physics II (5) OR
PHY131 University Physics II: Electricity and Magnetism (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
General Education Requirements Credits: 19-26 Arizona General Education Curriculum (AGEC) AGEC-S A single course with an [HU], [SB], or [L] designation may also be used to satisfy the Oral Communication, Critical Reading, or Awareness Area ([C], [G] and/or [H]) requirement(s).
A single course with both the [HU] and [L] designations may be used to satisfy both of these areas.
A single course with both the [SB] and [L] designations may be used to satisfy both of these areas.
First-Year Composition [FYC]
ENG101 First-Year Composition (3) OR
\begin{tabular}{ll} 
ENG107 & First-Year Composition for ESL (3) AND \\
ENG102 & First-Year Composition (3) OR \\
ENG108 & First-Year Composition for ESL (3)
\end{tabular}

Literacy and Critical Inquiry [L] Credits: 0-3
Any approved general education course in the Literacy and Critical Inquiry [L] area.
Recommend selecting a course that satisfies:
[L] Literacy and Critical Inquiry and [SB] Social-Behavioral Sciences or [L] Literacy and Critical Inquiry and [HU] Humanities, Arts \& Design or [L] Literacy and Critical Inquiry and (COM) Oral Communications or [L] Literacy and Critical Inquiry and CRE101 requirements simultaneously.

\section*{Mathematics [MA]}

Credits: 4-5
\(\begin{array}{ll}\text { MAT220 } & \text { Calculus with Analytic Geometry I (5) OR } \\ \text { MAT221 } & \text { Calculus with Analytic Geometry I (4) OR }\end{array}\)
Any approved general education course in the Mathe-
matical Applications [MA] area for which MAT22+ is a prerequisite.

\section*{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: 3
Met by GCU102 in Required Courses area
AND
Any approved general education course in Social-Behavioral Sciences area

Natural Sciences [SG]/[SQ] Credits: 0
Met by (PHY115 OR PHY121) AND (PHY116 OR PHY131) in Required Courses area.

\section*{Awareness Areas}

Credits: 0-3
These requirements may be shared with Core Requirements.

\section*{Cultural Diversity in the US [C]}

Credits: 0-3
Historical/Global Awareness [H]/[G] Credits: 0
Met by GCU102 in Required Courses area.
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 transferable credits, it is recommended that courses be selected that meet more than one requirement wherever possible.

Oral Communication
Credits: 0-3
COM100 Introduction to Human Communication (3) OR
\begin{tabular}{lll} 
COM110 & Interpersonal Communication (3) OR & \\
COM225 & Public Speaking (3) OR & \\
COM230 & Small Group Communication (3) & \(0-3\)
\end{tabular}

\section*{Critical Reading}

Credits: 0-3
CRE101 College Critical Reading and Critical Thinking (3)
OR Equivalent as indicated by assessment (0) 0-3

\section*{Associate in Science (AS), Emphasis in Geology}

\section*{Total Credits: 60 \\ Major Code: 8608}

\section*{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.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better in each course in the program.

\section*{Required Courses}

Credits: 32-37
CHM150 General Chemistry I (4) AND
CHM151LL General Chemistry I Laboratory (1) OR
CHM150AA General Chemistry I (5) OR
CHM151 General Chemistry I (3) AND
CHM151LL General Chemistry I Laboratory (1) OR
CHM151AA General Chemistry I (4)
4-5

CHM152 General Chemistry II (3) AND
CHM152LL General Chemistry II Laboratory (1) OR
CHM152AA General Chemistry II (4)
GLG101 Introduction to Geology I -
Physical Lecture (3) AND
GLG103 Introduction to Geology I - Physical Lab (1) OR
GLG101IN Introduction to Geology I - Physical (4) 4
GLG102 Introduction to Geology II -
Historical Lecture (3) AND
GLG104 Introduction to Geology II - Historical Lab (1) OR
GLG102IN Introduction to Geology II - Historical (4) 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
PHY115 University Physics I (5) OR
PHY121 University Physics I: Mechanics (4) 4-5
PHY116 University Physics II (5) OR
PHY131 University Physics II: Electricity and Magnetism (4)

\section*{Restricted Electives}

Credits: 0-10
Complete all courses in the transfer option that best aligns with your academic and professional goals. If your intended transfer institution is not listed, then select a combination of courses from the transfer options listed in order to meet the minimum credits required in the Restricted Electives section. Consult with an academic, faculty, or program advisor to prevent exceeding your university transfer program's maximum transferable credits (typically 64).

\section*{Transfer Plan 1: Arizona State University (College of Liberal Arts and Sciences), Earth and Space Exploration (Geological Sciences), Bachelor of Science}

No additional coursework needed.

\section*{Transfer Plan 2: University of Arizona, Geosciences (Geology Emphasis), Bachelor of Science}

Complete a language course at the elementary level (102 or equivalent), including American Sign Language IV with a 'C' or better OR demonstrate proficiency through this level as indicated by assessment:
ARB+++++ Any ARB Arabic course(s)
CHI+++++ Any CHI Chinese course(s)
FRE+++++ Any FRE French course(s)
GER+++++ Any GER German course(s)
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ITA+++++ Any ITA Italian course(s)
JPN++++++ Any JPN Japanese course(s)
SPA++++++ Any SPA Spanish course(s)
SLG++++++ Any SLG Sign Language course(s)

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General Education Requirements Credits: 22-32 Arizona General Education Curriculum (AGEC) AGEC-S A single course with an [HU], [SB], or [L] designation may also be used to satisfy the Oral Communication, Critical Reading, or Awareness Area ([C], [G] and/or [H]) requirement(s).
A single course with both the [HU] and [L] designations may be used to satisfy both of these areas.
A single course with both the [SB] and [L] designations may be used to satisfy both of these areas.
See the AGEC matrix for course designations.

\section*{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

\section*{Literacy and Critical Inquiry [L] Credits: 0-3}

Any approved general education course in the Literacy and Critical Inquiry [L] area.

0-3
Recommend selecting a course that satisfies [L] and [SB] or [L] and [HU] or [L] and (COM) or [L] and CRE101 requirements simultaneously.

\section*{Mathematics [MA]}

Credits: 4-5
MAT220 Calculus with Analytic Geometry I (5) OR
MAT221 Calculus with Analytic Geometry I (4) OR
Any approved general education course in the Mathematical Applications [MA] area for which MAT22+ is a prerequisite. (4-5)
Humanities, Arts and Design [HU] Credits: 6
Any approved general education courses in the Humanities, Arts and Design [HU] area. 6

\section*{Social-Behavioral Sciences [SB]}

Credits: 6
Any approved general education courses in the So-cial-Behavioral Sciences [SB] area.

\section*{Natural Sciences [SG]/[SQ]}

Credits: 0
Met by (PHY115 OR PHY121) AND (PHY116 OR PHY131) in Required Courses.

\section*{Awareness Areas}

Credits: 0-6
These requirements may be shared with Core Requirements.

\section*{Cultural Diversity in the US [C] \\ Credits: 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 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 transferable credits, it is recommended that courses be selected that meet more than one requirement wherever possible.

\section*{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

\section*{Critical Reading}

Credits: 0-3
CRE101 College Critical Reading and Critical Thinking (3)
OR Equivalent as indicated by assessment (0) 0-3

\title{
Associate in Science (AS), Emphasis in Physics
}

\section*{Total Credits: 60-64 \\ Major Code: 8606}

\section*{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 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.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better in each course in the program.
\begin{tabular}{lll} 
Required Courses & \multicolumn{1}{c}{ Credits: } & 16-20 \\
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) & \(4-5\) \\
PHY115 & University Physics I (5) OR & \\
PHY121 & University Physics I: Mechanics (4) & \(4-5\) \\
PHY116 & University Physics II (5) OR & \\
PHY131 & University Physics II: Electricity and & \\
& Magnetism (4) & \(4-5\)
\end{tabular}

\section*{Restricted Electives}

Credits: 0-36
Complete all courses in the transfer option that best aligns with your academic and professional goals. If your intended transfer institution is not listed, then select a combination of courses from the transfer options listed in order to meet the minimum credits required in the Restricted Electives section. Consult with an academic, faculty, or program advisor to prevent exceeding your university transfer program's maximum transferable credits (typically 64).

\section*{Transfer Plan 1: Arizona State University (College of Liberal Arts and Sciences), Bachelor of Science, Physics}
\begin{tabular}{llr} 
MAT225 & Elementary Linear Algebra & 3 \\
MAT276 & Modern Differential Equations (4) OR & \\
MAT277 & Modern Differential Equations (3) & \(3-4\) \\
PHY241 & \begin{tabular}{ll} 
University Physics III: Thermodynamics, & \\
& Optics, and Wave Phenomena
\end{tabular} & 4
\end{tabular}

\section*{Transfer Plan 2: Arizona State University (College of Liberal Arts and Sciences), Bachelor of Science, Biophysics}
\begin{tabular}{llr} 
BIO181 & General Biology (Majors) I & 4 \\
BIO182 & General Biology (Majors) II & 4 \\
CHM150 & General Chemistry I (4) AND & \\
CHM151LL & General Chemistry I Laboratory (1) OR & \\
CHM150AA & General Chemistry I (5) OR & \\
CHM151 & General Chemistry I (3) AND & \\
CHM151LL & General Chemistry I Laboratory (1) OR & \\
CHM151AA & General Chemistry I (4) & \(4-5\)
\end{tabular}

\section*{Transfer Plan 3: Arizona State University (College of Integrative Sciences and Arts), Bachelor of Science, Applied Physics}

No additional required coursework for this transfer plan.
\begin{tabular}{|c|c|c|}
\hline \multicolumn{3}{|l|}{Transfer Plan 4: Arizona State University (College of Liberal Arts and Sciences),} \\
\hline Bachelor & Arts, Physics of Arts, Physics & \\
\hline CHM150 & General Chemistry I (4) AND & \\
\hline CHM151LL & General Chemistry I Laboratory (1) OR & \\
\hline CHM150AA & General Chemistry I (5) OR & \\
\hline CHM151 & General Chemistry I (3) AND & \\
\hline CHM151LL & General Chemistry I Laboratory (1) OR & \\
\hline CHM151AA & General Chemistry I (4) & 4-5 \\
\hline MAT225 & Elementary Linear Algebra & 3 \\
\hline MAT276 & Modern Differential Equations (4) OR & \\
\hline MAT277 & Modern Differential Equations (3) & 3-4 \\
\hline PHY241 & University Physics III: Thermodynamics, Optics, and Wave Phenomena & 4 \\
\hline
\end{tabular}

Foreign Language
Credits: 0-20
Complete a language course at the intermediate level (202 or equivalent), including American Sign Language IV with a 'C' or better OR demonstrate proficiency through this level as indicated by assessment.
ARB+++ any ARB/Arabic course(s)
CHI+++ any CHI/Chinese course(s)
FRE+++ any FRE/French course(s)
GER+++ any GER/German course(s)
ITA+++ any ITA/Italian course(s)
JPN+++ any JPN/Japanese course(s)
SPA+++ any SPA/Spanish course(s)
SLG+++ any SLG/Sign Language course(s)
Transfer Plan 5: Northern Arizona University, Bachelor of Science, Physics
MAT276 Modern Differential Equations (4) OR
MAT277 Modern Differential Equations (3) 3-4
PHY241 University Physics III: Thermodynamics, Optics, and Wave Phenomena

\section*{Transfer Plan 6: University of Arizona, Bachelor of Science, Physics}

CHM150 General Chemistry I (4) AND
CHM151LL General Chemistry I Laboratory (1) OR
CHM150AA General Chemistry I (5) OR
CHM151 General Chemistry I (3) AND
CHM151LL General Chemistry I Laboratory (1) OR
CHM151AA General Chemistry I (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

Foreign Language
Credits: 0-10
Complete a language course at the elementary level (102 or equivalent), including American Sign Language II with a 'C' or better OR demonstrate proficiency through this level as indicated by assessment.
ARB+++ any ARB Arabic course(s)
CHI+++ any CHI Chinese course(s)
FRE+++ any FRE French course(s)
GER+++ any GER German course(s)
ITA+++ any ITA Italian course(s)
JPN+++ any JPN Japanese course(s)
SPA+++ any SPA Spanish course(s)
SLG+++ any SLG Sign Language course(s)

\section*{Transfer Plan 7: University of Arizona, Bachelor of Arts, Physics}

CHM150 General Chemistry I (4) AND
CHM151LL General Chemistry I Laboratory (1) OR
CHM150AA General Chemistry I (5) OR
CHM151 General Chemistry I (3) AND
CHM151LL General Chemistry I Laboratory (1) OR
CHM151AA General ChemistryI (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

\section*{Foreign Language}

Credits: 0-20
Complete a language course at the intermediate level (202 or equivalent), including American Sign Language IV with a 'C' or better OR demonstrate proficiency through this level as indicated by assessment.
ARB+++ any ARB Arabic course(s)
CHI+++ any CHI Chinese course(s)
FRE+++ any FRE French course(s)
GER+++ any GER German course(s)
ITA+++ any ITA Italian course(s)
JPN+++ any JPN Japanese course(s)
SPA+++ any SPA Spanish course(s)
SLG+++ any SLG Sign Language course(s)
General Education Requirements Credits: 22-32 Arizona General Education Curriculum (AGEC) AGEC-S A single course with an [HU], [SB], or [L] designation may also be used to satisfy the Oral Communication, Critical Reading, or Awareness Area ([C], [G] and/or [H]) requirement(s).

First-Year Composition [FYC]
Credits: 6
ENG107
ENG102
ENG108
First-Year Composition (3) OR
First-Year Composition for ESL (3)

6

\section*{Literacy and Critical Inquiry [L] Credits: 0-3}

Any approved general education course in the Literacy and Critical Inquiry area [L].

0-3
Recommend selecting a course that satisfies [L] and [SB] or [L] and [HU] or [L] and (COM) or [L] and CRE101 requirements simultaneously.

\section*{Mathematics [MA]}

Credits: 4-5
\(\begin{array}{ll}\text { MAT220 } & \text { Calculus with Analytic Geometry I (5) OR } \\ \text { MAT221 } & \text { Calculus with Analytic Geometry I (4) OR }\end{array}\)
Any approved general education course in the Mathematical Applications [MA] area for which MAT22+ is a prerequisite.

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 So-cial-Behavioral Sciences [SB] area.

6
Natural Sciences [SG]/[SQ] Credits: 0
Met by (PHY115 or PHY121) and (PHY116 or PHY131) in required courses.

\section*{Awareness Areas}

Credits: 0-6
These requirements may be shared with Core Requirements.

\section*{Cultural Diversity in the US [C]}

Credits: 0-3
Historical/Global Awareness [H]/[G] Credits: 0-3
Any approved general education course with the Histori-
cal [H] or Global [G] awareness area designation. 0-3
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 transferable credits, it is recommended that courses be selected that meet more than one requirement wherever possible.

\section*{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)

Critical Reading Credits: 0-3
CRE101 College Critical Reading and Critical Thinking (3) OR Equivalent as indicated by assessment (0) 0-3

\section*{Associate in Science (AS), Emphasis in Secondary Education}

\section*{Total Credits: 60-64 \\ Major Code: 8609}

\section*{Description}

The Associate in Science (AS), Emphasis in Secondary Education provides the first two years of a fouryear 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.

\section*{Program Notes}

Students must earn a grade of 'C' or better in each course to transfer.
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.

\section*{Required Courses}

Credits: 26-49
Complete all courses in the transfer option that best aligns with your academic and professional goals. Students should work with an advisor to determine the appropriate coursework and transfer institution for their intended area of study. If your intended transfer institution is not listed, then select a combination of courses from the transfer options listed in order to meet the minimum credits required in the Restricted Electives section. Consult with an academic, faculty, or program advisor to prevent exceeding your university transfer program's maximum transferable credits (typically 64).

Transfer Plan 1: Arizona State University (Mary Lou Fulton Teachers College), Bachelor of Arts in Education, Secondary Education (Biological Sciences)
BIO181 BIO181XT

General Biology (Majors) I (4) OR General Biology (Majors) | (5) 4-5
Note that this course may be used to satisfy the [SQ] requirement.
BIO182 General Biology (Majors) II
Note that this course may be used to satisfy the [SG] requirement.
BlO205 Microbiology (4) OR
BlO220 Biology of Microorganisms (4) 4
CIS105 Survey of Computer Information Systems (3) OR
CSC180 Computer Literacy (3) OR
CSC180AA Computer Literacy (3) OR
CSC180AB Computer Literacy (4)
CHM150 General Chemistry I (4) AND
CHM151LL General Chemistry I Laboratory (1) OR
CHM150AA General Chemistry I (5) OR
\begin{tabular}{ll} 
CHM151 & General Chemistry I (3) AND \\
CHM151LL \\
CHM151AA \\
General Chemistry I Laboratory (1) OR
\end{tabular}

Select one of the following. GCU/POS113 AND HIS103 may be used to fulfill outstanding AGEC requirements simultaneously.
GCU/POS113 United States and Arizona Social Studies (3) OR HIS103 United States History to 1865 (3) AND POS221 Arizona Constitution (1)

\section*{Transfer Plan 2: Arizona State University (College of Integrative Sciences and Arts), Bachelor of Science, Applied Biological Sciences (Secondary Education in Biology)}
\begin{tabular}{llr} 
BIO181 & General Biology (Majors) I (4) OR & \\
BIO181XT & General Biology (Majors) I (5) & \(4-5\) \\
& \begin{tabular}{l} 
Note that this course may be used to satisfy \\
the [SQ] requirement.
\end{tabular} & \\
BIO182 & \begin{tabular}{l} 
General Biology (Majors) II \\
Note that this course may be used to satisfy
\end{tabular} & 4 \\
BIO205 & \begin{tabular}{l} 
the [SG] requirement.
\end{tabular} & \\
& Microbiology & 4
\end{tabular}

CHM150 General Chemistry I (4) AND
CHM151LL General Chemistry I Laboratory (1) OR
CHM150AA General Chemistry I (5) OR
CHM151 General Chemistry I (3) AND
CHM151LL General Chemistry I Laboratory (1) OR
CHM151AA General ChemistryI (4) 4-5
Note that these courses may be used to satisfy the
Subject Options requirement.
CHM152 General Chemistry II (3) AND
CHM152LL General Chemistry II Laboratory (1) OR

CHM152AA General Chemistry II (4) OR
CHM154 General Chemistry II with Qualitative Analysis (3) AND
Note that these courses may be used to satisfy the Subject Options requirement.
EDU221 Introduction to Education (3) OR
EDU222 Introduction to the Exceptional Learner (3)3
Note that this course may be used to satisfy the
[SB] requirement.
Select one of the following. GCU/POS113 AND HIS103 may be used to fulfill outstanding AGEC requirements simultaneously.
GCU/POS113 United States and Arizona Social Studies (3) OR
HIS103 United States History to 1865 (3) AND
POS221 Arizona Constitution (1) 3-4
PHY101 Introduction to Physics (4) OR
PHY101AA Introduction to Physics (5) OR
PHY111 General Physics I (4) OR
PHY111AA General Physics I (5)

\section*{Transfer Plan 3: Northern Arizona University, Bachelor of Science in Education, Secondary Education - Biology}
\(\begin{array}{lll}\text { BIO181 } & \text { General Biology (Majors) I (4) OR } & \\ \text { BIO181XT } & \text { General Biology (Majors) I (5) } & \text { 4-5 }\end{array}\)
Note that this course may be used to satisfy the [SQ] requirement.
BIO182 General Biology (Majors) II
Note that this course may be used to satisfy the [SG] requirement.
BlO201 Human Anatomy and Physiology I 4
BIO202 Human Anatomy and Physiology II 4
BIO240 General Genetics 4
CHM150 General Chemistry I (4) AND
CHM151LL General Chemistry I Laboratory (1) OR
CHM150AA General Chemistry I (5) OR
CHM151 General Chemistry I (3) AND
CHM151LL General Chemistry I Laboratory (1) OR
CHM151AA General Chemistry I (4)
Note that these courses may be used to satisfy the Subject Options requirement.

CHM152 General Chemistry II (3) AND
CHM152LL General Chemistry II Laboratory (1) OR
CHM152AA General Chemistry II (4)
4
Note that these courses may be used to satisfy the Subject Options requirement.
\begin{tabular}{lll} 
CHM230 & Fundamental Organic Chemistry & 3 \\
CHM230LL & Fundamental Organic Chemistry Laboratory & 1 \\
EDU221 & Introduction to Education (3) OR & \\
EDU222 & \begin{tabular}{ll} 
Introduction to the Exceptional Learner (3) & 3 \\
& Note that this course may be used to satisfy \\
the [SB] requirement.
\end{tabular} & \\
Select one of the following. GCU/POS113 AND HIS103 \\
may be used to fulfill outstanding AGEC requirements
\end{tabular}

Transfer Plan 4: Arizona State University (Mary Lou Fulton Teachers College), Bachelor of Arts in Education, Secondary Education (Chemistry)
\(\begin{array}{ll}\text { BPC110 } & \text { Computer Usage and Applications (3) OR } \\ \text { CIS105 } & \text { Survey of Computer Information Systems (3) }\end{array}\)
CHM150 General Chemistry I (4) AND
CHM151LL General Chemistry I Laboratory (1) OR
CHM150AA General Chemistry I (5) OR
CHM151 General Chemistry I (3) AND
CHM151LL General Chemistry I Laboratory (1) OR
CHM151AA General Chemistryl(4) 4-5
Note that these courses may be used to satisfy the [SQ] requirement.

CHM152 General Chemistry II (3) AND
CHM152LL General Chemistry II Laboratory (1) OR
CHM152AA General Chemistry II (4)
Note that these courses may be used to satisfy the [SQ] requirement.

CHM235 General Organic Chemistry I (3) AND
CHM235LL General Organic Chemistry I Laboratory (1) 4 Note that these courses may be used to satisfy the Subject Options requirement.

CHM236 General Organic Chemistry IIA (3) AND
CHM236LL General Organic Chemistry IIA Laboratory (1) 4
Note that these courses may be used to satisfy the Subject Options requirement.

CFS/ECH176 Child Development
3
EDU221 Introduction to Education
Note that this course may be used to satisfy the [SB] requirement.
EDU222 Introduction to the Exceptional Learner Note that this course may be used to satisfy the [SB] requirement.
EDU230 Cultural Diversity in Education
Select one of the following. GCU/POS113 AND HIS103 may be used to fulfill outstanding AGEC requirements simultaneously.
GCU/POS113 United States and Arizona Social Studies (3) OR
HIS103 United States History to 1865 (3) AND
POS221 Arizona Constitution (1) 3-4
MAT230 Calculus with Analytic Geometry II (5) OR
MAT231 Calculus with Analytic Geometry II (4) 4-5
PHY101 Introduction to Physics (4) OR
PHY101AA Introduction to Physics (5)
4-5

\section*{Transfer Plan 5: Northern Arizona University, Bachelor of Science in Education, Secondary Education - Chemistry \\ BIO181 General Biology (Majors) I (4) OR BIO181XT General Biology (Majors) I (5)}

CHM150 General Chemistry I (4) AND
CHM151LL General Chemistry I Laboratory (1) OR
CHM150AA General Chemistry I (5) OR
CHM151 General Chemistry I (3) AND
CHM151LL General Chemistry I Laboratory (1) OR
CHM151AA General Chemistry I (4)
Note that these courses may be used to satisfy the [SQ] requirement.

CHM152 General Chemistry II (3) AND
CHM152LL General Chemistry II Laboratory (1) OR
CHM152AA General Chemistry II (4)
4
Note that these courses may be used to satisfy the [SQ] requirement.

CHM235 General Organic Chemistry I
3
Note that this course may be used to satisfy the subject Options requirement.

CHM235LL General Organic Chemistry I Laboratory 1
CHM236 General Organic Chemistry IIA 3
Note that this course may be used to satisfy the Subject Options requirement.
CHM236LL General Organic Chemistry IIA Laboratory
EDU221 Introduction to Education (3) OR
EDU222 Introduction to the Exceptional Learner (3)
Note that this course may be used to satisfy the [SB] requirement.

Select one of the following. GCU/POS113 AND HIS103 may be used to fulfill outstanding AGEC requirements simultaneously.
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
Note: Students must petition NAU to accept GCUI POS113 OR (HIS103 and POS221) for POS220.
GLG101 Introduction to Geology I Physical Lecture (3) AND
GLG103 Introduction to Geology I Physical Lab (1) OR
GLG101IN Introduction to Geology I - Physical (4) 4
MAT230 Calculus with Analytic Geometry II (5) OR
MAT231 Calculus with Analytic Geometry II (4) 4-5
PHY115 University Physics I (5) OR
PHY121 University Physics I: Mechanics (4) 4-5
PHY116 University Physics II (5) OR
PHY131 University Physics II: Electricity and Magnetism (4)
Transfer Plan 6: Arizona State University (Mary Lou Fulton Teachers College), Bachelor of Arts in Education, Secondary Education (Physics)
BPC110 Computer Usage and Applications (3) OR
CIS105 Survey of Computer Information Systems (3) OR
CSC180 Computer Literacy (3) 3
CFS/ECH176 Child Development 3
EDU221 Introduction to Education
Note that this course may be used to satisfy the [SB] requirement.
EDU222 Introduction to the Exceptional Learner 0-3 Note that this course may be used to satisfy the [SB] requirement.
EDU230 Cultural Diversity in Education
Select one of the following. GCU/POS113 AND HIS103 may be used to fulfill outstanding AGEC requirements simultaneously.


\section*{Transfer Plan 7: Arizona State University (College of Liberal Arts and Sciences), Bachelor of Science, Physics (Secondary Education)}

EDU222 Introduction to the Exceptional Learner 0-3 Note that this course may be used to satisfy the [SB] requirement.
Select one of the following. GCU/POS113 AND HIS103 may be used to fulfill outstanding AGEC requirements simultaneously.
GCU/POS113 United States and Arizona Social Studies (3) OR HIS103 United States History to 1865 (3) AND
POS221 Arizona Constitution (1) 3-4
MAT230 Calculus with Analytic Geometry II (5) OR
MAT231 Calculus with Analytic Geometry II (4) 4-5 Note that this course may be used to satisfy the subject Options requirement.
MAT240 Calculus with Analytic Geometry III (5) OR
MAT241 Calculus with Analytic Geometry III (4) 4-5
Note that this course may be used to satisfy the Subject Options requirement.
PHY115 University Physics I (5) OR
PHY121 University Physics I: Mechanics (4) 4-5 Note that this course may be used to satisfy the [SQ] requirement.
PHY116 University Physics II (5) OR

PHY131 University Physics II: Electricity and Magnetism (4)
Note that this course may be used to satisfy the [SQ] requirement.
PHY241 University Physics III: Thermodynamics, Optics, and Wave Phenomena
Transfer Plan 8: Northern Arizona University, Bachelor of Science in Education, Secondary Education - Physics
AST/GLG106 Life in the Universe 3
EDU221 Introduction to Education (3) OR
EDU222 Introduction to the Exceptional Learner (3) 0-3
Note that this course may be used to satisfy the [SB] requirement.
Select one of the following. GCU/POS113 AND HIS103 may be used to fulfill outstanding AGEC requirements simultaneously.
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
Note: Students must petition NAU to accept GCU/POS113 OR (HIS103 and POS221) for POS220.
MAT230 Calculus with Analytic Geometry II (5) OR
MAT231 Calculus with Analytic Geometry II (4) 4-5
Note that this course may be used to satisfy the
Subject Options requirement.
MAT240 Calculus with Analytic Geometry III (5) OR
MAT241 Calculus with Analytic Geometry III (4) 4-5
Note that this course may be used to satisfy the
Subject Options requirement.
MAT262 Differential Equations (3) OR
MAT276 Modern Differential Equations (4) OR
MAT277 Modern Differential Equations (3) 3-4
PHY115 University Physics I (5) OR
PHY121 University Physics I: Mechanics (4) 4-5
Note that this course may be used to satisfy the [SQ] requirement.
PHY116 University Physics II (5) OR
PHY131 University Physics II: Electricity and Magnetism (4)
Note that this course may be used to satisfy the [SQ] requirement.
PHY241 University Physics III: Thermodynamics, Optics, and Wave Phenomena

General Education Requirements Credits: 13-48 Arizona General Education Curriculum (AGEC) AGEC-S A single course with an [HU], [SB], or [L] designation may also be used to satisfy the Oral Communication, Critical Reading, or Awareness Area ([C], [G] and/or [H]) requirement(s). A single course with both the [HU] and [L] designations may be used to satisfy both of these areas. A single course with both the [SB] and [L] designations may be used to satisfy both of these areas. See the AGEC matrix for course designations.

\section*{First-Year Composition [FYC]}

Credits: 6
\begin{tabular}{ll} 
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)
\end{tabular}

Literacy and Critical Inquiry [L]
Credits: 0-3
Any approved general education course in the Literacy and Critical Inquiry [L] area.

\section*{Mathematics [MA]}

Credits: 4-5
\(\begin{array}{ll}\text { MAT220 } & \text { Calculus with Analytic Geometry I (5) OR } \\ \text { MAT221 } & \text { Calculus with Analytic Geometry I (4) OR }\end{array}\)
Any approved general education course in the Mathe-
matical Applications [MA] area for which MAT22+ is a
prerequisite. (4-5)
4-5
Humanities, Arts and Design [HU] Credits: 3-6
May be met by specific subplan option selections.
Any approved general education courses in the Human-
ities, Arts and Design [HU] area.
3-6
Social-Behavioral Sciences [SB] Credits: 0-6
May be met by specific subplan option selections.
Any approved general education courses in the So-
cial-Behavioral Sciences [SB] area.
0-6
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).
Awareness Areas
Credits: 0-6
These requirements may be shared with Core Requirements.
Cultural Diversity in the US [C]
Credits: 0-3
Historical/Global Awareness [H]/[G] Credits: 0-3

Any approved general education course with the Historical \([\mathrm{H}]\) or Global [G] awareness area designation. 0-3

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 transferable credits, it is recommended that courses be selected that meet more than one requirement wherever possible.
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)

\section*{Critical Reading}

Credits: 0-3
CRE101 College Critical Reading and Critical Thinking (3)
OR Equivalent as indicated by assessment (0) 0-3


\title{
Career 8 Technical Education \\ MESA \\ COMMUNITY COLLEGE \\ A MARICOPA COMMUNITY COLLEGE
}

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- Academic achievement is related to initial course placement determined by course placement tests, completion of 100-200 level course pre-/ corequisites, any courses below 100 level,and program prerequisites.
- Students should meet with an academic advisor, program director, or counselor who can assist in assessing student needs that may affect course enrollment. Appropriate resources can be discussed and agreed to in order to address student needs and support successful course completion.

Key for General Education Requirements:
Critical Rdg = Critical Reading
FYC = First Year Composition
HUM = Humanities and Fine Arts
Mathematics = Mathematics
NS = Natural Science
Oral Comm = Oral Communication
PP = Program Prerequisite
SB = Social \& Behavioral Sciences
\(R C=\) Required Courses

RE \(=\) Restricted Electives
+ = indicated course has prerequisites and/or corequisites
++ =indicates that any suffixed course may be selected

\section*{Automation Certificates/Degrees}
- Associate in Applied Science in Industrial Robotics and Automation Technology
- Certificate of Completion in Industrial Technology
- Certificate of Completion in Industrial Technology Level II
- Certificate of Completion in Industrial Robotics and Automation Technology Level III

\section*{Department Contact Information:}
(480) 461-7144


\section*{Applied Technology}

\title{
Associate in Applied Science (AAS) in Automated Industrial Technology
}

\section*{Total Credits: 63-73 \\ Major Code: 3177}

\section*{Description}

The Associate in Applied Science (AAS) in Automated Industrial Technology 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 the National Institute of Metalworking Skills (NIMS) certification exams. Certificates of Completion (CCL) in Automated Industrial Technology I and II are also available.

\section*{Program Notes}

Students must earn a grade of ' C ' or better in all courses in the program.
This program may require students to be able to lift objects as heavy as 50 pounds.

This program replaces: AAS/3000 Industrial Robotics and Automation Technology.
Required Courses Credits: 35
AIT100 Industrial Safety ..... 1
AlT105 Maintenance Operations ..... 3
AIT110 Mechanical Systems ..... 3
AIT115 Hydraulic Systems ..... 3
AlT120 Pneumatic Systems ..... 3
AlT125 Electrical Systems 1 ..... 3
AIT130 Maintenance Piping ..... 3
AIT205 Electronic Control Systems 1 ..... 3
AIT210 Electronic Control Systems 2 ..... 3
AIT215 Process Control Systems ..... 4
AIT225 Electrical Systems 2 ..... 3AIT250 Automated Industrial TechnologyCapstone (3) OR
AIT291 Automated Industrial Technology Internship (3) ..... 3
Restricted Electives ..... Credits: 6-10
Students should select 6-10 credits from the followingcourses:
AlT+++ Any AIT Automated Industrial Technology courses except courses used to satisfyRequired Courses area3
ATP123 Electrical Wiring J-STD Soldering Certification ..... 3
ELE173 Fabrication Techniques ..... 3
ATP190 Industrial Robotics ..... 3
MFG254 Solids Modeling-Solidworks ..... 3
DFT255 3D Printing/Additive Manufacturing ..... 4
WLD106++ Arc Welding ..... 5
General Education Requirements Credits: 22-28
General Education Core ..... Credits: 12-18
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\section*{Oral Communication}

COM100 Introduction to Human Communication (3) OR
COM110 Interpersonal Communication (3) OR
COM225 Public Speaking (3) OR
COM230 Small Group Communication (3)
Credits: 3

Critical Reading
Credits: 0-3
CRE101 College Critical Reading and Critical Thinking (3) OR Equivalent as indicated by assessment (0)

0-3
Mathematics
Credits: 3-6
GTC107 Technical Mathematics I (3) OR
Equivalent as indicated by assessment (0) AND
GTC108 Technical Mathematics II (3) 3-6
OR
MAT140 College Mathematics (5) OR
MAT141 College Mathematics (4) OR
MAT142 College Mathematics (3)
OR
MAT150 College Algebra/Functions (5) OR
MAT151 College Algebra/Functions (4) OR
MAT152 College Algebra/Functions (3)
General Education Distribution Credits: 10
Humanities and Fine Arts
Credits: 3
Any approved general education courses in the Humanities, Arts and Design [HU] area.

\section*{Social-Behavioral Sciences}

Credits: 3
Any approved general education course in the Social and Behavioral Sciences [SB] area.

\section*{Natural Sciences}

Credits: 4
Any approved general education course in the Natural Sciences (Quantitative) [SQ] area or the Natural Sciences (General) [SG] area.

\title{
Certificate of Completion (CCL) in Automated Industrial Technology I
}

\author{
Total Credits: 16 \\ Major Code: 5922
}

\section*{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. Includes preparation for National Institutes of Metalworking Skills (NIMS) certification exams.

\section*{Program Notes}

Students must earn a grade of 'C' or better in all courses in the program.
This program may require students to be able to lift objects as heavy as 50 pounds.
This program replaces: CCL/5000N Industrial Technology.


Required Courses Credits: 16
AIT100 Industrial Safety 1
AlT105 Maintenance Operations 3
AlT110 Mechanical Systems 3
AlT115 Hydraulic Systems 3
AlT120 Pneumatic Systems 3
AlT125 Electrical Systems 1 3

\section*{Certificate of Completion (CCL) in Automated Industrial Technology II}

\section*{Total Credits: 32 \\ Major Code: 5924}

\section*{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. Includes preparation for National Institutes of Metalworking Skills (NIMS) certification exams.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better in all courses in the program.
This program may require students to be able to lift objects as heavy as 50 pounds.
This program replaces: CCL/5630 Industrial Technology II, CCL/5848 Mechatronics.
Required Courses Credits: 32
In addition to the required course work, students mustconsult with a program advisor to select one of the spe-cializations within the Restricted Electives area.
MTC101 Introduction to Music Theory ..... 3
MTC191 Electronic Music I ..... 3
MTC192 Electronic Music II ..... 3
MUC109 Music Business: Content Creation and Copyright ..... 3
MUC110 Music Business: Marketing andMonetization (3) OR
MUC145 Recording Studio Business Operations (2) ..... 2-3
MUC111 Digital Audio Workstation I (DAW I) ..... 3
MUC194 Introduction to Audio Mixing Techniques ..... 3
MUC195 Studio Music Recording I (3) OR MUC195AA Studio Music Recording I (3) ..... 3
MUC196 Studio Music Recording II ..... 3
MUC197 Live Sound Reinforcement I ..... 3
MUC297AA Audio Production Internship ..... 1
Certificate of
Completion (CCL) in Automotive Automatic Transmission and Transaxle
Total Credits: 4
Major Code: 5930N

\section*{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.

\section*{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
Credits: 4
ASE121 Automatic Transmission and Transaxle (4) OR
ASE121AU Automatic Transmission and Transaxle (4) 4

\title{
Certificate of Completion (CCL) in Automotive Brake Systems
}

\section*{Total Credits: 4 \\ Major Code: 5936N}

\section*{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.

\section*{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.
\begin{tabular}{lll} 
Required Courses & Credits: 4 \\
ASE151 & Introduction to Brake Systems (2) OR & \\
ASE151AU & Introduction to Brake Systems (2) & 2
\end{tabular}

ASE251 Advanced Brake Systems (2) OR
ASE251AU Advanced Brake Systems (2)
2

\section*{Certificate of Completion (CCL) in Automotive Chassis}

\section*{Total Credits: 16}

Major Code: 5952

\section*{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.

\section*{Program Notes}

Students must earn a grade of 'C' or better for each course listed in the Required Courses area.
This program replaces: CCL/5447 Automotive Chassis.
\begin{tabular}{lll} 
Required Courses & \multicolumn{1}{c}{\(\quad\) Credits: 16} \\
ASE141 & Steering, Suspension and Pre-Alignment (2) OR & \\
ASE141AU & Steering, Suspension and Pre-Alignment (2) & 2 \\
ASE151 & Introduction to Brake Systems (2) OR & \\
ASE151AU & Introduction to Brake Systems (2) & 2 \\
ASE161 & Basic Automotive Electrical/Electronics (2) OR & \\
ASE161AU & Basic Automotive Electrical/Electronics (2) 2 \\
ASE162 & \begin{tabular}{l} 
Automotive Battery, Starting and \\
\\
Charging Systems (2) OR
\end{tabular} \\
\begin{tabular}{ll} 
ASE162AU & Automotive Battery, Starting and \\
& Charging Systems (2)
\end{tabular} & \\
& & 2
\end{tabular}

ASE241 Advanced Steering, Suspension and Alignment (2) OR
ASE241AU Advanced Steering, Suspension and Alignment (2)
ASE251 Advanced Brake Systems (2) OR
ASE251AU Advanced Brake Systems (2)
ASE261 Automotive Electrical Diagnostics and Repair (2) OR
ASE261AU Automotive Electrical Diagnostics and Repair (2) 2
ASE262 Automotive Electronic Control Systems (2) OR
ASE262AU Automotive Electronic Control Systems (2) 2

\section*{Certificate of \\ Completion (CCL) in Automotive Drive Train}

\section*{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.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better for each course listed in the Required Courses area.
This program replaces: CCL/5451 N Automotive Engine and Drive Trains, CCL/5463N Automotive Drive Trains.
\begin{tabular}{|c|c|}
\hline Require & Ourses Credits:16 \\
\hline ASE121 & Automatic Transmission and Transaxle (4) OR \\
\hline ASE121AU & Automatic Transmission and Transaxle (4) 4 \\
\hline ASE131 & Manual Drive Trains and Axles (4) OR \\
\hline ASE131AU & Manual Drive Trains and Axles (4) 4 \\
\hline ASE161 & Basic Automotive Electrical/Electronics (2) OR \\
\hline ASE161AU & Basic Automotive Electrical/Electronics (2) 2 \\
\hline ASE162 & Automotive Battery, Starting and Charging Systems (2) OR \\
\hline ASE162AU & Automotive Battery, Starting and Charging Systems (2) \\
\hline ASE261 & Automotive Electrical Diagnostics and Repair (2) OR \\
\hline ASE261AU & Automotive Electrical Diagnostics and Repair (2) 2 \\
\hline ASE262 & Automotive Electronic Control Systems (2) OR \\
\hline ASE262AU & Automotive Electronic Control Systems (2) 2 \\
\hline
\end{tabular}

\section*{Certificate of} Completion (CCL) in Automotive Electrical, Heating, Ventilation and Air Conditioning Systems

\section*{Total Credits: 11 \\ Major Code: 5948N}

\section*{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.

\section*{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).

\section*{Required Courses}

Credits: 11
ASE161 Basic Automotive Electrical/Electronics (2) OR
ASE161AU Basic Automotive Electrical/Electronics (2) 2
ASE162 Automotive Battery, Starting and Charging Systems (2) OR
ASE162AU Automotive Battery, Starting and Charging Systems (2)
ASE171 Automotive Heating, Ventilation and Air Conditioning Systems (3) OR
ASE171AU Automotive Heating, Ventilation and Air Conditioning Systems (3)
ASE261 Automotive Electrical Diagnostics and Repair (2) OR
ASE261AU Automotive Electrical Diagnostics and Repair (2) 2 ASE262 Automotive Electronic Control Systems (2) OR
ASE262AU Automotive Electronic Control Systems (2) 2

\section*{Certificate of \\ Completion (CCL) in Automotive Electronic/ Electrical Systems}

\section*{Total Credits: 8}

Major Code: 5938N

\section*{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.


\section*{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.

\section*{Required Courses}

Credits: 8
ASE161 Basic Automotive Electrical/Electronics (2) OR
ASE161AU Basic Automotive Electrical/Electronics (2) 2
ASE162 Automotive Battery, Starting and Charging Systems (2) OR
ASE162AU Automotive Battery, Starting and Charging Systems (2)
ASE261 Automotive Electrical Diagnostics and Repair (2) OR
ASE261AU Automotive Electrical Diagnostics and Repair (2) 2
ASE262 Automotive Electronic Control Systems (2) OR
ASE262AU Automotive Electronic Control Systems (2) 2

\section*{Certificate of}

Completion (CCL) in Automotive Engine Performance

\section*{Total Credits: 8 \\ Major Code: 5942N}

\section*{Description}

The Certificate of Completion (CCL) in Automotive Engine Performance 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.

\section*{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.

\author{
Required Courses \\ Credits: 8 \\ ASE181 Introduction to Engine Performance (2) OR \\ ASE181AU Introduction to Engine Performance (2) 2 \\ ASE182 Theory and Fundamentals of Automotive Fuel/Air and Ignition Systems (2) OR \\ ASE182AU Theory and Fundamentals of Automotive Fuel/Air and Ignition Systems (2) \\ 2 \\ ASE281 Computerized Automotive Engine Control Systems (2) OR \\ ASE281AU Computerized Automotive Engine Control Systems (2) \\ 2 \\ ASE282 Advanced Engine Performance Diagnosis (2) OR \\ ASE282AU Advanced Engine Performance Diagnosis (2) 2
}

\section*{Certificate of \\ Completion (CCL) in Automotive Engine Repair}

\author{
Total Credits: 4 \\ 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.

\section*{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.

\section*{Required Courses}

Credits: 4
Students are required to take (ASE102++ AND ASE111++) OR ASE113++ for a total of four (4) credits.

ASE102 Automotive Express Service (2) OR
ASE102AU Automotive Express Service (2)
AND
ASE111 Engine Diagnosis and Inspection (2) OR
ASE111AU Engine Diagnosis and Inspection (2) 4 OR
ASE113 Engine Repair (4) OR
ASE113AU Engine Repair (4)

\title{
Certificate of \\ Completion (CCL) in Automotive Engine Repair and Performance
}

\section*{Total Credits: 20}

\section*{Major Code: 5954}

\section*{Description}

The Certificate of Completion (CCL) in Automotive Engine Repair and Performance 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.

\section*{Program Notes}

Students must earn a grade of 'C' or better for each course listed in the Required Courses area.

This program replaces: CCL/5858 Automotive Engine Performance.

\section*{Required Courses}

Credits: 20
Students are required to take (ASE102++ AND ASE111++) OR
ASE113++ for a total of four (4) credits.
ASE102 Automotive Express Service (2) OR
ASE102AU Automotive Express Service (2) AND
ASE111 Engine Diagnosis and Inspection (2) OR
ASE111AU Engine Diagnosis and Inspection (2) 4 OR
ASE113 Engine Repair (4) OR
ASE113AU Engine Repair (4)
4
ASE161 Basic Automotive Electrical/Electronics (2) OR
ASE161AU Basic Automotive Electrical/Electronics (2) 2
ASE162 Automotive Battery, Starting and Charging Systems (2) OR
ASE162AU Automotive Battery, Starting and Charging Systems (2)
ASE261 Automotive Electrical Diagnostics and Repair (2) OR
ASE261AU Automotive Electrical Diagnostics and Repair (2)

2
ASE262 Automotive Electronic Control Systems (2) OR
ASE262AU Automotive Electronic Control Systems (2) 2
ASE181 Introduction to Engine Performance (2) OR
ASE181AU Introduction to Engine Performance (2) 2
ASE182 Fundamentals of Automotive Fuel/Air and Ignition Systems (2) OR
ASE182AU Fundamentals of Automotive Fuel/Air and Ignition Systems (2)
ASE281 Computerized Automotive Engine Control Systems (2) OR
ASE281AU Computerized Automotive Engine Control Systems (2)
ASE282 Advanced Engine Performance Diagnosis (2) OR
ASE282AU Advanced Engine Performance Diagnosis (2) OR
ASE263 Hybrid Vehicle Overview (2)

\title{
Certificate of \\ Completion (CCL) in \\ Automotive Heating, Ventilation and Air Conditioning Systems
}

\author{
Total Credits: 3 \\ 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.

\section*{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
Credits: 3
ASE171 Automotive Heating, Ventilation and Air Conditioning Systems (3) OR
ASE171AU Automotive Heating, Ventilation and Air Conditioning Systems (3)

\section*{Certificate of \\ Completion (CCL) in \\ Automotive Manual Drive Train and Axels}

\author{
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.

\section*{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
Credits: 4
ASE131 Manual Drive Trains and Axles (4) OR
ASE131AU Manual Drive Trains and Axles (4) 4

\title{
Certificate of \\ Completion (CCL) in \\ Automotive Steering and Suspension
}

\author{
Total Credits: 4 \\ Major Code: 5934N
}

\section*{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.

\section*{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
Credits: 4
ASE141 Steering, Suspension and Pre-Alignment (2) OR
ASE141AU Steering, Suspension and Pre-Alignment (2) 2
ASE241 Advanced Steering, Suspension and Alignment (2) OR
ASE241AU Advanced Steering, Suspension and Alignment (2)

\title{
Certificate of \\ Completion (CCL) in \\ Brakes, Alignment, Suspension and Steering
}

\author{
Total Credits: 19 \\ Major Code: 5459
}

Description
The Certificate of Completion (CCL) in Brakes, Alignment, Suspension and Steering program provides students the opportunity to learn the theory and practical skills necessary to service automotive vehicles. This CCL will introduce students to the theory, diagnosis, service and repair of automotive brake systems, powertrain systems, steering, and suspensions systems in vehicles. It also introduces students to vehicle alignment techniques and procedures. Courses in the CCL may include lecture and lab components to provide suitable classroom related material/theory, combined with hands-on learning experiences. Courses in the CCL are National Automotive Technicians Education Foundation (NATEF) accredited and aligned with the professional certification standards from National Institute for Automotive Service Excellence (ASE). This alignment can help prepare for ASE professional certification exams. Courses in this CCL are designed to help students gain insight into specific aspects of the automotive service industry. The courses contained in the CCL can be combined with courses in other CCLs and can be directly applied to the Associate in Applied Science (AAS) degree in Automotive Performance Technology.

\section*{Program Notes}

Students must earn a grade of 'C' or better for all courses within the program.

\title{
Career \& Technical
} Education
Required Courses ..... Credits: 19
APT101 Automotive Service Operations ..... 3
APT131 Automotive Manual Power Trains ..... 6
APT141 Alignment, Steering, and Suspension ..... 6
APT151 Automotive Brake Systems ..... 4
Certificate of Completion (CCL) in Building Inspection
Total Credits: 18
Major Code: 5554
Description
The Certificate of Completion (CCL) in Building In-spection helps prepare the student for a career asan inspector in various areas of the building inspec-tion fields. The student gains the knowledge anddevelops skills necessary to perform as a buildinginspector in general building code compliance in-spection or in specific areas of code compliance. Itis one pathway to the Associate in Applied Science(AAS) in Construction Management.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better for all courses within the program.
Required Courses ..... Credits: 18
CON101 Construction and Culture ..... 3
CON244 Working Drawing Analysis: Blueprint Reading 3CON252 Building Construction Methods, Materials,and Equipment3
CON262 Introduction International Residential Code (IRC) 33
CON271 Construction Safety ..... 3
Associate in Applied Science (AAS) in Caterpillar Technician Training

Total Credits: 73-83

Major Code: 3005

\section*{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.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better for all courses required 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
Credits: 58-65

\begin{tabular}{llr} 
CTT206 & Caterpillar Dealer Internship IV & 3 \\
WLD101 & Introduction to Welding & 3 \\
GTC108 & Technical Mathematics II (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.
\end{tabular}

General Education Requirements Credits: 15-18

\section*{General Education Core}

Credits: 9-12
First-Year Composition
Credits: 6
ENG101 First-Year Composition (3) OR
ENG107 First-Year Composition for ESL (3) AND
ENG111 Technical and Professional Writing (3) OR
ENG102 First-Year Composition (3) OR
ENG108 First-Year Composition for ESL (3) 6

\section*{Oral Communication}

\section*{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

\section*{Critical Reading}

Credits: 0-3
\(\begin{array}{lll}\text { CRE101 } & \text { College Critical Reading and Critical } & \\ & \text { Thinking (3) OR Equivalent as indicated } & \\ & \text { by assessment (0) } & 0-3\end{array}\)

\section*{Mathematics}

Credits: 0
Met by GTC108 or MAT15+ in Required Courses
General Education Distribution
Credits: 6
Humanities and Fine Arts
Credits: 3
Any approved general education course in the Humanities, Arts and Design area.

\section*{Social-Behavioral Sciences}

Credits: 3
Any approved general education course from the So-cial-Behavioral Sciences area.

Natural Sciences
Credits: 0

\title{
Certificate of Completion (CCL) in CNC Machine Operator
}

\author{
Total Credits: 6 \\ Major Code: 5103N
}

\section*{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.

\section*{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.

\section*{Required Courses}

Credits: 6
\(\begin{array}{ll}\text { MPT130 } & \text { CNC Machine Operator (6) OR } \\ \text { MPT130MP } & \text { CNC Machine Operator (6) }\end{array}\)

\section*{Certificate of \\ Completion (CCL) in CNC Machining I}

\section*{Total Credits: 25}

Major Code: 5100

\section*{Description}

The Certificate of Completion (CCL) in CNC Machining I prepares students for employment as en-try-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 Com-puter-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.

\section*{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 Technology, CCL/5616 CNC Machining I.

\section*{Required Courses}

Credits: 25
MPT101 Technical Documentation (3) OR
MPT101MP Technical Documentation (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 (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)
MPT131MP CNC Machining Levell(6) 6
MPT132 CNC Machining Level II (3) OR
MPT132MP CNC Machining Level II (3)

\section*{Certificate of}

Completion (CCL) in CNC Machining II

Total Credits: 43-44
Major Code: 5102

\section*{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/Com-puter-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.

\section*{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.

\section*{Required Courses}

Credits: 37
\begin{tabular}{lll} 
Required Courses for CCL in CNC Machining I & \\
MPT101 & Technical Documentation (3) OR & \\
MPT101MP & Technical Documentation (3) & 3 \\
MPT110 & Inspection Techniques (3) OR & 3 \\
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
\end{tabular}

\section*{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
\begin{tabular}{lll} 
MPT260MP & Computer Aided Manufacturing (CAM) I (3) 3 \\
MPT262 & Computer Aided Manufacturing (CAM) || (3) OR \\
MPT262MP & Computer Aided Manufacturing (CAM) || (3) & 3 \\
MPT270 & Tooling, Fixtures, and Gauges & 3
\end{tabular}

\section*{Restricted Electives}

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:
\(\begin{array}{lll}\text { MPT215 } & \text { Workplace Quality Systems } & 3 \\ \text { MPT216 } & \text { Applied Statistical Process Control Methods } & 3 \\ \text { MPT217 } & \text { Lean and Six Sigma Applied Concepts } & 3\end{array}\)
Industrial Design:
MPT152 Solid Design: Certified SolidWorks Associate/ Certified SolidWorks Professional Test Preparation

1
MPT250 Solid Design II: Advanced Part Modeling: SolidWorks
MPT255 Solid Design 3D Printing 4
MPT261 MasterCam Certified Programmer Mill Level I: Test Preparation: CPgM1

Manual Machining:
\(\begin{array}{lll}\text { MPT220 } & \text { Manual Machining: NIMS Level I Certification } & 3 \\ \text { MPT221 } & \text { Manual Machining: NIMS Level II Certification } & 3\end{array}\)
Related Experience:
AIT100 Industrial Safety
AIT105 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
Certificate of
Completion (CCL) in Computer Aided Drafting
Total Credits: 19 ..... Major Code: 5547

\section*{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 cours-

es towards the Associate in Applied Science (AAS) in Drafting and Design Technology (3504).

\section*{Program Notes}

Students must earn a grade of 'C' or better for all courses required within the program.

Required Courses
Credits: 19
DFT105AA Computer Aided Drafting I: AutoCAD 3
DFT110 Introduction to Drafting 3
DFT111 Intermediate Drafting
DFT254AA Computer Aided Drafting II: AutoCAD 3
DFT255 3D Printing/Additive Manufacturing 4
MPT150 Introduction to SolidWorks 3

\section*{Certificate of \\ Completion (CCL) in Construction Building Codes}

\section*{Total Credits: 3 \\ Major Code: 5182N}

\section*{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.

\section*{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 required within the program.

\author{
Required Courses
}

Credits: 3
CON263 Building Codes
3

\title{
Associate in Applied Science (AAS) in \\ Construction Management
}

\section*{Total Credits: 63-73 \\ Major Code: 3502}

\section*{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, 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.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better for all courses required within the program.

Program Prerequisites
Credits: 0
None.

\section*{Required Courses}

Credits: 45
Students must consult with a program advisor to select one of the specializations in the Restricted Elective area prior to completing the required courses.
CON100 Introduction to Construction (2) OR
CON/IND138 Introduction to Project Management and Resource Control (1) AND
CON/IND140 Construction Scheduling and Time Management (1)

CON101 Construction and Culture 3
CON106 Foundations of Concrete
CON221 Applied Statics
CON223 Strength of Materials 3
CON241 Surveying 3
CON243 Heavy Construction Equipment, Methods, and Materials
CON244 Working Drawing Analysis: Blueprint Reading
CON251 Microcomputers for Constructors
CON252 Building Construction Methods, Materials, and Equipment
CON262 Introduction International Residential Code (IRC)
CON263 Building Codes 3
CON271 Construction Safety 3
CON273 Electrical Construction Fundamentals 3
ECN211 Macroeconomic Principles (3) OR
ECN212 Microeconomic Principles (3)

\section*{Restricted Electives}

Credits: 6-13
Students must choose 1 of the following Specializations:
Specialization I: Construction Management
CON181 Cost Estimating
GTC108 Technical Mathematics II (3) OR
Equivalent or higher level mathematics course in the Mathematical Applications [MA] area (3-6)

Specialization II: Construction Management Arizona State University Transfer
MAT150 College Algebra/Functions (5) OR
MAT151 College Algebra/Functions (4) OR
MAT152 College Algebra/Functions (3) OR
MAT156 College Algebra/Functions with Review (6)
MAT206 Elements of Statistics (3) OR
PHY111 General Physics I (4) 3-4
An additional course with the Humanities, Arts and
Design [HU] and Cultural Diversity in the US [C] general studies designations3
General Education Requirements Credits: 12-15
General Education CoreCredits: 9-12
First-Year Composition ..... 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
Oral Communication ..... Credits: 3
COM225 Public Speaking ..... 3
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
Mathematics ..... Credits: 0
Met by GTC108, MAT150, MAT151, MAT152, or MAT156in Restricted Electives
General Education Distribution Credits: 3
Humanities and Fine Arts ..... Credits: 0
Met by CON101 in the Required Courses area.
Social-Behavioral SciencesCredits: 3
Any approved general education course in the Social-Be-havioral Sciences area.
Natural SciencesCredits: 0Met by CON106 in the Required Courses area.
Certificate of
Completion (CCL) in Construction Safety Osha 30
Total Credits: 3 ..... Major Code: 5179N

\section*{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.

\section*{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 required within the program.

Required Courses
Credits: 3
CON271 Construction Safety

\section*{Associate in Applied Science (AAS) in Construction Technology}

\section*{Total Credits: 60 \\ Major Code: 3193}

\section*{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.

\section*{Program Notes}

Students must earn a grade of ' C ' or better in all courses within the program.
\begin{tabular}{llr} 
Required Courses & Credits: & 5 \\
CON103 & Foundation of Construction Safety & 1 \\
CON104 & Hand and Power Tools, Equipment, & \\
& and Workspace & 1.5 \\
CON105 & Construction Calculations & 1.5 \\
CON107 & Construction Drawings Introduction & 1
\end{tabular}

\section*{Restricted Electives \\ Credits: 21-23}

\section*{Subplan 1: Carpentry}

CON110 Carpentry: Floor Systems 3
CON111 Carpentry: Wall Systems 3.5
CON112 Carpentry Ceiling Joist and Roof Framing 4.5
CON213 Carpentry: Steel Framing 1
CON214 Carpentry: Roof Systems and Building Envelopes
CON215 Carpentry: Interior Finishes 4
CON216 Carpentry: Concrete Forms 3

\section*{Subplan 2: Electrical}

CON/HVA131 Electrical Systems 3.5
\(\begin{array}{llll}\text { CON132 } & \begin{array}{l}\text { Distribution Panels, Wiring, and Circuit } \\ \\ \text { Protection in Electrical Systems }\end{array} & 3.5\end{array}\)
CON133 Conduit, Raceways, and Termination in \(\begin{aligned} & \text { Electrical Systems }\end{aligned}\)
CON234 Electric Power Distribution 3
CON235 Motors: Theory and Application 4
CON236 Industrial Wiring Applications 3

\section*{Subplan 3: Plumbing}

CON124 Plumbing: Pipes and Fittings 3.5
CON125 Plumbing: Fixtures 2
CON126 Plumbing: Drain, Waste, and Vent 3.5
CON127 Plumbing: Water Distribution Systems 2
CON224 Plumbing: Pipe Systems and Controls 3
CON225 Plumbing: Water Disposal Systems 4
CON226 Plumbing: Fixtures and Appliances 3
CON227 Plumbing: Water Resource Solutions 2

Free Electives
Credits: 4-12
Select additional courses 100 -level or higher to complete the minimum 60 credits required for this degree. Consult with the Program Director or an Academic Advisor.

\section*{Career \& Technical Education}

The following courses are recommended:
\begin{tabular}{ll} 
CON244 & \begin{tabular}{l} 
Working Drawing Analysis: \\
Blueprint Reading
\end{tabular} \\
CON271 & Construction Safety
\end{tabular}General Education Requirements Credits: 22-28General Education CoreCredits: 12-18
Credits: 6First-Year Composition
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) OR
ENG11 Technical and Professional Writing (3) ..... 6
Oral CommunicationCredits: 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 ReadingCredits: 0-3
CRE101 College Critical Reading and Critical
Thinking (3) OR Equivalent as indicatedby assessment (0)0-3
Mathematics
Credits: 3-6
GTC108 Technical Mathematics II (3) OR
MAT140 College Mathematics (5) OR
MAT141 College Mathematics (4) OR
MAT142 College Mathematics (3) ORMAT145 College Mathematics with Review (5) ORMAT146 College Mathematics with Review (6) ORAny approved general education course in theMathematical Applications [MA] area (3-6)3-6
Recommend one of the following mathematics courses for transfer to a university program:
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
Credits: 10 General Education Distribution
Humanities and Fine Arts ..... Credits: 3
Any approved general education course from the Hu-
manities and Fine Arts area.
Recommend:
CON101 Construction and Culture3
Social-Behavioral Sciences
Credits: 3
Any approved general education course from the Socia
and Behavioral Sciences area3
Natural Sciences ..... Credits: 4
Any approved general education course from the Natura
Sciences area (4)4
Certificate of
Completion (CCL) in Construction Trades: Construction Management

\author{
Total Credits: 20-23.5 \\ Major Code: 5595
}

\section*{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.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better in all courses within the program.

\section*{Required Courses}

Credits: 20-23.5
ABC/MEC/
PNT120 Basic Calculations for Construction (1.5) OR High School GPA of 2.6 or above OR placement exam if no GPA available (0) 0-1.5
CIS114DE Excel Spreadsheet (3) OR
CON251 Microcomputers for Constructors (3) 3
CON117 Interpersonal Skills, Issues, and Resolutions in Construction
CON/IND138 Introduction to Project Management and Resource Control
CON/IND140 Construction Scheduling and Time Management
CON181 Cost Estimating 3
CON244 Working Drawing Analysis: Blueprint Reading
CON252 Building Construction Methods, Materials, and Equipment
CON271 Construction Safety
CNS/
CON290AA Construction Internship (1) OR
CNS/
CON290AB Construction Internship (2) OR
CNS/
CON290AC Construction Internship (3)

\title{
Associate in Applied Science (AAS) in Drafting and Design Technology
}

\author{
Total Credits: 64-76 \\ Major Code: 3504
}

\section*{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.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better in all courses within the program.

\section*{Required Courses}

Credits: 45-54
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
GTC/MIT/
OSH106 Industrial Safety 2
GTC107 Technical Mathematics I (3) OR
\begin{tabular}{llr} 
& Equivalent as indicated by assessment (0) & \(0-3\) \\
GTC108 & Technical Mathematics II & 3 \\
GTC216 & Properties of Materials & 3 \\
GTC236 & CAD/CAM Computer Numerical Control & \\
& (CNC) Programming & 3 \\
MFG102 & Machine Processes, Theory and & \\
& Applications \\
MFG206 & CNC Programming of Word Address & 3 \\
& Language & 3 \\
MFG246 & Advanced CAD/CAM CNC Programming: & \\
& MasterCam & 3 \\
MFG254 & Solids Modeling - Solidworks & 3
\end{tabular}

\section*{General Education Requirements Credits: 19-22}

General Education Core
Credits: 9-12

\section*{First-Year Composition \\ 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
Oral Communication
Credits: 3
COM100 Introduction to Human Communication (3) OR
COM110 Interpersonal Communication (3) OR
COM230 Small Group Communication (3)
3

\section*{Critical Reading}

Credits: 0-3
CRE101 College Critical Reading and Critical Thinking (3) OR Equivalent as indicated by assessment (0)

\section*{Mathematics}

Credits: 0
Met by GTC108 in Required Courses area.

\section*{General Education Distribution}

Credits: 10

\section*{Humanities and Fine Arts}

Credits: 3
Any approved general education course from the Humanities, Arts and Design [HU] area.

\section*{Social and Behavioral Sciences}

Credits: 3
Any approved general education course from the So-cial-Behavioral Sciences [SB] area.

\section*{Natural Sciences}

Credits: 4
Any approved general education course from the Natural Sciences (Quantitative) [SQ] area or the Natural Sciences (General) [SG] area.

\title{
Certificate of Completion (CCL) in Industrial Robotics and Automation Technology
}

\author{
Total Credits: 35-38 \\ Major Code: 5696N
}

\section*{Description}

The Certificate of Completion (CCL) in Industrial Robotics and Automation Technology program is intended to be the capstone CCL leading to the AAS degree in Industrial Robotics and Automation Technology. Upon completion of this CCL the student will possess the skills necessary to be proficient in Robotics Operations and Programming and Automation System Integration. Additionally, this CCL is appropriate for industry personnel with background in Programmable Logic Controllers (PLC) and Automation to advance their skill level.

\section*{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.

\section*{Required Courses}

Credits: 35-38
ATP100 Introduction to Manufacturing and Programmable Logic Controllers
ATP106 Industrial Electrical Systems 3
ATP111 Mechanical Systems and Maintenance 3
ATP115 Fluid Power 3
ATP190 Industrial Robotics 3
ATP201 Programmable Logic Controller (PLC) Systems 3
ATP205 Electric Motors and Controls 3
ATP210 Process Control 3
ATP215 Automation System Integration 3

\section*{Career \& Technical} Education

ATP225
Robotics Operations and Programming
3
GTC/MIT/
OSH106
GTC107

GTC108

Industrial Safety
Technical Mathematics I (3) OR
Satisfactory score on math placement test0-3

Technical Mathematics II

\section*{Certificate of}

Completion (CCL) in International
Residential Code

Total Credits: 3
Major Code: 5181N

\section*{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 comple-
tion 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 for all courses required within the program.

Required Courses
Credits: 3
CON262 Introduction International Residential Code (IRC) 3

\title{
Associate in Applied Science (AAS) in Manufacturing Production Technology
}

\author{
Total Credits: 65-73
}

Major Code: 3192


\section*{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.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better for all courses required within the program.
This program replaces: AAS/3255 Production Technology, AAS/3616 Manufacturing Technology.

\section*{Required Courses}

Credits: 37
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 Levell (6)
MPT132 CNC Machining Level II (3) OR
MPT132MP CNC Machining Level II (3) OR

The following courses are required in CCL CNC Machining II:
\begin{tabular}{ll} 
Students interested in taking MPT250 are advised to take MPT151 \\
MPT150 & Introduction to SolidWorks (3) OR \\
MPT151 & Solid Design I: SolidWorks (3) \\
MPT260 & Computer Aided Manufacturing (CAM) | (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
\end{tabular}

\section*{Restricted Electives}

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:
\(\begin{array}{ll}\text { MPT152 } & \text { Solid Design: Certified SolidWorks } \\ & \text { Associate/Certified SolidWorks } \\ & \text { Professional Test Preparation }\end{array}\)
MPT250 Solid Design II: Advanced Part Modeling: SolidWorks
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:
AlT100 Industrial Safety 1
AlT105 Maintenance Operations 3
MPT282++ Volunteerism for Manufacturing:
\(\quad\) A Service Learning Experience
\(1-3\)
MPT290++ Manufacturing Production Internship 1-3
MPT296++ Cooperative Education 1-4
WLD101 Welding I 3
General Education Requirements Credits: 22-29
General Education Core
Credits: 12-18

First-Year Composition 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) OR
ENG111 Technical and Professional Writing (3) 3
Oral Communication
Credits: 3
Any approved general education course from the Oral Communication area
Recommend COM230 Small Group Communication

\section*{Critical Reading}

Credits: 0-3
\begin{tabular}{ll} 
CRE101 & College Critical Reading and Critical Thinking (3) \\
& \begin{tabular}{ll} 
OR Equivalent as indicated by \\
assessment (0)
\end{tabular} \\
&
\end{tabular}

\section*{Mathematics}

Credits: 3-6
MAT146 College Mathematics with Review (6) OR
MAT140 College Mathematics (5) OR
MAT141 College Mathematics (4) OR
MAT142 College Mathematics (3) OR
Any higher approved general education course in the Mathematics area (3-6)
For students intending to transfer into a STEM related field, recommend MAT150 College Algebra/Functions or higher.

\section*{General Education Distribution Credits: 10-11 \\ Humanities and Fine Arts \\ Credits: 3}

Any approved general education course in the Humanities, Arts and Design area.

\section*{Social and Behavioral Sciences}

Credits: 3
Any approved general education course in the Social-Behavioral Sciences area.

\section*{Natural Sciences}

Credits: 4-5
Any approved general education course from the Natural Sciences area
For students intending to transfer into a STEM related field, the following courses are recommended:
CHM150 General Chemistry I (4) AND
CHM151LL General Chemistry I Laboratory (1) OR
CHM150AA General Chemistry I (5) OR
CHM151 General Chemistry I (3) AND
CHM151LL General Chemistry I Laboratory (1) OR
\begin{tabular}{lll} 
CHM151AA & General Chemistry I (4) & \(4-5\) \\
& OR & \\
PHY115 & University Physics I (5) OR & \\
PHY121 & University Physics I: Mechanics (4) & \(4-5\)
\end{tabular}

\section*{Certificate of}

Completion (CCL) in Mechanical Drafting

\author{
Total Credits: 35-38 \\ Major Code: 5600
}

\section*{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.

\section*{Program Notes}

Students must earn a grade of 'C' or better for all courses within the program.

Required Courses
Credits: 35-38
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
MPT120MP Introduction to Manual Machining 4
MPT150 Introduction to SolidWorks 3

\title{
Certificate of \\ Completion (CCL) in Salt River Project Relay Apprentice
}

\author{
Total Credits: 36 \\ Major Code: 5763
}

\section*{Description}

The Certificate of Completion (CCL) in Salt River Project Relay Apprentice is a closed program that is available to SRP employees who are participating in the SRP apprenticeship program. The program supplements the industry-specific training that the apprentices receive at SRP with the theory and fundamentals of electronics that are necessary for success in that program.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better for all courses within the Required Courses area.

Admission Criteria
Current SRP employee who has been accepted into SRP's Relay Apprenticeship program.

Required Courses
Credits: 36
ENG101 First-Year Composition (3) OR
ENG107 First-Year Composition for ESL (3) 3
ENG111 Technical and Professional Writing 3
ELE100 Concepts of Electricity and Electronics 3
ELE101 Beginning Algebra for Technology 3
ELE105 Algebra-Trigonometry for Technology 5
ELE111 Circuit Analysis I 4
ELE112 Circuit Analysis II 4
ELE121 Solid-State Devices and Circuits I 4
ELE222 Solid-State Devices and Circuits II 4
ELE251 Electronic Measurements 3

\title{
Associate in Applied Science (AAS) in Welding
}

\author{
Total Credits: 60-66 \\ Major Code: 3244
}

\section*{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.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better for all courses required within the program.

Program Prerequisites
Credits: 0
None.

Required Courses
Credits: 19-22
WLD101 Introduction to Welding (3) OR Permission of Program Director
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
WLD103 Basic Blacksmithing and Metal Shaping
WLD150 Welding Blueprint Reading
WLD225 Welding Inspection and Quality Control 3

\section*{Restricted Electives}

Credits: 15-16
Select 15 to 16 credits in consultation with a Program and/or Academic Advisor to further develop skills in the specialization areas shown below. WLD106AB, WLD106AC, WLD206AA may be selected as a Restricted Electives if it is not used to satisfy Required Courses.

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
WLD208AC FCAW Code Welding
Shielded Metal Arc Welding (SMAW) Plate:
WLD106AC SMAW 7018 Plate
WLD208AA SMAW Code Welding
Shielded Metal Arc Welding (SMAW) Pipe:
WLD106AB SMAW 6010 Plate
WLD106AD SMAW Introduction to Pipe 5
WLD208AA SMAW Code Welding 5
WLD208AD SMAW Code Welding Pipe
Computer Aided Design
MPT150 Introduction to SolidWorks 3
DFT105AA Computer Aided Drafting I: AutoCAD

\section*{Free Electives}

Credits: 0-4
Select courses 100-level or higher to complete a minimum of 60 semester credits but no more than a total of 64 semester credits. Consult with an Academic Advisor.

General Education Requirements Credits: 22-28
General Education Core
Credits: 12-18

\section*{First-Year Composition}

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) OR
ENG111 Technical and Professional Writing (3) 6

\section*{Oral Communication}

Credits: 3
COM100 Introduction to Human Communication (3) OR
COM110 Interpersonal Communication (3) OR
COM230 Small Group Communication (3) OR
COM225 Public Speaking (3)
3

\section*{Critical Reading}

Credits: 0-3
CRE101 College Critical Reading and Critical Thinking OR equivalent as indicated by assessment.

\section*{Mathematics}

Credits: 3-6
\begin{tabular}{ll} 
GTC107 & \begin{tabular}{l} 
Technical Mathematics I (3) OR \\
Satisfactory score on math placement test \\
\\
AND
\end{tabular} \\
GTC108 & Technical Mathematics II (3) OR \\
MAT146 & College Mathematics with Review (6) OR \\
MAT145 & College Mathematics with Review (5) OR \\
MAT140 & College Mathematics (5) OR \\
MAT141 & College Mathematics (4) OR \\
MAT142 & College Mathematics (3) OR \\
Any higher level mathematics course & \\
\hline
\end{tabular}
General Education Distribution ..... Credits: 10
Humanities and Fine Arts ..... Credits: 3
Any approved general edu
ities, Arts and Design area ..... 3
Social and Behavioral Sciences ..... Credits: 3

Any approved general education course from the So-cial-Behavioral Sciences area.

\section*{Natural Sciences}

Credits: 4
Any approved general education course from the Natural Sciences area.

\section*{Recommended:}

CHM130 Fundamental Chemistry (3) AND
CHM130LL Fundamental Chemistry Laboratory (1) 4 OR
CHM130AA Fundamental Chemistry With Lab

4

4

\title{
Certificate of \\ Completion (CCL) in Welding
}

Total Credits: 10-15
Major Code: 5444N

\section*{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.

\section*{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 program.

Program Prerequisites
Credits: 0 None.

Required Courses
Credits: 10-15
WLD106AA Introduction to SMAW (5) OR Permission of instructor

Students must select one - two (1-2) courses for a total of 5-10 credits from the following courses:
\begin{tabular}{lll} 
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
\end{tabular}

\title{
Certificate of Completion (CCL) in Welding: Fundamentals
}

\author{
Total Credits: 20-23 \\ Major Code: 5995
}

\section*{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.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better for all courses within the program.

Required Courses
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
Credits: 10
Select 10 credits in consultation with a Program and/or Academic Advisor to further develop skills in the specialization areas shown below. WLD106AB, WLD106AC, WLD206AA may be selected as a Restricted Elective if it is not used to satisfy Required Courses.

Gas Metal / Flux Cored Arc Welding (GMAW)/(FCAW) and Gas Tungsten Arc Welding (GTAW):
WLD206AA Introduction to GMAW/FCAW and GTAW
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

Shielded Metal Arc Welding (SMAW) Plate:
WLD106AC SMAW 7018 Plate
WLD208AA SMAW Code Welding

Shielded Metal Arc Welding (SMAW) Pipe:
WLD106AB SMAW 6010 Plate
WLD106AD SMAW Introduction to Pipe
WLD208AA SMAW Code Welding
WLD208AD SMAW Code Welding Pipe

\section*{Certificate of}

Completion (CCL) in Welding:

\section*{Gas Metal / Flux Cored Arc Welding (GMAW)/(FCAW)}

\section*{Total Credits: 15}

Major Code: 5851N

\section*{Description}

The Certificate of Completion (CCL) in Welding: Gas Metal / Flux Cored Arc Welding (GMAW)/(FCAW) prepares students for industry code certification testing. An Associate in Applied Science (AAS) in Welding as well as certificates in the following areas
of specialization are also available:
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.

\section*{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 required within the program.

Required Courses
Credits: 15
WLD106AA Introduction to SMAW 5
WLD206AA Introduction to GMAW/FCAW and GTAW 5
WLD206AB Advanced GMAW/FCAW 5

\section*{Certificate of \\ Completion (CCL) in \\ Welding: \\ Gas Tungsten Arc Welding (GTAW) Ferrous}

\section*{Total Credits: 15 \\ Major Code: 5853N}

\section*{Description}

The Certificate of Completion (CCL) in Welding: Gas Tungsten Arc Welding (GTAW) Ferrous prepares students for aerospace industry code certification testing in the gas tungsten arc welding process in carbon steel and stainless-steel (ferrous metals). 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) Non-Ferrous, Welding: Shielded Metal Arc welding (SMAW) Plate, and Welding: Shielded Metal Arc Welding (SMAW) Pipe.

\section*{Program Notes}

This program is not eligible for Title IV Federal Financial Aid.

Students must earn a grade of ' \(C^{\prime}\) or better for all courses required within the program.

Required Courses
Credits: 15
WLD106AA Introduction to SMAW 5
WLD206AA Introduction to GMAW/FCAW and GTAW 5
WLD206AD Advanced GTAW Ferrous

\section*{Certificate of}

Completion (CCL) in Welding: Gas

\section*{Tungsten Arc Welding (GTAW) Non-Ferrous}

\section*{Total Credits: 15 \\ Major Code: 5855N}

Description
The Certificate of Completion (CCL) in Welding: Gas Tungsten Arc Welding (GTAW) Non-Ferrous prepares students for aerospace industry code certification testing in the gas tungsten arc welding process in aluminum (non-ferrous). 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: Shielded Metal Arc
welding (SMAW) Plate, and Welding: Shielded Metal Arc Welding (SMAW) Pipe.

\section*{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 required within the program.

Required Courses
Credits: 15
WLD106AA Introduction to SMAW 5
WLD206AA Introduction to GMAW/FCAW and GTAW 5
WLD206AC Advanced GTAW Non-Ferrous 5

\title{
Certificate of Completion (CCL) in Welding: Shielded Metal Arc Welding (SMAW) Pipe
}

\section*{Total Credits: 15 \\ Major Code: 5863N}

\section*{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.

\section*{Career \& Technical Education}

\section*{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 required within the program.

Required Courses
WLD106AA Introduction to SMAW
Credits: 15

WLD106AB SMAW 6010 Plate
WLD106AD SMAW Introduction to Pipe
Certificate of
Completion (CCL) in
Welding: Shielded
Metal Arc Welding
(SMAW) Plate

\section*{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 for all courses required within the program.

\section*{Required Courses}

Credits: 10
WLD106AA Introduction to SMAW 5
WLD106AC SMAW 7018 Plate

Total Credits: 10
Major Code: 5871N


\title{
Behavioral Science and Human Services
}

\title{
Certificate of Completion (CCL) in Administration of Justice
}

\author{
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.

\section*{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 required within the program. This program replaces: CCL/5008 Administration of Justice - Comprehensive, CCL/5327 Justice Studies, CCL/5837 Administration of Justice, CCL/5861N Justice Studies.

\section*{Admission Criteria} None.

Program Prerequisites Credits: 0 None.

Required Courses
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 Corrections Function 3

\section*{Certificate of Completion (CCL) in Corrections}

\author{
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.

\section*{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.
\begin{tabular}{llr} 
Required Courses & Credits: & 15 \\
AJS101 & Introduction to Criminal Justice & 3 \\
AJS123 & Ethics and the Administration of Justice (3) OR & \\
AJS255 & Crime, Law, and Mental Health (3) & 3
\end{tabular}

AJS212
Juvenile Justice Procedures
AJS240
The Correction Function
AJS205 Criminal Justice Report Writing (3) OR AJS275

Criminal Investigation (3)

Total Credits: 16-18
Major Code: 5964

\section*{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.

\section*{Program Notes}

Students must earn a grade of 'C' or better in all courses within the program.

This program replaces: CCL/5490 Crime Scene Investigation.

\section*{Admission Criteria}

None.

Program Prerequisites Credits: 0 None.

Required Courses 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

\title{
Certificate of \\ Completion (CCL) \\ in Driver Operator
}

Total Credits: 8
Major Code: 5418N


Description
The Certificate of Completion (CCL) in Driver Operator program is designed for students who need (1) advanced training as professional firefighters, (2) preparation courses for career advancement opportunities in fire services, and/or (3) more comprehensive information about the role and function of an emergency vehicle driver/operator.

\section*{Program Notes}

Students must earn a grade of 'C' or better for all courses required within the program.
This program is not eligible for Title IV Federal Financial Aid.

\section*{Admission Criteria}

Acceptance into the program and permission of Program Director is required.

\section*{Program Prerequisites}

Credits: 0 None.

Required Courses
Credits: 8
FSC111 Emergency Vehicle Driver Operator 2
FSC117 Fire Apparatus
FSC118 Fire Hydraulics

\section*{Certificate of Completion (CCL) in Emergency Management}

\section*{Total Credits: 18}

Major Code: 5304

\section*{Description}

The Certification of Completion (CCL) in Emergency Management provides the student with knowledge and skills required to conduct a comprehensive emergency management program. The program prepares students to manage emergency op-
erations, hazardous materials incidents, tactics, strategy, and safety of firefighting activities, and customer service in the public sector. The student will be prepared for positions such as Emergency Manager, Emergency Management Planner, Emergency Operations Coordinator, Environmental Compliance Planner, and Emergency Management Specialist, working in state, local, federal, and international governments, business and industry, military installations, and health care facilities.

\section*{Program Notes}

Students must earn a grade of ' C ' or better in all courses within the program.
This program replaces: CCL/5774N Domestic Preparedness and Homeland Security.

Required Courses
Credits: 18
AJS/FSC139 Emergency Response to Terrorism 3
AJS/FSC146 Disaster Recovery Operations 3
AJS/FSC147 Emergency Preparedness 3
AJS/FSC148 Fundamentals of Emergency Management 3
AJS/FSC149 Hazard Mitigation 3
FSC224 Incident Command Systems 3

\section*{Certificate of Completion (CCL) in in Fingerprint Identification and Photography}

\section*{Total Credits: 10 Major Code: 5010N}

\section*{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.

\section*{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 required within the program.

This program is not eligible for Title IV Federal Financial Aid.

This program replaces: CCL/5012N Crime and Accident Scene Photography, CCL/5655 Evidence Technology, CCL/5753 Crime Scene Technology, CCL/5877 Evidence Technology.

Required Courses
Credits: 10
AJS101 Introduction to Criminal Justice 3
AJS213 Evidence Technology/Fingerprints 3
AJS214 Evidence Technology/Photography 3
AJS290BN Courtroom Testimony Seminar 1

\section*{Associate in Applied Science (AAS) in Fire Science}

\section*{Total Credits: 60-88 \\ Major Code: 3205}

\section*{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.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better for all courses required 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.

This program replaces: AAS/3112 Emergency Response and Operations.

\section*{Admission Criteria}

Admission to program is required. See Program Director for details.

Required Courses
Credits: 37-57
EMT104 Emergency Medical Technology (10) AND
EMT104LL Emergency Medical Technology Lab (2) OR Arizona State EMT Certification (0) OR Arizona State Paramedic Certification (0) OR Permission of Program Director (0) 0-12
FSC101 Introduction to Fire Service Selection and Entry (4) OR
Current employment as a firefighter as determined by the Program Director. (0) 0-4
FSC102 Fire Department Operations 11
FSC105 Hazardous Materials/First Responder (3) OR Permission of Program Director (0) 0-3
FSC108 Fundamentals of Fire Prevention (3) OR
FSC110 Introduction to Wildland (3) 3
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 Verification of CPAT completion (0) 0-1
FSC134 Fitness and Conditioning for Firefighters (3) OR
FSC234 Fitness and Wellness for Firefighter Candidates (3)
FSC174 Functions of Command 2
FSC208 Firefighter Safety and Building Construction 3
FSC215 Customer Service in the Public Sector 3
Restricted Electives
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

\section*{General Education Requirements Credits: 22-28}

\section*{General Education Core}

Credits: 12-18

\section*{First-Year Composition}

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)
(3) 6

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)
COM100 is recommended.

\section*{Critical Reading}

Credits: 0-3
CRE101 College Critical Reading and Critic al Thinking (3) OR Equivalent as indicated by assessment (0)

\section*{Mathematics}

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
Equivalent or higher level mathematics course in the
Mathematical Applications [MA] area.
3-6

\section*{General Education Distribution}

Credits: 10
Humanities and Fine Arts
Credits: 3
Any approved general education course from the Humanities, Fine Arts and Design [HU] area.

\section*{Social and Behavioral Sciences Credits: 3}

Any approved general education course from the Social and Behavioral Sciences [SB] area.

\section*{Natural Sciences}

Credits: 4
Any approved general education course from the Natural Sciences [SG/SQ] area.

\title{
Associate in Applied Science (AAS) in Fire Service Management
}

\author{
Total Credits: 60 \\ Major Code: 3207
}

\section*{Description}

The Associate in Applied Science (AAS) in Fire Service Management can be used by professional firefighters for promotional opportunities within the Fire Services. The program provides courses for experienced professional firefighters who desire to learn advanced fireground tactics and strategy, building construction, practical incident command, supervisory training of personnel, public administration, basic finance, and human resource management. Students can select from a variety of fire science electives to meet their professional goals. A Certificate of Completion (CCL) in Fire Service Management is also available.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better in all courses within the program.
This program replaces: AAS/3064 Fire Service Professional.

\section*{Admission Criteria}

Current employment as a firefighter and/or Firefighter I and II Certification and/or related experience as determined by the Program Director.
\begin{tabular}{lll} 
Required & Courses & Credits: \\
ENG111 & Technical and Professional Writing & 3 \\
FSC119 & Introduction to Fire Service Ethics & 3 \\
FSC167 & Fire Captain Academy & 6 \\
FSC202 & Supervisory Training for Firefighters & 3 \\
FSC204 & Firefighting Tactics and Strategy & 3
\end{tabular}

ENG111 Technical and Professional Writing 3
FSC119 Introduction to Fire Service Ethics 3
FSC167 Fire Captain Academy 6
FSC202 Supervisory Training for Firefighters 3
FSC204 Firefighting Tactics and Strategy 3
\begin{tabular}{lll} 
FSC208 & Firefighter Safety and Building Construction & 3 \\
FSC214 & Human Resources Management in & \\
& Fire Service & 3 \\
FSC220 & Fire Officer & 5
\end{tabular}

\section*{Restricted Electives}

Credits: 3-9
Students should select 3-9 credit hours from the following courses in consultation with a Program Director. FSC+++++ Any Fire Science Technology course(s)

\section*{General Education Requirements Credits: 22-28}

General Education Core
Credits: 12-18

First-Year Composition
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)
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)
COM100 is recommended.

Critical Reading
Credits: 0-3
\(\begin{array}{ll}\text { CRE101 } & \text { College Critical Reading and Critical } \\ & \text { Thinking (3) OR Equivalent as indicated } \\ & \text { by assessment (0) }\end{array}\)

\section*{Mathematics}

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 Equivalent or higher level mathematics course in the Mathematical Applications [MA] area.

\section*{General Education Distribution}

\section*{Humanities and Fine Arts}

Credits: 10

Any approved general education course from the Humanities, Arts and Design [HU] area.

\author{
Social and Behavioral Sciences \\ Credits: 3 \\ Any approved general education course from the Social and Behavioral Sciences [SB] area. \\ SOC101 is recommended.
}

\section*{Natural Sciences}

Credits: 4
Any approved general education course from the Natural Sciences [SG/SQ] area.
BIO100, or BIO160, or (CHM130 AND CHM130LL) is recommended

\section*{Certificate of Completion (CCL) in Firefighter Operations}

\section*{Total Credits: 16-32 Major Code: 5557}

\section*{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.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better for all courses required within the program.

\section*{Admission Criteria}

Formal application and admission to the program is required.

Required Courses
Credits: 16-32
EMT104 Emergency Medical Technology (10) AND EMT104LL Emergency Medical Technology Practicum (2) OR Arizona State EMT Certification (0) OR Arizona State Paramedic Certification (0) OR Permission of Program Director (0) 0-12

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 FSC102 Fire Department Operations 11
FSC134 Fitness and Conditioning for Firefighters 3
FSC174
Functions of Command

\title{
Associate in Applied Science (AAS) in Forensic Science
}

\section*{Total Credits: 60-65 Major Code: 3183}

\section*{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 oppor-
tunity to complete two Certificates of Completion (CCL) in Crime Scene Investigation, and Fingerprint Identification and Photography.

\section*{Program Notes}

Students must earn a grade of 'C' or better in all courses within the program.

This program replaces: AAS/3041 Forensic Science: Crime Lab, AAS/3404 Forensic Technology.

\section*{Required Courses}

Credits: 31-41
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
Students should select courses from one of the following emphases based on career goals.

Crime Scene (15 credits)
AJS109 Substantive Criminal Law 3
AJS210 Constitutional Law 3
AJS213 Evidence Technology/ Fingerprints 3
\begin{tabular}{|c|c|}
\hline & ogy/Photography \\
\hline AJS260 & Procedural Criminal Law \\
\hline \multicolumn{2}{|l|}{Lab Science (23 credits)} \\
\hline \multicolumn{2}{|l|}{ASM/FOR275 Forensic Anthropology} \\
\hline CHM151 & General Chemistry I \\
\hline CHM151LL & General Chemistry I Laboratory \\
\hline CHM152 & General Chemistry II \\
\hline CHM152LL & General Chemistry II Laboratory \\
\hline PHY111 & General Physics I \\
\hline PHY112 & General Physics II \\
\hline \multicolumn{2}{|l|}{Any course with the \(\mathrm{HU}, \mathrm{C}\) and G general education designations (3) OR} \\
\hline \multicolumn{2}{|l|}{Any course with the \(\mathrm{HU}, \mathrm{C}\) and H general education designations (3)} \\
\hline \multicolumn{2}{|l|}{Restricted Electives Credits: 3} \\
\hline \multicolumn{2}{|l|}{Students must complete 3 credits of restricted electives.} \\
\hline \multicolumn{2}{|l|}{Students interested in the Crime Scene Emphasis} \\
\hline CIS105 & Survey of Computer Information Systems (3) OR \\
\hline BPC110 & Computer Usage and Applications (3) OR \\
\hline AJS+++++ & Any AJS Administration of Justice Studies course not listed in the required courses area. (3) \\
\hline
\end{tabular}

Students interested in the Lab Science Emphasis CIS105 Survey of Computer Information Systems (3) OR BPC110 Computer Usage and Applications (3) 3

\section*{Free Electives}

Credits: 0-10
Students must choose zero (0) to ten (10) additional credits of general elective courses. Total number of general electives required will largely depend upon emphasis selected.

\section*{General Education Requirements Credits: 12-24}

\section*{General Education Core}

Credits: 12-20

First-Year Composition
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)
Oral Communication
Credits: 3
COM225 Public SpeakingCredits: 0-3
CRE101 College Critical Reading and Critical Thinking (3) OR Equivalent by assessment ..... 0-3
Mathematics Credits: 3-8
For Crime Scene Emphasis
MAT140 College Mathematics (5) OR
MAT141 College Mathematics (4) OR
MAT142 College Mathematics (3)OR higher course with an [MA] general educationdesignation3-5
For Lab Science Emphasis
MAT150 College Algebra/Functions (5) OR
MAT151 College Algebra/Functions (4) OR
MAT152 College Algebra/Functions (3) AND MAT182 Plane Trigonometry (3) OR
MAT187 Precalculus (5)
OR higher course with an [MA] general education designation ..... 3-8
General Education Distribution ..... Credits: 0-4
Humanities and Fine Arts ..... Credits: 0
Met by AJS123 in Required Courses area.
Social and Behavioral Sciences
Credits: 0
Met by AJS101 in Required Courses area.
Natural SciencesCredits: 0-4
Recommended Course for Crime Scene Emphasis:
CHM130 Fundamental Chemistry (3) AND
CHM130LL Fundamental Chemistry Laboratory (1) OR
CHM151 General Chemistry I (3) AND
CHM151LL General Chemistry I Laboratory (1) OR
FOR105 Forensic Science: Physical Evidence ..... (4) ORLab Science Emphasis met by CHM151 and CHM151LL
Certificate ofCompletion (CCL) inHomeland Security
Total Credits: 15
Major Code: 5322N

\section*{Description}

The Certificate of Completion (CCL) in Homeland Security program is designed to provide students with the knowledge and skills needed to conduct a homeland security evaluation and to assess, investigate and respond to terrorism incidents. It also provides criminal justice practitioners with an opportunity for academic growth and the development of specialized skills in homeland security.

\section*{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 required within the program.

This program replaces: CCL/5774N Domestic Preparedness and Homeland Security.

\section*{Required Courses \\ Credits: 15}

AJS/DPR/
FSC139 Emergency Response to Terrorism 3
AJS/DPR/
FSC147 Emergency Preparedness 3
AJS/DPR/
FSC148 Fundamentals of Emergency Management 3
AJS/DPR/
FSC149
Hazard Mitigation
International and Domestic Terrorism
AJS195

\section*{Certificate of \\ Completion (CCL) in Law Enforcement}

\section*{Total Credits: 15}

Major Code: 5987N

\section*{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.

\section*{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.

This program replaces: CCL/5107 Police Science, CCL/5145N Law Enforcement.
Required Courses

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
AJS230 The Police Function 3
AJS275 Criminal Investigation I 3

\title{
Associate in Applied Science (AAS) in Law Enforcement Training
}

\author{
Total Credits: 62-68 \\ Major Code: 3188
}

\section*{Description}

The Associate in Applied Science (AAS) in Law Enforcement Training is designed to provide students with up-to-date industry specific training that will enhance their professional opportunities. Courses are also designed to teach students how to handle the challenges of the law enforcement profession. A Certificate of Completion (CCL) in Law Enforcement Training Academy is also available.

\section*{Program Notes}

Students must earn a grade of ' C ' or better in all courses within the program.

This program replaces: AAS/3385 Law Enforcement Technology.

\section*{Admission Criteria}

Must meet AzPOST minimum requirements for a law enforcement officer and meet any physical requirements by the Academy Director.

Required Courses
Credits: 40
Certificate of Completion in Law Enforcement Training
Academy (5991)
General Education Requirements Credits: 22-28

\section*{General Education Core}

Credits: 12-18

\section*{First-Year Composition}

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) OR
ENG111 Technical and Professional Writing (3) 6
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
Recommended: COM110 or COM230
\begin{tabular}{ll} 
Critical & Reading \\
CRE101 & College Critical Reading and Critical \\
& 0-3 \\
& Thinking (3) OR Equivalent as indicated by \\
& assessment (0)
\end{tabular}

\section*{Mathematics}

Credits: 3-6
Any approved general education course in the Mathe-
matics area
3-6
Recommend for transfer:
MAT140 College Mathematics (5) OR
MAT141 College Mathematics (4) OR

MAT142 College Mathematics (3) OR
Any higher approved general education course in the Mathematical Applications [MA] area (3-6)

General Education Distribution Credits: 10
Humanities and Fine Arts
Credits: 3
Any approved general education course in the Humanities, Arts and Design area 3

Recommended:
AJS123 Ethics and the Administration of Justice 3

\section*{Social and Behavioral Sciences}

Credits: 3
Any approved general education course in the Social-Behavioral Sciences area

3
Natural Sciences
Credits: 4
Any approved general education course in the Natural Sciences area

\title{
Certificate of Completion (CCL) in Law Enforcement Training Academy
}

\section*{Total Credits: 40}

Major Code: 5991N

\section*{Description}

The Certificate of Completion (CCL) in Law Enforcement Training Academy is designed for students wishing to pursue a career as a law enforcement officer. The student will develop skills in eight functional areas: Introduction to Law Enforcement, Law and Legal Matters, Patrol Procedures, Traffic Control, Crime Scene Management, Community and Police Relations, Report Writing, and Police Proficiency Skills. At the conclusion of this program the student will have completed all requirements of the Arizona Peace Officer Standards and Training
(AzPOST) Board standards established to certify police officers in the State of Arizona.

\section*{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 required within the program.

This Certificate of Completion (CCL) is offered as an educational partnership at Mesa Community College and Rio Salado College. Students at these colleges are advised to meet with the program director, chair and/or faculty advisor. Given these are educational partnerships, they are not eligible for Title IV Federal Financial Aid.

This program replaces: CCL/5385 Law Enforcement Technology, CCL/5485 Law Enforcement Training Academy, CCL/5758N Law Enforcement Technology Academy.

\section*{Admission Criteria}

Must meet AzPOST minimum requirements for a law enforcement officer and meet any physical requirements by the Academy Director.

\section*{Required Courses}

Credits: 40
AJS/LET280 Peace Officer Certification (40) OR AJS/LET280AA Peace Officer Certification I (20) AND AJS/LET280AB Peace Officer Certification II (20)

\title{
Certificate of Completion (CCL) in Leadership in Public Safety Organizations
}

\author{
Total Credits: 6 \\ Major Code: 5211N
}


\section*{Description}

The Certificate of Completion (CCL) in Leadership in Public Safety Organizations program builds the industry knowledge and skills for individuals to transition to leadership positions in the field of public safety. This CCL will introduce students to the fundamental concepts and skills of professionalism, organizational culture and management, characteristics of effective teams, conflict resolution, motivation, systems-thinking, problem-solving, and leadership as applicable to public safety organizations. Students with the requisite experience in the field who complete this CCL can pursue employment in a variety of front-line leadership positions within the fields of public safety including law enforcement, fire service, and public safety support operations such as communication operators and property and records management.

\section*{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 program.

\section*{Admission Criteria}

This is a closed program for Public Safety professionals. Please see the Program Advisor for admission requirements.

\section*{Required Courses}

Credits: 6
LET173 Introduction to Leadership in Public Safety 2
LET174 Organizational Culture and Leadership 3
LET175 Public Safety Leadership Capstone 1

\title{
Certificate of \\ Completion (CCL) in Non-Sworn Fire Service Professional
}

\author{
Total Credits: 18 \\ Major Code: 5486
}

\section*{Description}

The Certificate of Completion (CCL) in Non-Sworn Fire Service Professional program is designed for students who need basic preparation courses to pursue a non-sworn career as a fire service professional and/or more comprehensive information about life safety, fire hazards, and prevention. A unique feature of the program is that the instructors are professional fire service personnel including firefighters.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better for all courses within the program.

\section*{Admission Criteria}

None.

\section*{Required Courses}

Credits: 18
FSC105 Hazardous Materials Awareness and Operations
FSC106 Introduction to Fire Protection 3
FSC108 Fundamentals of Fire Prevention 3
FSC113 Introduction to Fire Suppression 3
FSC208 Firefighter Safety and Building Construction 3
FSC215 Customer Service in the Public Sector 3

\section*{Business, Entrepreneurialism, and Management}

\section*{Associate in Applied Science (AAS) in Accounting}

\section*{Total Credits: 61-70 \\ Major Code: 3149}

\section*{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.

\section*{Program Notes}

Students must earn a grade of ' C ' or better in all courses in the program.

Consultation with an Academic Advisor is recommended for course selection.

This program replaces: AAS/3130 Accounting-Specialized Para-Professional, AAS/3131 Accounting Paraprofessional.

\section*{Admission Criteria}

None.

Required Courses
Credits: 33-36
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 Income Tax Preparation (3) OR
ACC221 Tax Accounting (3) 3
ACC219 Intermediate Accounting | 3
CIS114DE Excel Spreadsheet 3
CIS105 Survey of Computer Information Systems 3
GBS151 Introduction to Business 3
GBS205 Legal, Ethical, and Regulatory Issues in Business
GBS120 Workplace Communication Skills (3) OR
GBS233 Business Communication (3) 3
Restricted Electives
Credits: 6
Students must select six (6) credits from the list below:
ACC+++++ Any ACC Accounting course(s) except courses used to satisfy Required Courses area 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
Free Electives
Credits: None
General Education Requirements Credits: 22-28
General Education Core
Credits: 12-18

\section*{First-Year Composition}

Credits: 6
\begin{tabular}{ll} 
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)
\end{tabular} 6

Oral Communication
Credits: 3
\begin{tabular}{ll} 
COM100 & \begin{tabular}{l} 
Introduction to Human \\
Communication (3) OR
\end{tabular} \\
COM110 & Interpersonal Communication (3) OR \\
COM225 & Public Speaking (3) OR \\
COM230 & Small Group Communication (3)
\end{tabular}

\section*{Critical Reading}

Credits: 0-3
\(\begin{array}{ll}\text { CRE101 } & \text { College Critical Reading and } \\ & \text { Critical Thinking (3) OR Equivalent by } \\ \text { assessment }\end{array}\) 0-3

\section*{Mathematics}

Credits: 3-6
Any approved general education course from the Mathematics [MA] area.

3-6
General Education Distribution
Credits: 10
Humanities and Fine Arts
Credits: 3
Any approved general education course from the Humanities, Arts and Design [HU] area.

3

\section*{Social-Behavioral Sciences}

Credits: 3
ECN211 Macroeconomic Principles (3) OR
ECN212 Microeconomic Principles (3) OR
SBU200 Society and Business (3)
Natural Sciences
Credits: 4
Any approved general education course from the Natural Sciences area.

\section*{Associate in Applied Science (AAS) in Administrative Professional}

\section*{Total Credits: 61-67 \\ Major Code: 3680}

Description
The Associate in Applied Science (AAS) in the Administrative Professional degree is designed to
provide training for various office positions. The curriculum incorporates people and technological skills essential for job success. Includes instruction in business communications, office procedures, public relations, accounting, records management, and report preparation. A Certificate of Completion (CCL) in Administrative Professional is also available.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better in all courses within the program.

This program replaces: AAS/3237 Administrative Technology, AAS/3238 Administrative Specialist.
Program Prerequisites

Credits: 0
 None.
Required Courses

Credits: 24

BPC110 Computer Usage and Applications (3) OR CIS105 Survey of Computer Information Systems (3)

GBS151 Introduction to Business
Select three (3) of the following courses:
BPC101AA Introduction to Computers I
BPC/
OAS111AA Computer Keyboarding I 1
CIS121AE Windows Operating System: Levell 1
CIS121AI Mac Operating System 1
CIS122AE Windows Operating System: Level II 1
CIS133AA Internet/Web Development Level I-A 1

\section*{Restricted Electives}

Credits: 15
Students should select fifteen (15) credits from the
following courses, except courses used to satisfy the
Required Courses area, in consultation with a program advisor:
\begin{tabular}{lll} 
ACC+++ & \begin{tabular}{l} 
Any ACC Accounting prefixed course \\
(except ACC115)
\end{tabular} & 3 \\
MGT251 & Human Relations in Business & 3 \\
MGT126 & Customer Service Skills and Strategies & 3 \\
CIS133DA & Internet/Web Development: Level I & 3 \\
CIS214DE & Advanced Excel Spreadsheet: Level II & 3 \\
CIS103 & Introduction to Social Media & 3 \\
MKT110 & Marketing and Social Networking & 3 \\
CIS117DM & Microsoft Access: Database Management & 3 \\
GBS205 & Legal, Ethical, and Regulatory Issues in & \\
& Business & 3 \\
MKT271 & Principles of Marketing & 3
\end{tabular}

\section*{General Education Requirements Credits: 22-28}

General Education Core Credits: 12-18
First-Year Composition
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)
Oral Communication
Credits: 3
COM100 Introduction to Human
COM110 Interpersonal Communication (3) OR
COM225 Public Speaking (3) OR
COM230 Small Group Communication (3)
Critical Reading
Credits: 0-3
Any approved general education course from the Critical Reading area OR Equivalent as indicated by assessment.

\section*{Mathematics}

Credits: 3-6
Any approved general education course from the Mathematics area OR Equivalent as indicated by assessment.
General Education Distribution
Humanities and Fine Arts
Credits: 10

Any approved general education course from the Humanities, Arts and Design area.

Social-Behavioral Sciences
Credits: 3
SBU200 Society and Business

\section*{Natural Sciences}

Credits: 4
Any approved general education course from the Natural Sciences area.

\title{
Certificate of Completion (CCL) in Administrative Professional
}

\author{
Total Credits: 18 \\ Major Code: 5677
}

\section*{Description}

The Certificate of Completion (CCL) in the Administrative Professional program is designed to provide students with basic office skills. This program is recommended for students with little or no of-fice-related work experience or college experience. Includes instruction in business communications, office procedures, and report preparation. An Associate in Applied Science (AAS) in Administrative Professional is available.

\section*{Program Notes}

Students must earn a grade of ' C ' or better in all courses required within the program. This program replaces: CCL/5234 Administrative Professional, CCL/5238 Business Office Assistant

\section*{Admission Criteria}

None.

Program Prerequisites \(\quad\) Credits: 0
None.


\section*{Career \& Technical Education}

\section*{BPC/}

OAS111AA Computer Keyboarding I 1
CIS121AE Windows Operating System: Levell 1
CIS121AI Mac Operating System 1
CIS122AE Windows Operating System: Level II 1
CIS133AA Internet/Web Development Level I-A 1

\section*{Associate in Applied Science (AAS) in Beauty and Wellness}

\section*{Total Credits: 60-68 \\ Major Code: 3209}

\section*{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.

\section*{Program Notes}

Students must earn a grade of 'C' or better in all courses within the program.

\section*{Admission Criteria:}

Entry into this program requires a current, active Cosmetology or Cosmetology Instructor or Hairstylist or Hairstylist Instructor License. Credits for prior learning will be awarded for equivalent Beauty and Wellness (BAW) prefix courses based on licensure.

Program Prerequisites
Credits: 19-31
Entry into this program requires a current active Cosmetology or Cosmetology Instructor or Hairstylist or Hairstylist Instructor License. Credits for prior learning will be awarded for equivalent Beauty and Wellness (BAW) prefix courses based on licensure.

\begin{tabular}{llr} 
Cosmetology License/ & \\
Instructor Cosmetology License Credits: & 31 \\
BAW112 & Hair Essentials & 7 \\
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 & 4 \\
OR & & \\
Hairstylist License/ & \\
Instructor & \\
BaW1rstylist License Credits: & 19 \\
BAW114 & Hair Essentials & Student Salon I \\
BAW116 & Student Salon II & 7 \\
BAW118 & Hairstylist State Licensure & 4 \\
& & 4
\end{tabular}

\section*{Required Courses}

Credits: 9
Select courses to complete a total of nine (9) credits:

BAW298++ Special Projects 1-3
GBS132 Personal Finance
MGT253 Small Business
MKT110 Marketing and Social Media

\section*{Free Electives}

Credits: 0-10
Select additional courses, 100-level or higher, to complete the minimum credits required for this degree. Consult with the Program Director or an Academic Advisor.

General Education Requirements Credits: 22-28
General Education Core Credits: 12-18
First-Year Composition Credits: 6
ENG101 First Year Composition (3) OR
ENG107 First Year Composition for ESL (3) AND
ENG102 FirstYear Composition (3) OR
ENG108 FirstYear Composition for ESL (3) 6

\section*{Oral Communication}

COM100 Introduction to Human Communication (3) OR
COM110 Interpersonal Communication (3) OR
COM225 Public Speaking (3) OR

COM230 Small Group Communication (3)
Critical Reading
Credits: 0-3
CRE101 College Critical Reading and Critical Thinking (3) OR Equivalent as indicated by assessment (0) 0-3

Mathematics
Credits: 3-6
\begin{tabular}{ll} 
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 \\
Equivalent or higher level mathematics course in the \\
Mathematical Applications [MA] area. & \(3-6\)
\end{tabular}

\section*{General Education Distribution \\ Credits: 10}

Humanities and Fine Arts Credits: 3
Any approved general education course from the Humanities, Arts, and Design area

\section*{Social-Behavioral Sciences}

Credits: 3
PSY101 Introduction to Psychology (3) OR
PSY132 Psychology and Culture (3) OR
SOC101 Introduction to Sociology (3) OR
SOC157 Sociology of Families and Relationships (3) OR
SWU250 Mindfulness for Stress Management (3) OR
WED110 Principles of Physical Fitness and Wellness (3) 3
Natural Sciences

\section*{Credits: 4}

Any approved general education course from the Natural Sciences area:

\section*{Recommended:}

BIO160 Introduction to Human Anatomy and Physiology (4) OR
CHM107 Chemistry and Society (3) AND
CHM107LL Chemistry and Society Laboratory (1) 4 OR
CHM130 Fundamental Chemistry (3) AND
CHM130LL Fundamental Chemistry Laboratory (1) 4 OR
FON241 Principles of Human Nutrition (3) AND
FON241LL Principles of Human Nutrition Laboratory (1) 4

\title{
Certificate of \\ Completion (CCL) in Entrepreneurial Studies Level I
}

\author{
Total Credits: 10-11 \\ Major Code: 5819N
}

\section*{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.

\section*{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 program.
This program replaces: CCL/5192N Small Business Entrepreneurship, CCL/5706N Small Business StartUp, CCL/5892 Business Micro Finance.

Required Courses
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
GBS/HEC132 Personal and Family Financial Security 3

\title{
Certificate of Completion (CCL) in Entrepreneurial Studies Level II
}

\author{
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.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better for all courses within the program.

This program replaces: CCL/5892 Business Micro Finance.

Required Courses
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
GBS/HEC132 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

\title{
Associate in Applied Science (AAS) in Fashion Merchandising
}

Total Credits: 61-69
Major Code: 3266

\section*{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.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better in all courses within the program.

\section*{Admission Criteria}

None.

\section*{Program Prerequisites}

None.
Required Courses
Credits: 27
BPC110 Computer Usage and Applications (3) OR
CIS105 Survey of Computer Information Systems (3) 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

\section*{Restricted Electives}

Credits: 0-12
Students should select a total of 0-12 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

Free Electives
None.

\section*{General Education Requirements Credits: 22-28}

General Education Core
Credits: 12-18

\section*{First-Year Composition}

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
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

\section*{Critical Reading}

Credits: 0-3
CRE101 College Critical Reading and Critical
Thinking (3) OR Equivalent as indicated
by assessment (0) 0-3

\section*{Mathematics}

Credits: 3-6
Any approved general education course from the Mathe-
matics [MA] area.

General Education Distribution
Humanities and Fine Arts
TEC105 Cultural Aspects of Clothing
Social and Behavioral Sciences
SBU200
Society and Business
Natural Sciences
Any approved general education course from the Natural Sciences area.

\section*{Associate in Applied Science (AAS) in General Business}

\section*{Total Credits: 61-66}

Major Code: 3148

\section*{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.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better in all courses in the program.

This program replaces: AAS/3051 General Business Specialized.

Required Courses
ACC111 Accounting Principles I
Credits: 21
3

CIS105 Survey of Computer Information Systems 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

\section*{Restricted Electives}

Credits: 18
Students should select eighteen (18) credits from the following courses.
Any 100/200 level prefixed courses may be selected, except courses used to satisfy the Required Courses area.
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)
General Education Requirements Credits: 22-27
General Education Core Credits: 12-17
First-Year Composition
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)
Oral Communication
Credits: 3
COM100 Introduction to Human Communication (3)
COM110 Interpersonal Communication (3)
COM225 Public Speaking (3) OR
COM230 Small Group Communication (3) 3

\section*{Critical Reading}

Credits: 0-3
\(\begin{array}{ll}\text { CRE101 } & \text { College Critical Reading and Critical } \\ & \text { Thinking (3) OR Equivalent by assessment }\end{array}\)

\section*{Mathematics}

Credits: 3-5
Any approved general education course from the Mathematics area.

\section*{General Education Distribution}

Credits: 10
Humanities and Fine Arts
Credits: 3
Any approved general education course in the Humanities, Arts and Design area.

\section*{Social and Behavioral Sciences}

Credits: 3
ECN211 Macroeconomic Principles (3) OR
ECN212 Microeconomic Principles (3) OR
SBU200 Society and Business (3)
Natural Sciences
Credits: 4
Any approved general education course in the Natural Sciences area.

\section*{Certificate of \\ Completion (CCL) in General Business}

\section*{Total Credits: 21 \\ Major Code: 5683}

\section*{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.

\section*{Program Notes}

Students must earn a grade of ' C ' or better in all courses in the program.

\section*{Required Courses}

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

Restricted Electives
Credits: 9

Students should select nine (9) credits from the following courses.
Any 100/200 level prefixed courses may be selected, except courses used to satisfy the Required Courses area.
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)

\title{
Certificate of Completion (CCL) in Human Resources Management
}

\section*{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.

\section*{Program Notes}

Students must earn a grade of 'C' or better in all courses required within the program.

\section*{Admission Criteria}

None.

Restricted Electives
Credits: 0
None.
Free Electives
Credits: 0
None.

Program Prerequisites
None.
Required Courses
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
GBS131 Business Calculations (3) 3 OR
MAT112 Mathematical Concepts and
Applications (3) OR
Satisfactory completion of higher level
Mathematics course
GBS120 Workplace Communication Skills 3
MGT229 Management and Leadership I 3
MGT251 Human Relations in Business 3
MGT276 Personnel/Human Resources Management 3
MGT286 Human Resource Employment Management 3
Credits: 0

A

\section*{Certificate of}

Completion (CCL) in Interior Design Professional

\section*{Total Credits: 21}

Major Code: 5068

\section*{Description}

The Certificate of Completion (CCL) in Interior Design Professional is designed for students who have an Associate in Applied Science (AAS) in Interior

Design for more competitive jobs within the Interior Design industry where certification of the designer is required. The courses within the CCL help to prepare students with the necessary knowledge and skills and the total number of credit hours to be qualified to take the NCIDQ certification examination.

\section*{Program Notes}

Students must earn a grade of ' C ' or better for all courses required within the program.

To pursue the Certificate of Completion (CCL) Interior Design Professional, students must have completed an Associate's in Interior Design or equivalent or be currently progressing in the Associate of Applied Science (AAS) in Interior Design at a Maricopa County Community College District (MCCCD). Students should consult with the program director for details.

Required Courses
Credits: 21
ARC/INT250 Basic Revit (3) OR
ARC265/
INT251 Sketchup I: Introduction to Sketchup (3) 3
INT205 Residential Design 3
INT255 Advanced Custom Design 3
INT260 Interior Codes and Regulations 3
INT265 Building Systems 3
INT268 Lighting Design 3
INT270 Commercial Design 3

\section*{Certificate of \\ Completion (CCL) in Interior Merchandising and Home Staging}

Total Credits: 21
Major Code: 5429

\section*{Description}

The Certificate of Completion (CCL) in Interior Merchandising and Home Staging is intended to provide students with the knowledge and creative skills important to colorizing, visual merchandising, home-staging, and selecting furnishings and accessories. The program prepares students for entry-level career as a home decorator, retail merchandiser, home stager, model home merchandiser, etc. or to advance within these job fields. Students will study design principles and elements, color theory, drawing, furniture layout, historical and modern architecture and furniture, fabrics, and other factors utilized in interior merchandising. An Associate in Applied Science (AAS) in Interior Design is also available.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better for all courses required within the program.

\section*{Required Courses}

Credits: 21
INT100 Interior Design Drafting (3) OR INT145 Drawing and Rendering (3)
INT105 Introduction to Interior Design 3
INT115 Historical Architecture and Furniture 3
INT120 Modern Architecture and Furniture
INT150 Color and Design
INT160 Fabrics for Interiors
INT215 Professional Practices (3) OR
MGT251 Human Relations in Business (3) OR
MGT253 Owning and Operating a Small Business (3)

\section*{Associate in Applied Science (AAS) in}
in Licensed Residential
Appraiser

Total Credits: 61.5-66.5
Major Code: 3104

\section*{Description}

The Associate in Applied Science (AAS) in Licensed Residential Appraiser program prepares students for the appraisal of residential land and real property. Licensed Real Property Appraisal students will be prepared for the Appraisal Qualification Board (AQB)-approved Licensed Residential Real Property Appraiser examination or its equivalent. Upon completion students will have completed the necessary education requirements designated by the Appraisal Qualification Board (AQB) and Arizona Department of Real Estate (ADRE) for prelicensing education. The Licensed Residential Appraiser may appraise non-complex 1-4 residential units having a transaction value less than \(\$ 1,000,000\) and complex 1-4 residential units having a transaction value less than \(\$ 250,000\). This classification does not include the appraisal of subdivisions.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better for all courses required within the program.

Program Prerequisites
Credits: 0
None.

Required Courses
Credits: 39.5
CIS105 Survey of Computer Information Systems 3
OAS108 Business English 3
MKT271 Principles of Marketing 3
PSY230 Introduction to Statistics 3
PSY231 Laboratory for Statistics 1
REA270 Basic Appraisal Principles 2
REA271 Basic Appraisal Procedures 2
REA272 \(\begin{aligned} & \text { Uniform Standards of Professional } \\ & \text { Appraisal Practice (USPAP) }\end{aligned}\)
REA273 Residential Market Analysis Highest and Best Use
REA274 Residential Appraiser Site Valuation and Cost Approach

1
REA275 Residential Sales Comparison and Income Approaches

2
REA276AA Residential Report Writing and Case Studies I
\begin{tabular}{llr} 
REA281 & Principles of Real Estate Law & 3 \\
REA282 & Real Estate Finance & 3 \\
REA150 & Supervisory Appraiser/Appraiser Trainee & 1 \\
REA179 & Real Estate Principles I & 3 \\
REA180 & Real Estate Principles II & 3 \\
REA283 & Property Management & 3 \\
REA290AH & Real Estate Seminar: Contract Writing & 0.5
\end{tabular}

\section*{General Education Requirements Credits: 22-27}

\section*{General Education Core}

\section*{First-Year Composition}

Credits: 12-17

Any appro ( Composition area.

\section*{Oral Communication}

Credits: 3
Any approved general education course from the Oral Communication area.
\begin{tabular}{ll} 
Critical Reading & Credits: 0-3 \\
CRE101 & College Critical Reading and Critical \\
& Thinking (3) OR Equivalent as indicated by \\
& assessment (0)
\end{tabular}

\section*{Mathematics}

Credits: 3-5
Any approved general education course from the Mathematics area.

\section*{General Education Distribution}

Credits: 10

\section*{Humanities and Fine Arts}

Credits: 3
Any approved general education course in the Humanities, Arts and Design area.

Social and Behavioral Sciences
Credits: 3
ECN211 Macroeconomic Principles (3) OR
ECN212 Microeconomic Principles (3)
3
Natural Sciences
Credits: 4
Any approved general education course in the Natural Sciences area.

\title{
Associate in Applied Science (AAS) in Management
}

\author{
Total Credits: 61-66 Major Code: 3070
}

\section*{Description}

The Associate in Applied Science (AAS) in Management program 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. The Certificate of Completion (CCL) in Management is fully embedded in this AAS. The following Certificates of Completion (CCL) are also available based on chosen restricted electives: Human Resources Management, Project Management, Business Administration, Supervision and Management, and Organizational Leadership.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better for all courses required in the program.
This program replaces: AAS/3054 Business Management, AAS/3780 Business Administration Fastrack.

\section*{Admission Criteria}

None.

Program Prerequisites None.

Required Courses
Credits: 21
ACC111 Accounting Principles I 3

BPC110 Computer Usage and Applications (3) OR
CIS105 Survey of Computer Information Systems (3) 3
GBS120 Workplace Communication Skills 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

\section*{Restricted Electives}

Credits: 18
Students should select eighteen (18) credits from the following courses in consultation with a Department Advisor. Courses cannot be shared with Required Courses.
ACC110 Understanding and Using Accounting Systems (3) OR
ACC112 Accounting Principles II (3) 3
CIS114DE Excel Spreadsheet 3
CIS224 Project Management Microsoft Project for Windows
GBS131 Business Calculations 3
IBS101 Introduction to International Business 3
MKT271 Principles of Marketing 3
MGT+++ Any MGT Management course(s) (except courses used to satisfy Required Courses area) 3
TQM230 Teamwork Dynamics 2
TQM240 Project Management in Quality Organizations 3

\section*{Free Electives}

None.
General Education Requirements Credits: 22-27
General Education Core Credits: 12-17
First-Year Composition
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
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

\section*{Critical Reading}

Credits: 0-3
CRE101 College Critical Reading and Critical Thinking (3) OR Equivalent as indicated by assessment (0)
Mathematics ..... Credits: 3-5
Any approved general education course from the Mathe-matics [MA] area.3-5
General Education Distribution ..... Credits: 10
Humanities and Fine Arts ..... Credits: 3
Any approved general education course from the Hu-manities, Arts and Design [HU] area.3
Social and Behavioral Sciences ..... Credits: 3
SBU200 Society and Business ..... 3
Natural Sciences ..... Credits: 4Any approved general education course in the NaturalSciences (Quantitative) [SQ] area or the Natural Sciences(General) [SG] area.4
Certificate of

Completion (CCL)

in Management

\section*{Total Credits: 18 \\ Major Code: 5729}

\section*{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.

\section*{Program Notes}

Students must earn a grade of 'C' or better for all courses required within the program.

This program replaces: CCL/5072 Middle Management, CCL/5088 Management, CCL/5721N Supervision and Management I, CCL/5722 Supervision and Management II.

\section*{Admission Criteria}

None.

Required Courses
Credits: 18
ACC111 Accounting Principles I 3
BPC110 Computer Usage and Applications (3) OR
CIS105 Survey of Computer Information Systems (3)
GBS151 Introduction to Business3

3
GBS205 Legal, Ethical, and Regulatory Issues in Business 3
MGT229 Management and Leadership I 3
MGT251 Human Relations in Business 3
Restricted Electives
None.

\section*{Free Electives}

Credits: 0
None.

\section*{Associate in Applied Science (AAS) in Marketing and Sales}

\section*{Total Credits: 61-66 \\ Major Code: 3094}

\section*{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.

\section*{Program Notes}

Students must earn a grade of 'C' or better for all courses in the program.

\section*{Admission Criteria}

None.

Program Prerequisites Credits: 0 None.
Required Courses

Credits: 24
ACC111 Accounting Principles I ..... 3
BPC110 Computer Usage and Applications ..... (3) OR
CIS105 Survey of Computer Information Systems (3) ..... 3
GBS151 Introduction to Business ..... 3GBS120 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 ElectivesCredits: 15
Students should select 15 credits from the followingcourses 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 exceptcourses used to satisfy the RequiredCourses area.3-15

\section*{Free Electives}

None.

General Education Requirements Credits: 22-27

\section*{General Education Core}

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
\(\begin{array}{ll}\text { CRE101 } & \text { College Critical Reading and Critical Thinking (3) } \\ & \text { OR Equivalent as indicated by assessment (0) 0-3 }\end{array}\)
Mathematics
Credits: 3-5
Any approved general education course from the Mathematics area.

\section*{General Education Distribution}

Credits: 10

\section*{Humanities and Fine Arts}

Credits: 3
Any approved general education course from the Humanities, Arts and Design area.

\section*{Social and Behavioral Sciences \\ SBU200 Society and Business}

Credits: 3

Natural Sciences
Credits: 4
Any approved general education course from the Natural Sciences area.

\title{
Certificate of \\ Completion (CCL) in Organizational Leadership
}

\section*{Total Credits: 18}

Major Code: 5731

\section*{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.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better in all courses within the program.

Program Prerequisites
Credits: 0
None.
\begin{tabular}{lll} 
Required Courses & \multicolumn{1}{c}{ 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 & \begin{tabular}{l} 
Project Management in Quality
\end{tabular} & \\
& Organizations (3) & 3 \\
MGT101 & Techniques of Supervision (3) OR & \\
MGT229 & Management and Leadership I (3) & 3
\end{tabular}

\section*{Associate in Applied Science (AAS) in Organizational Management}

\section*{Total Credits: 60-65 \\ 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.

\section*{Program Notes}

Students must earn a grade of 'C' or better for all courses required within the program.

Required Courses
Credits: 18
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)
MGT101 Techniques of Supervision (3) OR
MGT229 Management and Leadership I (3)

\section*{Restricted Electives}

Credits: 20
Students must choose 20 industry/job related course credits from any MCCCD 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 the business department chair or designee.

General Education Requirements Credits: 22-27
General Education Core
Credits: 12-17

First-Year Composition
ENG101 First-Year Composition (3) OR
\begin{tabular}{lll} 
ENG107 & First-Year Composition for ESL (3) AND \\
ENG102 & First-Year Composition (3) OR \\
ENG108 & First-Year Composition for ESL (3) & 6
\end{tabular}

\section*{Oral Communication}

Credits: 3
Any approved general education course from the Oral Communication area.

\section*{Critical Reading}

Credits: 0-3
CRE101 College Critical Reading and Critical Thinking (3)
OR Equivalent as indicated by assessment (0) 0-3
MathematicsCredits: 3-5
Any approved general education course from the Mathe- matics [MA] area. ..... 3-5
General Education Distribution ..... Credits: 10
Humanities and Fine Arts ..... Credits: 3
Any approved general education course from the Hu- manities, Arts and Design area. ..... 3
Social and Behavioral Sciences ..... Credits: 3Any approved general education course from the So-cial-Behavioral Sciences [SB] area.3
Natural SciencesAny approved general education course in the NaturalSciences (Quantitative) [SQ] area or the Natural Sciences(General) [SG] area.4
Certificate of Completion (CCL) in Project Management

Total Credits: 14

Major Code: 5477N

\section*{Description}

The Certificate of Completion (CCL) in Project Management program 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.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better for all courses required within the program.

This program is not eligible for Title IV Federal Financial Aid.

\section*{Program Prerequisites}

Credits: 3
TQM240 \(\begin{aligned} & \text { Project Management in Quality } \\ & \text { Organizations (3) OR }\end{aligned}\) Organizations (3) OR Department approval

\section*{Required Courses}

Credits: 14
CIS224 Project Management Microsoft Project for Windows
MGT242 Project Scope and Procurement Management
MGT243 Project Time and Cost Management 2
MGT244 Project Risk and Quality Management 2
MGT245 Project Human Resources and Committee Management2

MGT246 Principles of Project Management 3

\section*{Associate in Applied Science (AAS) in Public Relations}

\author{
Total Credits: 61-66 \\ Major Code: 3674
}

\section*{Description}

The Associate in Applied Science (AAS) in Public Relations program provides students with general, practical, and marketable skills that will enable them to seek entry-level employment in public relations, such as press relations, community or consumer relations, market research, in-house publications, political campaigns, fund raising and volunteer recruitment. The program includes development of a portfolio that will exhibit students' ability to write both news and feature stories, to develop and plan events, and to produce brochures, advertisements, or small publications with desktop publishing. The curriculum combines coursework in public relations with a General Education component.

\section*{Program Notes}

Students must earn a grade of 'C' or better for all courses required within the program.
\begin{tabular}{lll} 
Required & Courses & Credits: \\
BPC110 & Computer Usage and Applications & (3) \\
OR \\
CIS105 & Survey of Computer Information Systems (3) & 3 \\
GBS151 & Introduction to Business & 3 \\
JRN201 & News Writing & 3 \\
JRN215 & News Production & 3 \\
JRN225 & Photojournalism & 3 \\
JRN125 & Photo Editing (3) OR & \\
CIS120DF & Adobe Photoshop Level I: Digital Imaging (3) & 3 \\
JRN234 & Feature Writing (3) OR & \\
ENG235 & Magazine Article Writing (3) & 3 \\
JRN235 & Practicum: Public Relations & 3 \\
MCO120 & Media and Society & 3 \\
MCO220 & Cultural Diversity and the Media & 3 \\
MKT101 & Introduction to Public Relations (3) OR & \\
MKT110 & Marketing and Social Networking (3) & 3 \\
MKT263 & Advertising Principles & 3
\end{tabular}

Restricted Electives
Credits: 3
GBS110 Human Relations in Business and Industry 3
MGT251 Human Relations in Business 3
GBS233 Business Communication 3
JRN236 Advanced Practicum: Public Relations 3

\section*{General Education Requirements Credits: 22-27}

General Education Core Credits: 12-17

\section*{First-Year Composition}

Credits: 6
Any approved general education courses from the First-
Year Composition area
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

\section*{Critical Reading}

Credits: 0-3
\(\begin{array}{ll}\text { CRE101 } & \text { College Critical Reading and Critical Thinking (3) } \\ & \text { OR Equivalent as indicated by assessment (0) 0-3 }\end{array}\)

\section*{Mathematics}

Credits: 3-5
MAT112 Mathematical Concepts and Applications (3) OR
MAT120 Intermediate Algebra (5) OR
MAT121 Intermediate Algebra (4) OR
MAT122 Intermediate Algebra (3) OR Satisfactory completion of a higher level mathematics courses 3-5

General Education Distribution Credits: 10
Humanities and Fine Arts Credits: 3
Any approved general education course from the Humanities, Arts and Design area.

3

Social and Behavioral Sciences Credits: 3
Any approved general education course from the So-cial-Behavioral Sciences area.
Natural Sciences

Credits: 4

Any approved general education course from the Natural Sciences area

\title{
Certificate of Completion (CCL) in Real Estate: Prelicense
}

\section*{Total Credits: 6.5 \\ Major Code: 5139N}

\section*{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.

\section*{Program Notes}

This program is note eligible for Title IV Fderal Financial Aid.

Students must earn a grade of 'C' or better for each course listed in the program.

Required Courses
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

\section*{Certificate of \\ Completion (CCL) in Residential Appraisal Trainee}

\section*{Total Credits: 6 \\ Major Code: 5619N}

Description
The Certificate of Completion (CCL) in Residential Appraiser Trainee will prepare students for entry level employment as a trainee in Real Estate Appraisal. Licensed Appraisal students will gain entry level knowledge in the field of appraisal. Upon completion students will have completed the necessary education requirements designated by the National Appraisal Qualification board. An Appraiser Trainee is subject to direct supervision by an appraiser who is certified in good standing, and may appraise those properties that his or her supervising appraiser is permitted to appraise.

\section*{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 required within the program.
\begin{tabular}{llr} 
Required & Courses & Credits: \\
REA270 & Basic Appraisal Principles & 2 \\
REA271 & Basic Appraisal Procedures & 2 \\
REA272 & Uniform Standards of Professional & \\
& Appraisal Practice (USPAP) & 1 \\
REA150 & Supervisory Appraiser/Trainee Appraiser & 1
\end{tabular}

\title{
Associate in Applied Science (AAS) in Retail Management
}

\section*{Total Credits: 61-63 \\ Major Code: 3048}

\section*{Description}

The Associate in Applied Science (AAS) in Retail Management degree is designed to prepare individuals working in the retail management, food industry, and related fields, for the mid-level management position challenges of the future. The curriculum encompasses business essentials and also emphasizes the skill sets needed for effective management and communication in the work environment. Instruction will provide the background and knowledge necessary for students to develop the judgment skills they must exercise as business managers. A Certificate of Completion (CCL) in Retail Management is also available.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better in all courses within the program.

Required Courses
Credits: 27-30
Choose one of the following three accounting sequences:
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
BPC110 Computer Usage and Applications (3) OR
CIS105

MGT101
MGT229

MGT180
MKT268
MGT251
Human Relations in Business
MGT276 Personnel/Human Resources Management 3
MKT271 Principles of Marketing 3
SBU200 Society and Business 3

\section*{Restricted Electives Credits: 9-15}

Student must complete an additional nine (9) to fifteen (15) credits from GBS, MGT, and/or MKT prefixed courses (except courses used to satisfy Required Courses area) to complete a minimum of 61 total program credits. Must include at least one MKT course.
GBS+++ Any GBS General Business course(s)
MGT+++ Any MGT Management course(s)
MKT+++ Any MKT Marketing course(s)
General Education Requirements Credits: 19-24

\section*{General Education Core}

Credits: 12-17

\section*{First-Year Composition}

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) OR
ENG111 Technical and Professional Writing (3) 6 ENG102 or ENG108 recommended for students considering pursuing a bachelors degree at an Arizona university.

Oral Communication
Credits: 3
COM100 Introduction to Human Communication

Critical Reading
Credits: 0-3
CRE101 College Critical Reading and Critical Thinking (3)
OR Equivalent as indicated by assessment (0) 0-3

\section*{Mathematics}

Credits: 3-5
Any approved general education course from the Mathematics area.

\section*{General Education Distribution \\ Credits: 7 \\ Humanities and Fine Arts \\ Credits: 3}

Any approved general education course from the Humanities, Arts and Design area.

Social and Behavioral Sciences
Credits: 0
Met by SBU200 in Required Courses area.
Natural Sciences
Credits: 4
Any approved general education course from the Natural Sciences area.

\section*{Certificate of Completion (CCL) in Retail Management}

\section*{Total Credits: 24 \\ Major Code: 5286}

\section*{Description}

The Certificate of Completion (CCL) in Retail Management is designed to prepare individuals working in the retail industry, and related fields, for the industry training needs in supervision and management, marketing, financial management, and business planning. The curriculum encompasses several business essentials and also emphasizes the skill sets needed for effective management and communication in the work environment. An Associate in Applied Science (AAS) in Retail Management is also available.

\section*{Program Notes}

Students must earn a grade of 'C' or better required for all courses within the program.
\begin{tabular}{lll} 
Required Courses & Credits: 24 \\
ACC111 & Accounting Principles I (3) OR & \\
ACC211 & Financial Accounting (3) & 3 \\
BPC110 & Computer Usage and Applications (3) OR & \\
CIS105 & Survey of Computer Information Systems (3) & 3 \\
COM100 & Introduction to Human Communication & 3 \\
MGT251 & Human Relations in Business & 3 \\
MGT101 & Techniques of Supervision (3) OR & \\
MGT229 & Management and Leadership I (3) & 3 \\
MGT180 & Retail Management (3) OR & \\
MKT268 & Merchandising (3) & \\
MGT276 & Personnel/Human Resources Management & 3 \\
MKT271 & Principles of Marketing & 3
\end{tabular}

\section*{Associate in Applied Science (AAS) in Risk Management and Insurance}

Total Credits: 61-67
Major Code: 3172

\section*{Description}

The Associate in Applied Science (AAS) in Risk Management and Insurance program is designed to provide students with foundational skills in insurance and risk management. This program encourages development of critical thinking, leadership, and communication skills as well as techniques for planning and organizing personal and business insurance strategies. Courses offer a framework of knowledge including an introduction to the insurance industry, risk management, principles of property and liability insurance, health, life, personal, and commercial insurance. A Certificate of

Completion (CCL) in Risk Management and Insurance is also available and is fully embedded in this program.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better for all courses required within the program.
\begin{tabular}{llr} 
Required & Courses & Credits: \\
INS100 & Insurance Industry Profession & 3 \\
INS200 & Principles of Property and Liability Insurance & 3 \\
INS205 & Personal Insurance & 3 \\
INS210 & Commercial Insurance & 3 \\
CIS105 & Survey of Computer Information Systems (3) & OR \\
BPC110 & Computer Usage and Applications (3) & 3
\end{tabular}

\section*{Restricted Electives}

Credits: 24
Students must choose twenty-four (24) industry/job related credits from the list of Restricted Electives below.
Students must choose 6-9 credits from:
Any INS Insurance Studies course except courses used to satisfy the Required Courses area. 6-9

\section*{AND}

Students must choose a total of 15-18 credits from other Business courses listed up to the maximum number of credits allowed for each prefix.
ACC+++++ Any ACC Accounting course(s) 0-9
CIS113DE Microsoft Word: Word Processing (3) OR
CIS114DE Excel Spreadsheet (3) OR
CIS117DM Microsoft Access: Database Management (3) 0-3
COM+++++ Any COM Communication course(s) 0-3
EPS+++++ Any EPS Entrepreneurial Studies course(s) 0-6
FIN+++++ Any FIN Financial Planning course(s) 0-6
GBS+++++ Any additional GBS General Business course(s) 0-6 (Recommend GBS120 or GBS233 as one of the course options)
IBS+++++ Any IBS International Business course(s) 0-3
MGT+++++ Any MGT Management course(s) 0-6
MKT+++++ Any MKT Marketing course(s) 0-6
REA+++++ Any REA Real Estate course(s) 0-6
SBS+++++ Any SBS Small Business Management course(s)

\section*{TQM+++++ Any TQM Total Quality Management course(s)}

\section*{General Education Requirements Credits: 22-28}

\section*{General Education Core}

Credits: 12-18

\section*{First-Year Composition}

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)
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) 0-3

\section*{Critical Reading}

Credits: 0-3
CRE101 College Critical Reading and Critical Thinking (3) OR Equivalent as indicated by assessment (0) 0-3

\section*{Mathematics}

Credits: 3-6
Any approved general education course from the Mathematics area.
MAT1++ recommended.

\section*{General Education Distribution}

Credits: 10

\section*{Humanities and Fine Arts}

Credits: 3
Any approved general education course in the Humanities, Arts and Design area.

\section*{Social and Behavioral Sciences}

Credits: 3
Any approved general education course in the Social-Behavioral Sciences area.

\section*{Natural Sciences}

Credits: 4
Any approved general education course in the Natural Sciences area.

\title{
Certificate of \\ Completion (CCL) in Risk Management and Insurance
}

\author{
Total Credits: 18 \\ Major Code: 5842
}

\section*{Description}

The Certificate of Completion (CCL) in Risk Management and Insurance program is designed to provide students with foundational skills in insurance and risk management. Courses offer a framework of knowledge including an introduction to the insurance industry, risk management, principles of property and liability insurance, health, life, personal, and commercial insurance. An Associate in Applied Science (AAS) in Risk Management and Insurance is also available.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better for all courses within the program.

Required Courses
Credits: 12
INS100 Insurance Industry Profession 3
INS200 Principles of Property and Liability Insurance 3
INS205 Personal Insurance 3
INS210 Commercial Insurance 3

\section*{Restricted Electives}

Credits: 6
Students must choose six (6) industry/job related credits from the list of Restricted Electives below.
\begin{tabular}{llr} 
COM+++++ & Any COM Communication course(s) & \(0-6\) \\
Recommended: COM110 Interpersonal Communication & 3 \\
FIN+++++ & Any FIN Financial Planning course(s) & \(0-6\) \\
GBS+++++ & Any GBS General Business course(s) & \(0-6\) \\
Recommended: & \\
GBS151 & Introduction to Business 3 OR \\
GBS205 & Legal, Ethical, and Regulatory Issues in Business & 3
\end{tabular}

Recommended: COM110 Interpersonal Communication 3
FIN+++++ Any FIN Financial Planning course(s) 0-6
GBS+++++ Any GBS General Business course(s) 0-6
Recommended:

GBS205 Legal, Ethical, and Regulatory Issues in Business 3

\section*{Career \& Technical Education}
INS+++++ Any INS Insurance Studies course(s) except courses used to satisfy Required Courses area0-6
MGT+++++ Any MGT Management course(s) ..... 0-6
Recommended: MGT175 Business Organization and Management 3
MKT+++++ Any MKT Marketing course(s) ..... 0-6
Recommended: MKT271 Principles of Marketing ..... 3
TQM+++++ Any TQM Total QualityManagement course(s)0-6
Recommended: TQM101 Quality Customer Service
Certificate of
Completion (CCL) in Social Media Marketing
Total Credits: 17-18
Major Code: 5830
Description
dia 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.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better for all courses in the program.

\section*{Required Courses}

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

\section*{Restricted Electives \\ Credits: 2-3}

MKT101 Introduction to Public Relations 3
MKT280AB Marketing Internship 2
MKT298AB Special Projects 2


\title{
Computer and Information Technology
}

Certificate of
Completion (CCL) in Adobe Foundations: Animation and Graphics Production

\author{
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.

\section*{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 required within the program.
This program replaces: CCL/5807N Adobe Foundations.

Required Courses
Credits: 9
CIS120DB Introduction to Adobe Illustrator 3
CIS120DC Introduction to Adobe Animate 3
CIS120DF Introduction to Adobe Photoshop

\section*{Certificate of Completion (CCL) in Adobe Foundations: Audio and Video Production}

\author{
Total Credits: 9 \\ Major Code: 5166N
}

\section*{Description}

The Certificate of Completion (CCL) in Adobe Foundations: Audio and Video Production program helps prepare students to edit and enhance video, sound, and special effects for online and broadcast delivery. A Certificate of Completion in Adobe Foundations: Animation and Graphics Production and an Associate in Applied Science (AAS) in Web Design and Development are also available.

\section*{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 required within the program.

\section*{Required Courses}

Credits: 9
CIS120DA Introduction to Adobe Premiere 3 OR CIS120DK Introduction to Digital Video Editing CIS120DL Introduction to Adobe After Effects CIS120DO Introduction to Adobe Audition

\title{
Certificate of \\ Completion (CCL) in Android App Development
}

\author{
Total Credits: 9-12 \\ Major Code: 5834N
}

\section*{Description}

The Certificate of Completion (CCL) in Android App Development prepares students for employment in entry-level coding, programming, and software development positions with an emphasis on Android mobile apps. This CCL will help prepare students to take the Associate Android Developer industry certification. Courses in this certificate can apply toward the Associate in Applied Science (AAS) in Mobile App Development and Certificate of Completion (CCL) in Mobile App Development, and Certificate of Completion (CCL) in Native Mobile App Development.

\section*{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.

\section*{Program Prerequisites}

Credits: 0 None.

\section*{Required Courses}

Credits: 9-12
CIS105 Survey of Computer Information Systems (3) OR Permission of Program Director, Department or Division Chair (0) 0-3
CIS150 Programming Fundamentals (3) OR
CIS150AB
Object-Oriented Programming Fundamentals (3) OR

CIS156
CIS159
CIS162AD
CIS163AA

Python Programming: Level I (3) OR
Visual Basic Programming I (3) OR C\# Level I (3) OR
Java Programming: Level I (3)
3
CIS150 or CIS150AB recommended for students with no program-
ming experience or who plan to complete the AAS 3099 or CCL 5193
in Mobile App Development.

Introduction to Android Application Development

3
CIS265DA
Advanced Android Application Development
3

\section*{Certificate of} Completion (CCL) in Cisco Network Administration and Security

\author{
Total Credits: 16-19 \\ Major Code: 5036
}

\section*{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.

\section*{Program Notes}

Students must earn a grade of 'C' or better for all courses required 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.All courses within the Required and Restricted elective areas are not applicable if taken more than five (5) years prior to the completion of the program. Consult with an Academic Advisor or Program Director for exceptions.

\section*{Required Courses}

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 Essentials4
CNT160AB Enterprise Networking, Security, and Automation4
CNT202 Cisco Secure Firewall Appliance Configuration (4) OR
CNT205 Cisco Certified Network Associate Security (4) 4

\section*{Certificate of}

Completion (CCL) in Cisco Network Administration: CCNA

\section*{Total Credits: 12-15 \\ Major Code: 5969N}

\section*{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 available.

\section*{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 required 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.
All courses within the Required Courses area are not applicable if taken more than five (5) years prior to the completion of the program. Consult with an Academic Advisor or Program Director for exceptions.
This program replaces: CCL/5967 Networking Technology: Cisco.
\begin{tabular}{llr} 
Required & Courses & \multicolumn{1}{c}{ Credits: } \\
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
\end{tabular}

\section*{Certificate of}

Completion (CCL) in Cisco Network Administration: CCNP

\section*{Total Credits: 20-23 \\ Major Code: 5037}

\section*{Description}

The Certificate of Completion (CCL) in Network Administration: Cisco Network Professional (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 Certifications (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.

\section*{Program Notes}

Students must earn a grade of 'C' or better for all courses required 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.All courses within the Required and Restricted elective areas are not applicable if taken more than five (5) years prior to the completion of the program. Consult with an academic advisor or program director for exceptions.

This program replaces: CCL/5328 Network Administration: Cisco Network Professional, CCL/5526 Information Technology: Cisco Networking.
\begin{tabular}{llr} 
Required & Courses & \multicolumn{1}{c}{ Credits: 20-23 } \\
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 Essentials4 \\
CNT160AB & Enterprise Networking, Security, and Automation4 \\
CNT200 & CCNP ROUTE: Implementing Cisco IP Routing & 4 \\
CNT220 & CCNP SWITCH: Implementing Cisco IP & \\
& Switching & 4
\end{tabular}

\section*{Certificate of Completion (CCL) in Computer System Configuration and Support}

Total Credits: 6-9
Major Code: 5038N

\section*{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.

\section*{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.

All courses within the Required areas are not applicable if taken more than five (5) years prior to the completion of the program. Consult with an academic advisor or program director for exceptions.

Required Courses
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
BPC270 A+ Exam Prep: Operating System Configuration and Support

\title{
Certificate of Completion (CCL) in Computer System Configuration and Support, Linux
}

\author{
Total Credits: 9-12 \\ Major Code: 5039N
}

\section*{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.

\section*{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.
All courses within the Required areas are not applicable if taken more than five (5) years prior to the completion of the program. Consult with an academic advisor or program director for exceptions.

\section*{Required Courses}

Credits: 9-12
CIS1 05 Survey of Computer Information Systems (3) OR Permission of program director (0) 0-3
BPC170 A+ Exam Prep: Computer Hardware Configuration and Support
BPC270 A+ Exam Prep: Operating System Configuration and Support

Certificate of
Completion (CCL) in Computer System Configuration and Support, Network

Total Credits: 9-13
Major Code: 5044N

\section*{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.

\section*{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.
All courses within the Required Courses and Restricted Electives areas are not applicable if taken more than five (5) years prior to the completion of
the program. Consult with an Academic Advisor or Program Director for exceptions.

This program replaces: CCL/5909 Computer Hardware and Network Support

Required Courses
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
BPC270 A+ Exam Prep: Operating System Configuration and Support
CIS190 Introduction to Local Area Networks (3) OR
CNT140AB Introduction to Networks (4) 3-4

\section*{Certificate of \\ Completion (CCL) in Computer System Configuration and Support, Security}

\section*{Total Credits: 9-19 \\ Major Code: 5040N}

\section*{Description}

The Certificate of Completion (CCL) in Computer System Configuration and Support, Security program is designed to prepare students for entry-level computer maintenance, help desk, and network technician jobs with an emphasis on security. The courses focus on the development of knowledge and skills in computer and security technologies including system components, installation, system configuration, peripheral devices, and notebooks. Emphasis is placed on preventing, identifying, and mitigating threats to the security of information systems and utilizing the basic tools for information security. This program helps prepare participants for the CompTIA A+, Security+, and 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.

\section*{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.

All courses within the Required Courses area are not applicable if taken more than five (5) years prior to the completion of the program. Consult with an academic advisor or program director for exceptions.

This program replaces: CCL/5841 Microsoft Technical Specialist.

\section*{Required Courses}

Credits: 9-19
CIS105 Survey of Computer Information Systems (3) OR Permission of Program Director (0) 0-3
BPC170 A+ Exam Prep: Computer Hardware Configuration and Support
BPC270 A+ Exam Prep: Operating System Configuration and Support
Select from one of the following areas of specialization.
Specialization 1:
Credits: 3-6
CIS270 Essentials of Network and Information Security (3) OR

\title{
Career \& Technical Education
}

ITS110 Information Security Fundamentals (3) AND
CIS126DL Linux Operating System (3) OR
CIS126RH Red Hat System Administration I (3) 3-6
Specialization 2:
Credits: 9
CNT140AB Introduction to Networks (3) OR
CIS190 Introduction to Networks (3)
CIS250 Management of Information Systems 3
CIS271DB Information Security Essentials

\title{
Associate in Applied Science (AAS) in Cybersecurity
}

\author{
Total Credits: 61-77 \\ Major Code: 3197
}

\section*{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, Power Systems, and Cyber Engineering.

\section*{Program Notes}

Students must earn a grade of 'C' or better for all courses required within the program.
Only required courses and restricted electives taken within eight (8) years of completion of the program may be applied towards this degree. Consult with your faculty mentor or academic advisor.
This program replaces: AAS/3097 Information Technology: Network and Cyber Security.

Required Courses


\section*{Restricted Electives}

Credits: 15-18
Students must complete 15-18 credits from the following list of courses. Courses that are required for an emphasis in Cyber Operations, Cyber Engineering, Linux System Administration, Microsoft System Administration, Cisco Networking CCNA Security, and/or Power Systems are noted. Courses cannot be repeated for credit.
\begin{tabular}{lll}
\multicolumn{2}{l}{ Specialization I: Cyber Operations } \\
BPC170 & A+ Exam Prep: Computer Hardware \\
& Configuration and Support
\end{tabular}\(\quad 3\)
\begin{tabular}{lll}
\multicolumn{2}{l}{ 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 \\
CIS271DL & Linux Security & 3 \\
CIS275DL & Linux Capstone & 3
\end{tabular}

Specialization III: Microsoft System Administration
\(\begin{array}{ll}\text { CIS121AH } & \text { Microsoft PowerShell/Command } \\ & \text { Line Operations }\end{array}\)

MST155DC Installation, Storage, \& Compute With
 Windows Server ..... 4
MST157DC Networking With Windows Server ..... 4
MST158DC Installing and Configuring Windows Server 4
Specialization IV: Cisco Network Administration andSecurity
CNT140AB CCNA-1 Introduction to Networks v7.0 (ITN) ..... 4
CNT150AB CCNA-2 Switching, Routing, and Wireless Essentials v7.0 (SRWE) ..... 4
CNT160AB CCNA-3 Enterprise Networking, Security, and Automation v7.0 (ENSA) ..... 4
CNT202 Cisco Secure Firewall ApplianceConfiguration (4) OR
CNT205 Cisco Certified Network Associate Security (4) 4 ..... 4
Specialization V: Power Systems
CIS274DA Introduction to Power Systems Security 3
CIS275DA Generation and Transmission Systems Security 3
CIS275DB Smart Grid and Distribution System Security ..... 3
CIS275DC Embedded Systems Security ..... 3
CPD104 Career and Personal Development ..... 3
PPT120 Energy Industry Fundamentals ..... 3
Specialization VI: Cyber Engineering
CIS119DO 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 \(\cup\) of ASouth 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

\section*{General Education Requirements Credits: 22-28}

General Education Core
First-Year Composition
Credits: 12-18
Credits: 6
ENG101 First Year Composition (3) AND
ENG102 First Year Composition (3) OR
ENG107 First-Year Composition for ESL (3) AND
ENG108 First-Year Composition for ESL (3)
Oral Communication
Credits: 3
COM100 \(\begin{array}{r}\text { Introduction to Human } \\ \text { Communication (3) OR }\end{array}\)
COM110 Interpersonal Communication (3) OR
COM225 Public Speaking (3) OR
COM230 Small Group Communication (3) 3
COM100 required for students intending to transfer to ASU West to earn a Bachelor of Science in Applied Computing (Cybersecurity).

\section*{Critical Reading}

Credits: 0-3
CRE101 College Critical Reading and Critical Thinking (3) OR Equivalent as indicated by assessment (0)

0-3

\section*{Mathematics}

Credits: 3-6
Any approved general education course in the Mathematics area.

3-6
General Education Distribution
Credits: 10
Humanities and Fine Arts
Credits: 3
Any approved general education course(s) in the Humanities, Arts and Design area.

\section*{Social-Behavioral Sciences}

Credits: 3
Any approved general education course(s) in the So-cial-Beavioral Sciences area. 3

Natural Sciences
Credits: 4
Any approved general education course(s) from the Natural Sciences area.

\section*{Description}

The Certificate of Completion (CCL) in Desktop 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, network, and security technologies, as well as the interpersonal skills in customer service/technical support needed to be successful within the industry. Depending on course selection, this program helps prepare students for the CompTIA A+, CompTIA Network+, and/or CompTIA 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.

\section*{Program Notes}

Students must earn a grade of 'C' or better in all courses within the program.
All courses within the Required Courses and Restricted Electives areas are not applicable if taken more than five (5) years prior to the completion of the program. Consult with an Academic Advisor or Program Director for exceptions.
This program replaces: CCL/5026 Computer Hardware and Desktop Support, CCL/5215 Networking: Design and System Support, CCL/5473 Microsoft Desktop Support Technology, CCL/5529 Information Technology: Network Server, CCL/5841 Microsoft Technical Specialist, CCL/5867 Computer Systems Maintenance, CCL/5909 Computer Hardware and Network Support, CCL/5997 Technology Support Analyst.

\section*{Required Courses}

Credits: 18-19
\(\begin{array}{ll}\text { BPC170 } & \text { A+ Exam Prep: Computer Hardware } \\ & \text { Configuration and Support }\end{array}\)
BPC270 A+ Exam Prep: Operating System Configuration and Support3
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 (Note: CNT140AB is recommended for students interested in pursuing their Cisco Network Administration Certification)

\section*{Restricted Electives}

Credits: 1-3
Students must select one to three \((1-3)\) credits from the following:
BPC171 Recycling Used Computer Technology 1
CIS290AA Computer Information Systems Internship 1
CIS290AB Computer Information Systems Internship 2
CIS290AC Computer Information Systems Internship 3
CIS296WB Cooperative Education
CIS296WC Cooperative Education 3
CIS298AA Special Projects
CIS298AB Special Projects
CIS298AC
Special Projects

\section*{Associate in Applied Science (AAS) in Information Technology}

\section*{Total Credits: 60-65 \\ Major Code: 3196}

\section*{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. Students will earn one or more of the following Certificates of Completion (CCLs):

\author{
CCL/5154 Cybersecurity Fundamentals \\ CCL/5083 Database Development \\ CCL/5043 Desktop Support \\ CCL/5793 Foundations of Mobile App Development \\ CCL/5132 Microsoft Office Professional \\ CCL/5031 Microsoft System Administration \\ CCL/5048 Programming and Systems Analysis Level I CCL/5183N Oracle Database Operations \\ CCL/5050N Red Hat Linux Engineer \\ CCL/5984 Web Foundations
}

\section*{Program Notes}

Students must earn a grade of 'C' or better in all courses required within the program.
++ indicates all suffixed courses.
This program replaces: AAS/3023 Information Technology, AAS/3098 Information Technology: Computer Applications Specialist, AAS/3152 Computer Information Systems, AAS/3162 Computer Information Systems Technologies, AAS/3167 Computer and Information Technologies, AAS/3217 Computer Technology, AAS/3546 Business Office Computer Applications, AAS/3547 Computer Applications Technology, AAS/3548 Business Applications, AAS/3786 Computer Information Technology.

\section*{Required Courses}

Credits: 32-38

\section*{Specialization 1:}

Cybersecurity Fundamentals
Credits: 33-38
Information Technology Core
Credits: 24-25
\[
\begin{array}{ll}
\text { BPC270 } & \text { A+ Exam Prep: Operating System } \\
& \text { Configuration and Support (3) OR }
\end{array}
\]

MST150++ Any Microsoft Windows course (3) 3 CIS105 Survey of Computer Information Systems 3 CIS117DM Microsoft Access: Database Management (3) OR
CIS119DO Introduction to Oracle: SQL (3) OR
\begin{tabular}{llr} 
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 \\
Students taking CIS271DB would be required to take CIS250. & \\
& & \\
Cybersecurity Fundamentals & Credits: 9-12 \\
CIS111 & Ethics in Information Technology (3) OR & \\
ITS120 & Legal, Ethical and Regulatory Issues (3) & 3 \\
CIS270 & Essentials of Network and Information & \\
CIS271DB & Security (3) OR & Information Security Essentials (3) AND
\end{tabular}

\section*{Related Area}

Credits: 0-5
Select courses with one of the following prefixes to complete a minimum of 60 credits for the Associate in Applied Science (AAS) in Information Technology:
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

\section*{Specialization 2:}

Database Development
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
CIS119DO Introduction to Oracle: SQL 3
CIS133DA Internet/Web Development Level। 3
CIS156 Python Programming: Level I (3) OR
CIS162++ Any C Programming: Level I course (3) OR
\begin{tabular}{llr} 
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
\end{tabular}

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)
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 a minimum of 60 credits for the Associate in Applied Science (AAS) in Information Technology:
\begin{tabular}{ll} 
BPC++++++ & \begin{tabular}{l} 
Any BPC Business-Personal \\
Computers courses
\end{tabular} \\
CIS+++++ & \begin{tabular}{l} 
Any CIS Computer Information \\
Systems courses
\end{tabular} \\
CLD++++++ & Any CLD Cloud Computing courses \\
CNT+++++ & Any CNT Cisco Network Technology courses \\
ITS+++++ & \begin{tabular}{l} 
Any ITS Information Technology
\end{tabular} \\
MST+++++ & Security courses \\
Any MST Microsoft Technology courses
\end{tabular}

Specialization 3: Desktop Support Credits: 32-38 Information Technology Core Credits: 24-25
BPC270 A+ Exam Prep: Operating System Configuration and Support
CIS105 Survey of Computer Information Systems 3
CIS117DM Microsoft Access: Database Management (3) OR
CIS119DO Introduction to Oracle: SQL (3) OR
CIS276DA MySQL Database (3) OR
CIS276DB SQL Server Database (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
\begin{tabular}{|c|c|}
\hline 56 & Python Programming: Level I (3) OR \\
\hline 162++ & Any C Programming: Level I course (3) OR \\
\hline S163AA & Java Programming: Level I (3) \\
\hline CIS190 & Introduction to Networking (3) OR \\
\hline CNT140AB & Introduction to Networks (4) \\
\hline CIS224 & Project Management Microsoft Project for Windows (3) OR \\
\hline CIS250 & Management of Information Systems (3) \\
\hline \multicolumn{2}{|l|}{Desktop Support} \\
\hline BPC170 & A+ Exam Prep: Computer Hardware Configuration and Support \\
\hline CIS102DA & Customer User Suppor \\
\hline \multicolumn{2}{|l|}{Related Area Credits: 2-8} \\
\hline \multicolumn{2}{|l|}{Select courses with one of the following prefixes to complete a minimum of 60 credits for the Associate in} \\
\hline BPC+++++ & Any BPC Business-Personal Computers courses \\
\hline CIS+++++ & Any CIS Computer Information Systems courses \\
\hline +++++ & Any CLD Cloud Computing courses \\
\hline CNT+++++ & Any CNT Cisco Network Technology cours \\
\hline ITS+++++ & Any ITS Information Technology Security courses \\
\hline MST+++++ & Any MST Microsoft Technology courses \\
\hline
\end{tabular}

\section*{Specialization 4:}

\section*{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
CIS119DO 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: Levell coursev 3
CIS190 Introduction to Networking (3) OR
CNT140AB Introduction to Networks (4)
\begin{tabular}{|c|c|}
\hline CIS224 & Project Management Microsoft Project for Windows (3) OR \\
\hline CIS250 & Management of Information Systems (3) \\
\hline \multicolumn{2}{|l|}{Foundations of Mobile App Development Credits: 12} \\
\hline CIS120DF & Introduction to Adobe Photoshop \\
\hline \multirow[t]{2}{*}{CIS165} & Introduction to IOS Application \\
\hline & Development \\
\hline \multirow[t]{2}{*}{CIS165DA} & Introduction to Android Application \\
\hline & Development \\
\hline CIS165DB & C\#NB.NET: Windows 8 App Development (3) O \\
\hline CIS165DC & Xamarin/C\# Cross Platform Development (3) \\
\hline Related Area & \(a \quad\) Credits: 0-5 \\
\hline \multicolumn{2}{|l|}{Select courses with one of the following prefixes to complete a minimum of 60 credits for the Associate in} \\
\hline \multicolumn{2}{|l|}{Applied Science (AAS) in Information Technology:} \\
\hline BPC+++++ & Any BPC Business-Personal Computers courses \\
\hline CIS+++++ & Any CIS Computer Information Systems courses \\
\hline CLD+++++ & Any CLD Cloud Computing courses \\
\hline CNT+++++ & Any CNT Cisco Network Technology courses \\
\hline ITS+++++ & Any ITS Information Technology Security courses \\
\hline MST+++++ & Any MST Microsoft Technology courses \\
\hline
\end{tabular}

\section*{Specialization 5:}

\section*{Microsoft Office Professional}

\section*{Credits: 31-38}
\begin{tabular}{|c|c|}
\hline In & Core Credits: 18-19 \\
\hline CIS105 & Survey of Computer Information Systems 3 \\
\hline CIS117DM & Microsoft Access: Database Management 3 \\
\hline CIS133DA & Internet/Web Development Level I \\
\hline CIS150AB & Object-Oriented Programming Fundamentals (3) OR \\
\hline CIS156 & Python Programming: Level I (3) OR \\
\hline CIS162++ & Any C Programming: Level I course (3) OR \\
\hline CIS163AA & Java Programming: Level I (3) \\
\hline CIS190 & Introduction to Networking (3) OR \\
\hline CNT140AB & Introduction to Networks (4) 3-4 \\
\hline MST150++ & Microsoft Windows (3) OR \\
\hline BPC270 & A+ Exam Prep: Operating System \\
\hline & Configuration and Support (3) \\
\hline
\end{tabular}

Microsoft Office Professional Credits: 11-13
BPC/
OAS111AA Computer Keyboarding (1) OR Permission of Program Director (0)
\begin{tabular}{lll} 
CIS113DE & Microsoft Word: Word Processing & 3 \\
CIS114DE & Excel Spreadsheet & 3 \\
CIS118DB & Desktop Presentation: PowerPoint & 3 \\
CIS124AA & \begin{tabular}{l} 
Project Management Software: Level I (1)
\end{tabular} \\
& & \\
AND
\end{tabular}

Specialization 6: Microsoft Server Credits: 36-38
\begin{tabular}{lll} 
Information Technology Core: & \multicolumn{1}{c}{ Credits: 21-22 } \\
CIS105 & Survey of Computer Information Systems & 3 \\
CIS117DM & Microsoft Access: Database Management (3) OR \\
CIS119DO & 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 & \\
CIS250 & for Windows (3) OR & Management of Information Systems (3)
\end{tabular}

Microsoft Server
Credits: 15
CIS121AH Microsoft PowerShell/Command Line Operations
\begin{tabular}{lll} 
MST155DC & Installation, Storage, and Compute with & \\
& Windows Server & 4 \\
MST157DC & Networking with Windows Server & 4 \\
MST158DC & Identity Management with Windows & \\
& Server 2016 & 4
\end{tabular}

Related Area
Credits: 0-2
Select courses with one of the following prefixes to complete a minimum of 60 credits for the Associate in Applied Science (AAS) in Information Technology:
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

\section*{Specialization 7:}

Oracle Database Operations
Credits: 32-38
Information Technology Core
Credits: 21-22
\begin{tabular}{lll} 
BPC270 & \begin{tabular}{l} 
A+ Exam Prep: Operating System \\
\\
Configuration and Support (3) OR
\end{tabular} & \\
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 \\
CIS119DO & 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
\end{tabular}

\section*{Related Area}

Credits: 2-8
Select courses with one of the following prefixes to complete a minimum of 60 credits for the Associate in Applied Science (AAS) in Information Technology:
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: Credits: 32-38
Information Technology Core Credits: 21-22
CIS105 Survey of Computer Information Systems 3
CIS119DO Introduction to Oracle: SQL (3) OR
CIS276DA MySQL Database (3) OR
CIS276DB SQL Server Database (3)
CIS126DL Linux Operating System (3) OR
CIS126RH Red Hat System Administration I (3) OR
MST150++ Microsoft Windows (3)
CIS133DA Internet/Web Development Level। 3
CIS150AB Object-Oriented Programming Fundamentals
CIS190 Introduction to Networking (3) OR
CNT140AB Introduction to Networks (4)
CIS224 Project Management Microsoft Project for Windows (3) OR
CIS250 Management of Information Systems (3) 3

Programming and Systems Analysis
Credits: 9
\begin{tabular}{lll} 
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
\end{tabular}

\section*{Related Area}

Credits: 1-8
Select courses with one of the following prefixes to complete a minimum of 60 credits for the Associate in Applied Science (AAS) in Information Technology:
BPC+++++ Any BPC Business-Personal Computers courses
\begin{tabular}{ll} 
CIS+++++ & \begin{tabular}{l} 
Any CIS Computer Information Systems \\
courses
\end{tabular} \\
CLD++++++ & Any CLD Cloud Computing courses \\
CNT++++++ & Any CNT Cisco Network Technology courses \\
ITS+++++ & \begin{tabular}{l} 
Any ITS Information Technology Security
\end{tabular} \\
courses
\end{tabular}

\section*{Specialization 9:}

Redhat Linux Engineer
Credits: 32-38
Information Technology Core
Credits: 21-22
CIS105 Survey of Computer Information Systems 3
\begin{tabular}{lll} 
CIS117DM & Microsoft Access: Database Management (3) OR \\
CIS119DO & 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 & \begin{tabular}{l} 
Project Management Microsoft Project
\end{tabular} & \\
CIS250 & for Windows (3) OR & \\
& Management of Information Systems (3) & 3
\end{tabular}

Redhat Linux Engineer Credits: 6
CIS238RH Red Hat System Administration II 3
CIS240RH Red Hat System Administration III 3

\section*{Related Area Credits:}

5-11
Select courses with one of the following prefixes to complete a minimum of 60 credits for the Associate in Applied Science (AAS) in Information Technology:
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
\begin{tabular}{|c|c|}
\hline \multicolumn{2}{|l|}{Specialization 10:} \\
\hline \multicolumn{2}{|l|}{Web Foundations Credits: 36-38} \\
\hline Information & Technology Core Credits: 21-22 \\
\hline BPC270 & A+ Exam Prep: Operating System Configuration and Support (3) OR \\
\hline CIS126DL & Linux Operating System (3) OR \\
\hline CIS126RH & Red Hat System Administration I (3) OR \\
\hline MST150++ & Microsoft Windows (3) \\
\hline CIS105 & Survey of Computer Information Systems \\
\hline CIS117DM & Microsoft Access: Database Management (3) OR \\
\hline CIS119DO & Introduction to Oracle: SQL (3) OR \\
\hline CIS276DA & MySQL Database (3) OR \\
\hline CIS276DB & SQL Server Database (3) 3 \\
\hline CIS133DA & Internet/Web Development Level I 3 \\
\hline CIS150AB & Object-Oriented Programming Fundamentals (3) OR \\
\hline CIS156 & Python Programming: Level I (3) OR \\
\hline CIS162++ & Any C Programming: Level I course (3) OR \\
\hline CIS163AA & Java Programming: Level I (3) 3 \\
\hline CIS190 & Introduction to Networking (3) OR \\
\hline CNT140AB & Introduction to Networks (4) 3-4 \\
\hline CIS224 & Project Management Microsoft Project for Windows (3) OR \\
\hline CIS250 & Management of Information Systems (3) 3 \\
\hline \multicolumn{2}{|l|}{Web Foundation Credits: 15} \\
\hline CIS120DF & Introduction to Adobe Photoshop 3 \\
\hline CIS136 & Content Management Systems: WordPress3 \\
\hline CIS166AA & Introduction to Javascript 3 \\
\hline CIS233DA & Internet/Web Development Level II \\
\hline CIS235 & e-Commerce \\
\hline \multicolumn{2}{|l|}{Related Area Credits: 0-2} \\
\hline \multicolumn{2}{|l|}{Select courses with one of the following prefixes to complete a minimum of 60 credits for the Associate in} \\
\hline \[
\mathrm{BPC}+++++
\] & Any BPC Business-Personal Computers courses \\
\hline CIS+++++ & Any CIS Computer Information Systems courses \\
\hline CLD+++++ & Any CLD Cloud Computing courses \\
\hline CNT+++++ & Any CNT Cisco Network Technology courses \\
\hline ITS+++++ & Any ITS Information Technology Security courses \\
\hline MST+++++ & Any MST Microsoft Technology courses \\
\hline
\end{tabular}

Specialization 10:

\section*{Web Foundations}

Information Technology Core
Credits: 21-22

Web Foundation Credits: 15
CIS120DF Introduction to Adobe Photoshop 3
CIS136 Content Management Systems: WordPress3
CIS166AA introduction to Javascript - 3
CIS233DA Internet/Web Development Level II 3
CIS235 e-Commerce 3

Credits: 0-2
Select courses with one of the following prefixes to complete a minimum of 60 credits for the Associate in Applied Science (AAS) in Information Technology: BPC+++++ Any BPC Business-Personal Computers courses
CIS+++++ Any CIS Computer Information Systems courses

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
\begin{tabular}{|c|c|}
\hline \multicolumn{2}{|l|}{Specialization 11: A related Certificate of} \\
\hline \multicolumn{2}{|l|}{Completion (CCL) at the discretion of the} \\
\hline Program D the followi the Progra & Director (minimum of 11 credits) AND ing core courses with permission of am Director. \\
\hline Information & Technology Core Credits: 21-22 \\
\hline CIS105 & Survey of Computer Information Systems 3 \\
\hline CIS117DM & Microsoft Access: Database Management (3) OR \\
\hline CIS119DO & Introduction to Oracle: SQL (3) OR \\
\hline CIS276DA & MySQL Database (3) OR \\
\hline CIS276DB & SQL Server Database (3) 3 \\
\hline BPC270 & A+ Exam Prep: Operating System Configuration and Support (3) OR \\
\hline CIS126DL & Linux Operating System (3) OR \\
\hline CIS126RH & Red Hat System Administration I (3) OR \\
\hline MST150++ & Microsoft Windows (3) 3 \\
\hline CIS150AB & Object-Oriented Programming Fundamentals (3) OR \\
\hline CIS156 & Python Programming: Level I (3) OR \\
\hline CIS162++ & Any C Programming: Level I course (3) OR \\
\hline CIS163AA & Java Programming: Level I (3) 3 \\
\hline CIS190 & Introduction to Networking (3) OR \\
\hline CNT140AA & Introduction to Networks (4) 3-4 \\
\hline CIS133DA & Internet/Web Development Level I 3 \\
\hline CIS224 & Project Management Microsoft Project for Windows (3) OR \\
\hline CIS250 & Management of Information Systems (3) 3 \\
\hline
\end{tabular}

\section*{General Education Requirements Credits: 22-28}

\section*{General Education Core}

Credits: 12-18

\section*{First-Year Composition}

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

\section*{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

\section*{Critical Reading}

Credits: 0-3
CRE101 College Critical Reading and Critical Thinking (3) OR Equivalent as indicated by assessment (0)
\begin{tabular}{lll} 
Mathematics & 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 \\
Equivalent or higher level mathematics course in the \\
Mathematical Applications [MA] area. & 3-6
\end{tabular}

\section*{General Education Distribution}

Credits: 10
Humanities and Fine Arts
Credits: 3
Any approved general education course from the Humanities, Arts and Design [HU] area.

Social and Behavioral Sciences
Credits: 3
Any approved general education course from the So-cial-Behavioral Sciences [SB] area.

\section*{Natural Sciences}

Credits: 4
Any approved general education course from the Natural Science [SG] or [SQ] area.

\section*{Certificate of \\ Completion (CCL) in iOS App Development}

\section*{Total Credits: 9-12 \\ Major Code: 5914N}

\section*{Description}

The Certificate of Completion (CCL) in iOS Application Development prepares students for positions in app development for the Apple iPad, iPhone, and Apple Watch series. The program emphasizes knowledge and skills required to design, develop, test, and document structured and object-oriented programs utilizing Swift and Xcode. Courses in this certificate can apply toward the Associate in Applied Science (AAS) in Mobile App Development and Certificates of Completion (CCLs) in Native App Development and Mobile App Development.

> 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 required within the program.
\begin{tabular}{|c|c|}
\hline & Cred \\
\hline CIS105 & Survey of Computer Information Systems (3) OR \\
\hline & Permission of Program Director, \\
\hline & \\
\hline CIS165 & Introduction to IOS Application Developr \\
\hline CIS265 & Advanced ios Application Developn \\
\hline
\end{tabular}

\section*{Certificate of Completion (CCL) in Linux Associate}

\author{
Total Credits: 6-9 \\ Major Code: 5046N
}

\section*{Description}

The Certificate of Completion (CCL) in Linux Associate program is designed to help prepare students for employment or to improve current professional skills. The program includes Linux operating system basics and management 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. This program helps prepare students for the Linux Professional Institute Certification (LPIC-1) and CompTIA 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 tech-
nology field to deepen their knowledge and skills and to help prepare them for multiple industry certification examinations. An Associate in Applied Science (AAS) in Network and Systems Administration is also available.

\section*{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 required 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.

All courses within the Required areas are not applicable if taken more than five (5) years prior to the completion of the program. Consult with an academic advisor or program director for exceptions.

This program replaces: CCL/5219 Linux Associate.
\begin{tabular}{llr} 
Required & Courses & Credits: \\
CIS105 & Survey of Computer Information Systems (3) & OR \\
& Permission of program director (0) & \(0-3\) \\
CIS126DL & Linux Operating System & 3 \\
CIS238DL & Linux System Administration & 3
\end{tabular}

Certificate of
Completion (CCL) in Linux System Administration

\author{
Total Credits: 15-18 \\ Major Code: 5052N
}

\section*{Description}

The Certificate of Completion (CCL) in Linux System Administration program is designed to help prepare students for a variety of industry-recognized Linux certification exams as well as provide practical hands-on skills for the workplace. The program includes a core of Linux classes including Linux operating system basics, system administration, network administration and network security. The courses in the program will help develop a student's knowledge and skill level in preparation for employment or to improve current professional skills. Students who complete this program may seek employment in a variety of environments. The program helps prepare students for the Red Hat Certified System Administrator (RHCSA), Red Hat Certified Engineer (RHCE), and CompTIA Linux+ certification exams. An Associate in Applied Science (AAS) in Network and Systems Administration is also available.

\section*{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 required 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.
All courses within the Required Courses and Restricted Electives areas are not applicable if taken more than five (5) years prior to the completion of the program. Consult with an Academic Advisor or Program Director for exceptions.

This program replaces: CCL/5225 Linux Networking Administration.

Required Courses
Credits: 15-18
CIS1 05
Survey of Computer Information Systems (3) OR Permission of program director (0) 0-3

Students should select from one of the following two tracks (Linux or Red Hat Enterprise Linux): Linux Track
CIS126DL Linux Operating System 3
CIS238DL Linux System Administration 3
CIS239DL Linux Shell Scripting 3
CIS240DL Linux Network Administration 3
CIS275DL Linux Capstone
Red Hat Enterprise Linux Track
CIS126RH Red Hat System Administration I
CIS238RH Red Hat System Administration II 3
CIS239DL Linux Shell Scripting
CIS240RH Red Hat System Administration III
CIS275DL Linux Capstone

\title{
Certificate of \\ Completion (CCL) in Microsoft Desktop Associate
}

\section*{Total Credits: 3 \\ Major Code: 5030N}

\section*{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 Ad-
ministrator 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.

\section*{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 required within the program.

Students are encouraged, but not required, to complete CIS105, or CIS190, or CNT140AB prior to beginning this CCL.
All courses within the Required areas are not applicable if taken more than five (5) years prior to the completion of the program. Consult with an academic advisor or program director for exceptions.

\section*{Required Courses}

Credits: 3
MST150WT Installing and Configuring Microsoft Windows 10

\title{
Certificate of Completion (CCL) in Microsoft Office Professional
}

Total Credits: 16-22
Major Code: 5132

\section*{Description}

The Certificate of Completion (CCL) in Microsoft Office Professional emphasizes training on word processing, spreadsheet, database, and presentation software for business purposes. This certificate provides students with the knowledge and skills requisite of various business settings. This certificate helps with initial preparation for the Microsoft examinations for certification as a Microsoft Office Specialist (MOS). This certificate embeds into the Associate in Applied Science (AAS) degree in Information Technology and Certificate of Complete (CCL) in Microsoft Office Specialist.

\section*{Program Notes}

Students must earn a grade of ' C ' or better in all courses required within the program.
Only required courses taken within eight (8) years of completion of the program may be applied towards this certificate. Consult with your faculty mentor or academic advisor.

This program replaces: CCL/5146 Computer Applications: Microsoft Office Specialist/Basic, CCL/5147 Computer Applications: Microsoft Office Specialist/ Advanced, CCL/5212 Business Office Computer Applications, CCL/5213 Computer Usage and Applications, CCL/5214 Computer Applications Technology, CCL/5217 Computer Applications, CCL/5644 Business Applications Specialist.

\section*{Required Courses}

Credits: 16-22
BPC/
OAS111AA Computer Keyboarding 1 (1) OR
Permission of Program Director (0) 0-1
CIS105 Survey of Computer Information Systems (3) OR Permission of Program Director (0) 0-3
CIS113DE Microsoft Word: Word Processing 3
CIS114DE Excel Spreadsheet 3
CIS117DM Microsoft Access: Database Management 3
CIS118DB Desktop Presentation: Powerpoint 3
BPC270 A+ Exam Prep: Operating System
Configuration and Support (3) OR

Windows Operating System: Level I (1) AND
CIS122AE
Windows Operating System: Level II (1) OR
MST150++ Microsoft Windows (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)

\title{
Certificate of \\ Completion (CCL) in \\ Microsoft Office Specialist
}

\section*{Total Credits: 25-31 \\ Major Code: 5137}

\section*{Description}

The Certificate of Completion (CCL) in Microsoft Office Specialist emphasizes advanced training on word processing, spreadsheet, and database software for business purposes. This certificate builds upon the knowledge and skills gained by the CCL in Microsoft Office Professional for use in various business settings. This certificate helps prepare students for the Microsoft Office Specialist (MOS) certification examinations. This certificate embeds into the Associate in Applied Science (AAS) degree in Information Technology.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better in all courses required within the program.
Only required courses taken within eight (8) years of completion of the program may be applied towards this certificate. Consult with your faculty mentor or academic advisor.
This program replaces: CCL/5218 Advanced Computer Usage and Applications.

Required Courses
Credits: 25-31
The following courses are required and included in Microsoft Office Professional CCL:
BPC/
OAS111AA Computer Keyboarding I (1) OR
Permission of Program Director (0) 0-1
CIS105 Survey of Computer Information Systems (3) OR
Permission of Program Director (0) 0-3
CIS113DE Microsoft Word: Word Processing 3
CIS114DE Excel Spreadsheet 3
CIS117DM Microsoft Access: Database Management 3
CIS118DB Desktop Presentation: Powerpoint
BPC270
A+ Exam Prep: Operating System Configuration and Support (3) OR
CIS121AE Windows Operating System: Level I (1) AND
CIS122AE Windows Operating System: Level II (1) OR
MST150++ Microsoft Windows (3) 2-3
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
The following courses are required in Microsoft Office Specialist CCL:
CIS213DE Advanced Microsoft Word: Word Processing 3
CIS214DE Advanced Excel Spreadsheet: Level II
CIS217AM Advanced Microsoft Access:
Database Management

\section*{Certificate of}

Completion (CCL) in Microsoft System Administration

\section*{Total Credits: 18-21}

Major Code: 5031

\section*{Description}

The Certificate of Completion (CCL) in Microsoft System Administration program is designed to provide students with background knowledge and skills required for learning the specific tasks and industry recognized standards associated with
computer networks and data communications. The program includes a core of Microsoft courses to develop professionals who implement, manage, and troubleshoot existing network and system environments based on current Microsoft operating systems including active directory, messaging services, file and print servers, and firewalls. The courses in the program are also designed to help prepare students for the Microsoft 365 Certified: Modern Desktop Administrator Associate and Microsoft Certified Solutions Associate (MCSA) Windows Server 2016 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 to help prepare them for multiple industry certification examinations. An Associate in Applied Science (AAS) in Network and Systems Administration is also available.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better for all courses required within the program.
All courses within the Required areas are not applicable if taken more than five (5) years prior to the completion of the program. Consult with an academic advisor or program director for exceptions.

This program replaces: CCL/5124 Network Administration: Microsoft Windows Server, CCL/5852 Microsoft Server Administration.

Required Courses
Credits: 18-21
CIS1 05 Survey of Computer Information Systems (3) OR May be waived by permission of the Program Director (0) 0-3
CIS121AH Microsoft PowerShell/Command Line Operations
MST150++ Any Microsoft Windows course 3
MST155DC Installation, Storage, and Compute with Windows Server

MST157DC Networking with Windows Server 4 MST158DB Installing and Configuring Windows Server 4

\section*{Associate in Applied Science (AAS) in Mobile App Development}

\section*{Total Credits: 60-64 \\ Major Code: 3099}

\section*{Description}

The Associate in Applied Science (AAS) in Mobile App Development provides students with the design and programming skills necessary for entry-level coding, programming, and software development positions with an emphasis on mobile apps. Students will be prepared for transfer to selected BAS programs. Students will be prepared to take the App Developer with Swift Certification Level 1, Microsoft C\# Software Essentials, and Associate Android Developer certifications. A Certificate of Completion (CCL) in iOS Application Development, Android Application Development, Windows Application Development, Web App Development, Native Mobile App Development, Cross-Platform App Development, Foundations of Mobile App Development and Mobile App Development are also available.

\section*{Program Notes}

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.

Program requirements for CCL 5193 Mobile App Development and CCL 5914N iOS Application Development may be taken in the AAS 3099 Mobile App Development. An additional CCL within mobile apps may also be earned based on course selection.

This program replaces: AAS/3139 Mobile Apps Programming

\section*{Admission Criteria}

None.

\section*{Program Prerequisites}

Credits: 0 None.

Required Courses
Credits: 24-27
CIS105 Survey of Computer Information Systems (3) OR Permission of Program Director, Department or Division Chair (0)
CIS120DF Introduction to Adobe Photoshop 3

CIS133DA Internet/Web Development Level I 3
CIS150AB Object-Oriented Programming Fundamentals3

CIS156

Python Programming: Level I (3) OR

CIS159 Visual Basic Programming I (3) OR
CIS163AA Java Programming: Levell (3) 3
CIS162AD C\#: Levell 3
CIS165 \(\begin{aligned} & \text { Introduction to IOS Application } \\ & \text { Development }\end{aligned}\)
\(\begin{array}{ll}\text { CIS165DA } & \text { Introduction to Android Application } \\ & \text { Development }\end{array}\)
CIS165DB C\#NB.NET: Windows 8 App Development (3) OR
CIS165DC Xamarin/C\# Cross Platform Development (3) 3

\section*{Restricted Electives}

Credits: 9
Students must select one additional course from the following. Course may not apply to both Required Courses and Restricted Electives areas.
\begin{tabular}{lll} 
CIS156 & Python Programming: Level I & 3 \\
CIS159 & Visual Basic Programming I & 3 \\
CIS166AA & Introduction to JavaScript & 3 \\
CIS166AE & Web Scripting with PHP: Hypertext & \\
& Preprocessor (PHP) & 3
\end{tabular}

Students must select two additional courses from the following. Courses may not apply to both Required Courses and Restricted Electives areas.
CIS225 Business Systems Analysis and Design 3
CIS233DA Internet/Web Development Level II 3
CIS262AD C\# Level II 3
CIS265 Advanced iOS Application Development 3
CIS265DA Advanced Android Application Development 3
CIS276DA MySQL Database 3

CIS276DB SQL Server Database

\section*{Free Electives}

Credits: 0-5
Select additional courses 100-level or higher to complete a minimum of 60 semester credits. Consult with the Program Director or an Academic Advisor.

General Education Requirements Credits: 22-28

\section*{General Education Core \\ Credits: 12-18}

\section*{First-Year Composition}

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
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

\section*{Critical Reading}

Credits: 0-3
CRE101 College Critical Reading and Critical Thinking (3) OR Equivalent as indicated by assessment (0) 0-3

\section*{Mathematics}

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
Equivalent or higher level mathematics course in the
Mathematical Applications [MA] area.
3-6

\section*{General Education Distribution}

Credits: 10
Humanities and Fine Arts
Credits: 3
Any approved general education course in the Humanities, Arts and Design area.

\section*{Social and Behavioral Sciences}

Credits: 3
Any approved general education course in the Social-Behavioral Sciences area.

\section*{Natural Sciences}

Credits: 4
Any approved general education course in the Natural Sciences area.

\title{
Associate in Applied Science (AAS) in Network and Systems Administration
}

\author{
Total Credits: 60-65 \\ 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.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better in all courses within the program.

For students considering university transfer consult with an Academic, Program, or Faculty Advisor at the college and/or university transfer partner.All courses within the Required Courses and Restricted Electives areas are not applicable if taken more than five (5) years prior to the completion of the program. Consult with an Academic Advisor or Program Director for exceptions.
Students may receive credit for courses within the program based on current industry certifications. Consult with an Academic Advisor or Program Director.

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.

\section*{Required Courses}

Credits: 30-37
\begin{tabular}{lll} 
BPC170 & \begin{tabular}{l} 
A+ Exam Prep: Computer Hardware \\
Configuration and Support
\end{tabular} & 3 \\
BPC270 & \begin{tabular}{l} 
A+ Exam Prep: Operating System \\
Configuration and Support
\end{tabular} & \\
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 emphasis) &
\end{tabular}

Students must also select from one of the following areas of emphasis based on their career goals.

Emphasis 1: Cisco System Administration (CCNA) and Security

Credits: 12
CNT150AB Switching, Routing, and Wireless Essentials4 CNT160AB Enterprise Networking, Security, and Automation4 CNT202 Cisco Secure Firewall Appliance Configuration (4) OR
CNT205 Cisco Certified NetworkAssociate Security (4) 4

Emphasis 2: Cisco System Administration (CCNP)

Credits: 16
CNT150AB Switching, Routing, and Wireless Essentials4 CNT160AB Enterprise Networking, Security, and Automation4 CNT200 CCNP ROUTE: Implementing Cisco IP Routing 4
CNT220 CCNP SWITCH: Implementing Cisco IP Switching 4

Emphasis 3: Linux System Administration Credits: 12
CIS238DL Linux System Administration 3
CIS239DL Linux Shell Scripting 3
CIS240DL Linux Network Administration 3
CIS275DL Linux Capstone 3

Emphasis 4: Red Hat Enterprise Linux Administration

Credits: 12
CIS238RH Red Hat System Administration II 3
CIS239DL Linux Shell Scripting 3
CIS240RH Red Hat System Administration III 3
CIS275DL Linux Capstone 3

Emphasis 5: Microsoft System
Administration
Credits: 18
CIS121AH Microsoft PowerShell/ Command Line Operations
MST150++ Any Microsoft Windows Operating System course
\(\begin{array}{ll}\text { MST155DC } & \begin{array}{l}\text { Installation, Storage, and Compute } \\ \text { with Windows Server }\end{array}\end{array}\)
MST157DC Networking with Windows Server 4
MST158DC Identity Management with Windows Server 2016 4

Emphasis 6: VMware Network AdministratorCredits: 12
CIS189 Virtualization and IT Solutions for Digital Businesses
CIS197 VMware ESXI Server Enterprise 3
CIS198 VMware vSphere: Optimize and Scale 3
CIS200 VMware NSX: Install, Configure, Manage 3

\section*{Restricted Electives \\ Credits: 0-8 \\ Students are to select enough Restricted Elective credits} to meet a minimum of 60 credits not used to satisfy Required Courses or selected area of emphasis within the Required Courses. Consult with an Academic, Program, or Faculty Advisor to pick courses that align with your career goals.

\section*{Cisco Electives}

CNT140AB Introduction to Networks 4
CNT150AB Switching, Routing, and Wireless Essentials4
CNT160AB Enterprise Networking, Security, and Automation
CNT171 CCNA Exam Prep 1
CNT200 CCNP ROUTE:
Implementing Cisco IP Routing 4
CNT202 Cisco Secure Firewall Appliance Configuration (4) OR
CNT205 Cisco Certified NetworkAssociate Security (4) 4
CNT206 Cisco Certified Network Associate Wireless 4
CNT220 CCNP SWITCH:
Implementing Cisco IP Switching

Linux Electives
\begin{tabular}{lll} 
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 Systems Administration III (3) & 3 \\
CIS275DL & Linux Capstone & 3
\end{tabular}

Microsoft Electives
\(\begin{array}{ll}\text { MST+++++ } & \text { Any MST Microsoft Technology course } \\ \text { CIS121AB } & \text { Microsoft Command Line Operations }\end{array}\)
CIS121AH Microsoft PowerShell/Command Line Operations

\section*{Security Electives}

CIS270 Essentials of Network and Information Security 3
CIS271DB Information Security Essentials 3
CIS272DB Information Security Principles 3
ITS110 Information Security Fundamentals

VMware Electives
CIS189 Virtualization and IT Solutions for Digital Businesses
CIS197 VMware ESXI Server Enterprise

CIS198 VMware vSphere: Optimize and Scale 3
CIS200 VMware NSX: Install, Configure, Manage 3
\begin{tabular}{llr} 
Other Information Technvology 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 \\
CIS240 & Local Area Network Planning and Design & 3 \\
CIS250 & Management of Information Systems & 3 \\
CIS266 & Network Integration Capstone & 4 \\
CIS290++ & Computer Information Systems Internship & \(1-3\) \\
ITS120 & Legal, Ethical, and Regulatory Issues & 3 \\
CIS290AA & Computer Information Systems Internship & 1 \\
CIS290AB & Computer Information Systems Internship 2 \\
CIS290AC & Computer Information Systems Internship 3 \\
CIS296WB & Cooperative Education & 2 \\
CIS296WC & Cooperative Education & 3 \\
CIS298AA & Special Projects & 1 \\
CIS298AB & Special Projects & 2 \\
CIS298AC & Special Projects & 3
\end{tabular}

General Education Requirements Credits: 22-28

\section*{General Education Core}

Credits: 12-17

\section*{First-Year Composition}

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) OR
ENG111 Technical and Professional Writing (3) 6
(ENG111 does not count as an ENG Transfer option)

\section*{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
COM225 is recommended for students transferring to Northern Arizona University.
\begin{tabular}{ll} 
Critical Reading & Credits: \\
CRE101 & College Critical Reading and Critical Thinking (3) \\
& OR Equivalent as indicated by assessment (0) \(0-3\)
\end{tabular}

\section*{Mathematics}

Credits: 3-6
\begin{tabular}{ll} 
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 \\
Equivalent or higher level mathematics course in the \\
Mathematical Applications [MA] area.
\end{tabular}

\section*{General Education Distribution}

Credits: 10

\section*{Humanities and Fine Arts}

Credits: 3
Any approved general education course from the Humanities, Arts and Design [HU] area.

Social and Behavioral Sciences
Credits: 3
Any approved general education course from the So-
cial-Behavioral Sciences [SB] area.
Credits: 4
Natural Sciences
Any approved general education course from the Natural
Sciences [SG] or [SQ] area.

\section*{Associate in Applied Science (AAS) in Programming and System Analysis}

Total Credits: 61-67
Major Code: 3844

\section*{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 (CCL) in Programming and Systems Analysis Level I and Level II and iOS Application Development are also available.

\section*{Program Notes}

Students must earn a grade of 'C' or better for all courses required within the program.

Consultation with an Academic Advisor is recommended for course selection.

This program replaces: AAS/3164 Computer Programming.

Program Prerequisites
Credits: 0 None.
\begin{tabular}{llr} 
Required Courses & Credits: & 33-34 \\
GBS151 & Introduction to Business & 3 \\
CIS105 & Survey of Computer Information Systems & 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
\end{tabular}
\begin{tabular}{llr} 
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 Networks (3) OR & \\
CNT140AA & Introduction to Networks (4) OR & \\
MST140 & Microsoft Networking Essentials (3) & \(3-4\) \\
CIS225 & Business Systems Analysis and Design (3) OR & \\
CIS225AB & Object-Oriented Analysis and Design (3) OR \\
CIS250 & Management of Information Systems (3) & 3 \\
CIS119DO & Introduction to Oracle: SQL (3) OR & \\
CIS276DA & MySQL Database (3) OR & \\
CIS276DB & SQL Server Database (3) & 3
\end{tabular}

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 the following areas: CIS159 Visual Basic Programming I (3) AND

CIS259
CIS162++ CIS262++
CIS163AA
CIS263AA
CIS165++

\section*{CIS265}

Visual Basic Programming II (3) OR
Any C Programming: Level I course (3) AND
Any C Programming: Level II course (3) OR
Java Programming: Level I (3) AND
Java Programming: Level II (3) OR
Any Mobile Application Development course (3) AND
Advanced iOS Application Development (3) 6

\section*{Restricted Electives}

Credits: 6
Students may not use courses from the Required Courses Area.
CIS224 Project Management Microsoft Project for Windows
CIS151 Computer Game Development-Level I 3
CIS156 Python Programming: Levell 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
CIS259 Visual Basic Programming II
CIS262++ Any C Programming: Level II course
CIS263AA Java Programming: Level II
CIS265 Advanced iOS Application Development
GBS211 Legal, Ethical and Regulatory Issues of the Internet Studies

General Education Requirements Credits: 22-27
General Education Core
Credits: 12-17
First-Year Composition
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
Oral Communication
Credits: 3
Any approved general education course in the Oral Communication area.
\(\begin{array}{ll}\text { Critical } & \text { Reading } \\ \text { CRE101 } & \text { College Critical Reading and Critical Thinking (3) } \\ & \text { OR Equivalent as indicated by assessment (0) } 0-3\end{array}\)

\section*{Mathematics}

Credits: 3-5
MAT150 College Algebra/Functions (5) OR
\begin{tabular}{llr} 
MAT151 & College Algebra/Functions (4) OR & \\
MAT152 & College Algebra/Functions (3) OR & \\
Any MAT course that is equivalent or higher & \(3-5\)
\end{tabular}

General Education Distribution Credits: 10
Humanities and Fine Arts Credits: 3
Any approved general education courses in the Humanities, Arts and Design [HU] area. 3

Social and Behavioral Sciences Credits: 3
ECN211 Macroeconomic Principles (3) OR
ECN212 Microeconomic Principles (3) OR
SBU200 Society and Business (3)
3
Natural Sciences Credits: 4
Any approved general education course in the Natural Sciences (Quantitative) [SQ] area or the Natural Sciences (General) [SG] area.

\section*{Certificate of Completion (CCL) in Programming and Systems Analysis Level I}

\section*{Total Credits: 24 \\ Major Code: 5048}

\section*{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 Application Development and an Associate in Applied Science (AAS) in Programming and Systems Analysis are also available.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better for all courses required within the program.

Consultation with an Academic Advisor is recommended for course selection.

This program replaces: CCL/5084 Software Development, CCL/5207 Computer Programming

\section*{Required Courses}

Credits: 24
CIS105 Survey of Computer Information Systems 3
CIS133DA Internet/Web Development Level I 3
GBS151
CIS126DL Linux Operating System (3) OR
CIS126RH Red Hat System Administration I (3) OR
MST150++ Any Microsoft Windows course (3) 3
CIS150 Programming Fundamentals (3) OR
CIS150AB Object-Oriented Programming Fundamentals (3)3
CIS166++ Any Web Scripting course(s)
CIS119DO Introduction to Oracle: SQL (3) OR
CIS276DA MySQL Database (3) OR
CIS276DB SQL Server Database (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 the following areas:
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
Certificate of
Completion (CCL) in Programming and Systems Analysis Level II

\author{
Total Credits: 36-37 \\ Major Code: 5962
}

\section*{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.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better for all courses required within the program.

Consultation with an Academic Advisor is recommended for course selection.

This program replaces: CCL/5084 Software Development, CCL/5207 Computer Programming.

\section*{Required Courses}

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
CIS133DA Internet/Web Development Level I 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
CIS150 Programming Fundamentals (3) OR
CIS150AB Object-Oriented Programming Fundamentals (3)3
CIS166++ Any Web Scripting course(s) 3
CIS119DO Introduction to Oracle: SQL (3) OR
CIS276DA MySQL Database (3) OR
CIS276DB SQL Server Database (3)
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
The following courses are required for CCL
Programming and Systems Level II
CIS190 Introduction to Local Area Networks (3) OR
CNT140AA Introduction to Networks (4) OR
MST140 Microsoft Networking Essentials (3) 3-4
CIS225 Business Systems Analysis and Design (3) OR
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 the following areas: 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

\section*{Restricted Electives}

Credits: 3
Select one of the courses below that best aligns with academic and professional goals for a total of 3 credits. Students may not choose courses they have taken from the required courses area.
CIS224 Project Management Microsoft Project for Windows
CIS151 Computer Game Development-Level I
CIS156 Python Programming: Level I
CIS159
Visual Basic Programming I
CIS162++ Any C Programming: Level I course CIS163AA Java Programming: Level I
CIS165++ Any Mobile Application Development course
CIS251 Computer Game Development-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

\section*{Certificate of \\ Completion (CCL) in Red Hat Linux Administrator}

\section*{Total Credits: 6-9 \\ Major Code: 5049N}

\section*{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 man-
agement 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.

\section*{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 required 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.
All courses within the Required areas are not applicable if taken more than five (5) years prior to the completion of the program. Consult with an academic advisor or program director for exceptions.

Required Courses
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

\title{
Certificate of \\ Completion (CCL) in Red Hat Linux Engineer
}

\author{
Total Credits: 9-12 \\ Major Code: 5050N
}

\section*{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.

\section*{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 required 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.
All courses within the Required Courses and Restricted Electives areas are not applicable if taken more than five (5) years prior to the completion of the program. Consult with an Academic Advisor or Program Director for exceptions.
This program replaces: CCL/5204N Linux Professional.

Required Courses
Credits: 9-12
CIS1 05 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

\section*{Associate in Applied Science (AAS) in Video Game Production}

\section*{Total Credits: 61-76 \\ Major Code: 3890}

\section*{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.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better for all courses required 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.
This program replaces: AAS/3145 Game Technology.

\section*{Required Courses}

Credits: 28
In addition to the required course work, students must consult with a program advisor to select one of the specializations within the Restricted Electives area.
ART100 Introduction to Computer Graphic Art 1
ART177 Computer-Photographic Imaging (3) OR
CIS120DF Adobe Photoshop Level I (3)
ART/MMT185 Modeling for Animation (3) OR CIS130DA 3D Studio Max: Modeling (3)
Note: ART/MMT185 is recommended for students interested in the Game Art Emphasis and CIS130DA is recommended for students interested in the Coding and Scripting Emphasis
CIS105 Survey of Computer Information Systems 3
CIS107 The Electronic Game Industry 3
CIS151 Computer Game Development Levell 3
CIS251 Computer Game Development Level II 3
CRW176 Narrative for Games 3
GST202 Games, Culture and Aesthetics 3
MUC122 Sound Design I 3
Restricted Electives
Credits: 14-23
Students must select 1 of the following 4 specializations:


General Education Requirements Credits: 19-25
General Education Core
Credits: 12-18

\section*{First-Year Composition}

Credits: 6
ENG101 First-Year Composition (3) OR
ENG107 First-Year Composition (3) AND
ENG102 First-Year Composition (3) OR
ENG108 First-Year Composition (3)
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 OR equivalent as indicated by assessment.

\section*{Mathematics}

Credits: 3-6
Recommended for students who do not intend to transfer.
MAT120 Intermediate Algebra (5) OR
MAT121 Intermediate Algebra (4) OR
MAT122 Intermediate Algebra (3) OR
MAT126 Intermediate Algebra with Review (6) OR satisfactory completion of a higher level mathematics course

Recommended for students who intend to transfer to Arizona State University in the Game Arts, Narrative for Games, or Audio and Music emphases.
MAT140 College Mathematics (5) OR
MAT141 College Mathematics (4) OR
MAT142 College Mathematics (3) OR
MAT145 College Mathematics (5) OR
MAT146 College Mathematics (6)
3-6
Recommended for students who intend to transfer to Arizona State University in the Scripting and Coding emphasis.
MAT150 College Algebra (5) OR
MAT151 College Algebra (4) OR
MAT152 College Algebra (3) OR
MAT155 College Algebra/Functions with Review (5) OR
MAT156 College Algebra/Functions with Review (6) 3-6

\section*{General Education Distribution}

Humanities and Fine Arts
Met by GST202 in Required Courses.

\section*{Social and Behavioral Sciences}

Credits: 7

Any approved Social and Behavioral Sciences.

Natural Sciences
Credits: 4
Any approved general education course from the Natural Sciences Area.

\section*{Certificate of Completion (CCL) in VMware Foundations}

\section*{Total Credits: 3 Major Code: 5035N}

\section*{Description}

The Certificate of Completion (CCL) in VMware Foundations program is designed to help students prepare for VMware industry certifications and work in a variety of information technology environments including software defined data centers. The program introduces vSphere and VMware ESXi server in the enterprise and covers many aspects of virtualization for VMware ESXi server administration. It is designed to prepare students for the VMware Foundations (VCA) certification exam. 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 to help prepare them for multiple industry certification examinations. An Associate in Applied Science (AAS) in Network and Systems Administration is also available.

\section*{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 required within the program.
All courses within the Required Courses areas are not applicable if taken more than five (5) years prior to the completion of the program. Consult with an
academic advisor or program director for exceptions.

\section*{Admission Criteria}

This Certificate of Completion (CCL) is intended for industry professionals with the requisite experience. To pursue this CCL, students must complete the prerequisites to the courses within the Required Courses area as follows OR receive permission of the Program Director:
CIS105 Survey of Computer Information Systems 3+ BPC170 A+ Exam Prep: Computer Hardware Configuration and Support (3) AND+ BPC270 A+ Exam Prep: Operating System Configuration and Support (3) OR MST150++ Any Windows Operation Course (3) 3-6CIS126DL, Linux Operating System
(3) OR CIS126RH Red Hat System Administration I (3) 3+, CIS190 Introduction to Networking (3) OR CNT140AB Introduction to Networks (3) 3. Students also have the option to complete the full CCL in this program, VMware Network Administrator (major code 5032), that includes the prerequisites and required courses.

\title{
Certificate of \\ Completion (CCL) in VMware Systems Administrator
}

\section*{Total Credits: 6 \\ Major Code: 5033N}

\section*{Description}

The Certificate of Completion (CCL) in VMware Systems Administrator program is designed to help students prepare for VMware industry certifications and work in a variety of information technology
environments including software defined data centers. The program introduces vSphere and VMware ESXi server in the enterprise and covers many aspects of virtualization for VMware ESXi server administration. It includes advanced skills for configuring and maintaining a highly available and scalable virtual infrastructure and is designed to prepare students for the VMware VCA and VCP certification exams. 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 to help prepare them for multiple industry certification examinations. An Associate in Applied Science (AAS) in Network and Systems Administration is also available.

\section*{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 required within the program.

All courses within the Required Courses area are not applicable if taken more than five (5) years prior to the completion of the program. Consult with an academic advisor or program director for exceptions.

\section*{Admission Criteria}

This Certificate of Completion (CCL) is intended for industry professionals with the requisite experience. To pursue this CCL, students must complete the prerequisites to the courses within the Required Courses area as follows OR receive permission of the Program Director:
CIS105 Survey of Computer Information Systems, 3+ BPC170 A+ Exam Prep: Computer Hardware Configuration and Support (3) AND+ BPC270 A+ Exam Prep: Operating System Configuration and Support (3) OR MST150++ Any Windows Operation Course (3) 3-6, CIS126DL Linux Operating System
(3) OR CIS126RH Red Hat System Administration

I (3) 3+ CIS190 Introduction to Networking (3) OR CNT140AB Introduction to Networks (3) 3 Students also have the option to complete the full CCL in this program, VMware Network Administrator (major code 5032), that includes the prerequisites and required courses.
\begin{tabular}{lll} 
Required Courses & Credits: & 6 \\
CIS197 & VMware ESXI Server Enterprise & 3 \\
CIS198 & VMware vSphere: Optimize and Scale & 3
\end{tabular}

Certificate of
Completion (CCL) in Web App Development

\section*{Total Credits: 9-12 \\ Major Code: 5835N}

\section*{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.

\section*{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 program.
Students should consult with a Department Advisor in arranging their schedules.

Required Courses
Credits: 9-12
CIS105 Survey of Computer Information Systems (3) OR Permission of Program Director, Department or Division Chair (0)

\title{
Certificate of Completion (CCL) in Web Design
}

\section*{Total Credits: 38-43 \\ Major Code: 5986}

\section*{Description}

The Certificate of Completion (CCL) in Web Design provides students with comprehensive and focused studies in web design, including advanced image manipulation, vector graphics, page layout, video editing and design principles. A Certificate of Completion (CCL) in Web Development and an Associate in Applied Science (AAS) in Web Design/Development are also available.

\section*{Program Notes}

Students must earn a grade of ' C ' or better in each course in the program.
This program replaces: CCL/5159 Web Design, CCL/5168 Web Development and Graphic Design, CCL/5172 Web Design Technologies, CCL/5344 Web Designer, CCL/5345 Advanced Web Designer, CCL/5885 Media Arts: Web Design.

Required Courses
Credits: 36-37
The following courses are required and also fulfill the requirements for the CCL in Web Foundations:
CIS105 Survey of Computer Information Systems 3 CIS120DF Adobe Photoshop Level I: Digital Imaging 3 CIS133DA Internet/Web Development Level I 3
\begin{tabular}{lll} 
CIS136 & Content Management Systems: WordPress & 3 \\
CIS166AA & Introduction to Javascript & 3 \\
CIS233DA & Internet/Web Development Level II & 3 \\
CIS235 & e-Commerce & 3
\end{tabular}

The following courses are required and fulfill the requirements for the CCL in Web Design:
ADA/ART183 Digital Graphic Arts I (3)
OR
ART100 Introduction to Digital Arts (1) AND
ART181 Graphic Design I (3)
OR
ART112 Two-Dimensional Design (3) 3-4
CIS120DB Computer Graphics: Adobe Illustrator 3
CIS120DA Introduction to Digital Video Editing: Adobe Premiere (3) OR
CIS120DK Introduction to Digital Video Editing (3) 3
CIS138DA Desktop Design and Publishing Using Adobe InDesign
CIS220DF Adobe Photoshop Level II:
Advanced Digital Imaging

\section*{Restricted Electives}

Credits: 2-6
Select 2 to 6 credits in consultation with your program advisor to further develop skills in the areas of Adobe, Art, Social Media, Marketing, Business and/or Multimedia.

\section*{Associate in Applied Science (AAS) in Web Design/Development}

\section*{Total Credits: 60-67}

Major Code: 3185

\section*{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.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better in each course in the program.

This program replaces: AAS/3029 Web Design Technologies, AAS/3031 Web Development, AAS/3084 Web Developer, AAS/3085 Web Designer, AAS/3100 Web Development and Graphic Design, AAS/3147 Digital Media/Multimedia Technology, AAS/3824 Media Arts: Web Design.

\section*{Required Courses}

Credits: 21
In addition to the required course work students must consult with a program advisor to select one of the specializations within the Restricted Electives area.

CIS105
CIS120DF
CIS133DA
CIS136
CIS166AA
CIS233DA
CIS235

\section*{Restricted Electives}

\section*{Specialization I: Web Design}

ADA/ART183 Digital Graphic Arts I (3) OR
ART100 Introduction to Digital Arts (1) AND
ART181 Graphic Design I (3) OR
ART112 Two-Dimensional Design (3) 3-4
CIS120DA Introduction to Digital Video Editing: Adobe Premiere (3) OR
CIS120DK Introduction to Digital Video Editing (3) 3
CIS120DB Computer Graphics: Adobe Illustrator 3
CIS120DC Adobe Animate: Digital Animation (3) OR
CIS220DF Adobe Photoshop Level II:
Advanced Digital Imaging (3)
3
CIS138DA Desktop Design and Publishing Using Adobe InDesign

Students must select 2 to 6 credits in consultation with your program advisor to further develop skills in the ar-
eas of Adobe, Art, Social Media, Marketing, Business and/ or Multimedia.

Specialization II: Web Development
CIS119DO 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)
CIS166AE Web Scripting with PHP: Hypertext Preprocessor (PHP)

Programming Language:
Select two courses for a total of 6 credits
CIS150AB Object-Oriented Programming Fundamentals
CIS156 Python Programming: Levell 3
CIS159 Visual Basic Programming I
CIS162++ Any C Programming course
CIS163AA Java Programming: Level I
CIS165++ Any Mobile Application Development course
CIS262AD C\# Level॥
CIS263AA Java Programming: Level II 3
CIS265++ Advanced iOS Application Development 3v

Students must select 3 credits of any course with a CIS prefix in consultation with their program advisor to further develop skills in the areas of Databases, Information Systems, Programming, and/or Operating Systems.

General Education Requirements Credits: 22-28

\section*{General Education Core}

Credits: 12-18
First-Year Composition
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
Oral Communication
Credits: 3
Any approved general education course from the Oral Communication area.

\section*{Critical Reading}

Credits: 0-3
CRE101 College Critical Reading and Critical Thinking (3) OR Equivalent as indicated by assessment (0) 0-3

\section*{Mathematics}

Credits: 3-6
Any approved general education course in the Mathematics Area.
(MAT140, MAT141, MAT142, MAT145, MAT146 College Mathematics) OR (MAT150, MAT151, MAT152, MAT155, MAT156 College Algebral Functions) OR higher math course with the Mathematical Applications [MA] general education designation recommended for students intending to transfer to a four-year institution.
MAT187 Precalculus is recommended for students intending to transfer to ASU (Tempe campus) to earn a BS in Graphic Information Technology.

\section*{General Education Distribution}

Credits: 10

\section*{Humanities and Fine Arts}

Credits: 3
Any approved general education course from the Humanities, Arts and Design area.

\section*{Social and Behavioral Sciences}

Credits: 3
Any approved general education course from the So-cial-Behavioral Sciences area.

PSY101 Introduction to Psychology is recommended for students intending to transfer to ASU (Polytechnic campus) to earn a BS in Technical Communication (User Experience) or to ASU (Tempe campus) to earn a BS in Graphic Information Technology.

\section*{Natural Sciences}

Credits: 4
Any approved general education course from the Natural Sciences area. 4

\section*{Certificate of Completion (CCL) in Web Development}

\section*{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.

\section*{Program Notes}

Students must earn a grade of 'C' or better in each course in the program.
This program replaces: CCL/5051 Web Developer, CCL/5060 Web Developer, CCL/5168 Web Development and Graphic Design, CCL/5346 Web Development.

\section*{Required Courses}

Credits: 36
The following courses are required and included CCL Web Foundations

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: WordPress3
CIS166AA Introduction to Javascript 3
CIS233DA Internet/Web Development Level II 3
CIS235 e-Commerce 3
The following courses are required for CCL Web Development:
CIS166AE Web Scripting with PHP:
Hypertext Preprocessor (PHP)
CIS119DO 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

\section*{Programming Language:}

Select two courses for a total of 6 credits
CIS150AB Object-Oriented Programming Fundamentals
CIS156 Python Programming: Level I
CIS159 Visual Basic Programming I
CIS162++ Any C Programming course
CIS163AA Java Programming: Level I
CIS165++ Any Mobile Application Development course

CIS262AD C\# Level II 3
CIS263AA Java Programming: Level II 3
CIS265++ Advanced iOS Application Development 3

\section*{Restricted Electives}

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 Databases, Information Systems, Programming, and/or Operating Systems. 3

\section*{Certificate of Completion (CCL) in Web Foundations}

\section*{Total Credits: 21 \\ Major Code: 5984}

\section*{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.

\section*{Program Notes}

Students must earn a grade of 'C' or better in each course in the program.

\section*{Required Courses}

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

\section*{Certificate of Completion (CCL) in Windows App Development}

Total Credits: 12-15
Major Code: 5833N

\section*{Description}

The Certificate of Completion (CCL) in Windows App Development prepares students for employment in entry-level coding, programming, and software development positions with an emphasis on Windows platform and cross-platform apps. This CCL will help prepare students to take the MTA Software Development Fundamentals C\# certification. Courses in this certificate can apply toward the Associate in Applied Science (AAS) in Mobile App Development and Certificates of Completion (CCLs) in Cross-Platform App Development and Mobile App Development.

\section*{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.
\begin{tabular}{llr} 
Required & Courses & Credits: 9-12 \\
CIS105 & Survey of Computer Information Systems (3) & OR \\
& Permission of Program Director, \\
& Department or Division Chair (0) & \(0-3\) \\
CIS162AD & C\#: Level I & 3 \\
CIS165DB & C\#NB.NET: Windows 8 App Development (3) OR \\
CIS165DC & Xamarin/C\# Cross Platform Development (3) & 3 \\
CIS262AD & C\# Level II & 3
\end{tabular}

Restricted Electives
Credits: 0
None.
Free Electives
Credits: 0
None.


\section*{Culture and Society}

\title{
Associate in Applied Science (AAS) in Journalism and New Media Studies
}

\author{
Total Credits: 62-68 \\ Major Code: 3120
}

\section*{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.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better for 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
Credits: 40
BPC110 Computer Usage and Applications (3) OR
CIS105 Survey of Computer Information Systems (3) 3
\begin{tabular}{lll} 
ENG235 & Magazine Article Writing (3) OR & \\
JRN234 & Feature Writing (3) & 3 \\
JRN125 & Photo Editing & 3 \\
JRN201 & News Writing & 3 \\
JRN203 & Writing for Online Media & 3 \\
JRN205 & Copyediting & 3 \\
JRN212 & Broadcast Writing & 3 \\
JRN225 & Photojournalism & 3 \\
JRN290 & Publications Portfolio & 1 \\
MCO120 & Media and Society & 3 \\
MCO220 & Cultural Diversity and the Media & 3
\end{tabular}

Any combination of the following courses must be taken
for a total of nine (9) credits:
\begin{tabular}{lll} 
JRN101 & Professional Writing Fundamentals & 1 \\
JRN215 & News Production & 3 \\
JRN240AC & Journalism Internship & 3 \\
JRN298AA & Special Projects & 1 \\
JRN298AB & Special Projects & 2
\end{tabular}

General Education Requirements Credits: 22-28

\section*{General Education Core Credits: 12-18}

First-Year Composition 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
Oral Communication
Credits: 3
COM100 Introduction to Human Communication (3) OR
COM110 Interpersonal Communication (3) OR


\section*{Social and Behavioral Sciences \\ Credits: 3}

ECN211 Macroeconomic Principles (3) OR
ECN212 Microeconomic Principles (3) OR
POS110 American National Government (3) OR
PSY101 Introduction to Psychology (3) OR
SOC101 Introduction to Sociology (3) 3

\section*{Natural Sciences}

Credits: 4
Any approved general education course from the Natural Sciences area.

\section*{Education}

\title{
Associate in Applied Science (AAS) in Early Childhood Education
}

\section*{Total Credits: 60-71 \\ Major Code: 3186}

\section*{Description}

The Associate in Applied Science (AAS) in Early Childhood Education (ECE) program 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.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better for 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 vaccination.

This program replaces: AAS/3007 Early Childhood Education, AAS/3109 Early Childhood Administration and Management, AAS/3124 Early Learning and Development, AAS/3356 Early Childhood Education and Administration: Birth through Age Five, AAS/3836 Early Childhood Education.

Required Courses
Credits: 29-34
CFS/ECH176 Child Development (3)
CFS235 Developing Child: Theory into Practice, Prenatal - Age 8 (3) OR
EED205 The Developing Child: Prenatal to Age Eight (3) 3

EED225 Language and Literacy in the Context of Culture and Relationships

3

CFS101AH Art Activities for the Young Child (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
EED200 Foundations of Early Childhood Education 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, Management and the Environment (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 Fitness (3)

EED222 Introduction to the Exceptional Young Child: Birth to Age Eight (3) OR
EDU222 Introduction to the Exceptional Learner (3) 3
CFS/ECH269 Child Care Seminar (1) AND
CFS/ECH287 Professional Development in Early Childhood Education (1) OR
EED255 Portfolio Development and Writing for the Profession (3) 2-3
CFS/
ECH284AB Early Childhood Teaching Internship (3) OR
EED260 Early Childhood Infant/Toddler Internship (1) AND
EED261 Early Childhood Preschool Internship (1) 2-3
ECH272 Science for the Young Child (1) AND
CFS/ECH273 Math for the Young Child (1) AND
CFS/ECH275 Literacy Development and the Young Child (1) AND
ECH279 Early Childhood Curriculum Development (1) ORBirth/Preschool (3)

ECH140

ECH270
EED280
Learning Made Visible Through Documentation (1) AND
Observing Young Children (1) OR
Standards, Observation and Assessment of Typical/Atypical Behaviors of Young Children Birth Age Eight (3)2-3

\section*{Restricted Electives}

Credits: 9-12
Students must select 9-12 credits from the following and must complete a minimum of 60 credits for the degree.
Students are encouraged to consult with a faculty advisor or student services analyst to identify the requirements for their desired academic and professional goals:
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)

\section*{General Education Requirements Credits: 19-25}

\section*{General Education Core}

Credits: 12-18
First-Year Composition
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
Oral Communication
Credits: 3
Any approved general education course in the Oral Communication area.
Note: COM225 is recommended for students who wish to transfer to the BAE at ASU.

\section*{Critical Reading}

Credits: 0-3
CRE101 College Critical Reading and Critical Thinking (3) OR Equivalent as indicated by assessment (0) 0-3

\section*{Mathematics}

Credits: 3-6
Any approved general education course in the Mathematical Applications [MA] area (3-6)3-6
General Education Distribution

Credits: 7
Humanities and Fine Arts ..... Credits: 3

Any approved general education course in the Humanities, Arts and Design area.3

Recommend: EDU/ENH291 Children's Literature OR EDU/HUM/ STO292 The Art of Storytelling.

\section*{Social and Behavioral Sciences}

Credits: 0
Fulfilled by EDU222 or EED222 in Required Courses area.

\section*{Natural Sciences}

Credits: 4
Any approved general education course in the Natural Sciences area.

\title{
Certificate of Completion (CCL) in Early Childhood Education
}

\section*{Total Credits: 36}

Major Code: 5056

\section*{Description}

The Certificate of Completion (CCL) in Early Childhood Education program 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.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better for 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 vaccination.

This program replaces: CCL/5016 Early Childhood Education, CCL/5356 Early Childhood Education and Administration: Birth through Age Five, CCL/5358 Early Care Specialist, CCL/5374 Early Childhood Education.

\section*{Required Courses}

Credits: 29-34
CFS/ECH176 Child Development (3) OR
CFS235 Developing Child: Theory into Practice, Prenatal - Age 8 (3) OR
EED205 The Developing Child: Prenatal to Age Eight (3) 3
EED200 Foundations of Early Childhood Education 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, Management and the Environment (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 Fitness (3)
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
EED222 Introduction to the Exceptional Young Child: Birth to Age Eight (3) OR
EDU222 Introduction to the Exceptional Learner (3)3
ECH272 Science for the Young Child (1) AND
CFS/ECH273 Math for the Young Child (1) AND
CFS/ECH275 Literacy Development and the Young Child (1) AND
ECH279
Early Childhood Curriculum Development (1) OR

EED278
EED225

ECH140

ECH270
EED280

CFS/ECH269
CFS/ECH287
EED255
CFS/
ECH284AB Early Childhood Teaching Internship (3) OR
EED260
EED261
Early Learning: Curriculum and Instruction Birth/Preschool (3)
Language and Literacy in the Context of Culture and Relationships
Learning Made Visible Through Documentation (1) AND
Observing Young Children (1) OR
Standards, Observation and Assessment of Typical/Atypical Behaviors of Young Children Birth Age Eight (3)
Child Care Seminar (1) AND
Professional Development in Early Childhood Education (1) OR Portfolio Development and Writing for the Profession (3)

\section*{Restricted Electives}

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 Courses Area.
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)

\title{
Certificate of Completion (CCL) in Foundations of Early Childhood Education
}

\author{
Total Credits: 18-19 \\ Major Code: 5054
}

\section*{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. The program requirements meet the 18 hours of coursework required for the Child Development Associate (CDA). 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.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better for 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 vaccination.
This program replaces: CCL/5016 Early Childhood Education, CCL/5019N Early Childhood Classroom Management, CCL/5356 Early Childhood Education and Administration: Birth through Age Five, CCL/5358 Early Care Specialist, CCL/5374 Early Childhood Education, CCL/5710 Foundations of Early Childhood Education, CCL/5714 Family Child Care Management, CCL/5715 Infant and Toddler Development.

\section*{Required Courses}

Credits: 18-19
CFS/ECH176 Child Development (3) OR
CFS235 Developing Child: Theory into Practice, Prenatal - Age 8 (3) OR
EED205 The Developing Child: Prenatal to Age Eight (3) 3

EED200 Foundations of Early Childhood Education 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, Management and the Environment (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 Fitness (3)

3
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
EDU222 Introduction to the Exceptional Learner (3) OR
EED222 Introduction to the Exceptional Young Child: Birth to Age Eight (3) 3
EED260 Early Childhood Infant/Toddler Internship (1) OR
EED261 Early Childhood Preschool Internship (1) 1

\title{
Associate in Applied Science (AAS) in Instructional Assistance
}

\author{
Total Credits: 60 \\ Major Code: 3119
}

\section*{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.

\section*{Program Notes}

Students must earn a grade of 'C' or better for all courses required within the program.

Required Courses
Credits: 16-18
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
Students must select one of the following technology/ computer usage courses
\begin{tabular}{ll} 
BPC110 & Computer Usage and Applications (3) OR \\
CIS105 & Survey of Computer Information Systems (3) OR \\
ETL102 & Educational Application of Technology (1) 1-3
\end{tabular}

Restricted Electives
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
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
\(\begin{array}{ll}\text { EDU111 } & \text { Inquiry-Based Instructional Approaches } \\ & \text { for Science and Mathematics I }\end{array}\)
EDU112 Inquiry-Based Instructional Approaches for Science and Mathematics II 1
EDU233 Structured English Immersion, English as a Second Language, and Bilingual Teaching Methods
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/
STO292 The Art of Storytelling

EDU298++ Special Projects (any suffixed course) 1-3
EED212 Guidance, Management and the Environment

3
EED215 Early Learning: Health, Safety, Nutrition and Fitness

3
EED245 Early Learning: Language Acquisition
EED272 and Literacy Development
3
EED278 Early Learning: Curriculum and Instruction 3
EED280 Standards, Observation \& Assessment of Typical/Atypical Behaviors of Young Children Birth to Age Eight
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 Welfare 3
THP211 Creative Drama 3
ENG213 Introduction to the Study of Language (3) OR
EPD260 Technology in Education Overview (2) 2-3
BPC110 Computer Usage and Applications (3) OR
CIS105 Survey of Computer Information Systems (3) 3
EDU236 Classroom Relationships (3) OR
EDU253 Analyzing Behavior and Managing the Classroom (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
SLG+++ Any SLG/Sign Language course (6-8) 6-8
General Education Requirements Credits: 22-25
General Education Core
Credits: 12-15

\section*{First-Year Composition}

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

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

\section*{Critical Reading}

Credits: 0-3
\(\begin{array}{ll}\text { CRE101 } & \text { College Critical Reading and Critical Thinking (3) } \\ & \text { OR Equivalent as indicated by assessment (0) 0-3 }\end{array}\)

\section*{Mathematics}

Credits: 3
MAT1 12 Mathematical Concepts and Applications (3) OR
Satisfactory completion of a higher-level mathematics course

\section*{General Education Distribution}

Credits: 10
Humanities and Fine Arts
Credits: 3
EDU/
ENH291 Children's Literature
Social and Behavioral Sciences
Credits: 3
HIS103 United States History to 1865 (3) OR
POS110 American National Government (3) OR
GCU/POS113 United States and Arizona Social Studies (3)
3
Natural Sciences
Credits: 4
Any approved general education course from the Natural Sciences area.

\section*{Certificate of \\ Completion (CCL) in Instructional Assistance}

Total Credits: 27
Major Code: 5119

\section*{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.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better for all courses required within the program.
Program Prerequisites

Credits: 0
 None.
Required Courses ..... 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 ..... Credits: 9
Restricted Electives (BPC110 or CIS105), COM225, and (ENG101 or
ENG107) courses are recommended if completing coursework forthe Associate in Arts Elementary Education (AAEE) degree.BPC110 Computer Usage and Applications (3) ORCOM225 Public Speaking -EDU101A+ Tutor Training and Practicum (anysuffixed course)1-3
EDU236 Classroom Relationships ..... 3
EDU282A+ Service-Learning Experience in Education(any suffixed course)1-3
EDU/HUM/
STO292 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

\section*{Health \\ Sciences}


\title{
Certificate of \\ Completion (CCL) in Community Health Paramedicine
}

\section*{Total Credits: 8 \\ Major Code: 5017N}

\section*{Description}

The Certificate of Completion (CCL) in Community Health Paramedicine is designed to provide the knowledge, skills and ability to synthesize 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 in the community setting. This certificate prepares students for a community health paramedic credential.

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 required within the program.

Admission Criteria
Current state Paramedic certification.

\title{
Completion (CCL) in Critical Care Paramedicine
}

\section*{Total Credits: 8 Major Code: 5003N}

Description
The Certificate of Completion (CCL) in Critical Care Paramedicine is designed to provide the knowledge, skills and ability to synthesize 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 in the clinical, out-of-hospital, and inter-facility transport settings. This certificate prepares students for a critical care paramedic credential.

\section*{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 required within the program.

\section*{Admission Criteria}

Current state Paramedic certification.

Required Courses
Credits: 8
PME292 Critical Care Paramedicine 8

\title{
Certificate of \\ Completion (CCL) in Emergency Medical Technology
}

\author{
Total Credits: 13 \\ Major Code: 5643N
}

\section*{Description}

The Certificate of Completion (CCL) in Emergency Medical Technology Preparation 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.

\section*{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 EMT/ FSC104AB or program director-approved rotation.

\section*{Admission Criteria}

None.

Program Prerequisites
Credits: 0
None.

\section*{Required Courses}

Credits: 13
Students who have current validation in Basic Life Sup-
port (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)
EMT/
FSC104AB Applied Practical Studies for Emergency Medical Technology
EMT104LL Emergency Medical Technology Practicum 2
EMT104 Emergency Medical Technology 10
Restricted Electives
Credits: 0
None.

Free Electives
Credits: 0
None.

\title{
Certificate of Completion (CCL) in Emergency Medical Technology Comprehensive
}

Total Credits: 16-17 Major Code: 5058

\section*{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.

\section*{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 EMT/ FSC104AB or program director-approved rotation.

\section*{Required Courses}

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)

\section*{EMT/}

FSC104AB Applied Practical Studies for Emergency Medical Technology
EMT104 Emergency Medical Technology ..... 10
EMT104LL Emergency Medical Technology Practicum 2
Restricted Electives ..... Credits: 3-4
AIS/EMT/FSC/
SWU258 Victimology and Crisis Management ..... 3
BIO160 Introduction to Human Anatomy and Physiology ..... 4
HCC145 Medical Terminology for Health CareProfessionals3
PME190 Introduction to ECG Rhythm Analysis andInterpretation for EMS Professionals3
PME191 Introduction to Pharmacology for EMSProfessionals3
Associate in Applied Science (AAS) in Exercise Science: Health, Fitness and Sports Performance

\author{
Total Credits: 63-72.5
}

\author{
Major Code: 3059
}

\section*{Description}

The Associate in Applied Science (AAS) in Exercise Science: Health, Fitness and Sports Performance program 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 entry-level positions such as personal training within health and fitness clubs, wellness centers, and public and private recreation facilities. This curriculum also provides good preparation for transfer to a fouryear bachelor program.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better required for all courses within the program.
Students can achieve the AGEC-A by completing the following:

An additional course with the Humanities, Arts and Design general studies designation
An additional course with the Natural Science general studies designation
Recommend BIO202 Human Anatomy and Physiology I
An additional course with the Computer/Statistics/ Quantitative Applications general studies designation
Recommend MAT206 Elements of Statistics
OR PSY230 Introduction to Statistics
Program Prerequisites
Credits: 0 None.

Required Courses Credits: 44-48.5
EXS101 Introduction to Exercise Science 3
EXS125 Introduction to Exercise Physiology 3
EXS210 Assessment and Program Design: Muscular Fitness
EXS211 Assessment and Program Design:
EXS212 Assessment and Program Design:
EXS213 \(\begin{aligned} & \text { Cardiorespiratory Fitness } \\ & \text { Assessment and Program Design: }\end{aligned}\)
EXS213 Assessment and Program Design: Weight Management and Motivation 2
EXS214 Instructional Competency: Flexibility and Mind Body Exercises 2
EXS216 Instructional Competency: Muscular Strength and Conditioning 2
EXS218 Instructional Competency: Cardiorespiratory Exercises and Activities 2
EXS290 Introduction to Evidence Based Practice 3
EXS239 Practical Applications of Personal Training Skills and Techniques Internship (3) OR
EXS239AA Practical Applications of Personal Training Skills and Techniques Internship (1) AND
EXS239AB Practical Applications of Personal Training Skills and Techniques Internship (2) 3
HES100 Healthful Living 3
HES210 Cultural Aspects of Health and Illness 3



EXS214 Instructional Competency:Skills and Techniques Internship (3) OR?
:3

HES106
EMT101

N100
FON241
PSY101
BIO181
BIO201
PED101ST
PED101G
PED101KB
PED101PS
PED101TC
PED101YH
PED101YO
PED101YP
PED101YR
PED101B
PEDT01PC Body Sculpligo (1) OR
PED101PC Physical Conditioning (1) OR
PED101BC Boot Camp (1) OR
PED101ZU Zumba Fitness (1) OR
PED101SR Stretch and Relaxation (1) OR
PED101CY Cycling-Indoor (1) OR
PED101YG Gentle Yoga (1) OR
PED101TX Suspension Training (1)
Introductory Nutrition (3) OR
Principles of Human Nutrition (3)
Introduction to Psychology

General Biology (Majors) I (4) OR 1 year of high school biology
Human Anatomy and Physiology I
Strength Training 1
Group Fitness/Aerobics (1) OR
Kickboxing (1) OR
Pilates (1) OR
Tai Chi (1) OR
Hatha Yoga (1) OR
Yoga (1) OR
Power Yoga (1) OR
Restorative Yoga (1) OR


\section*{Free Electives}

Credits: 4
Students must choose four (4) additional credits of general elective courses.
(CHM130 AND CHM130LL), OR (CHM151 and CHM151LL) OR BIO202 are recommended for students who intend to transfer.

\section*{General Education Requirements Credits: 15-20 \\ General Education Core \\ Credits: 12-17}

\section*{First-Year Composition}

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
Cardiopulmonary Resuscitation (CPR)/ Automated External Defibrillator (AED) (0.5) OR
Basic Life Support/Cardiopulmonary
Resuscitation (CPR) for Health Care
Providers (0.50) OR
Current Basic Life Support (BLS) Health
Care Provider/Professional Rescuer
certification (0) 0-0.5
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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)
Critical Reading
Credits: 0-3
\(\begin{array}{ll}\text { CRE101 } & \text { College Critical Reading and Critical } \\ & \text { Thinking (3) OR Equivalent as indicated } \\ & \text { by assessment (0) }\end{array}\)
0-3

\section*{Mathematics}

Credits: 3-5
\(\begin{array}{lll}\text { MAT150 } & \text { College Algebra/Functions (5) OR } & \\ \text { MAT151 } & \text { College Algebra/Functions (4) OR } & \\ \text { MAT152 } & \text { College Algebra/Functions (3) } & 3-5\end{array}\)
General Education Distribution
Humanities and Fine Arts
Credits: 3
Credits: 3
Any approved general education course from the Humanities, Arts and Design area.

\section*{Social and Behavioral Sciences}

Credits: 0
Met by HES100 in Required Courses.

\section*{Natural Sciences}

Met by BlO201 in Required Courses.

\section*{Certificate of \\ Completion (CCL) in Group Fitness Instructor}

\section*{Total Credits: 4 \\ Major Code: 5414N}

Description
The Certificate of Completion (CCL) in Group Fitness Instructor program is designed to provide the fitness instructor with additional, specialized skills in group fitness instruction in both a studio and gym setting, and will help prepare the student for
national group fitness certification.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better for each course listed in the Required Courses area.
This program is not eligible for Title IV Federal Financial Aid.
\begin{tabular}{lll} 
Program & Prerequisites & \multicolumn{1}{c}{ Credits: 15} \\
EXS112 & Professional Applications of Fitness & \\
& Principles & 3 \\
EXS125 & Introduction to Exercise Physiology & 3 \\
EXS130 & Strength Fitness-Physiological Principles & \\
& and Training Techniques & 3 \\
EXS220 & Personal Trainer Practicum & 3 \\
FON105 & Nutrition Principles for Fitness Professionals & 3
\end{tabular}

Required Courses
Credits: 4
EXS190 Small Group Personal Training in a Studio Setting 2
EXS192 Small Group Personal Training in a Gym 2

\section*{Certificate of}

Completion (CCL) in Health Services Management

\section*{Total Credits: 16-22 \\ Major Code: 5336}

\section*{Description}

The Certificate of Completion (CCL) in Health Services Management program prepares students to become candidates for leadership, supervisory and management positions in health services settings. The health services supervisor must develop skills to be an effective leader and planner, capable of coaching and developing motivated and committed employees and employee teams.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better in all courses within the program.
HCC courses may be taken prior to admission or concurrently during enrollment in the program.

\section*{Required Courses}

Credits: 16-22
HCC130 Fundamentals in Health Care Delivery (3) OR
HCC130AA Health Care Today (0.5) AND
HCC130AB Workplace Behaviors in Health Care (0.5) AND
HCC130AC Personal Wellness and Safety (0.5) AND
HCC130AD Communication and Teamwork in Health Care Organizations (0.5) AND
HCC130AE Legal Issues in Health Care (0.5) AND
HCC130AF Decision making in the Heath Care Setting (0.5)
OR
Work Experience or equivalent course education as evaluated by the GateWay Health Core Curriculum Coordinator (0)

HCC145 Medical Terminology for Health Care Professionals (3) OR
Work Experience or equivalent course education as evaluated by the GateWay Health Core Curriculum Coordinator (0) 0-3

HRC101
HSM122
HSM125

HSM222
HSM226

MGT276

Overview of Healthcare Compliance 1
Health Services Supervision 3
Current Issues in Health Services Management
Health Services Management
Ethics and Legalities of Health Services Management

\section*{Certificate of Completion (CCL) in Nurse Assisting}

\section*{Total Credits: 2-6 \\ Major Code: 5963N}

\section*{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 MCCCD Nurse Assisting program is approved by the Arizona State Board of Nursing.

\section*{Waiver of Licensure/Certification Guarantee:}

Admission or completion from the MCCCD 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).

\section*{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.

\section*{Health and Safety Requirements for MCCCD 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 MCCCD 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.

\section*{Grade Requirements:}

Student must obtain a 'C' grade or better in all courses.

\section*{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.

\section*{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.

\section*{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.

\section*{Admission Criteria}

Application and acceptance into the program, high school graduate or GED, and meet current health and safety course requirements.

Required Courses
Credits: 2-6
NUR158 Nurse Assisting (6) OR
Advanced Placement course:
NCE150 Advanced Placement: Nurse Assisting (2)
2-6

\section*{Associate in Applied Science (AAS) in Nursing}

\section*{Total Credits: 62-75}

Major Code: 3812

\section*{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), 3343 Peachtree Road NE, Suite 850, Atlanta, GA 30326;
(404.975.5000); email: info@acennursing.org.

\section*{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

\section*{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.

\section*{Career \& Technical Education}

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 MCCCD 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).

\section*{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.

\section*{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 MCCCD background check policy.

\section*{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.

\section*{REGISTERED NURSE PATHWAY}

\section*{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 com-munity-based healthcare settings. The AAS degree in Nursing provides the graduate with an educational foundation for articulation into the university setting.

\section*{Program Notes}

Students must earn a grade of 'C' or better in all courses required within the program.

\section*{Course Fee Information:}

Please see class schedule for information regarding course fees.

\section*{MaricopaNursing is aligned with Nurse of the Future Competencies:}

Patient-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.

\section*{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 requirement by providing high school diploma/transcripts or GED completion OR by signing the nursing application page containing the 'Declaration of High School Graduation or GED completion'. In some instances, high school diploma/transcripts or proof of GED completion may be required.

Formal application and admission to the program is required; all program prerequisites must be completed prior to submission of application.

A passing score on a nursing program admission test is required to complete an application.
Applicants for Advanced Placement must receive a passing score on a practical nursing content exam for placement into Block 3.

The final decision rests with the Nursing Program Chair at the College to which the student is accepted.
The Nursing Program Chair reserves the right to deny acceptance of an admission application if the applicant was previously dismissed for issues relating to academic integrity, unsafe patient care, and/or two (2) or more failures from any nursing program.

All applicants holding or receiving a certificate as a Nursing Assisting and/or license as a Practical Nurse must remain in good standing with the Regulatory Board. Once enrolled, students receiving any disciplinary actions against their certificate or license must notify the Nursing Program Chair within five (5) school days. The Nursing Program Chair reserves the right to restrict the student's participation in clinical experiences and involvement in patient care until the certificate and/or license is valid and unrestricted.

Program Prerequisites Credits: 10-20
The credit-hour range is subject to change depending on the student's educational experience.
BIO156 Introductory Biology for Allied Health (4) OR
BIO181 General Biology (Majors) I (4) OR
One year of high school biology
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
One year of high school chemistry
ENG101 First-Year Composition (3) OR
ENG107 First-Year Composition for ESL (3)
MAT140 College Mathematics (5) OR
MAT141 College Mathematics (4) OR
MAT142 College Mathematics (3) OR
Satisfactory completion of higher level math course 3-5
Required Courses Credits: 36
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
General Education Requirements Credits: 16-19
General Education Core Credits: 3-6
First-Year Composition
Credits: 3
Three (3) credits of First Year Composition are met by

ENG101 or ENG107 in Program Prerequisites area.
ENG102 First-Year Composition (3) OR
ENG108 First-Year Composition for ESL (3)
Oral Communication
Credits: 0
Waived.
Critical Reading Credits: 0-3
CRE101 College Critical Reading and Critical Thinking (3)
OR Equivalent as indicated by assessment (0) 0-3

\section*{Mathematics}

Credits: 0
Met by MAT140 OR MAT141 OR MAT142 OR Satisfactory completion of higher level mathematics course in Program Prerequisites area.

\section*{General Education Distribution}

Credits: 13

\section*{Humanities and Fine Arts}

Credits: 2
Any approved general education course in the Humanities, Arts and Design area.
\begin{tabular}{llr} 
Social and & Behavioral Sciences & Credits: 3 \\
PSY101 & Introduction to Psychology & 3 \\
Natural & \\
Sciences & Credits: 8 \\
BIO202 & Human Anatomy and Physiology II (4) AND \\
BIO205 & Microbiology (4) &
\end{tabular}

\section*{Certificate of Completion (CCL) in Nursing Refresher}

\section*{Total Credits: 10}

Major Code: 5739N

\section*{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).

\section*{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.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better for all courses within the program.

This program is not eligible for Title IV Federal Financial Aid.

Massachusetts Nurse of the Future Core Competencies are integrated into the student learning outcomes/program competencies.

\section*{Course Fee Information:}

Please see class schedule for information regarding course fees.

\section*{Admission Criteria}

Formal application and admission to the program is required.
All applicants must have an active or inactive Regis-
tered Nurse (RN) license that is eligible for renewal per Regulatory Board requirements or has successfully passed the RN licensing examination, but has never worked as a registered nurse.
All applicants must be eligible for issuance of an active or temporary registered nurse license.

All applicants must be in good standing with the Regulatory Board. RN's with restricted licenses are not eligible for the program. Once enrolled, students receiving any disciplinary actions against their license must notify the Nursing Program Chair within five (5) school days. The Nursing Program Chair reserves the right to restrict the student's participation in clinical experiences and involvement in patient care until the license is valid and unrestricted.

\section*{Health and Safety Requirements for the Nursing Refresher Program:}
1. Students must submit a Health and Safety Documentation 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. Students must provide a copy of their current and valid Level One Finger Print Clearance Card upon application.

\section*{Required Courses}

Credits: 10
NUR295 Registered Nurse Refresher

\title{
Associate in Applied Science (AAS) in Paramedicine
}

\author{
Total Credits: 63-75 \\ Major Code: 3889
}

\section*{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.

\section*{Program Notes}

Students must earn a grade of 'B' or better in all PME courses required within the program.

This program replaces: AAS/3065 Advanced Emergency Medical Technology, AAS/3112 Emergency Response and Operations.

\section*{Admission Criteria}

Students must be current and in good standing with the Arizona Department of Health Services Bureau of Emergency Medical Services-Certified as an Emergency Medical Technician. EMT certification preparatory courses are available at Maricopa County Community Colleges. Contact an academic advisor for details.

Students must complete an application and selection process.
\begin{tabular}{|c|c|}
\hline Required & Courses Credits: 45-51 \\
\hline BIO160 & Introduction to Human Anatomy and Physiology \\
\hline PME190 & Introduction to ECG Rhythm Analysis and Interpretation for EMS Professionals (3) 0-3 \\
\hline PME191 & Introduction to Pharmacology for EMS Professionals (3) \\
\hline PME201 & Advanced Cardiac Life Support (ACLS) Initial Provider in Paramedicine \\
\hline PME202 & Pediatric Advanced Life Support (PALS) Initial Provider in Paramedicine \\
\hline PME203 & Pediatric Emergencies for Prehospital Professionals (PEPP) Initial Provider in Paramedicine \\
\hline PME204 & Neonatal Resuscitation Provider (NRP) in Paramedicine \\
\hline PME205 & Advanced Medical Life Support (AMLS) Initial Provider in Paramedicine \\
\hline PME206 & International Trauma Life Support (ITLS) Provider/Pre-Hospital Trauma Life Support (PHTLS) \\
\hline PME240 & Pharmacology in Paramedicine 3 \\
\hline PME245 & Airway and Ventilatory Management in Paramedicine \\
\hline PME250 & Comprehensive Patient Assessment in Paramedicine \\
\hline PME251 & Medical Emergencies in Paramedicine I 4 \\
\hline PME252 & Medical Emergencies in Paramedicine II 4 \\
\hline PME253 & Medical Emergencies in Paramedicine III 4 \\
\hline PME254 & Technical Operations in Paramedicine 2.5 \\
\hline PME260 & Trauma Patient Management in Paramedicine \\
\hline PME270 & Immersive Total Patient Management Experience (ITPME) 2 \\
\hline PME280 & Preparation for Paramedicine Practicum 1 \\
\hline PME281 & Paramedicine Clinical Practicum: Comprehensive (2) OR \\
\hline PME281AA & Paramedicine Clinical Practicum: Phase I (1) AND \\
\hline PME281AB & Paramedicine Clinical Practicum: Phase II (1) 2 \\
\hline PME288 & Paramedicine Comprehensive Field Internship Practicum \\
\hline PME289 & Preparation for Paramedic National Credentialing \\
\hline
\end{tabular}

\section*{Restricted Electives}

Credits: 20
Students must choose 20 industry/job related course credits from any MCCCD 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 the business department chair or designee.

General Education Requirements Credits: 18-24
General Education Core
Credits: 12-18

\section*{First-Year Composition}

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
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
COM225 recommended for students who intend to transfer to satisfy the AGEC-A literacy requirement
COM110 or COM230 recommended for students who do not intend to transfer.

Critical Reading
Credits: 0-3
CRE101 College Critical Reading and Critical Thinking (3) OR Equivalent as indicated by assessment (0) 0-3

\section*{Mathematics}

Credits: 3-6
MAT126 Intermediate Algebra with Review (6) OR
MAT120 Intermediate Algebra (5) OR
MAT121 Intermediate Algebra (4) OR
MAT122 Intermediate Algebra (3)
3-6
MAT150, or MAT151, or MAT152 recommended for students who intend to transfer

\section*{General Education Distribution}

Humanities and Fine Arts
Credits: 6

Any approved general education course from the Humanities, Arts and Design area.

\section*{Social and Behavioral Sciences}

Credits: 3
Any approved general education course from the So-cial-Behavioral Sciences area.

\author{
Natural Sciences
}

Credits: 0
Met by BIO 160 in the Required Courses area.

\title{
Certificate of Completion (CCL) in Paramedicine
}

\section*{Total Credits: 45 \\ Major Code: 5990}

\section*{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, 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.

\section*{Program Notes}

Students must earn a grade of 'B' or better in all PME courses required within the program.

This program replaces: CCL/5513 Paramedicine.

\section*{Admission Criteria}

Students must be current and in good standing with the Arizona Department of Health Services

Bureau of Emergency Medical Services-Certified as an Emergency Medical Technician. EMT certification preparatory courses are available at Maricopa County Community Colleges. Contact an academic advisor for details.

Students must complete an application and selection process.

\section*{Required Courses \\ Credits: 45}

BIO160 Introduction to Human Anatomy and Physiology
PME201 Advanced Cardiac Life Support (ACLS) Initial Provider in Paramedicine
PME202 Pediatric Advanced Life Support (PALS) Initial Provider in Paramedicine
PME203 Pediatric Emergencies for Prehospital Professionals (PEPP) Initial Provider in Paramedicine
PME204 Neonatal Resuscitation Provider (NRP) in Paramedicine
PME205 Advanced Medical Life Support (AMLS) Initial Provider in Paramedicine
PME206 International Trauma Life Support (ITLS) Provider/Pre-Hospital Trauma Life Support (PHTLS)
PME240 Pharmacology in Paramedicine 3
PME245 Airway and Ventilatory Management in Paramedicine
PME250 Comprehensive Patient Assessment in Paramedicine
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
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
PME289 Preparation for Paramedic National Credentialing

\title{
Certificate of Completion (CCL) in Personal Trainer: Advanced
}

\author{
Total Credits: 31-31.5 Major Code: 5445
}

\section*{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 includes the foundational courses required for the CCL in Personal Trainer coupled with some additional advanced and specialized courses.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better for all courses within the program.

Required Courses
Credits: 31-31.5
EMT101 Basic Life Support/Cardiopulmonary Resuscitation (CPR) for Health Care Providers (0.50) OR
HES106 Cardiopulmonary Resuscitation (CPR)/Automated External Defibrillator (AED) (0.5) OR Current Basic Life Support (BLS) Health Care Provider/Professional Rescuer certification (0) 0-0.5
EXS101 Introduction to Exercise Science 3
EXS125 Introduction to Exercise Physiology 3
\(\begin{array}{ll}\text { EXS210 Assessment and Program Design: } \\ & \text { Muscular Fitness }\end{array}\)
EXS211 Assessment and Program Design: Flexibility and Balance

EXS212

EXS214
EXS216
EXS218

EXS239

EXS239AA

EXS239AB

FON100
FON241
HES100
PED101ST
PED101BC
PED101BS
PED101CY
PED101GF
PED101KB
PED101PC
PED101PS
PED101SR
PED101TC
PED101TX
PED101YG
PED101YH
PED101YO
PED101YP
PED101YR Restorative Yoga (1) OR
PED101ZU Zumba® Fitness (1)

\section*{Certificate of \\ Completion (CCL) in Practical Nursing}

Total Credits: 35-45
Major Code: 5957

\section*{Description}

The Certificate of Completion (CCL) in Practical Nursing Program is available at seven of the Maricopa Community Colleges. Clinical experiences are provided in a variety of healthcare settings. Practical Nursing Program graduates are eligible to apply for the national exam for the practical nurse license. Licensing requirements are the exclusive responsibility of the State Board of Nursing.
The Certificate of Completion Practical Nursing Program is approved by the Arizona State Board of Nursing.

\section*{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
Scottsdale Community College

\section*{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

\section*{Career \& Technical Education}
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 MCCCD 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).

\section*{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.


\section*{Health and Safety Requirements for the 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.

\section*{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 MCCCD background check policy.

\section*{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.

\section*{PRACTICAL NURSE EXIT OPTION}

Following completion of the practical nurse level program of study, the student is eligible to apply for licensure as a practical nurse. Licensed Practical Nurses (LPN) may be employed in acute, long-term, and community-based health care settings under the direction of a registered nurse. Practical Nurses function within their legal scope of practice and use
professional standards of care in illness care and health promotion activities for clients and families across the life span.

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), 3343 Peachtree Road NE, Suite 850, Atlanta, GA 30326;
(404.975.5000); email: info@acennursing.org.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better in all courses within the program.

Course Fee Information:Please see class schedule for information regarding course fees.
Maricopa Nursing is aligned with Nurse of the Future Competencies: Patient-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.

\section*{Admission Criteria}

High School diploma or GED is required for the Certificate of Completion in Practical Nursing. Applicants must signify that they meet this requirement by providing high school diploma/transcripts or GED completion OR by signing the nursing application page containing the 'Declaration of High School Graduation or GED completion'. In some instances, high school diploma/transcripts or proof of GED completion may be required.

Formal application and admission to the program is required; all program prerequisites must be completed prior to submission.

A passing score on a nursing program admission test is required to complete an application.

The Nursing Program Chair reserves the right to deny acceptance of an admission application if the applicant was previously dismissed for issues relating to academic integrity, unsafe patient care, and/or two (2) or more failures from any nursing program.
All applicants holding or receiving a certificate as a Nursing Assistant and/or license as a Practical Nurse must remain in good standing with the Board of Nursing. Once enrolled, students receiving any disciplinary actions against their certificate or license must notify the Nursing Program Chair within five (5) school days. The Nursing Program Chair reserves the right to restrict the student's participation in clinical experiences and involvement in patient care until the certificate and/or license is valid and unrestricted.

\section*{Program Prerequisites Credits: 10-20}

The credit-hour range is subject to change depending on the student's educational experience.
BIO156 Introductory Biology for Allied Health (4) OR
BIO181 General Biology (Majors) I (4) OR One year of high school biology
BIO201 Human Anatomy and Physiology I
CHM130 Fundamental Chemistry (3) AND
CHM130LL Fundamental Chemistry Laboratory (1) OR
CHM130AA Fundamental Chemistry with Lab (4) OR One year of high school chemistry 0-4
ENG101 First-Year Composition (3) OR
ENG107 First-Year Composition for ESL (3)
MAT140 College Mathematics (5) OR
MAT141 College Mathematics (4) OR
MAT142 College Mathematics (3) OR
Satisfactory completion of higher level mathematics course 3-5
Students that are admitted into the Maricopa Nursing Program for Fall 2015 and Spring 2016, AND completed MAT120/121/122 prior to Fall 2015 as an admission requirement, may complete the program without completing MAT140/141/142 as a graduation requirement, by waiver of the program director.

\section*{Required Courses}

Credits: 25
BIO202 Human Anatomy and Physiology II 4
NUR152 Nursing Theory and Science I 9
NUR172 Nursing Theory and Science II 9
NUR191 Practical Nursing Transition 3

\section*{Certificate of \\ Completion (CCL) in Tactical Emergency Casualty Care}

\section*{Total Credits: 2.5 Major Code: 5998N}

\section*{Description}

The Certificate of Completion (CCL) in Tactical Emergency Casualty Care is designed to provide the knowledge, skills and ability to synthesize 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 in the tactical emergency setting. This certificate prepares students for a tactical emergency casualty care paramedic credential.

\section*{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 required within the program.

\section*{Admission Criteria}

Current state Paramedic certification.

Credits: 2.5
PME293 Tactical Emergency Casualty Care (TECC) 2.5

\section*{Science, Technology, \\  Engineering and Mathematics}

\title{
Associate in Applied Science (AAS) in Electronics Engineering Technology
}

\section*{Total Credits: 61-65 \\ Major Code: 3224}

\section*{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.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better for all courses within the program.
Required CoursesECE102 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
PHY111 General Physics I ..... 4
PHY112 General Physics II (4) OR
CHM130 Fundamental Chemistry (3) AND
CHM130LL Fundamental Chemistry Laboratory (1) ..... 4
Restricted Electives Credits: 0-3
Students should work with Program Director to selectcourses 100-level or higher in the ECE, EEE, ELE or MATprefix that are not listed in the required or generaleducation courses areas to complete a minimum of 60semester credits but no more than a total of 64 semestercredits.
General Education Requirements Credits: 23-27
General Education CoreCredits: 17-21
First-Year CompositionENG101 First-Year Composition (3) OR
ENG107 First-Year Composition for ESL (3) AND
ENG102 First-Year Composition (3) ORENG108 First-Year Composition for ESL (3) ORENG111 Technical and Professional Writing (3) 6
Oral CommunicationCredits: 3
COM100 Introduction to Human Communication (3) ORCOM110 Interpersonal Communication (3) ORCOM225 Public Speaking (3) ORCOM230 Small Group Communication (3)3
Critical ReadingCredits: 0-3
CRE101 College Critical Reading and CriticalThinking (3) OR Equivalent as indicatedby assessment (0)0-3

\section*{Mathematics}

Credits: 8-9
MAT220 Calculus with Analytic Geometry I (5) OR
MAT221 Calculus with Analytic Geometry I (4) 4-5
MAT231 Calculus with Analytic Geometry I
General Education Distribution
Credits: 6
Humanities and Fine Arts
Credits: 3
Any approved general education course from the Humanities, Arts and Design area.

Social and Behavioral Sciences
Credits: 3
Any approved general education course from the Social and Behavioral Sciences area.

\section*{Natural Sciences}

Credits: 0
Met by PHY111 AND (PHY112 OR (CHM130 AND CHM130LL)) in Required Courses area.

\section*{Associate in Applied Science (AAS) in Electronics Technology}

\section*{Total Credits: 67-73}

Major Code: 3220

\section*{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.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better for all courses required within the program.
\begin{tabular}{llr} 
Required & Courses & Credits: \\
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 \\
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 \\
ELE261 & Communication Systems & 4 \\
ELE263 & Digital Data Communications & 4 \\
GTC/OSH/ & & \\
MIT106 & Industrial Safety & 2
\end{tabular}

\section*{General Education Requirements Credits: 22-28}

\section*{General Education Core \\ Credits: 12-18}

\section*{First-Year Composition}

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) OR
ENG111 Technical and Professional Writing (3)
6

\section*{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

\section*{Critical Reading}

Credits: 0-3
\(\begin{array}{ll}\text { CRE101 } & \text { College Critical Reading and Critical } \\ & \text { Thinking (3) OR Equivalent as indicated } \\ & \text { by Assessment (0) }\end{array}\)

Mathematics
Credits: 3-6
MAT120 Intermediate Algebra (5) OR
MAT121 Intermediate Algebra (4) OR
MAT122 Intermediate Algebra (3) OR
MAT126 Intermediate Algebra with Review (6) OR

Equivalent or higher level mathematics course in the Mathematical Applications [MA] area. 3-6

\section*{General Education Distribution}

Credits: 10
Humanities and Fine Arts
Credits: 3
Any approved general education course from the Humanities and Fine Arts area.

\section*{Social and Behavioral Sciences}

Credits: 3
Any approved general education course from the Social and Behavioral Sciences area.

Natural Sciences
Credits: 4

\section*{Certificate of \\ Completion (CCL) in Electronics Technology}

\section*{Total Credits: 24 \\ Major Code: 5591}

\section*{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.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better for all courses required within the program
Required CoursesCredits: 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 ..... 42
Associate in Applied Science (AAS) in Geospatial Technologies
Total Credits: 60-70
Major Code: 3108

\section*{Description}

The Associate in Applied Science (AAS) in Geospatial Technologies prepares students for entry level positions within the field of Geographic Information Systems. The Geospatial Technologies program will also provide students with the educational foundation necessary for a four-year degree. A Certificate of Completion (CCL) is also available.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better for all courses within the program.
Program is designed for students with varying skills; consult with a program director.
Depending on a student's educational experience, additional coursework may be needed to be eligible for MAT220 or MAT221.

\section*{Required Courses}

Credits: 23-25
In addition to the required course work students must consult with a program advisor to select one of the specializations within the Restricted Electives area.
CIS105 Introduction to Computer Information Systems

3
\begin{tabular}{lll} 
GCU102 & Introduction to Human Geography & 3 \\
GIS205 & Geographic Information Technologies & 3 \\
GIS211 & Geographic Information Science I & 4 \\
GIS220 & Introduction to ArcPy Scripting & 3 \\
GIS222 & Geographic Information Science II & 3 \\
GPH113 & Introduction to Physical Geography & 4 \\
GCU/ & & \\
GPH298++ & Special Projects (any suffixed course) & \(1-3\)
\end{tabular}

\section*{Restricted Electives \\ Credits: 13-17}

Specialization I: Technician
\begin{tabular}{lll} 
CIS163AA & Java Programming: Level I & 3 \\
CIS117DM & Microsoft Access: Database Management & 3 \\
GIS223 & Introduction to Digital Image Processing & 3 \\
GIS211 & Geographic Information Science I & 4
\end{tabular}

Specialization II: Analyst/Developer
CSC110 Introduction to Computer Science (Java) 3
CIS276DB SQL Server Database 3
GIS223 Introduction to Digital Image Processing 3
GIS211 Geographic Information Science I 4

\section*{Related Area:}
\begin{tabular}{lll} 
GPH212 & Introduction to Meteorology I (4) OR \\
GPH213 & Climate and Weather (3) OR & \\
GPH267 & Extreme Weather and Climate (3) & \(3-4\)
\end{tabular}

Specialization III: Transfer Emphasis
CSC110 Introduction to Computer Science (Java) 3
CSC205AB Object Oriented Programming and Data Structures
GPH211 Landform Processes

\section*{Related Area:}
\begin{tabular}{lll} 
GPH212 & Introduction to Meteorology I (4) OR \\
GPH213 & Climate and Weather (3) OR & \\
GPH267 & Extreme Weather and Climate (3) & 3-4
\end{tabular}

\section*{Free Electives \\ Credits: 0-2}

Students must select 0-2 credits of any course with a CIS prefix in consultation with their program advisor to further develop skills in the areas of Geographic Information Systems (GIS).

General Education Requirements Credits: 22-28
General Education Core
Credits: 12-18

\section*{First-Year Composition}

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)

\section*{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

\section*{Critical Reading \\ Credits: 0-3 \\ \(\begin{array}{ll}\text { CRE1 } 01 & \text { College Critical Reading and Critical Thinking (3) } \\ & \text { OR Equivalent as indicated by assessment }\end{array}\)}

\section*{Mathematics}

Credits: 3-6
Specialization 1: Technician:
Any approved general education course in the Mathe-
matics [MA] area

Specialization 2: Analyst/Developer:
\begin{tabular}{ll} 
MAT120 & Intermediate Algebra (5) OR \\
MAT121 & Intermediate Algebra (4) OR \\
MAT122 & Intermediate Algebra (3) OR \\
MAT126 & Intermediate Algebra with Review (6) OR \\
Appropriate District Placement & \(3-6\)
\end{tabular}

Specialization 3: Transfer Emphasis:
MAT220 Calculus with Analytic Geometry I (5) OR
MAT221 Calculus with Analytic Geometry I (4) 4-5
General Education Distribution Credits: 10

Humanities and Fine Arts
Any approved general education course from the Humanities, Arts and Design [HU] area.

Social and Behavioral Sciences
Credits: 3
Any approved general education course from the So-cial-Behavioral Sciences [SB] area.

\section*{Natural Sciences}

Credits: 4
Any approved general education course from the Natural Science [SG] or [SQ] area.

\title{
Certificate of Completion (CCL) in Geospatial Technologies
}

\author{
Total Credits: 33-45 \\ Major Code: 5135
}

\section*{Description}

The Certificate of Completion (CCL) in Geospatial Technologies program provides a solid foundation in Geographic Information Systems (GIS) concepts, not simply GIS software. This program equips students with fundamental GIS abilities that can be applied in a variety of environments where spatial data analysis is required.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better for all courses required within the program.

Program is designed for students with varying skills; consult with a program director.
Depending on a student's educational experience, additional coursework may be needed to be eligible for MAT220 or MAT221.

\section*{Required Courses}

Credits: 24-26
In addition to the required coursework students must consult with a program advisor to select one of the specializations within the Restricted Electives area.
CIS105 Survey of Computer Information Systems 3
GCU102 Introduction to Human Geography 3
GIS205 Geographic Information Technologies 3
GIS211 Geographic Information Science I 4
GIS220 Introduction to ArcPy Scripting 3
GIS222 Geographic Information Science II 3
GPH113 Introduction to Physical Geography 4
GCU/
GPH298++ Special Projects (any suffixed course) 1-3

Restricted Electives
Credits: 9-19
Specialization I: Technician
CIS163AA Java Programming: Levell 3
CIS117DM Microsoft Access: Database Management 3
GIS223 Introduction to Digital Image Processing 3

Specialization II: Analyst/Developer
CSC110 Introduction to Computer Science (Java) 3
CIS276DB SQL Server Database 3
GIS223 Introduction to Digital Image Processing 3
MAT120 Intermediate Algebra (5) OR
MAT121 Intermediate Algebra (4) OR
MAT122 Intermediate Algebra (3) OR
MAT126 Intermediate Algebra with Review (6) OR
Appropriate District Placement 0-6

Related Area:
GPH212 Introduction to Meteorology I (4) OR
GPH213 Climate and Weather (3) OR
GPH267 Extreme Weather and Climate (3) 3-4

Specialization III: Transfer Emphasis
CSC110 Introduction to Computer Science (Java) 3
CSC205AB Object Oriented Programming and Data Structures

\section*{Related Area:}

GPH212 Introduction to Meteorology I (4) OR
GPH213 Climate and Weather (3) OR
GPH267 Extreme Weather and Climate (3) 3-4
MAT220 Calculus with Analytic Geometry I (5) OR
MAT221 Calculus with Analytic Geometry I (4) 4-5

\title{
Certificate of \\ Completion (CCL) in Landscape Aide
}

Total Credits: 13-16
Major Code: 5069N

\section*{Career \& Technical} Education

\section*{Description}

The Certificate of Completion (CCL) in Landscape Aide program emphasizes the basic skills of Plant Science and Plant Identification, incorporating these skills into the practical study of Landscape Design and Construction. The program is designed to prepare students to become employed as technicians, salespeople and supervisors in nurseries or landscape design/build firms. Students may continue their studies with the Certificate of Completion in Landscape Specialist program. In addition, the program prepares students for jobs with government agencies or other agencies involved with the technical phases of the Landscape Horticulture industry.

\section*{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 program.
\begin{tabular}{lcr} 
Required & Courses & Credits: \\
AGL181 & Landscape Construction Techniques & 3 \\
AGL189 & Landscape Design I & 3
\end{tabular}

AGL181 Landscape Construction Techniques 3
AGL189 Landscape Design I

AGS164
AGS183
CHM130

Plant Growth and Development Urban Plant Identification and Use Fundamental Chemistry (3) OR Permission of Program Director 0-3

\title{
Associate in Applied Science (AAS) in Landscape Horticulture
}

\author{
Total Credits: 62-68 \\ Major Code: 3030
}

\section*{Description}

The Associate in Applied Science (AAS) in Landscape Horticulture 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, or landscape management 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 industry.


\section*{Program Notes}

Students must earn a grade of 'C' or better in all courses within the program.

The course SSH111 cannot be used to satisfy both the Humanities, Arts and Design and Social-Behavioral Sciences areas.

Must take three (3) credits from either Humanities, Arts and Design area or Social-Behavioral Sciences area.
\begin{tabular}{lll} 
Required & Courses & \multicolumn{1}{c}{ Credits: 43-46 } \\
AGB130 & Establishing and Running an Agribusiness & 3 \\
AGB139 & Agribusiness Computer Operations & 3 \\
AGL181 & Landscape Construction Techniques & 3 \\
AGL189 & Landscape Design I & 3 \\
AGS164 & Plant Growth and Development & 4 \\
AGS182AA & Gardening Practices and Techniques & 2 \\
AGS183 & Urban Plant Identification and Use & 3 \\
AGS192 & Urban Plant Care & 3 \\
AGS262 & Irrigation Design, Installation, Operation, & \\
& and Trouble Shooting & 3 \\
AGS268 & Integrated Pest Management in the & \\
& Cultivated Environment & 4 \\
AGS284 & Lawn and Turf Care & 3 \\
SSH111 & Sustainable Cities & 3 \\
CHM130 & Fundamental Chemistry (3) OR & \\
& Permission of Program Director. & \(0-3\)
\end{tabular}

Students must select one (1) of the following two (2) tracks:

Track I: Residential Landscape Design Credits: 6
DFT105AA Computer Aided Drafting I: AutoCAD 3
AGL/CAD269Computer Aided Landscape Design 3

Track II: Nursery and Greenhouse Operations Credits:6
AGS186 Greenhouse Management and Construction 3
AGS285 Propagation of Horticultural Plants 3
General Education Requirements Credits: 19-22
General Education Core
Credits: 12-15

First-Year Composition
Credits: 6
ENG101 First-Year Composition (3) OR
ENG107 First-Year Composition for ESL (3) AND
\(\begin{array}{ll}\text { ENG102 } & \text { First-Year Composition (3) OR } \\ \text { ENG108 } & \text { First-Year Composition for ESL (3) }\end{array}\)
Oral Communication
Credits: 3
Any approved general education course in the Oral Communication area 3

\section*{Critical Reading}

Credits: 0-3
\begin{tabular}{ll} 
CRE101 & College Critical Reading and Critical \\
& Thinking (3) OR Equivalent as indicated by \\
& assessment (0)
\end{tabular}

\section*{Mathematics}

Credits: 3
Any approved general education course in the
Mathematics area

General Education Distribution
Credits: 7

\section*{Humanities and Fine Arts}

Credits: 0-3
Met by SSH111 in Required Courses area or any approved general education course from the Humanities, Arts and Design area.
SSH111 fulfills either Humanities, Arts and Design OR
Social-Behavioral Sciences area.

\section*{Social and Behavioral Sciences}

Credits: 0-3 Met by SSH111 in Required Courses area or any approved general education course in the Social-Behavioral Sciences area.

SSH111 fulfills either Humanities, Arts and Design OR Social-Behavioral Sciences area.

Natural Sciences

Credits: 4

AGS260 Soils

\section*{Certificate of Completion (CCL) in Landscape Specialist}

Total Credits: 27-30
Major Code: 5073

\section*{Description}

The Certificate of Completion (CCL) in Landscape Specialist program emphasizes the technology of production and management. 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.

\section*{Program Notes}

Students must earn a grade of ' C ' or better in all courses in the program.

\section*{Required Courses}

Credits: 27-30
AGB130 Establishing and Running an Agribusiness 3
AGB139 Agribusiness Computer Operations 3
AGL181 Landscape Construction Techniques 3
AGL189 Landscape Design I 3
AGS164 Plant Growth and Development 4
AGS183 Urban Plant Identification and Use 3
AGS260 Soils 4
AGS268 Integrated Pest Management in the Cultivated Environment
CHM130 Fundamental Chemistry (3) OR Permission of Program Director 0-3

\section*{Associate in Applied Science (AAS) in} Sustainable Agriculture

\section*{Total Credits: 60-66 \\ Major Code: 3014}

\section*{Description}

The Associate in Applied Science (AAS) in Sustainable Agriculture program focuses on sustainable agriculture, agribusiness, and urban farming. This
program is designed to prepare individuals for employment in Agribusiness.

\section*{Program Notes}

Students must earn a grade of ' C ' or better in all courses within the program.

\section*{Required Courses}

Credits: 39-42
AGB130 Establishing and Running an Agribusiness 3
AGB139 Agribusiness Computer Operations 3
AGB231 Marketing of Agricultural Products 3
AGS164 Plant Growth and Development 4
AGS165AA Fall Sustainable Crop Production 3
AGS165AB Spring Sustainable Crop Production 3
AGS166 Aquaponics 3
AGS260 Soils 4
AGS262 Irrigation Design, Installation, Operation, and Trouble Shooting 3
AGS268 Integrated Pest Management in the Cultivated Environment

4
CHM130 Fundamental Chemistry (3) OR Permission of Program Director
FON161 Sustainable Food Production Systems 3
SSH111 Sustainable Cities 3
Restricted Electives
Credits: 6
Students must select two (2) of the following courses:
AGB132 Agribusiness and Management 3
AGB144 Agriculture Processing 3
AGS186 Greenhouse Management and Construction 3
General Education Requirements Credits: 15-18

\section*{General Education Core}

Credits: 12-15

\section*{First-Year Composition}

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
Oral Communication
Credits: 3
Any approved general education course in the Oral Communication area

Critical Reading
Credits: 0-3
\begin{tabular}{ll} 
CRE101 & \begin{tabular}{l} 
College Critical Reading and Critical Thinking (3) \\
OR Equivalent as indicated by assessment (0) 0-3
\end{tabular} \\
Mathematics \\
MAT112 & \begin{tabular}{l} 
Mathematical Concepts and Applications (3) OR
\end{tabular} \\
& Higher level mathematics course
\end{tabular}
General Education Distribution Credits: 3
Humanities and Fine Arts

Credits: 3
Any approved general education course in the Humanities, Arts and Design area.

Social and Behavioral Sciences
Met by SSH111 in the Required Courses area.

Natural Sciences
Credits: 0
Met by AGS260 in the Required Courses area.

\section*{Certificate of Completion (CCL) in Sustainable Agriculture}

\section*{Total Credits: 30-33 \\ Major Code: 5886}

\section*{Description}

The Certificate of Completion (CCL) in Sustainable Agriculture program focuses on hands-on skills in sustainable agriculture, agribusiness, and urban farming.

\section*{Program Notes}

Students must earn a grade of 'C' or better for all courses required within the program.
\begin{tabular}{lll} 
Required & Courses & Credits: \(27-30\) \\
AGB130 & Establishing and Running an Agribusiness & 3 \\
AGS164 & Plant Growth and Development & 4 \\
AGS165AA & Fall Sustainable Crop Production & 3 \\
AGS165AB & Spring Sustainable Crop Production & 3
\end{tabular}
AGS260 Soils ..... 4
AGS262 Irrigation Design, Installation, Operation,
AGS268
CHM130
FON161and Trouble Shooting3
Integrated Pest Management in the Cultivated Environment ..... 4
Fundamental Chemistry (3) OR
Permission of Program Director ..... 0-3
Sustainable Food Production Systems ..... 3
Restricted Electives ..... Credits: 3
Students must select one (1) of the following courses:
AGB132 Agribusiness and Management ..... 3
AGB144 Agriculture Processing ..... 3
AGS166 Aquaponics ..... 3
AGS186 Greenhouse Management and Construction ..... 3
Certificate of Completion (CCL) in Veterinary Assisting
Total Credits: 16
Major Code: 5960N
Description
The Certificate of Completion (CCL) in VeterinaryAssisting prepares students for introductorycareers in veterinary medicine and animal healthwhich require basic knowledge and skills involvinganimal care and management, veterinary medicalcare, and client communications and service.

\section*{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 required within the program.

Required Courses
Credits: 16
COM100 Introduction to Human Communication (3) OR
COM110 Interpersonal Communication (3) OR

\section*{Career \& Technical Education}

COM225
COM230
ENG101
ENG107
VET101
VET103
VET104
VET109

Public Speaking (3) OR
Small Group Communication (3)
First-year Composition (3) OR
First-year Composition for ESL(3)
Introduction to Veterinary Technology
Veterinary Assisting I
Veterinary Assisting II

\section*{Associate in Applied Science (AAS) in Veterinary Technology}

\author{
Total Credits: 82-88 \\ Major Code: 3015
}

\section*{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.

\section*{Program Notes}

Students must earn a grade of 'C' or better in all courses within the program.

\section*{Admission Criteria}

High school graduation or G.E.D. equivalency.
Formal application and admission to the Veterinary
Technology program.

\begin{tabular}{|c|c|}
\hline \multicolumn{2}{|r|}{Credits: 0} \\
\hline Required & Courses Credits: 73-79 \\
\hline BIO181 & General Biology (Majors) I \\
\hline BIO205 & Microbiology \\
\hline BPC110 & Computer Usage and Applications (3) OR \\
\hline CIS105 & Survey of Computer Information Systems (3) \\
\hline CHM130 & Fundamental Chemistry (3) AND \\
\hline CHM130LL & Fundamental Chemistry Laboratory (1) \\
\hline CRE101 & \begin{tabular}{l}
College Critical Reading and Critical Thinking \\
(3) OR Equivalent as indicated by assessment (0)
\end{tabular} \\
\hline ENG101 & First-Year Composition (3) OR \\
\hline ENG107 & First-Year Composition for ESL (3) \\
\hline ENG102 & First-Year Composition (3) OR \\
\hline ENG108 & First-Year Composition for ESL (3) OR \\
\hline ENG111 & Technical and Professional Writing (3) \\
\hline EQS105 & Principles of Equine Science \\
\hline EQS162VT & \begin{tabular}{l}
Equine Management for the Veterinary \\
Technician (0.5) OR
\end{tabular} \\
\hline VET250AB & Veterinary Technician Internship (0.5) 0.5 \\
\hline MAT120 & Intermediate Algebra (5) OR \\
\hline MAT121 & Intermediate Algebra (4) OR \\
\hline MAT122 & Intermediate Algebra (3) OR \\
\hline MAT126 & Intermediate Algebra with Review (6) 3-6 \\
\hline VET101 & Introduction to Veterinary Technology \\
\hline VET101LL & Animal Care Skills I \\
\hline VET112 & Animal Nursing I \\
\hline VET132 & Veterinary Office Management and Client Communication \\
\hline VET140 & Animal Care Skills II (2) \\
\hline & Note: VET140 must be repeated for 4 credits \\
\hline VET150 & Veterinary Anatomy and Physiology I \\
\hline VET150LL & Veterinary Anatomy and Physiology Laboratory I \\
\hline VET151 & Veterinary Anatomy and Physiology II \\
\hline VET200 & Veterinary Clinical Pathology Methods \\
\hline VET201 & Animal Care Skills III (2) \\
\hline & Note: VET201 must be repeated for 4 credits \\
\hline VET210 & Animal Nursing II \\
\hline VET220 & Veterinary Pharmacology for the \\
\hline & Veterinary Technician \\
\hline VET223 & Animal Diseases \\
\hline
\end{tabular}
\begin{tabular}{llr} 
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
\end{tabular}

General Education Requirements Credits: 9

\section*{General Education Core}

Credits: 3

\section*{First-Year Composition}

Credits: 0
Met by any combination of ENG courses in Required Courses

\section*{Oral Communication}

Credits: 3
Any approved general education course in the Oral Communication area.

3

\section*{Critical Reading}

Credits: 0
Met by CRE101 or equivalent as indicated by assessment in Required Courses

\section*{Mathematics}

Credits: 0
Met by MAT120, MAT121, MAT122, or MAT126 in Required Courses

\section*{General Education Distribution \\ Credits: 6 \\ Humanities and Fine Arts \\ Credits: 3}

Any approved general education course in the Humanities, Arts and Design area.

\section*{Social and Behavioral Sciences \\ Credits: 3}

ECN100 Economics in American Society (3) OR
ECN211 Macroeconomic Principles (3) OR
ECN212 Microeconomic Principles (3)
3

\section*{Natural Sciences}

Credits: 0
Met by BIO181 in Required Courses.

\section*{Career \& Technical Education}

\section*{Visual and Performing Arts}

\section*{Certificate of \\ Completion (CCL) in Alteration Specialist}

\author{
Total Credits: 19-27 \\ Major Code: 5556
}

\section*{Description}

The Certificate of Completion (CCL) in Alteration Specialist is designed to prepare students for employment in alterations for the apparel industry. Students will develop skills in advanced clothing construction, tailoring and couture techniques appropriate for a variety of fabrics and designs, and
fitting techniques for all types of apparel. They will develop the ability to select appropriate fashion fabrics, interfacing, and lining materials for specific items of apparel. Students completing this certificate will be able to alter and repair ready-made garments in entry level positions in the alteration profession for retailers, dry-cleaning industry or their own alteration establishment. An Associate in Applied Science (AAS) in Fashion Design is also available.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better for all courses required within the program.

\section*{Required Courses}

Credits: 19-27
TEC110 Beginning Apparel Construction (3) OR

Permission of Program Director 0-3
TEC111 Intermediate Apparel Construction (3) OR
TEC122
Sewing with Knits
TEC124
Advanced Appare Construction
TEC129 Sewing with a Serger 3
TEC130 Alteration of Ready Made Garments
TEC222 Textiles
Textiles 3

Permission of Program Director 0-33


Tailoring (3) OR
TEC227
Couture Sewing (3)
TEC277++ Any Alteration Internship course

\section*{Associate in Applied Science (AAS) in Animation and Time-Based Media}

\section*{Total Credits: 68-74 \\ Major Code: 3199}

\section*{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.

\section*{Program Notes}

Students must earn a grade of ' C ' or better in all courses within the program.
This program replaces: AAS/3046 Media Arts: Digital Animation.
Required Courses ..... Credits: 16
ADA/ART169 2D Media Design (3) OR
ART178 Digital Arts Studies (3) ..... 3
ADA/ART177 Digital Photographic Imaging | ..... 3
ADA/ART/
MMT184 Digital Animation I ..... 3
ART100 Introduction to Digital Arts ..... 1
ART248 Design Self Promotion (3) ORART255 Art Marketing (3)3
ART280AC Digital Media Arts and Design Capstone ..... 3
Restricted Electives
Credits: 30
Specialization 1: Digital Animation
ART111 Drawing I ..... 3
ART116 Life Drawing I ..... 3
ART/COM/
STO150 Digital Storytelling (3) OR
CRW150 Introduction to Creative Writing (3) ORCRW172 Introduction to Comic Book Writing (3) ORCRW176 Narrative for Games (3) ORFMT121 Story Theory for Film, Television andMedia (3)3
ART170 Three Dimensional Computer Design (3) ORART/THP246 Introduction to Digital 3D FabricationTools (3)3
ART/MMT185 3D Modeling for Animation I ..... 3
ART200 Animation and Interactivity ..... 3
ART240 Cinematography and Directing for 2D/3D Animation ..... 3
ART284 Intermedia Animation ..... 3
ART/MMT285 3D Modeling and Animation II ..... 3
ART287 3D Character Animation ..... 3
Specialization 2: Time-Based Media
ART142 Introduction to Digital Photography ..... 3ART/COM/
STO150 Digital Storytelling (3) ..... (3) ORFMT121 Story Theory for Film, Television andMedia (3) OR
JRN203 Writing for Online Media (3) ..... 3
ART202 Media Productions I (3) OR
FMP108 Video Production (3) ..... 3
ART279 Media Productions II (3) OR
FMP215 Digital Video Effects (3) ..... 3
MTC191 Electronic Music I (3) OR
MUC122 Sound Design 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 among multiple emphasis areas according to their occupational needs.

Photography Emphasis
\begin{tabular}{lll} 
ART131 & Photography I & 3 \\
ART138 & Commercial Photography I & 3 \\
ART140 & Portrait Photography & 3 \\
ART143 & Intermediate Digital Photography & 3 \\
ART270 & Digital Photographic Imaging II & 3
\end{tabular}

Audio Emphasis
FMP114 Audio Production 3
MTC191 Electronic Music I 3
MTC192 Electronic Music II 3
MUC122 Sound Design I 3
MUC195 Studio Music Recording I 3
MUC222 Sound Design II
Media Production Emphasis
ART/COM/
STO145 Digital Storybook 1
ART190 Art of Web Site Design 3
ART192 Advanced Web Presentation Design 3
\(\begin{array}{ll}\text { ART/THP246 Introduction to Digital 3D } \\ & \text { Fabrication Tools }\end{array}\)
CIS133DA Internet/Web Development Level I 3
FMP204 Advanced Video Production 3
FMP215 Digital Video Effects
FMT151 TV and New Media Production
Motion Graphics Emphasis
ART116 Life Drawing I
ART174 Electronic Color Principles 1
ART/MMT185 3D Modeling for Animation I 3
ART200 Animation and Interactivity 3
ART240 Cinematography and Directing for 2D/3D Animation
ART273AC Special Topics: Multimedia Arts
ART287 3D Character Animation
FMP215 Digital Video Effects
FMP215 Digit Video Effect

General Education Requirements Credits: 22-28
General Education Core
Credits: 12-18
First-Year Composition
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)

Oral Communication
Credits: 3
\begin{tabular}{llr} 
COM100 & \begin{tabular}{l} 
Introduction to Human \\
Communication (3) OR
\end{tabular} \\
COM110 & Interpersonal Communication (3) OR \\
COM225 & Public Speaking (3) OR & \\
COM230 & Small Group Communication (3) & Credits: 0-3 \\
Critical Reading & \(\quad\) College Critical Reading and Critical \\
CRE101 & Thinking (3) OR Equivalent as indicated by \\
& assessment. (0) & \(0-3\)
\end{tabular}

\section*{Mathematics}

Credits: 3-6
\begin{tabular}{l} 
Any approved general education course from the \\
Mathematics area. \\
\begin{tabular}{ll} 
Recommended for students planning to transfer to a four- \\
year university: \\
MAT140 \(\quad\) 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)
\end{tabular} \\
\hline
\end{tabular}
General Education Distribution ..... Credits: 10
Humanities and Fine Arts ..... Credits: 3
ARH101 Prehistoric through Gothic Art (3) OR
ARH102 Renaissance through Contemporary Art (3) OR ARH115 History of Photography (3) OR
(3)3
Social-Behavioral Sciences ..... Credits: 3
Any approved general education course from the So-cial-Behavioral Sciences area.3
Natural Sciences4

Associate in Applied
 Science (AAS) in Audio
 Production Technologies

\author{
Total Credits: 61-68 \\ Major Code: 3024
}

\section*{Description}

The Associate in Applied Science (AAS) in Audio Production Technologies program 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 Audio Production Technologies is also available.

\section*{Program Notes}

Students must earn a grade of 'C' or better for all courses required within the program.

\section*{Required Courses}

Credits: 30-31
In addition to the required course work, students must consult with a program advisor to select one of the specializations within the Restricted Electives area.
\begin{tabular}{llr} 
MTC101 & Introduction to Music Theory & 3 \\
MTC191 & Electronic Music I & 3 \\
MTC192 & Electronic Music II & 3 \\
MUC109 & Music Business: Content Creation & 3 \\
& and Copyright & \\
MUC110 & Music Business: Marketing and & \\
& Monetization (3) OR & \\
MUC145 & Recording Studio Business Operations (2) & \(2-3\) \\
MUC111 & Digital Audio Workstation I (DAW I) & 3 \\
MUC194 & Introduction to Audio Mixing Techniques & 3 \\
MUC195 & Studio Music Recording I (3) OR & \\
MUC195AA & Studio Music Recording I (3) & 3 \\
MUC196 & Studio Music Recording II & 3 \\
MUC197 & Live Sound Reinforcement I & 3 \\
MUC297AA & Audio Production Internship (1) OR & \\
MUC296WA Cooperative Education (1) OR & \\
MUC298AA & Special Projects (1) & 1
\end{tabular}

\section*{Restricted Electives}

Credits: 9
Students must select one (1) of two (2) Specializations: Specialization I: Audio Engineering MUC112 Digital Audio Workstation II (DAW II)
\begin{tabular}{lll} 
MUC198 & Live Sound Reinforcement II & 3 \\
MUC289 & Live Sound Reinforcement III (3) OR & \\
MUC295 & Studio Music Recording III (3) & 3 \\
Specialization II: Sound Design & \\
MUC122 & Sound Design I & 3 \\
MUC222 & Sound Design II & 3 \\
MUC292 & Sound Design III & 3
\end{tabular}

General Education Requirements Credits: 22-28
General Education Core
Credits: 12-18
First-Year Composition 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)
ENG111 Technical and Professional Writing (3) 6
Oral Communication
Credits: 3
COM100 Introduction to Human
COM110 Interpersonal Communication (3) OR
COM225 Public Speaking (3) OR
COM230 Small Group Communication (3) 3
COM110 is recommended.

\section*{Critical Reading}

Credits: 0-3
CRE101 College Critical Reading and Critical Thinking
(3) OR equivalent as indicated by assessment.

\section*{Mathematics}

Credits: 3-6
Any approved general education course from the Mathematics area.

Students who intend to transfer must take
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) 3-6
General Education Distribution Credits: 10
Humanities and Fine Arts
Credits: 3
Any approved general education courses from the Humanities, Arts and Design area.

MHL140 or MHL145 or MHL153 are recommended.

\author{
Social-Behavioral Sciences \\ Credits: 3 \\ Any approved general education course from the So-cial-Behavioral Sciences area. \\ PSY101 is recommended. \\ Natural Sciences \\ Credits: 4 \\ Any approved general education course from the Natural Sciences area. \\ \title{
Certificate of Completion (CCL) in Audio in Production Technologies
}
}

\section*{Total Credits: 39-40 \\ Major Code: 5334}

\section*{Description}

The Certificate of Completion (CCL) in Audio Production Technologies program 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.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better in all courses within the program.

This program replaces: CCL/5686 Sound Design.

\section*{Required Courses}

Credits: 30-31
In addition to the required course work, students must consult with a program advisor to select one of the specializations within the Restricted Electives area.
MTC101
Introduction to Music Theory
MTC191 Electronic Music I ..... 3
MTC192 Electronic Music II ..... 3
MUC109 Music Business: Content Creation and Copyright ..... 3
MUC110 Music Business: Marketing andMonetization (3) OR
MUC145 Recording Studio Business Operations (2) ..... 2-3
MUC111 Digital Audio Workstation I (DAW I) ..... 3
MUC194 Introduction to Audio Mixing Techniques ..... 3
MUC195 Studio Music Recording I (3) OR
MUC195AA Studio Music Recording I (3) ..... 3
MUC196 Studio Music Recording II ..... 3
MUC197 Live Sound Reinforcement I ..... 3
MUC297AA Audio Production Internship ..... 1
Restricted ElectivesCredits: 9
Students must select one (1) of two (2) Specializations:
Specialization I: Audio Engineering
MUC112 ..... 3MUC198MUC289 Live Sound Reinforcement III (3) ORMUC295 Studio Music Recording III (3)3
Specialization II: Sound Design
MUC122 Sound Design I ..... 3
MUC222 Sound Design II ..... 3
MUC292 Sound Design III ..... 3
Certificate of Completion (CCL) in Beginning Piano Pedagogy
Total Credits: 15 ..... Major Code: 5743N

\section*{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.

\section*{Program Notes}

This program is not eligible for Title IV Federal Financial Aid.

\section*{Admission Criteria \\ None.}

Program Prerequisites
Credits: 0
Acceptance into the program and permission of Program Director is required.
\begin{tabular}{llr} 
Required & Courses & Credits: \\
MTC105 & Music Theory I & 3 \\
MTC106 & Aural Perception I & 1 \\
MUP102AD & Private Instruction: Piano & 2 \\
MUP123AA & Studio Class/Piano (.5) & 1 \\
& (Two (2) semesters of course is required) & \\
MUP140 & Elementary Piano Pedagogy & 2 \\
MUP152AD & Private Instruction: Piano & 2 \\
MUP181 & Chamber Music Ensembles (1) & 2 \\
& (Two (2) semesters of course is required) & \\
MUP240 & Piano Literature & 2
\end{tabular}

\section*{Certificate of \\ Completion (CCL) \\ in Costume Design and Production, Level I}

\section*{Total Credits: 28-34 \\ Major Code: 5406}

Description
The Certificate of Completion (CCL) in Costume Design and Production, Level I trains students to design and make costumes for theatre, film, opera, dance and period reproductions. A Certificate of Completion (CCL) in Costume Design and Production, Level II and an Associate in Applied Science (AAS) in Fashion Design are also available.

\section*{Program Notes}

Students must earn a grade of 'C' or better for all courses required within the program.

Required Courses
Credits: 25-31
TEC105 Cultural Aspects of Clothing (3) OR
THF115 Makeup for Stage and Screen (3) 3
TEC106 History of Fashion 3
TEC110 Beginning Apparel Construction (3) OR Permission of Program Director 0-3
TEC111 Intermediate Apparel Construction (3) OR
THP206 Introduction to Costume Construction
for Theatre (4) 3-4
Specialty Apparel Construction (3) OR
TEC120 Advanced Apparel Construction (3) OR
TEC227 Couture Sewing (3) 3
TEC122 Sewing with Knits 3
TEC134 Fashion Illustration I 3
TEC225 Pattern Design I 3
TEC226 Draping for Fashion Design 3
TEC278++ Any Costume Design and Production Internship course(s) (1-3) OR
THP201++ Any Theatre Production course(s) (1-2) OR
THP202AC Theatre Production I Costume Shop (1) 1-3
Restricted Electives
Credits: 3
TEC113 Textiles: Dyeing 1
TEC114 Textiles: Block Printing/Silk Screening 1
TEC115 Textiles: Hand Painting 1
TEC116 Textiles: Stitchery and Embellishment 1
TEC121 Creative Sewing Machine Use 3
TEC161 Digital Machine Embroidery Laboratory 1
TEC222 Textiles 3
Note: TEC113, TEC114, TEC115, TEC116, TEC161 may be repeated for up to three (3) credits.

\title{
Certificate of Completion (CCL) in Digital Arts: Digital Photography
}

Total Credits: 22
Major Code: 5632

\section*{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.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better for all courses required within the program.

Required Courses
Credits: 22
ADAVART177 Digital Photographic Imaging I 3 ART100 Introduction to Digital Arts 1
ART131 Photography I 3
ART132 Photography II 3
ART142 Introduction to Digital Photography 3
ART143 Intermediate Digital Photography 3
ART270 Digital Photographic Imaging II 3
ART274 Digital Photographic Imaging III 3

\section*{Associate in Applied Science (AAS) in Disc Jockey Techniques}

Total Credits: 60-62
Major Code: 3159

\section*{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.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better for all courses required within the program.

\section*{Required Courses \\ Credits: 35 \\ MHL204 Hip-Hop Music and Culture 3}

MUC109 Music Business: Merchandising and the Law 3
MUC110 Music Business: Recording and Mass Media 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
MTC191 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)
MKT101 Introduction to Public Relations (3)
HRM145 Events Management (3) OR
GBS151 Introduction to Business (3)
3

\section*{Restricted Electives}

Credits: 6-9
Students should choose six (6) to nine (9) credits from the following list of courses to complete a minimum of 60 credits for the AAS degree.
MTC101 Introduction to Music Theory 3
MTC192 Electronic Music II 3
MUC195 Studio Music Recording I (3) OR
\(\begin{array}{ll}\text { MUC195AA } & \text { Studio Music Recording I (3) } \\ \text { MUC198 } & \text { Live Sound Reinforcement II } \\ \text { MUC237 } & \text { Electronic Dance Music Production }\end{array}\)
Free Electives
Credits: 0
General Education Requirements Credits: 16-21
General Education Core
Credits: 9-14
First-Year Composition
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
Oral Communication
Credits: 0
Met by COM110 or COM225 or COM230 in the Required Courses area.

\section*{Critical Reading}

Credits: 0-3
CRE101 College Critical Reading and Critical Thinking (3) OR Equivalent as indicated by assessment (0)

0-3

\section*{Mathematics}

Credits: 3-5
MAT112 Mathematical Concepts and Applications (3) OR
MAT140 College Mathematics (5) OR
MAT141 College Mathematics (4) OR
MAT142 College Mathematics (3) OR
Higher level course in the Mathematical Applications
[MA] area (3-5)

\section*{General Education Distribution}

Credits: 7
Humanities and Fine Arts
Credits: 0
Met by MHL204 in the Required Courses area.

\section*{Social-Behavioral Sciences}

Credits: 3
Any approved general education course from the Social and Behavioral Sciences area.

\section*{Natural Sciences}

Credits: 4
Any approved general education course from the Natural Sciences area.

\title{
Certificate of Completion (CCL) in Disc Jockey Techniques I
}

\author{
Total Credits: 11 \\ Major Code: 5976N
}

\section*{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.

\section*{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 required within the program.

\section*{Required Courses}

Credits: 11
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
MUC293 Self Promotion for Music 1

\section*{Certificate of Completion (CCL) in Disc Jockey Techniques II}

Total Credits: 23
Major Code: 5745

\section*{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 ( D ). 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.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better for all courses required within the program.

Program Prerequisites
Credits: 0
None.
Required Courses
Credits: 23
MHL204 Hip-Hop Music and Culture 3
MUC1 09 Music Business: Merchandising and the Law 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

\title{
Associate in Applied Science (AAS) in Fashion Design
}

\author{
Total Credits: 62-71 \\ Major Code: 3355
}

\section*{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.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better in all courses within the program.

\section*{Required Courses}

Credits: 37-40
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
TEC122
TEC124 Advanced Apparel Construction 3
TEC125 Fashion Design 3
TEC134 Fashion Illustration I 3
TEC221 Computer-Assisted Fashion Design 3
TEC222 Textiles 3
TEC223 Tailoring 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) 1

\section*{Restricted Electives}

Credits: 4-6
Select 4 to 6 credits from the following except courses used in the Required Courses area:
\(\begin{array}{llr}\text { ART113 } & \text { Color } & 3 \\ \text { TEC+++++ } & \text { Any TEC Textiles and Clothing course } & 1-3\end{array}\)
General Education Requirements Credits: 22-28
General Education Core
Credits: 12-17
First-Year Composition
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
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

\section*{Mathematics}

MAT140 College Mathematics (5) OR
MAT141 College Mathematics (4) OR
MAT142 College Mathematics (3) OR
MAT146 College Mathematics with Review (6) OREquivalent or higher level mathematics course in theMathematical Applications [MA] area. (3-6)3-6
General Education Distribution ..... Credits: 10
Humanities and Fine Arts ..... Credits: 3
ARH100 Introduction to Art (3) OR
ARH101 Prehistoric through Gothic Art (3) OR
ARH1 02 Renaissance through Contemporary Art (3) ORINT115 Historical Architecture and Furniture (3) OR
INT120 Modern Architecture and Furniture (3) 3
ARH100, ARH101, or ARH102 Recommended for University Transfer
Social and Behavioral SciencesCredits: 3
Any approved general education course in the Social-Be-Natural SciencesCredits: 4
Any approved general education course from the NaturalSciences area.
Associate in Applied Science (AAS) in Fashion Merchandising and Design
Total Credits: 60-67Major Code: 3260


\section*{Description}

The Associate in Applied Science (AAS) in Fashion Merchandising and Design prepares students for entry-level positions in fashion merchandising. Students acquire a basic knowledge of textiles, clothing construction, display and visual merchandising, and the fashion industry. The program offers opportunities for students to select courses that reflect a special area of interest such as business management, advertising, or fashion illustration.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better for all courses within the program.

\section*{Required Courses}

Credits: 9
TEC105 Cultural Aspects of Clothing
TEC111 Clothing Construction (3) OR
TEC250 Apparel Quality Analysis (3)
TEC222 Textiles

\section*{Restricted Electives}

Credits: 28-31
Students must select one (1) of the following two (2) tracks:

Students should choose 28-31 credits to complete a minimum of 60 credits for the AAS degree. Therefore if selecting Track I, students completing the minimum in the General Education area, must complete at least 29 credits in Restricted Electives to meet the 60 credits minimum

Track I - Fashion Merchandising Credits:
ACC109 Accounting Concepts
MKT/TEC200 Retail Buying
MKT271 Principles of Marketing 3
MKT/TEC109 Introduction to Fashion Merchandising 3
MKT/TEC151 Display and Visual Merchandising 3
TEC255 Fashion Retail Merchandising 3
TEC260 Fashion Sales Management
TEC272AA Retail Merchandising Internship
Select six (6) to nine (9) credits from the following courses:
ART131 Photography I 3
ART142 Introduction to Digital Photography 3
BPC110 Computer Usage and Applications 3
CIS105 Survey of Computer Information Systems 3

GBS233 Business Communication 3
MGT229 Management and Leadership I 3
MGT230 Management and Leadership II 3
MGT251 Human Relations in Business 3
MGT253 Owning and Operating a Small Business 3
MKT101 Introduction to Public Relations 3
MKT263 Advertising Principles 3
MKT/
TEC274AC Fashion Merchandising Study Tour 3
TEC106 History of Fashion 3
TEC221 Computer-Assisted Fashion Design 3
TEC241 Advanced Computer-Assisted Fashion Design 3
TEC+++++ Any TEC Textiles and Clothing course not listed under Required Courses area 1-3

Track II - Fashion Design Credits: 29-31
TEC106 History of Fashion 3
TEC124 Advanced Clothing Construction 3
TEC125 Fashion Design 3
TEC134 Fashion Illustration I 3
TEC221 Computer-Assisted Fashion Design 3
TEC223 Tailoring 3
TEC225 Pattern Design I 3
TEC226 Draping for Fashion Design 3
TEC236 Portfolio Development 1
Select four (4) to six (6) credits from the following courses:
INT150 Color and Design 3
TEC135 Fashion Illustration II 3
TEC230 Pattern Design II 3
TEC271AC Fashion Design Internship 3
MKT/
TEC274AC Fashion Merchandising Study Tour 3
TEC+++++ Any TEC Textiles and Clothing course not listed under Required Courses area 1-3

General Education Requirements Credits: 22-27
General Education Core
Credits: 12-17

\section*{First-Year Composition}

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) OR
ENG111 Technical and Professional Writing (3)
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)
Critical Reading
Credits: 0-3
\(\begin{array}{ll}\text { CRE101 } & \text { College Critical Reading and Critical } \\ & \text { Thinking (3) OR Equivalent as indicated } \\ & \text { by assessment (0) }\end{array}\) by assessment (0) 0-3

\section*{Mathematics}

Credits: 3-5
\(\begin{array}{ll}\text { MAT140 } & \text { College Mathematics (5) OR } \\ \text { MAT141 } & \text { College Mathematics (4) OR }\end{array}\)
MAT142 College Mathematics (3) OR
Satisfactory completion of higher level mathematics course

3-5

\section*{General Education Distribution}

Credits: 10

\section*{Humanities and Fine Arts}

Credits: 3
Any approved general education course in the Humanities, Arts and Design area.
\(\begin{aligned} \text { ARH+++++ } & \text { Any ARH Art Humanities course } \\ & \text { recommended. }\end{aligned}\)
Social and Behavioral Sciences
Credits: 3
Any approved general education course in the Social-Behavioral Sciences area.

Natural Sciences
Credits: 4
Any approved general education course in the Natural Sciences area.

\section*{Associate in Applied Science (AAS) in Graphic Design}

\section*{Total Credits: 60-65 \\ Major Code: 3201}

\section*{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.

\section*{Program Notes}

Students must earn a grade of 'C' or better for all courses required within the program.
This program replaces: AAS/3081 Digital Arts, AAS/3684 Media Arts: Graphic Design.Required CoursesCredits: 32-34
ADA/ART169 2D Media Design ..... 3
ADA/ART177 Digital Photographic Imaging I ..... 3
ADA/ART183 Digital Graphic Arts I ..... 3
ADA/ART248 Design Self Promotion (3) OR ART255 Art Marketing (3) ..... 3
ADA/ART283 Digital Graphic Arts II ..... 3
ART100 Introduction to Digital Arts ..... 1
ART111 Drawing I (3) ORART116 Life Drawing I (3)3
ART113 Color (3) ORART114 Digital Color (3)3
ART142 Digital Photography ..... 3
ART178 Digital Arts Studies ..... 3
ART/MMT190 Art of Website Design (3) OR
CIS133DA Web Design (3) ..... 3
Capstone/Internship Course:
ART280AA Digital Media Arts and Design Capstone (1) OR
ART280AB Digital Media Arts and Design Capstone (2) OR
ART280AC Digital Media Arts and Design Capstone (3) 1-3
Restricted ElectivesCredits: 3
Students must select three (3) credits from the following
list of courses:
ADA/ART175 Electronic Publishing Design I ..... 3
ADA/ART289 Computer Illustration ..... 3
ART103 Typography in the Digital Age ..... 3

\section*{ART/COM/}
\begin{tabular}{lll} 
STO150 & Digital Storytelling & 3 \\
ART192 & Advanced Web Presentation Design & 3 \\
ART200 & Animation and Interactivity & 3 \\
ART210 & Design Tools for Imagery, Production, & \\
& and Publishing & 3 \\
ART/THP246 & Digital Fabrication & 3
\end{tabular}

ART/THP246 Digital Fabrication

\section*{Free Electives}

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 an Academic Advisor.

\section*{General Education Requirements Credits: 22-28}

\section*{General Education Core}

Credits: 12-18

\section*{First-Year Composition}

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)
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)

\section*{Critical Reading}

Credits: 0-3
CRE101 College Critical Reading and Critical Thinking (3) OR Equivalent as indicated by assessment (0)

0-3

\section*{Mathematics}

Credits: 3-6
Any approved general education course from the Mathematics area.3-6

Recommended for students planning to transfer to a fouryear university:
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) 3-6
General Education Distribution
Credits: 10
Humanities and Fine Arts
Credits: 3
Students who intend to transfer should choose either

ARH101 or ARH102 to fulfill the [HU] requirement for transfer.
\begin{tabular}{lll} 
ARH101 & Prehistoric through Gothic Art (3) OR \\
ARH102 & Renaissance through Contemporary Art (3) OR \\
ARH110 & History of Graphic Design (3)
\end{tabular}

Social and Behavioral Sciences
Credits: 3
Any approved general education course from the So-cial-Behavioral Sciences area.

Natural Sciences
Credits: 4
Any approved general education course from the Natural Sciences area.

\title{
Certificate of Completion (CCL) in Graphic Design
}

\section*{Total Credits: 34 \\ Major Code: 5173}

\section*{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.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better for all courses required within the program.
This program replaces: CCL/5633 Digital Arts: Graphic Design, CCL/5684 Media Arts: Graphic Design.

Required Courses

Credits: 31

ADA/

ART169 2D Media Design 3
ADA/
ART177 Digital Photographic Imaging I
ADA/
ART183
Digital Graphic Arts I
ADA/
ART248 Design Self Promotion (3) OR
ART255 Art Marketing (3)
ADA/
ART283
Digital Graphic Arts II
ART100 Introduction to Digital Arts
ART111
Drawing I (3) OR
ART116 Life Drawing I (3)
ART113 Color (3) OR
ART114 Digital Color (3) 3
ART142 Introduction to Digital Photography 3
ART178 Digital Arts Studies 3
ART/MMT190 Art of Web Site Design (3) OR
CIS133DA Internet/Web Development Levell (3) 3

\section*{Restricted Electives}

Credits: 3
Students must select 3 credits from the following list of courses:
ADA/ART175 Electronic Publishing Design I
ADA/ART289 Computer Illustration
ART103 Typography in the Digital Age
ART/COM/
STO150 Digital Storytelling 3
ART192 Advanced Web Presentation Design 3
ART200 Animation and Interactivity 3
ART210 Design Tools for Imagery, Production, and Publishing
ART/THP246 Digital Fabrication

\section*{Certificate of}

Completion (CCL) in Illustration

Total Credits: 31
Major Code: 5174

\section*{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. Areas of emphasis 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.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better for all courses required within the program.

This program replaces: CCL/5631 Digital Arts: Digital Illustration, CCL/5881 Media Arts: Computer Art/ Illustration.

Program Prerequisites
Credits: 0
None.

Required Courses
Credits: 25
ADA/
ART169 2D Media Design 3
ADA/
ART177 Digital Photographic Imaging | 3
ADA/
ART248 Design Self Promotion (3) OR
ART255 Art Marketing (3)
ADA/ART289 Computer Illustration 3
ART100 Introduction to Digital Arts 1
ART111 Drawing I 3
ART113 Color (3) OR
ART114 Digital Color (3) 3
ART116 Life Drawing I 3
ART178 Digital Arts Studies 3

\section*{Restricted Electives}

Credits: 6
Students must select six (6) credits from the following list of courses. Students may select from one emphasis or may select from different emphases to fulfill the six (6) credit requirement.

\section*{Animation Emphasis}

ADA/ART/
MMT184
Digital Animation I
ART/
MMT185
3D Modeling for Animation I

Drawing Emphasis
ART117 Life Drawing II 3
ART118 Art Anatomy
ART122 Drawing and Composition II 3

Painting Emphasis
ART165 Watercolor Painting I
ART166 Watercolor Painting II
ART167 Painting I 3
ART168 Painting II
ART263 Figure Painting 3

\section*{Associate in Applied Science (AAS) in Illustration and Sequential Art}

\section*{Total Credits: 60-71 \\ Major Code: 3203}

\section*{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.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better for all courses required within the program.
This program replaces: AAS/3081 Digital Arts, AAS/3129 Comic and Sequential Art, AAS/3822 Media Arts: Computer Art/Illustration.

\section*{Required Courses}

Credits: 23-25
ADA/ART169 2D Media Design 3
ADA/ART177 Digital Photographic Imaging 3
ADA/ART289 Computer Illustration 3
ART100 Introduction to Digital Arts 1
ART111 Drawing I 3
ART113 Color (3) OR
ART114 Digital Color (3) 3
ART116 Life Drawing I 3
ART178 Digital Arts Studies 3
Capstone/Internship Course:
ART280AA Digital Media Arts and Design Capstone (1) OR
ART280AB Digital Media Arts and Design Capstone (2) OR
ART280AC Digital Media Arts and Design Capstone (3) 1-3

\section*{Restricted Electives}

Credits: 9-18
Specialization 1: Sequential Art
ART119 Penciling for Sequential Art 3
ART120 Inking for Sequential Art 3
ART219 Coloring, Toning and Lettering for Sequential Art
ART220 Publishing for the Comic Industry 3
ART221 Comics Creation 3
CRW172 Introduction to Comic Book Writing (3) OR
CRW176 Writing Narrative for Video Games (3) OR
CRW190 Introduction to Screenwriting (3)

Specialization 2: Illustration
ADANART248 Design Self Promotion (3) OR
ART255 Art Marketing (3)

Students must select six (6) credits from the following list of courses. Students may select from one emphasis or may select from different emphases to fulfill the six (6) credit requirement.

Animation Emphasis
ADA/ART/
MMT184 Digital Animation I
ART/MMT185 3-D Modeling for Animation I
Drawing Emphasis
ART117 Life Drawing II 3
ART118 Art Anatomy
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

\section*{Free Electives \\ 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 an Academic Advisor.

General Education Requirements Credits: 22-28

\section*{General Education Core}

Credits: 12-18
First-Year Composition
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

\section*{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)
Critical Reading
Credits: 0-3
CRE101 College Critical Reading and Critical

Thinking (3) OR Equivalent as indicated by assessment (0)

0-3

\section*{Mathematics}

Credits: 3-6
Any approved general education course from the Mathematics area.

Recommended for students planning to transfer to a fouryear university:
\begin{tabular}{ll} 
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)
\end{tabular}

General Education Distribution

Credits: 10

Humanities and Fine Arts Credits: 3
ARH101 Prehistoric through Gothic Art (3) OR ARH102 Renaissance through Contemporary Art (3) 3

\section*{Social and Behavioral Sciences}

Credits: 3
Any approved general education course from the So-cial-Behavioral Sciences area.

\section*{Natural Sciences}

Credits: 4
Any approved general education course from the Natural Sciences area.

\title{
Certificate of Completion (CCL) in Image Consultant
}

\section*{Total Credits: 19-21 \\ Major Code: 5402}

Description
The Certificate of Completion (CCL) in Image Consultant is designed for students with an interest in Image Consulting. Students learn clothing strategies for all figure types, appropriate dress for all occasions, nutrition, and interpersonal skills. They develop the ability to advise clients and groups for an acceptable image. Completers of this certificate

\section*{Career \& Technical} Education
will have interned with a nationally certified Image Consultant through the Association of Image Consultants, International (AICI), for a minimum of 480 hours. They may then apply for accreditation from AICI.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better for all courses required within the program.

Required Courses Credits: 19-21
ART113 Color 3
COM110 Interpersonal Communication 3
HES100 Healthful Living 3
TEC105 Cultural Aspects of Clothing 3
TEC222 Textiles 3
TEC245 Wardrobe Strategies 3
TEC275++ Any Image Consultant Internship course 1-3

\section*{Associate in Applied Science (AAS) in Interior Design}

Total Credits: 64-73
Major Code: 3191

\section*{Description}

The Associate in Applied Science (AAS) in Interior Design prepares students to work in an entry-level interior design position. The program provides both general and interior design education, which includes design, color theory and application, architectural and furniture history, drafting and computer aided design (CAD) for interior design, space planning, interior materials, rendering, and basic codes and regulations. Studio projects allow students to identify, research, solve, and present design problems. Students interested in a Bachelor's degree have a pathway to Northern Arizona University. Certificates of Completion (CCL) in areas of specialization are also available and embedded within the AAS.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better for all courses required within the program.
This program replaces: AAS/3093 Interior Design, AAS/3122 Interior Design.

\section*{Required Courses}

Credits: 30
Students must consult with a program advisor to select one of the specializations in the Restricted Elective area

prior to completing the required courses.
INT105 Introduction to Interior Design 3
INT115 Historical Architecture and Furniture 3
INT120 Modern Architecture and Furniture 3
INT145 Drawing and Rendering 3
INT150 Color and Design 3
INT160 Fabrics for Interiors 3
INT175 Custom Design 3
INT190 Space Planning 3
INT211 Interior Materials and Specifications 3
INT230 Presentation Techniques 3

\section*{Restricted Electives}

Credits: 15-18
Students must consult with a program advisor to select one of the following specializations prior to completing courses in the required courses area.

Specialization 1: Interior Design
ARC141 Architectural CAD I: Introduction (3) AND
ARC142 Architectural CAD II: Plans and Elevations (3) AND
INT200 Digital Rendering for Design (3) OR
INT100 Interior Design Drafting (3) AND
INT200 Digital Rendering for Design (3) AND
INT140 Introduction to CAD for Interior Design (3) 9
INT215 Professional Practices
INT205 Residential Design (3) OR
INT240 Kitchen and Bath Design (3)

Specialization 2: Interior Design Northern Arizona
University Transfer
ARC/INT250 Basic Revit (3) OR
ARC265/
INT251 Sketchup: Introduction to Sketchup (3) 3
ARC141 Architectural CAD I: Introduction (3) AND
ARC142 Architectural CAD II: Plans and Elevations (3) AND
INT200 Digital Rendering for Design (3) OR
INT140 Introduction to CAD for Interior Design (3) AND
INT200 Digital Rendering for Design (3) 6-9
INT100 Interior Design Drafting 3
INT240 Kitchen and Bath Design 3
General Education Requirements Credits: 19-25
General Education Core
Credits: 12-18
First-Year Composition
Credits: 6
\begin{tabular}{ll} 
ENG107 & First-Year Composition for ESL (3) AND \\
ENG102 & First-Year Composition (3) OR \\
ENG108 & First-Year Composition for ESL (3)
\end{tabular}

\section*{Oral Communication}

Credits: 3
COM100 Introduction to Communication (3) OR COM110 Interpersonal Communication (3) 3
Students who intend to transfer to Northern Arizona University should consult with a transfer specialist.
COM110 is recommended for students who intend to transfer to
Northern Arizona University

\section*{Critical Reading \\ Credits: 0-3 \\ CRE101 College Critical Reading and Critical Thinking (3) OR Equivalent as indicated by assessment (0) 0-3}

\section*{Mathematics}

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
Equivalent or higher level mathematics course in the
Mathematical Applications [MA] area.

\section*{General Education Distribution \\ Credits: 7}

\section*{Humanities and Fine Arts}

Credits: 0
Met by INT115 or INT120 in the Required Courses area.
Students who intend to transfer to Northern Arizona University
should consult with a transfer specialist.

\section*{Social and Behavioral Sciences}

Credits: 3
Any approved general education course in the Social Behavioral area.
Students who intend to transfer to Northern Arizona University
should consult with a transfer specialist.
PSY101 Introduction to Psychology is required for students who intend to transfer to Northern Arizona University

\section*{Natural Sciences}

Credits: 4
Any approved general education course in the Natural
Science area.

\section*{Recommend:}

AGS164 Plant Growth and Development (4) OR
BIO108 Plants and Society (4) OR
GLG101 Introduction to Geology I -
Physical Lecture (3) AND
GLG103 Introduction to Geology I -

Physical Lab (1) OR
FON241 Principles of Human Nutrition (3) AND
FON241LL Principles of Human Nutrition Laboratory (1) Students who intend to transfer to Northern Arizona University should consult with a transfer specialist.

\section*{Certificate of Completion (CCL) in Intermediate Piano Pedagogy}

\section*{Total Credits: 15 \\ Major Code: 5749N}

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.

\section*{Program Notes}

This program is not eligible for Title IV Federal Financial Aid.

\section*{Admission Criteria}

None.

Program Prerequisites
Credits: 15
CCL/5743N is not eligible for Title IV Federal Financial Aid. Certificate of Completion in Beginning Piano Pedagogy (5743N)

15

\section*{Required Courses}

Credits: 15
\(\begin{array}{ll}\text { MHL140 } & \text { Survey of Music History (3) OR } \\ \text { MHL242 } & \begin{array}{l}\text { Music History and Literature 1750 to } \\ \\ \\ \text { present (3) }\end{array}\end{array}\)
\begin{tabular}{lll} 
MUP123AA & Studio Class/Piano (.5) & 1 \\
& (Two (2) semesters of course is required) & \\
MUP141 & Intermediate Piano Pedagogy & 2 \\
MUP166 & Jazz Piano I & 1 \\
MUP181 & Chamber Music Ensembles (1) & 2 \\
& (Two (2) semesters of course is required) & \\
MUP202AD & Private Instruction: Piano \\
MUP241 & Piano Artistry & 2 \\
MUP252AD & Private Instruction: Piano & 2 \\
& & 2
\end{tabular}

\section*{Certificate of Completion (CCL) in in Music Business II}

\section*{Total Credits: 35-37 Major Code: 5258}

Description
The Certificate of Completion (CCL) in 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 Industries: Music Business is available.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better for all courses within the program.

\section*{Admission Criteria}

None.

Program Prerequisites
Credits: 0 None.
\(\begin{array}{lll}\text { Required Courses Credits: 25-26 } \\ \text { MGT253 } & \text { Owning and Operating a Small Business } 3\end{array}\)
MKT110 Marketing and Social Networking 3
MKT271 Principles of Marketing 3
MUC109 Music Business: Content Creation and Copyright
MUC110 Music Business: Marketing and Monetization
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

Music Industry Capstone Experience
MUC290AA Music Business Internship (1) OR
MUC296WA Cooperative Education (1) OR
MUC298AA Special Projects (1)
Overview of Music Genres
MUC242 Music Genres and Styles (2) OR
MHL155 Survey of American Music (3)

\section*{Restricted Electives}

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 their development in the areas of Music Business and Marketing, Music Production, and Commercial Performance. Courses from required courses area may not be used.

Music Business and Marketing
\(\begin{array}{ll}\text { GBS+++ } & \text { Any GBS General Business course } \\ \text { MKT+++ } & \text { Any MKT Marketing course } \\ \text { MUC+++ } & \text { Any MUC Music: Commercial/Business course }\end{array}\)

Music Production
MTC+++ Any MTC Music: Theory/Composition course
MUC+++ Any MUC Music: Commercial/Business course

Commercial Performance
MTC+++ Any MTC Music: Theory/Composition course
MUP+++ Any MUP Music: Performance course

\title{
Associate in Applied \\ Science (AAS) in \\ Music Industries: Music Business
}

\author{
Total Credits: 60-66 \\ Major Code: 3017
}

Description
The Associate in Applied Science (AAS) in Music Industries: 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.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better for all courses required within the program.

\section*{Admission Criteria}

None.
Program Prerequisites
Credits: 0 None.

Required Courses
Credits: 25-26
MGT253 Owning and Operating a Small Business 3
MKT110 Marketing and Social Networking 3
MKT271 Principles of Marketing 3
\begin{tabular}{lll} 
MUC109 & \begin{tabular}{l} 
Music Business: Content Creation and \\
\\
Copyright
\end{tabular} & 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 & & 3 \\
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 & \\
Overview of Music Genres & Special Projects (1) & \\
MUC242 & Music Genres and Styles (2) OR & \\
MHL155 & Survey of American Music (3) & \(2-3\)
\end{tabular}

\section*{Restricted Electives \\ 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 their development in the areas of music business and marketing, music production, and commercial performance. Courses from required courses area may not be used.

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

Commercial Performance
MTC+++ Any MTC Music: Theory/Composition course MUP+++ Any MUP Music: Performance course

\section*{Free Electives}

Credits: 0-1
Select courses 100-level or higher to complete a minimum of 60 semester credits. Consult with an Academic and/or Program Advisor.

\section*{General Education Requirements Credits: 22-28}

\section*{General Education Core}

Credits: 12-18

\section*{First-Year Composition}

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) OR
ENG111 Technical and Professional Writing (3) 6 ENG101 or ENG107 and ENG102 or ENG108 is recommended for students who intend to transfer.
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
Consult with an academic advisor about specific COM requirements if intending to transfer.

\section*{Critical Reading}

Credits: 0-3
CRE101 College Critical Reading and Critical Thinking (3) OR Equivalent as indicated by assessment (0) 0-3

\section*{Mathematics}

Credits: 3-6
\begin{tabular}{ll} 
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)
\end{tabular} 3-6

\section*{General Education Distribution}

Credits: 10

\section*{Humanities and Fine Arts}

Credits: 3
Any approved general education course from the Humanities Arts and Design area

\section*{Social and Behavioral Sciences}

Credits: 3
Any approved general education course from the So-cial-Behavioral Sciences area

\section*{Natural Sciences}

Credits: 4
Any approved general education course from the Natural Sciences area.

\title{
Associate in Applied Science (AAS) in Photography
}

\author{
Total Credits: 60-64 \\ Major Code: 3195
}

\section*{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.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better for all courses required within the program.

There will be costs for supplies and equipment in this program.
This program replaces: AAS/3080 Digital Photography, AAS/3784 Media Arts: Digital Imaging, AAS/3081 Digital Arts.

\section*{Required Courses}

Credits: 26-28
ARH101 Prehistoric Through Gothic Art (3) OR
ARH1 02 Renaissance Through Contemporary Art (3) 3
ARH115 History of Photography 3
ART100 Introduction to Computer Graphic Art 1
ART112 Two-Dimensional Design 3
ART113 Color 3
ART131 Photography I 3
ART132 Photography II 3
ART142 Introduction to Digital Photography 3
ART143 Intermediate Digital Photography 3
ART255 Art Marketing (3) OR
ART255AB The Portfolio (1) 1-3
Restricted Electives
Credits: 8-19

Complete all courses in the subplan option below that best aligns with your academic and professional goals.

\section*{Subplan 1: Commercial (Fashion, Studio, Portrait, and Editorial) Photography \\ ART138 Commercial Photography I 3 \\ ART139 Commercial Photography II 3 \\ ART140 Portrait Photography (3) OR \\ ART237 Fashion Photography (3) 3 \\ SBS200 Small Business Operations 2 \\ SBS204 Small Business Marketing and Advertising 2}

Select 0-6 credits from the following:
ADA/ART169 Two-Dimensional Computer Design 3
ADAVART177 Computer-Photographic Imaging 3
ART111 Drawing I 3
ART116 Life Drawing I 3
ART137 Alternative Photographic Processes 3
ART181 Graphic Design I 3
ART202 Digital Arts Survey 3
ART234 Color Photography I 3
ART270 Intermediate Computer Photographic Imaging 3
ART290AC Studio Art 3
ART290EC Studio Art: Photography 3
ART290MC Studio Art: Digital Photography 3
ART295DA Art Workshop/Seminar: Photography 1
ART295DB Art Workshop/Seminar: Photography 2
ART295DC Art Workshop/Seminar: Photography 3
ART297AA Commercial Art Internship 1
TCMNPT108 Video Production 3

\section*{Subplan 2: Fine Art Photography}

ART133

Photography III

ART137 Alternative Photographic Processes 3
Select 2-13 credits from the following:
ADAVART169 Two-Dimensional Computer Design 3
ADAVART177 Computer-Photographic Imaging 3
ART111 Drawing I 3
ART116 Life Drawing I 3
ART134 Photography IV 3
ART202 Digital Arts Survey 3
ART234 Color Photography I 3
ART250 Introduction to Printmaking 3
ART270 Intermediate Computer Photographic Imaging 3
ART274 Advanced Computer Photographic Imaging 3
ART290AC Studio Art 3
ART290EC Studio Art: Photography 3
\begin{tabular}{lll} 
ART290MC & Studio Art: Digital Photography & 3 \\
ART295DA & Art Workshop/Seminar: Photography & 1 \\
ART295DB & Art Workshop/Seminar: Photography & 2 \\
ART295DC & Art Workshop/Seminar: Photography & 3 \\
ART297AA & Commercial Art Internship & 1 \\
SBS200 & Small Business Operations & 2 \\
SBS204 & Small Business Marketing and Advertising & 2
\end{tabular}

\section*{Free Electives}

Credits: 0-7
Select courses 100-level or higher to complete a minimum of 60 semester credits but no more than a total of 64 semester credits. Consult with the Program Director or an Academic Advisor.

Recommend that students interested in transferring to a four-year institution to earn a bachelor's degree take courses that fulfill any unmet Arizona General Education Curriculum (AGEC) requirements.

\section*{General Education Requirements Credits: 19-25}

\section*{General Education Core}

Credits: 12-18

\section*{First-Year Composition \\ 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)
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

\section*{Critical Reading}

Credits: 0-3
\(\begin{array}{ll}\text { CRE101 } & \text { College Critical Reading and Critical Thinking (3) } \\ & \text { OR Equivalent as indicated by assessment (0) 0-3 }\end{array}\)

\section*{Mathematics}

Credits: 3-6
\begin{tabular}{ll} 
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
\end{tabular}

Any approved general education course in the
Mathematical Applications [MA] area (3-6) 3-6

\section*{General Education Distribution}

Humanities and Fine Arts
Credits: 0
Met by ARH101 OR ARH102 OR ARH115 OR ART131 in Required Courses.

\section*{Social and Behavioral Sciences}

Credits: 3
Any approved general education courses in the So-cial-Behavioral Sciences [SB] area.

\section*{Natural Sciences}

Credits: 4
Any approved general education course in the Natural Sciences (Quantitative) [SQ] area or the Natural Sciences (General) [SG] area.

\section*{Certificate of Completion (CCL) in Retail Sales Manager}

\section*{Total Credits: 22-24 \\ Major Code: 5405}

\section*{Description}

The Certificate of Completion (CCL) in Retail Sales Manager is designed for students with an interest in retail store management. Students learn about apparel and retail store management, merchandising, salesmanship, customer service, basic computer systems, and human resources. They develop the ability to train and manage personnel in a store, display and merchandise their areas or store, effectively train personnel to sell the merchandise, and manage stocks and profitability.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better required for all courses within the program.
\(\begin{array}{ll}\text { Required Courses } & \text { Credits: 22-24 } \\ \text { BPC110 } & \text { Computer Usage and Applications (3) OR }\end{array}\)
\begin{tabular}{llr} 
CIS105 & Survey of Computer Information Systems (3) & 3 \\
MKT/TEC109 & Introduction to Fashion Merchandising & 3 \\
MKT/TEC151 Display and Visual Merchandising & 3 \\
MKT/TEC200 & Retail Buying & 3 \\
MKT268 & Merchandising & 3 \\
TEC222 & Textiles & 3 \\
TEC245 & Wardrobe Strategies & 3 \\
TEC272++ & Any Retail Merchandising Internship course & \(1-3\)
\end{tabular}

\section*{Certificate of}

Completion (CCL) in Technical Theatre: Audio Technician

\section*{Total Credits: 11-12}

Major Code: 5077N

\section*{Description}

The Certificate of Completion (CCL) in Technical Theatre: Audio Technician is designed to prepare students to apply live sound reinforcement in theatre productions. Classes include instruction in live sound reinforcement, setting up equipment, and sound design for theatrical productions. A Certificate of Completion (CCL) in Technical Theatre and the Associate in Arts, Fine Arts (AAFA), Emphasis in Theatre are also available.

\section*{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 required within the program.

\section*{Required Courses}

Credits: 11-12
MUC122 Sound Design I 3
MUC197 Live Sound I 3
MUC198 Live Sound II 3
THP201AA Theatre Production I (1) OR

THP201AB Theatre Production II (2) OR
THP202 Theatre Production Projects (1) OR
THP202AB Theatre Production I Electrics (1) OR 1-2
THP251

\title{
Certificate of Completion (CCL) in Technical Theatre: Cosplay I
}

\section*{Total Credits: 13-14 \\ Major Code: 5080N}

Description
The Certificate of Completion (CCL) in Technical Theatre: Cosplay I is designed to provide students with the skills to create characters in the world of Cosplay. The courses explore the history, culture, and rules of Cosplay, as well as costume, makeup, wigs, and properties development and use. A Certificate of Completion (CCL) in Technical Theatre and the Associate in Arts, Fine Arts (AAFA), Emphasis in Theatre are also available.

\section*{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 required within the program.

Required Courses
Credits: 13-14
TEC111 Clothing Construction (3) OR
THP206 Introduction to Costume Construction for Theatre (4)
THP250 Stage Properties 3

THP251 Safety Practices in Theatre and Film Production 1

\title{
Certificate of \\ Completion (CCL) in Technical Theatre: Costuming
}

\author{
Total Credits: 8-9 \\ Major Code: 5090N
}

\section*{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.

\section*{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 required within the program.

Required Courses
Credits: 5-6
THP201AA Theatre Production I (1) OR
THP201AB Theatre Production II (2) OR
THP202AC Theatre Production Costume Shop (1) 1-2 THP206 Introduction to Costume Construction for Theatre

\section*{Restricted Electives}

Credits: 3
Students should select one course for a total of 3 credits based on their career goal. Speak to a Program Director for additional information.

TEC113
Textiles: Dyeing
TEC114 Textiles: Block Printing/Silk Screening 1
TEC115 Textiles: Hand Painting 1
TEC225 Pattern Design I 3
THF115 Makeup for Stage and Screen 3

\title{
Certificate of \\ Completion (CCL) in Technical Theatre: Hair and Makeup
}

\author{
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.

\section*{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 required within the program.Required CoursesCredits: 10-11
THF115 Makeup for Stage and Screen ..... 3THF215 Advanced Makeup Techniques forStage and Screen3
THF216 Wig and Hair Production for Theatre and Film ..... 3
THP201AA Theatre Production I (1) OR
THP201AB Theatre Production II (2) OR

\section*{Certificate of \\ Completion (CCL) in Technical Theatre: Lighting}

\author{
Total Credits: 12-13 \\ Major Code: 5095N
}

\section*{Description}

The Certificate of Completion (CCL) in Technical Theatre: Lighting is designed to provide students with skills in lighting for theatrical performances. Courses Include instruction in basic circuiting and dimmer application, lighting plots, programming, hanging and focus of lighting instruments, light board operation, and safety in the theatre. A Certificate of Completion (CCL) in Technical Theatre and the Associate in Arts, Fine Arts (AAFA), Emphasis in Theatre are also available.

\section*{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 required within the program.

Required Courses
Credits: 12-13
THP201AA Theatre Production I (1) OR
THP201AB Theatre Production II (2) OR
THP202AB Theatre Production Electrics (1) 1-2
THP213 Introduction to Technical Theatre 4
THP216 Beginning Stage Lighting 3
THP251 Safety Practices in Theatre and Film Production 1
THP263 Entertainment Industry Drafting I: 2D CAD 3

\title{
Certificate of Completion (CCL) in Technical Theatre: Properties
}

\author{
Total Credits: 12-14 \\ Major Code: 5098N
}

Description
The Certificate of Completion (CCL) in Technical Theatre: Properties is designed to provide students with skills in the acquisition, construction, alteration, maintenance, and repair of properties for theatrical performances. Courses include instruction in prop construction, sewing, use of tools, and creation and maintenance of production paperwork. A Certificate of Completion (CCL) in Technical Theatre and the Associate in Arts, Fine Arts (AAFA), Emphasis in Theatre are also available.

\section*{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 required within the program.

Required Courses
Credits: 12-14
THP201AA Theatre Production I (1) OR
THP201AB Theatre Production II (2) OR
THP202AA Theatre Production I Scene Shop (1) OR
THP202AC Theatre Production I Costume Shop (1) 1-2
THP206 Introduction to Costume Construction for Theatre (4) OR
THP267 Painting Techniques for Film, TV and Theatre (3)
THP213 Introduction to Technical Theatre 4
THP250 Stage Properties 3
THP251 Safety Practices in Theatre and Film Production 1

\title{
Certificate of \\ Completion (CCL) in Technical Theatre: Puppetry
}

\author{
Total Credits: 15-16 \\ Major Code: 5148N
}

\section*{Description}

The Certificate of Completion (CCL) in Technical Theatre: Puppetry is designed to provide students with skills in puppetry for theatrical performances. Courses include instruction in the creation and operation of puppets in performance. 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 for all courses required within the program.

Required Courses
Credits: 15-16
THP112 Acting I (3) OR THP151 Theatre for Youth (3)
THP201AA Theatre Production I (1) OR
THP201AB Theatre Production II (2) OR
THP202AA Theatre Production I Scene Shop (1) OR
THP202AC Theatre Production I Costume Shop (1) 1-2
THP206 Introduction to Costume Construction for Theatre
THP219 Introduction to Puppetry 3
THP250 Stage Properties 3
THP251 Safety Practices in Theatre and Film Production 1

\title{
Certificate of \\ Completion (CCL) in Technical Theatre: Set/Scenic Construction
}

\author{
Total Credits: 9-10 \\ Major Code: 5096N
}

Description
The Certificate of Completion (CCL) in Technical Theatre: Set/Scenic Construction is designed to provide students with skills in the construction of sets for theatrical performances. Courses include instruction in theatrical set and scene construction, use of scene shop tools, materials and hardware. Plan reading and safety for set and scenic construction are also emphasized. A Certificate of Completion (CCL) in Technical Theatre and the Associate in Arts, Fine Arts (AAFA), Emphasis in Theatre are also available.

\section*{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 required within the program.

\section*{Required Courses}

Credits: 9-10
THP201AA Theatre Production I (1) OR
THP201AB Theatre Production II (2) OR
THP202AA Theatre Production I Scene Shop (1) 1-2
THP213 Introduction to Technical Theatre 4
THP251 Safety Practices in Theatre and Film Production 1
THP267 Painting Techniques for Fllm, TV and Theatre (3) OR
WLD102 Basic Metal Sculpture (3)

\title{
Certificate of \\ Completion (CCL) in Technical Theatre: Stage Crew Technician
}

Total Credits: 6-7
Major Code: 5099N

\section*{Description}

The Certificate of Completion (CCL) in Technical Theatre: Set/Scenic Construction is designed to provide students with skills in the construction of sets for theatrical performances. Courses include instruction in theatrical set and scene construction, use of scene shop tools, materials and hardware. Plan reading and safety for set and scenic construction are also emphasized. A Certificate of Completion (CCL) in Technical Theatre and the Associate in Arts, Fine Arts (AAFA), Emphasis in Theatre are also available.

\section*{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 required within the program.

\section*{Required Courses}

Credits: 6-7
THP201AA Theatre Production I (1) OR
THP201AB Theatre Production II (2) OR
THP202AA Theatre Production I Scene Shop (1) OR
THP202AB Theatre Production I Electrics (1) 1-2
THP213 Introduction to Technical Theatre 4
THP251 Safety Practices in Theatre and Film Production 1

\title{
Certificate of \\ Completion (CCL) in Textile and Apparel: Fashion Stylist
}

\author{
Total Credits: 19 \\ Major Code: 5768
}

Description
The Certificate of Completion (CCL) in Textile and Apparel: Fashion Stylist program is designed for students with an interest in visual display and merchandise styling for wholesale or retail trades. It provides students with skills defining target market, historical and current fashions, visual display techniques, color theory, and fashion styling practices. Completers of the certificate will enter the fashion industry at entry-level positions with additional understanding of the styling profession.

\section*{Program Notes}

Students must earn a grade of 'C' or better for all courses within the program.

\section*{Admission Criteria} None.

\section*{Program Prerequisites None.}
Required Courses

Credits: 19
ART113 Color ..... 3
MKT/TEC109 Introduction to Fashion Merchandising ..... 3
MKT/TEC151 Display and Visual Merchandising ..... 3
TEC106 History of Fashion ..... 3
TEC150 Fashion Show Production ..... 3
TEC245 Wardrobe Strategies ..... 3
TEC272AA Retail Merchandising Internship ..... 1

\section*{Certificate of \\ Completion (CCL) in \\ Visual Communication: Digital Process Management}

\author{
Total Credits: 36-37 \\ Major Code: 5996
}

Description
The Certificate of Completion (CCL) in Visual Communication: Digital Process Management is designed to prepare students for employment and upgrade the skills of those already employed in the digital printing industry. Coursework and experiences include training in the areas of proper file creation, troubleshooting and digital prepress for output, the operation and maintenance of a digital press, the operation of finishing equipment, project management, and the basics of estimating a job for digital output. Employment opportunities are available in a variety of fields including, but not limited to, digital prepress, digital press operation, binding and finishing, project management, digital workflow management, and variable data. Students interested in continuing their studies may choose to pursue the Associate in Applied Science (AAS) in Visual Communication (3052) where these courses apply.

\section*{Program Notes}

Students must earn a grade of ' \(C\) ' or better for all courses required within the program.

Required Courses
Credits: 36-37
ADA/ART169 Two-Dimensional Computer Design

\section*{ART103}

ART114
ART181
ART227
ART249

ART288
ART291
ART292
ART293
MPT150

Typography in the Digital Age
Digital Color

\section*{Graphic Design I}

Visual Communication Project Management and Workflow
Digital Output Prepress ..... 3
Digital Output ..... 3
Introduction to SolidWorks ..... 3


\title{
Course \\ Descriptions
}

COMMUNITY COLLEGE
A MARICOPA COMMUNITY COLLEGE

\section*{Course}

\title{
Descriptions
}

\section*{Accounting}

\section*{ACC109 Accounting Concepts}

3 Credits 3 Periods
Introduction to accounting with emphasis on analysis and applications of financial information. Prerequisites: None. GBS151 and reading ability equivalent to RDG100 suggested but not required.

\section*{ACC111 Accounting Principles I}

\section*{3 Credits 3 Periods}

Fundamental theory of accounting principles and procedures. Prerequisites: None.

\section*{ACC112 Accounting Principles II}

\section*{3 Credits 3 Periods}

Continuation of the fundamental theory of accounting principles and procedures, including interpretation of general purpose financial statements. Prerequisites: ACC111 with a grade of ' C ' or better, or permission of Department or Division.

\section*{ACC115 Computerized Accounting 2.0}

2 Credits 3 Periods
Mastery of a microcomputer accounting system including the general ledger, accounts receivable, accounts payable and payroll. Prerequisites: A grade of 'C' or better in ACC107 or ACC111 or ACC211 or ACC230, or permission of Instructor.

\section*{ACC121 Income Tax Preparation} 3 Credits 3 Periods
Preparation of and practical experience in preparing individual federal income tax returns using computer software. Prerequisites: None.

\section*{ACC212 Managerial Accounting}

3 Credits 3 Periods
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).

\section*{ACC219 Intermediate Accounting I}

3 Credits 3 Periods
Theory and practice applicable to determination of asset values, liabilities, and related problems of income determination. Prerequisites: ACC212 or ACC240 with a grade of 'C' or better, or permission of Department or Division.

\section*{ACC221 Tax Accounting}

3 Credits 3 Periods
Preparation of and accounting procedures for individuals; introduction to partnerships and corporate tax structures. Prerequisites: A grade of 'C' or better in ACC111 or ACC211 or permission of Department or Division.

\section*{ACC282AA Volunteerism Accounting: Service Learning Experience 1 Credit 1 Period}

Service learning field experience within private/ public agencies, educational institution, and citizen volunteer groups. ACC282AA may be repeated for a total of six (6) ACC282 credit hours. Standard grading available according to procedures outlined in catalog. Prerequisites: A grade of ' C ' or better in ACC111 or (ACC230 and ACC250) and permission of Instructor.

\section*{ACC282AB Volunteerism Accounting: Service Learning Experience 2 Credits 2 Periods}

Service learning field experience within private/ public agencies, educational institution, and citizen volunteer groups. ACC282AB may be repeated for a total of six (6) ACC282 credit hours. Standard grading available according to procedures outlined in catalog. Prerequisites: A grade of 'C' or better in ACC111 or (ACC230 and ACC250) and permission of Instructor

\section*{Administration of Justice}

\section*{AJS101 Introduction to Criminal Justice SB}

\section*{3 Credits 3 Periods}

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. Covers the history of the criminal justice system, terminology and career opportunities. Prerequisites: None.

\section*{AJS107 Patrol Procedures}

3 Credits 3 Periods
Specialized areas of the patrol function, including responding to crowds, riots, bomb threats, intoxication, hazardous materials, fires, and domestic disputes. Partially fulfills Arizona POST (Peace Officer Standards and Training) requirements for proficiency skills academy attendance. Prerequisites: None.

\section*{AJS109 Substantive Criminal Law \\ 3 Credits 3 Periods}

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 essential elements of each offense. Required in AJS curriculum. Prerequisites: None.

\section*{AJS112 Wellness For Law Enforcement Officers}

\section*{3 Credits 3 Periods}

The value of physical fitness in law enforcement and the basic elements of strength training, aerobic conditioning, flexibility, nutrition, and back injury prevention. Prerequisites: None.

\section*{AJS113 Criminal Justice Crime Control Policies and Practices}

\section*{3 Credits 3 Periods}

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, hot spots policing, defensible space, and crime prevention through defensible space. Prerequisites: None.

\section*{AJS119 Computer Applications in Justice Studies}

\section*{3 Credits 4 Periods}

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 justice studies. Prerequisites: None.

\section*{AJS123 Ethics and the Administration of Justice HU}

\section*{3 Credits 3 Periods}

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 making in criminal justice system situations. Prerequisites: None.

\section*{AJS151 Firearms I}

\section*{1 Credit 1 Period}

Moral aspects, legal provisions, safety precautions and restrictions covering the use of firearms, and the firing of sidearms. Prerequisites: None.

\section*{AJS152 First Aid}

\section*{3 Credits 3 Periods}

Methods for providing emergency medical care to victims of accidents or illness and related safeguards. Includes legal and civil issues, basic functions and major organs of the human body, injury management, resuscitation, movement and extrication of victims. Prerequisites: None.the firing of sidearms. Prerequisites: None.

\section*{AJS153 Firearms II/Handguns}

1 Credit 1 Period
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 Department.

\section*{AJS162 Domestic Violence}

3 Credits 3 Periods
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 violence. Addresses research issues and contemporary domestic violence policy. Prerequisites: None.

\section*{AJS192 Serial Killers And Mass Murderers} 3 Credits 3 Periods
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, and prevention. Prerequisites: None.

\section*{AJS200 Current Issues In Criminal Justice SB}

\section*{3 Credits 3 Periods}

Examines current issues, techniques and trends in the Criminal Justice System. Prerequisites: None.

\section*{AJS201 Rules of Evidence}

\section*{3 Credits 3 Periods}

A practical insight into the rules of evidence to include how to recognize evidence: the general rules governing admissibility of evidence; the hearsay rule and its exceptions; the use of documentary evidence, written memoranda, photographs, recordings and electronic surveillance; corpus delicti; opinion evidence, circumstantial evidence, evidential privileges. Prerequisites: None.

\author{
AJS205 Effective Communication and Report Writing in Criminal Justice 3 Credits 3 Periods \\ 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 and improper conclusions, and descriptions of persons and property. Prerequisites: None.

\section*{AJS210 Constitutional Law}

\section*{3 Credits 3 Periods}

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. Required in AJS curriculum. Prerequisites: None.

\section*{AJS212 Juvenile Justice Procedures}

\section*{3 Credits 3 Periods}

Examines the history and development of juvenile justice theories, procedures, and institutions. Prerequisites: None.

\section*{AJS213 Evidence Technology/Fingerprints} 3 Credits 3 Periods
Fundamental principles and processes of fingerprints to include identification, interpretation, and classification. In addition, students will apply fingerprinting latent fingerprint developing, preservation of evidence and the chain of custody. Prerequisites: None.

\section*{AJS214 Evidence Technology/Photography} 3 Credits 3 Periods
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.

\section*{AJS215 Criminalistics: Physical Evidence 3 Credits 3 Periods}

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, firearms identification, paint chips and arson. Prerequisites: None.

\section*{AJS216 Criminalistics: Biological Evidence 3 Credits 3 Periods}

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 interest in criminalistics. Prerequisites: None.

\section*{AJS225 Criminology}

SB
3 Credits 3 Periods
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 offenders. Required in the AJS curriculum. Prerequisites: None.

\section*{AJS230 The Police Function} 3 Credits 3 Periods
Theories of procedures and methods of operations of public police with emphasis on discretionary powers available to the working police officer. Career opportunities and current trends in law enforcement presented. Prerequisites: None.

\section*{AJS240 The Correction Function 3 Credits 3 Periods}

Examines the history and development of correctional theories and institutions. Prerequisites: None.

\author{
AJS255 Crime, Law, and Mental Health 3 Credits 3 Periods
}

An interdisciplinary course that draws from the fields of psychology, sociology, criminology, and law. Covers the distinct and interfacing roles of mental health professionals and the legal justice system when dealing with a mentally ill criminal offender. Other topics covered include mental health issues within communities, role of clinical assessment, civil and criminal commitment, civil competencies, confidentiality of clinicians, rights and refusal to treatment, and informed consent. Prerequisites: None.

\section*{AJS258 Victimology and Crisis Management \\ C, SB}

3 Credits 3 Periods
Victimology, the criminal justice system, techniques of crisis intervention, and the importance of a multicultural and global perspective. Includes sexual assault, family violence, post-traumatic stress disorder, the role of substance abuse, effective coping skills, appropriate community resources and the responsiveness of the justice system. Prerequisites: None.

\section*{AJS260 Procedural Criminal Law}

\section*{3 Credits 3 Periods}

Concerned with the understanding of procedural criminal law. Examines the rationale underlying major court holdings, the procedural requirements that stem from these holdings, and their effect on the daily operations of the criminal justice system. Prerequisites: None.

\section*{AJS275 Criminal Investigation I} 3 Credits 3 Periods
Introduction to the theory of criminal investigation. Examines crime scene procedures, case preparation, interviewing, and basic investigative techniques. Prerequisites: None.

\section*{AJS282AA Service-Learning Experience in Administration of Justice Studies}

\section*{1 Credit 1 Period}

Unpaid Service-Learning (SL) experience, completed with approved community partner. AJS282AA may be repeated for a total of six (6) credit hours. Standard grading is available according to procedures outlined in catalog. Prerequisites: Permission of Instructor.

\section*{AJS290AI Theories of Criminal Behavior} 1 Credit 1 Period
Theories of human behavior and crime. Biological, sociological, and psychological approaches to the theories of criminal behavior. Prerequisites: None.

\section*{AJS290AU Child Abuse Investigation 1 Credit 1 Period Definition and investigation of the causes and effects of child abuse. Prerequisites: None.}

\section*{AJS290BE Probation And Parole}

1 Credit 1 Period
Current issues in probation and parole, including sentencing, parole revocation, and administrative procedure. Prerequisites: None.

\section*{AJS290BH Sex Crimes Investigation 1 Credit 1 Period}

Investigative procedures employed by the police and courtroom procedures utilized by the prosecuting attorney in sex-related crimes. Prerequisites: None.

\author{
AJS290BN Courtroom Testimony Seminar \\ 1 Credit 1 Period \\ Courtroom demeanor and protocol. Role and primary functions of witness and legal counsels. Prerequisites: None.
}

\author{
AJS290BU Family Violence \\ 1 Credit 1 Period \\ Family violence issues as they relate to the criminal justice response. Prerequisites: None.
}

\section*{AJS290BU Family Violence}

\section*{1 Credit 1 Period}

Family violence issues as they relate to the criminal justice response. Prerequisites: None.

\section*{AJS290BV Victim Assistance} 1 Credit 1 Period
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 resources. Prerequisites: None.

\section*{Aerospace Studies}

\section*{AES101 Air Force Today I}

\section*{2 Credits 1 Period}

Survey course designed to introduce students to the United States Air Force and Air Force Reserve Officer Training Corps (AFROTC). Featured topics include: mission and organization of the Air Force, officership and professionalism, military customs and courtesies, Air Force officer opportunities, group leadership problems, and an introduction to communication skills. The Leadership Laboratory component provides dynamic and integrated grouping of leadership developmental activities designed to meet the needs and expectations of prospective Air Force second lieutenants and complement the AFROTC academic program. Emphasizes common Air Force customs and courtesies, drill and ceremonies, health and physical fitness through group participation. Prerequisites: None.

\section*{AES103 Air Force Today II}

\section*{2 Credits 1 Period}

Introduce students to the United States Air Force and encourage participation in Air Force Reserve Officer Training Corps (AFROTC). Featured topics include: introduction to leadership, Air Force core values, introduction to interpersonal communication and team building, and a continuation of communication skills. The Leadership Laboratory component provides dynamic and integrated grouping of leadership developmental activities designed to meet the needs and expectations of prospective Air Force second lieutenants and complement the AFROTC academic program. Emphasizes learning the environments and dynamics of an Air Force officer. Prerequisites: None.

\section*{AES201 Evolution of USAF Air and Space Power I}

\section*{2 Credits 1 Period}

Focuses on facilitating the transition from Air Force ROTC cadet to Air Force ROTC candidate. Examines the general aspects of air and space power through a historical perspective. Utilizing this perspective, covers a time period from the first balloons and dirigibles to the modern technology currently used in overseas contingency operations. Featured topics include: Air Force heritage, Air Force leaders, introduction to ethics and values, group leadership problems and continuing application of communication skills. The Leadership Laboratory component provides dynamic and integrated grouping of leadership developmental activities designed to meet the needs and expectations of prospective Air Force second lieutenants and complement the AFROTC academic program. Provides application of advanced drill and ceremonies; issuing commands; knowing flag etiquette; and developing, directing, and evaluating skills to lead others. Prerequisites: None.

\begin{abstract}
AES203 Evolution of USAF Air and Space Power II

\section*{2 Credits 1 Period}

Provides knowledge-level understanding for general element and employment of air and space power. Furthermore, discusses the importance of Air Force Core Values with use of operational examples and historical Air Force leaders. Continues to develop communication skills. Topics include: the Air Force mission and organization, modern joint expeditionary Airmen, officer opportunities, and professionalism. The Leadership Laboratory component provides dynamic and integrated grouping of leadership developmental activities designed to meet the needs and expectations of prospective Air Force second lieutenants and complement the AFROTC academic program. Emphasizes preparation for field training. Prerequisites: None.
\end{abstract}

\section*{AES294 Air Force Physical Fitness}

\section*{1 Credit 3 Periods}

Physical training component of Air Force ROTC. Covers topics of immediate or special interest to a faculty member and students. Prerequisites: None. AES294 may be repeated for credit.

\section*{African American Studies}

\section*{AFR110 Introduction to \\ African-American Studies \\ C}

\section*{3 Credits 3 Periods}

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 for the future. Prerequisites: None.

\section*{AFR202 Ethnic Relations in the United States}

\section*{C, H, SB}

3 Credits 3 Periods
Basic concepts and processes, including historic overview, of inter-ethnic relations in the United States: culture, race, ethnicity, ethnocentrism, prejudice, discrimination, racism, assimilation, acculturation, and individual and group responses to inter-ethnic contact. Cultural knowledge and intercultural communication skills and perspectives as fundamental tools for successful management of social relations in a multicultural world. Prerequisites: None.

\section*{Agribusiness}

\section*{AGB130 Establishing And Running \\ An Agribusiness \\ 3 Credits 3 Periods}

Basic principles used in establishing and running an Agribusiness. Emphasis on business requirements to maintain a business enterprise in Arizona. Prerequisites: None.

\section*{AGB132 Agribusiness and Management 3 Credits 3 Periods}

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 operations of an agribusiness venture. Prerequisites: None.

\section*{AGB139 Agribusiness}

Computer Operations
3 Credits 6 Periods
Agribusiness operations for solving, forecasting and projecting agribusiness problems, agribusiness

\section*{Course Descriptions}
communications, accounting systems and database use. Prerequisites: None.

\section*{AGB142 Floriculture}

3 Credits 5 Periods
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, pest management, and greenhouse construction and operations. Prerequisites: None.

\section*{AGB144 Agriculture Processing} 3 Credits 5 Periods
Agricultural processing and the meat industry as a business enterprise. Carcass evaluation, grading, judging for cut ability and quality, cut identification, meat cutting, wrapping, freezing, and storing. Prerequisites: None.

\section*{AGB231 Marketing of Agricultural Products}

3 Credits 3 Periods
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 domain. Prerequisites: None.

\section*{AGB290 Internship}

\section*{3 Credits 6 Periods}

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.

\section*{Agricultural Landscape}

\section*{AGL181 Landscape Construction Techniques 3 Credits 6 Periods}

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.

\section*{AGL189 Landscape Design I}

3 Credits 6 Periods
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 pro-

gram, measured base, study diagrams, rendered and colored plans, and sectional elevations. Architectural communication developed through hand sketch and hand drafting techniques with practice in client interview and design presentation. Prerequisites: None.

\section*{AGL269 Computer Aided} Landscape Design
3 Credits 6 Periods
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 Instructor.

\section*{AGL296WA Cooperative Education Landscape Design}

1 Credit 5 Periods
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 12 college credits, min 2.6 gpa and obtain a position related to academic or career goals or permission of Instructor. Corequisites: At least 1 class related to major or career interest or with permission of the Instructor.

\section*{Agricultural Science}

\section*{AGS164 Plant Growth and Development SQ}

\section*{4 Credits 6 Periods}

Principles of growth in relation to seed germination, emergence, growth and reproduction processes of plants and the environmental influences on plant growth processes. Prerequisites: None.

\section*{AGS165AA Fall Sustainable Crop Production \\ 3 Credits 2 Periods}

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 quality control with an emphasis on sustainability. Prerequisites: A grade of 'C' or better in AGS164 or permission of Instructor.

\section*{AGS165AB Spring Sustainable Crop Production}

3 Credits 2 Periods
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 quality control with an emphasis on sustainability. Prerequisites: A grade of 'C' or better in AGS164 or permission of Instructor.

\section*{AGS166 Aquaponics}

\section*{3 Credits 5 Periods}

Establishment, care, and selection of facilities for commercial production of animals and plants in a water-based closed system. Prerequisites: None.

\section*{AGS182AA Gardening Practices and Techniques}

2 Credits 1 Period
Cultural practices of vegetables, fruits and ornamental plants as they relate to organic and inorganic gardening. Prerequisites: None.

\footnotetext{
AGS183 Urban Plant Identification and Use 3 Credits 3 Periods
Identification, growth, cultural requirements, uses, maintenance, and care of landscape trees, shrubs, vines and ground covers commonly used in Arizona. Prerequisites: None.
}

\section*{AGS186 Greenhouse Management and Construction}

\section*{3 Credits 2 Periods}

Principles and practices of greenhouse operation; control of environmental factors and cultural practices affecting the production of greenhouse crops. Prerequisites: None.

\section*{AGS192 Urban Plant Care}

3 Credits 5 Periods
Establishment, care and preservation of ornamental trees, shrubs, vines, and ground cover plants used in landscape for human well-being and pleasure. Prerequisites: None.

\section*{AGS260 Soils}

SQ

\section*{4 Credits 3 Periods}

Fundamental properties of the physical, chemical, and biological relation of soil to plant growth. Evaluation of the human impact on soil health.

Prerequisites: A grade of 'C' or better in CHM130 or permission of Instructor.

\section*{AGS262 Irrigation Design, Installation, Operation, and Trouble Shooting} 3 Credits 5 Periods
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 water and their use in the landscape. Prerequisites: None.

\section*{AGS268 Integrated Pest Management in the Cultivated Environment}

\section*{4 Credits 6 Periods}

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.

\section*{AGS284 Lawn And Turf Care}

3 Credits 3 Periods
Factors that affect the establishment and maintenance of turf grasses. Includes budgets, schedules and selection of equipment. Prerequisites: None.

\section*{AGS285 Propagation of Horticultural Plants}

\section*{3 Credits 2 Periods}

Principles and processes of propagation of crops using seed, budding, grafting, and cuttings in greenhouse structures and open ground. Prerequisites: None.

\section*{AGS290 Internship}

\section*{3 Credits 6 Periods}

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.

\section*{AGS296WA Cooperative Education}

\section*{1 Credit 5 Periods}

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 12 college credits, min. 2.6 GPA and obtain a position related to academic or career goals or permission of Instructor. Corequisites: At least 1 class related to major or career interest or with permission of the Instructor.

\section*{AGS296WC Cooperative Education}

\section*{3 Credits 15 Periods}

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 12 college credits, min. 2.6 GPA and obtain a position related to academic or career goals or permission of Instructor. Corequisites: At least 1 class related to major or career interest or with permission of the Instructor.

\section*{AGS298AA Special Projects}

\section*{1 Credit 1 Period}

Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: Permission of Program Director or Instructor.

\section*{AGS298AC Special Projects}

\section*{3 Credits 3 Periods}

Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: Permission of Program Director or Instructor.

\section*{American Indian Studies}

AIS101 Survey of American Indian Issues
C, SB
3 Credits 3 Periods
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 American Indian communities. Prerequisites: None.

\section*{AIS105 Introduction to}

American Indian Studies

\section*{C}

\section*{3 Credits 3 Periods}

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 western social systems on tribal nations. Prerequisites: None.

\section*{AIS110 Navajo Government}

\section*{C, H}

3 Credits 3 Periods
Addresses and examines major historical developments of the Navajo People with a focus on government, Iaw, 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 federal and tribal laws, and the role of the Navajo clanship system and other relevant cultural concepts addressed. Prerequisites: None.

\section*{AIS140 American Indian History}

C, H, SB
3 Credits 3 Periods
Survey of American Indian history with emphasis on the last 200 years including developments in the 20th century. Focuses on selected groups such as the Cherokee, Iroquois Confederation, Navajo, Sioux and Indians of the Southwest in relation to cultural, economic, political and social continuity and changes. Topics include development and influence of federal policies, past and present issues confronting Native Americans and how Native American individuals and communities maintain their identities as they confront social changes. Prerequisites: None.

\section*{AIS141 Sovereign Indian Nations}

C, H, SB

\section*{3 Credits 3 Periods}

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 development, other current issues, and contemporary social problems. Prerequisites: None.

\section*{AIS170 American Indian History of the Southwest}

C, H
3 Credits 3 Periods
Covers history of Indian peoples in the southwestern United States from pre-Columbian era to the present. Includes historical events, the development and implementation of Spanish-Mexican and United States' policies and their impact on Indian peoples in these areas, and current issues of importance to Indian peoples. Prerequisites: None.

\section*{AIS213 American Indian Religions}

C, HU, L

\section*{3 Credits 3 Periods}

An examination of the historical and cultural background of diverse life ways and worldviews belonging to the peoples indigenous to the North American continent over time, including a study of modern day American Indian beliefs and practices. Prerequisites: A grade of 'C' or better in ENG101, or ENG107, or equivalent.

\section*{Animal Science}

\author{
ANS212 Livestock Production and Management \\ C, SB \\ 3 Credits 3 Periods \\ Production and management of beef cattle, dairy cattle, sheep, swine, stock horses, goats, and poultry. Evaluation of livestock for agricultural purposes. Housing and care requirements of common livestock. Prerequisites or Corequisites: ANS110 or permission of instructor.
}

\section*{Anthropology: Science/ Mathematics}

\section*{ASM104 Bones, Stones, and Human Evolution}

SB, SG
4 Credits 5 Periods
Study of human evolution and variation; including fossil hominids and their tools, primate anatomy and behavior, human genetics, and the environment and human biology. Prerequisites: None.

\section*{ASM275 Forensic Anthropology}

SB, SG
4 Credits 5 Periods
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 re-
constructing 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 investigations, and the deciphering of historic cases. Lab activities designed to illustrate techniques and principles central to the discipline. Prerequisites: None.

\section*{Anthropology: Social/ Behavioral Sci.}

\section*{ASB100 Introduction to Global Health}

G, SB
3 Credits 3 Periods
The study of human health patterns at an international and local scale. Focus on pressing global health challenges that the world faces today are examined from a broad social, ecological, and cultural context. Prerequisites: None.

\section*{ASB102 Introduction to Cultural Anthropology}

G, SB

\section*{3 Credits 3 Periods}

Principles of cultural anthropology, with illustrative materials from a variety of cultures. The nature of culture; social, political, and economic systems; religion, aesthetics and language. Prerequisites: None.

ASB202 Ethnic Relations in the United States

\section*{C, H, SB}

3 Credits 3 Periods
Basic concepts and processes, including historic overview, of inter-ethnic relations in the United States: culture, race, ethnicity, ethnocentrism, prejudice, discrimination, racism, assimilation, acculturation, and individual and group responses to inter-ethnic contact. Cultural knowledge and intercultural communication skills and perspectives as fundamental tools for successful management of social relations in a multicultural world. Prerequisites: None.

\section*{ASB211 Women in Other Cultures}

G, HU, SB
3 Credits 3 Periods
Cross-cultural analysis of the economic, social, political, and religious factors that affect women's status in traditional and modern societies. Prerequisites: None.

\section*{ASB214 Magic, Witchcraft and Healing: An Introduction to Comparative Religion}

G, HU
3 Credits 3 Periods
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 total culture. Prerequisites: None.

\section*{ASB222 Buried Cities and Lost Tribes:? Old World}

G, H, HU, SB
3 Credits 3 Periods
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 life ways, the rise of cities and complex societies, political strife across different cultures and the forces which tend to fragment societies. Examples drawn from Africa, Asia, Europe, the Pacific Islands, and Australia. Prerequisites: None.

\section*{ASB223 Buried Cities and Lost Tribes: New World}

G, H, HU, SB
3 Credits 3 Periods
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 life ways, the rise of cities and complex societies, political strife across different cultures and the forces which fragment societies. Examples drawn from North America, Central America, and South America. Prerequisites: None.

\section*{ASB231 Archaeological Field Methods}

SG
4 Credits 6 Periods
Excavation of an archaeological site; recording and interpreting data collected during the field experience. Overview of the cultures concerned; contemporary issues in archaeology. Prerequisites: None.

\section*{ASB252 Sports and Culture}

G, SB
3 Credits 3 Periods
Cross-cultural examination of symbolic and social dimensions of sports, past and present. Prerequisites: None.

\section*{ASB253 Death and Dying Across Cultures}

G, HU
3 Credits 3 Periods
Responses to death and dying in cultures around the world. Explanations for particular cultural responses to death and dying. Examples drawn from ancient and contemporary cultures. Prerequisites: None.

\section*{ASB282AA Service-Learning Experience in Anthropology}

\section*{1 Credit 1 Period}

Unpaid Service-Learning (SL) experience, completed with approved community partner. ASB282AA may be repeated for a total of six (6) credit hours. Standard grading available according to procedures outlined in catalog. Prerequisites: Permission of Instructor.

\section*{ASB298AA Special Projects}

\section*{1 Credit 1 Period}

Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: Permission of Program Director or Instructor.

\section*{Arabic}

\section*{ARB101 Elementary Arabic I}

\section*{4 Credits 5 Periods}

Introduction to the basic alphabet, grammar, pronunciation and vocabulary of the Arabic language. Listening, speaking, reading and writing skills. Prerequisites: None.

\section*{ARB102 Elementary Arabic II}

4 Credits 5 Periods
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 years is required.

\section*{Architecture}

\section*{ARC265 Sketchup I: Introduction to Sketchup}

3 Credits 6 Periods
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 three-dimensional schematic and rendered interior and exterior building views. Prerequisites: None. Previous CAD experience recommended but not required. ARC265 may be repeated for a total of six (6.0) credits.

\section*{Art}

\section*{ART100 Introduction to Computer Graphic Art \\ 1 Credit 2 Periods}

Conceptualization, visualization, and production of art using the computer. Prerequisites: None.

\section*{ART106 Gallery Operations 3 Credits 6 Periods}

Operation of an art gallery. Includes organization, publicity, evaluation of artwork, selection and installation of exhibits. ART106 may be repeated for a total of six (6) credit hours. Prerequisites: Permission of Instructor.

\section*{ART111 Drawing I}

3 Credits 6 Periods
Fundamental principles of drawing. Emphasis on composition and facility in objective and expressive representation, using variety of drawing media. Prerequisites: None.


\section*{ART112 Two-Dimensional Design}

3 Credits 6 Periods
Study of fundamental elements and principles of two-dimensional design. Prerequisites: None.

\section*{ART113 Color}

\section*{3 Credits 6 Periods}

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.

\section*{ART115 Three-Dimensional Design}

3 Credits 6 Periods
Fundamental principles of three-dimensional design. Prerequisites: None.

\section*{ART116 Life Drawing I}

\section*{3 Credits 6 Periods}

Use of form, structure and anatomy of draped and undraped human figure to develop basic principles of sound draftsmanship. Prerequisites: None.

\section*{ART117 Life Drawing II}

\section*{3 Credits 6 Periods}

Further study of form, structure, and anatomy of the draped and undraped human figure with emphasis on composition. Prerequisites: ART116.

\section*{ART118 Art Anatomy}

\section*{3 Credits 6 Periods}

Artistic study of the concept of anatomical unity. Principle skeletal and muscular structures affecting surface form of the human figure. Includes drawing project, portfolio, and tests. Prerequisites: A grade of ' \(C\) ' or better in ART116 or permission of Instructor.

\section*{ART122 Drawing and Composition II}

\section*{3 Credits 6 Periods}

Emphasis on composition and exploration of drawing media. Prerequisites: A grade of 'C' or better in ART111.

\section*{ART131 Photography I}

\section*{HU}

3 Credits 6 Periods
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 photographic aesthetic and photography's role in society. Prerequisites: None. Camera required.

\section*{ART132 Photography II}

\section*{3 Credits 6 Periods}

Advanced camera and darkroom techniques.
Aesthetic awareness with personal expression. Prerequisites: A grade of 'C' or better in ART131 or permission of Instructor.

\section*{ART133 Photography III}

3 Credits 6 Periods
Refinement of aesthetic and technical aspects producing convincing images of highest quality. Prerequisites: A grade of 'C' or better in ART132 or permission of Instructor.

\section*{ART142 Introduction to} Digital Photography

\section*{3 Credits 6 Periods}

Fundamentals of digital photography. Includes camera operations, exposure techniques, introduction to digital output, and theory of digital photography. Prerequisites: None. Digital camera required.

\section*{ART143 Intermediate Digital Photography} 3 Credits 6 Periods
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-resolution digital output. Semi-adjustable, high-resolution digital camera is required. Prerequisites: A grade of 'C' or better in ART142 or permission of Instructor.

\section*{ART161 Ceramics I}

\section*{3 Credits 6 Periods}

Introduction to ceramic materials and techniques of hand construction, decorating, glazing and throwing on potters' wheel. Prerequisites: None.

\section*{ART162 Ceramics II}

\section*{3 Credits 6 Periods}

Major emphasis on wheel throwing, glaze making and decorating techniques. Prerequisites: A grade of ' \(C\) ' or better in ART161.

\section*{ART165 Watercolor Painting I}

3 Credits 6 Periods
Transparent and Gouache watercolor painting.Prerequisites: A grade of 'C' or better in (ART111 and ART112), or permission of instructor.

\section*{ART166 Watercolor Painting II 3 Credits 6 Periods}

Painting in water soluble media. Emphasis on individual techniques and design. Prerequisites: A grade of 'C' or better in ART165.

\section*{ART167 Painting I}

3 Credits 6 Periods
Exploration of technical and expressive possibilities of various painting media in easel painting. Prerequisites: A grade of 'C' or better in (ART111 and ART112), or permission of instructor.

\section*{ART168 Painting II}

\section*{3 Credits 6 Periods}

Continued refinement of painting skills and investigation of new possibilities in painting. Prerequisites: A grade of 'C' or better in ART167 or permission of Instructor.

\section*{ART169 Two-Dimensional Computer Design}

3 Credits 6 Periods
Generation of electronic two-dimensional images and traditional methods of visual problem solving.

Understanding of computer techniques and art presentation methods. A grade of ' \(C\) ' or better required in all Prerequisites. Prerequisites or Corequisites: ART100 or permission of Instructor.

\section*{ART177 Computer-Photographic Imaging}

3 Credits 6 Periods
Introduction to the multiple elements of micro-computer-photographic imaging. Basic foundation in the use of the photographic manipulation of images using software programs. Special attention to aesthetic foundations underlying photographic composition. A grade of ' C ' or better required in all Prerequisites. Prerequisites or Corequisites: ART100 or permission of Instructor.

\section*{ART183 Computer Aided Graphic Arts I} 3 Credits 6 Periods
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: ART100 or permission of Instructor.

\section*{ART184 Digital Animation I}

3 Credits 6 Periods
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. Screening and discussion of selected animated short films and videos. Prerequisites: A grade of ' C ' or better in (ART111 or ART116) or permission of Instructor. Corequisites: ART100 or permission of Instructor.

\section*{ART185 3-D Modeling for Animation 3 Credits 6 Periods}

Basic concepts of 3-D modeling. Anatomy of computer geometry; basic elements that make computer models-curves, surfaces, nurbs, and polygons.

\section*{Course Descriptions}

3-D translation, shading, materials, and rendering. Prerequisites: A grade of ' \(C\) ' or better in ADA/ART/ MMT184 or ADA/ART184AC or permission of the Instructor.

\section*{ART200 Animation and Interactivity 3 Credits 6 Periods}

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 tools. Includes tools used by the creative industry for animation productions and interactive media. Prerequisites: A grade of 'C' or better in ART100 or permission of Instructor.

\section*{ART202 Digital Arts Survey \\ 3 Credits 6 Periods}

Designed for broad overview of the digital arts. Experience in digital based media, creative problem solving, design and aesthetics. Prerequisites: A grade of 'C' or better in ART100 or permission of Instructor.

\section*{ART211 Drawing and Composition III 3 Credits 6 Periods}

Advanced development of drawing skill with emphasis on compositional theory. Prerequisites: A grade of 'C' or better in ART122 or permission of Instructor.

\section*{ART216 Life Drawing III}

\section*{3 Credits 6 Periods}

Advanced creative study from model in various painting and drawing media. Prerequisites: A grade of 'C' or better in ART117 or permission of Instructor.

\section*{ART217 Life Drawing IV}

\section*{3 Credits 6 Periods}

Further development of skills in expressive drawing materials and techniques as applied to finished drawings of the human form. Prerequisites: A grade of ' \(C\) ' or better in ART216 or permission of Instructor.

\section*{ART222 Drawing and Composition IV} 3 Credits 6 Periods
Further study of drawing techniques with emphasis on individual problems and techniques. Prerequisites: A grade of 'C' or better in ART211 or permission of Instructor.

\section*{ART250 Introduction to Printmaking 3 Credits 6 Periods}

Introduction to concepts and techniques involved in Fine Art field of Printmaking. Deals with three most basic Printmaking modes of Serigraphy, Woodcut, and Monoprinting in first part of course. Overview of Etching, Lithography and Papermaking in second part of course. Prerequisites: A grade of 'C' or better in ART111 and ART113.


\section*{ART255 Art Marketing}

\section*{3 Credits 3 Periods}

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, contracts and agreements, royalties, record keeping, and communication skills. Prerequisites: None.

\section*{ART261 Ceramics III}

\section*{3 Credits 6 Periods}

Emphasis on wheel throwing skill and individual style development. Prerequisites: A grade of 'C' or better in ART162 or permission of Instructor.

\section*{ART262 Ceramics IV}

\section*{3 Credits 6 Periods}

Experimental work in clays and glazes. Prerequisites: A grade of 'C' or better in ART261.

\section*{ART263 Figure Painting}

\section*{3 Credits 6 Periods}

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 of the Head" models, and the studio skeleton will be used as the basis of projects. Previous experience drawing from the live model recommended. Oil paint is the preferred medium but students may work in other painting media if they have previous experience. ART263 may be repeated for credit. Prerequisites: A grade of ' \(C\) ' or better in ART167 or permission of Instructor.

\section*{ART265 Watercolor Painting III}

3 Credits 6 Periods
Continuation of watercolor painting with emphasis on control and expression. Prerequisites: A grade of 'C' or better in ART166 or permission of Instructor.

\section*{ART266 Watercolor Painting IV}

3 Credits 6 Periods
Advanced problems directed toward more personal expression. Prerequisites: \(A\) grade of ' \(C\) ' or better in ART265.

\section*{ART267 Painting III}

3 Credits 6 Periods
Development of materials and techniques of painting. Individual problem-solving. Prerequisites: A grade of 'C' or better in ART168 or permission of Instructor.

\section*{ART268 Painting IV}

3 Credits 6 Periods
Advanced problem in painting. Study with greater emphasis on personal expression. Prerequisites: A grade of ' C ' or better in ART267 or permission of Instructor.

\section*{ART270 Intermediate Computer Photographic Imaging}

\section*{3 Credits 6 Periods}

Intermediate microcomputer-based photographic imaging techniques. Refinement of aesthetic awareness and personal expression. Prerequisites: A grade of 'C' or better in ADA/ART177.

\section*{ART274 Advanced Computer Photographic Imaging}

\section*{3 Credits 6 Periods}

Advanced microcomputer-based photographic imaging techniques. Advanced manipulation techniques of photographic images. Continued development of aesthetic awareness and personal expression. Prerequisites: A grade of ' \(C\) ' or better in ART270.

\section*{ART277 Textiles I}

\section*{3 Credits 6 Periods}

Introduction to exploration of textile media. Prerequisites: A grade of 'C' or better in ART112 or permission of Instructor.

\section*{ART283 Computer Aided Graphic Arts II}

\section*{3 Credits 6 Periods}

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 color separation.Prerequisites: A grade of 'C' or better in ADA/ART183 or permission of Instructor.

\section*{ART284 Intermedia Animation}

\section*{3 Credits 6 Periods}

Elements of electronic animation with interactive text graphics, photography, sound, film, and video construction. Prerequisites: A grade of 'C' or better in ADA/ART/MMT184 or permission of Instructor.

\section*{ART287 3D Character Animation}

\section*{3 Credits 6 Periods}

3D-Character modeling and animation for multimedia, film, broadcast, video games and interactive entertainment. Character motion, editing, and blending electronic with traditional techniques. Prerequisites: A grade of ' \(C\) ' or better in ADA/ART/ MMT184 or ART180AC. Corequisites: ART116 or permission of Instructor.

\section*{ART289 Computer Illustration}

\section*{3 Credits 6 Periods}

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 and output devices. A
grade of ' \(C\) ' or better required in all Prerequisites. Prerequisites or Corequisites: ART100 or permission of Instructor.

\section*{ART290AA Studio Art \\ 1 Credit 2 Periods}

Studio course for art majors allowing continuation in a subject field. ART290AA may be repeated for credit. Prerequisites: Permission of Instructor.

\section*{ART290AC Studio Art}

\section*{3 Credits 6 Periods}

Studio course for art majors allowing continuation in a subject field. ART290AC may be repeated for credit. Prerequisites: Permission of Instructor.

\section*{ART295GB Art Workshop/Seminar: Ceramics}

\section*{2 Credits 4 Periods}

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 Department or Division Chair.

\section*{ART298AA Special Projects}

\section*{1 Credit 1 Period}

Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: Permission of Program Director or Instructor.

\section*{ART298AB Special Projects \\ 2 Credits 2 Periods}

Organized and tailored around the interests and needs of the individual student. Structured to
provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: Permission of Program Director or Instructor.

\section*{Art History/ Humanities}

\section*{ARH100 Introduction to Art}

HU

\section*{3 Credits 3 Periods}

Understanding and enjoyment of art and visual culture through study of two-dimensional and three-dimensional works of art, design elements, media and processes, and cultural contexts. Emphasis on contemporary topics and cultural diversity in the arts. Prerequisites: None.

\section*{ARH101 Prehistoric Through Gothic Art H, HU}

3 Credits 3 Periods
History of art from prehistoric through medieval period. Prerequisites: None.

\section*{ARH102 Renaissance Through Contemporary Art}

H, HU
3 Credits 3 Periods
History of art from around the world from the Renaissance through contemporary period. Prerequisites: None.

\section*{ARH112 History of Modern Art}

H, HU
3 Credits 3 Periods
Development of and significant aspects of modern art since the mid-nineteenth century. Emphasis on modern art's relationship to socio-political and aesthetic developments, new media and the rise of mass culture. Prerequisites: None.

\section*{ARH115 History of Photography HU}

\section*{3 Credits 3 Periods}

Survey of history of photography from beginning to present. Emphasizes medium's impact upon society and other visual arts. Technical developments, aesthetic concerns, and individual photographers studied. Prerequisites: None.

\section*{ARH201 Art of Asia}

G, H, HU
3 Credits 3 Periods
Introduction to the origins and historic development of art in Asia, with emphasis on China, Japan, and India. Prerequisites: None.

\section*{Astronomy}

\section*{AST106 Life in the Universe}

\section*{SQ}

\section*{4 Credits 3 Periods}

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 placement.

\begin{abstract}
AST107 Life in the Universe Laboratory 1 Credit 3 Periods
Astronomy, Biology, and Planetary Science laboratory. AST/GLG107 is a course intended for those students who have previously completed the corresponding lecture course. Current MCCCD students should enroll in AST/GLG106 only. Prerequisites: A grade of 'C' or better in AST/GLG106 and permission of Instructor or Department or Division.
\end{abstract}

\section*{AST111 Introduction to Solar System Astronomy} 4 Credits 3 Periods SQ
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 observations and laboratory exercises.Prerequisites: A grade of 'C' or better in MAT092 or higher, or satisfactory district placement.

\section*{AST112 Introduction to Stars Galaxies, and Cosmology}

\section*{4 Credits 3 Periods}

SQ
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 universe. Note that AST111 is not a prerequisite for this course. Prerequisites: A grade of 'C' or better in MAT092 or higher, or satisfactory district placement.

\section*{AST113 Introduction to Solar System Astronomy Laboratory \\ 1 Credit 3 Periods \\ SQ}

Hands-on astronomical observations and exercises to supplement AST111. AST113 is a course intended for those students who have previously completed the corresponding lecture course. Current

MCCCD students should enroll in AST111 only. Prerequisites: A grade of ' \(C\) ' or better in AST111 and permission of Instructor or Department or Division.

\section*{AST114 Introduction to Stars, Galaxies, and Cosmology Laboratory}

\section*{1 Credit 3 Periods}

Hands-on astronomical observations and exercises to supplement AST112. AST114 is a course intended for those students who have previously completed the corresponding lecture course. Current MCCCD students should enroll in AST112 only. Prerequisites: A grade of 'C' or better in AST112 and permission of Instructor or Department or Division.

\section*{AST282AA Service-Learning Experience in Astronomy}

\section*{1 Credit 1 Period}

Unpaid Service-Learning (SL) experience, completed with approved community partner. AST282AA may be repeated for a total of six (6) credit hours. Standard grading is available according to procedures outlined in catalog. Prerequisites: Permission of Instructor.

\section*{Automotive Performance Technology}

\section*{APT111 Internal Combustion Engines Theory}

3 Credits 3 Periods
Study of construction and operating principles of internal combustion engines and related lubrication, cooling, fuel, and electrical systems. Prerequisites: None.

\section*{APT131 Automotive Manual Power Trains} 6 Credits 3 Periods
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, drive shafts, differentials and transfer case. Prerequisites: None.

\section*{APT141 Alignment, Steering, and Suspension}

\section*{6 Credits 3 Periods}

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, and replacement of steering and suspension components. Prerequisites: None.

\section*{APT151 Automotive Brake Systems}

\section*{4 Credits 2 Periods}

Designed for beginning automotive students. Fundamentals of drum, disc, ABS and hybrid regenerative braking theory. Includes training in diagnosis, testing, service, and repair. Prerequisites: None.

\section*{APT161 Auto Electrical/ Electronic Systems I}

\section*{4 Credits 2 Periods}

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 Digital Multi Meters (DMM) will be addressed in this course. Prerequisites: None.

\section*{APT171 Automotive Air Conditioning 4 Credits 2 Periods}

Designed for beginning automotive students. Theory and principles of ventilation, heating, automotive refrigeration, vacuum-electric controls, and automatic temperature control systems. Includes training in diagnosis, testing, service and repair. Prerequisites: None.

\section*{APT181 Engine Performance and Diagnosis I 6 Credits 3 Periods}

Designed for beginning automotive students. Engine construction and operating principles, including lubrication, cooling, induction, exhaust, fuel, and ignition systems. Includes training in diagnosis, testing, service, and repair. Prerequisites: None.

\section*{APT262 Auto Electrical/ Electronic Systems II}

4 Credits 2 Periods
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 technology, hybrid technology, mobile connectivity, use of Digital Multi Meters (DMM) and automotive oscilloscopes. Prerequisites: A grade of 'C' or better in APT161 or permission of Instructor.

\author{
APT282 Engine Performance and Diagnosis II \\ 6 Credits 3 Periods \\ 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 which are Concern, Cause and Correction will be addressed in this course. Prerequisites: A grade of 'C' or better in APT181 or permission of Instructor.

\section*{Automotive Performance Technology}

\section*{AUT270AC Automotive Service Internship 3 Credits 3 Periods}

Automotive work experience in the automotive service industry. 80 hours of designated work per credit. Maximum of four (4) credits can be earned by taking any combination of ASE290AA and/or ASE290AB, and/or ASE2900AC; this combination may include repeats of the same suffixed course(s). Prerequisites: Permission of Department or Division.

\section*{AUT298AA Special Projects}

\section*{1 Credit 1 Period}

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 development. Prerequisites: Permission of Program Director or Instructor.

\section*{AUT298AB Special Projects}

2 Credits 2 Periods
An organized and tailored activity around the inter-
ests and needs of the individual student. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: Permission of Program Director or Instructor.

\section*{AUT298AC Special Projects}

\section*{3 Credits 3 Periods}

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 development. Prerequisites: Permission of Program Director or Instructor.

\section*{Biology}

\section*{BIO100 Biology Concepts}

\section*{SQ}

\section*{4 Credits 3 Periods}

Introductory course covering basic principles and concepts of biology. Methods of scientific inquiry and behavior of matter and energy in biological systems are explored. Prerequisites: None. Field trips may be required at students' expense.

\section*{BIO105 Environmental Biology}

\section*{SQ}

\section*{4 Credits 3 Periods}

Fundamentals of ecology and their relevance to human impact on natural ecosystems. Field trips may be required at students' expense. Prerequisites: None.

\section*{BIO106 Biotechnology and Society I}

SQ
3 Credits 3 Periods
Introduction to biotechnology and its impact on society. Covers applications, limitations, benefits,
risks, and legal and moral issues associated with biotechnology. Prerequisites: None.

\section*{BIO107 Introduction to Biotechnology SQ}

\section*{4 Credits 3 Periods}

Introduction to biotechnology and its global impact on society. Covers applications, laboratory techniques, limitations and the international economic benefits, risks, and legal and moral issues associated with biotechnology. Prerequisites: None.

\section*{BIO108 Plants and Society \\ SQ}

4 Credits 3 Periods
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.

\section*{BIO111 Microbes and Society}

SG

\section*{4 Credits 3 Periods}

Examination of the science of microbes and the impact of microbes on human affairs. Topics include principles of microbial diversity, cell structure, growth and reproduction, global processes, disease, and prevention of disease. Prerequisites: None.

\section*{BIO111 Microbes and Society}

SG
4 Credits 3 Periods
Examination of the science of microbes and the impact of microbes on human affairs. Topics include principles of microbial diversity, cell structure, growth and reproduction, global processes, disease, and prevention of disease. Prerequisites: None.

\section*{BIO145 Marine Biology}

SG
4 Credits 3 Periods
A survey of marine environments and their biotic
communities with emphasis on the natural history of marine organisms. Prerequisites: None.

\section*{BIO149AH Field Biology:} Marine Biology in Mexico

\section*{1 Credit 7 Periods}

Introduction to marine experiments, marine biology, and ecology. On-site field experience in Mexico. Emphasis on observation and study of marine organisms along the shore. Prerequisites: Permission of Instructor.

\section*{BIO149AI Biology:}

Tropical Biology/ Costa Rica
2 Credits 14 Periods
A 14-day study of different tropical life zones, including hot wet jungle, hot dry jungle, and cloud forest. Emphasis on unusual plant and animal interactions, tropical ecology, and adaptations. Topics include diversity, competition, epiphytes, parasites, pollinators, reproductive strategies, and zonation. Field sites located in national parks of Costa Rica. Living conditions not developed but comfortable. Daily hikes required. Prerequisites: None.

\section*{BIO149SV Field Biology: Ecological and Environmental Field Experience \\ 1 Credit 1.3 Periods}

Field expeditions in which ecological and environmental principles and concepts are observed and studied. Prerequisites: None. BIO149SV may be repeated for a total of eight (8) credit hours.

\section*{BIO160 Introduction to Human Anatomy and Physiology}

4 Credits 3 Periods
SG
Principles of scientific method. Structural organization, homeostasis and control mechanisms of the body. Specific chemistry concepts. Structure and function of the major systems of the body. Prerequisites: None.

\section*{BIO175 Research Methods in Biology \\ 1 Credit 2 Periods}

Fundamentals of planning and conducting biological experiments, including ones that simultaneously vary multiple experimental variables. Subsequent analysis, interpretation, and reporting of results. Prerequisites: None. BIO156 or BIO181 recommended.

\section*{BIO181 General Biology (Majors) I}

\section*{SQ}

\section*{4 Credits 3 Periods}

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 higher or eligibility for CRE101. One year of high school or one semester of college-level biology and chemistry is strongly recommended.

\section*{BIO182 General Biology (Majors) II} SG

\section*{4 Credits 3 Periods}

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, and ecology. BIO182 may require field trips. Prerequisites: A grade of 'C' or better in BIO181 or BIO181XT.

\section*{BIO201 Human Anatomy and Physiology I SG}

\section*{4 Credits 3 Periods}

Study of structure and function of the human body. Topics include cells, tissues, integumentary system, skeletal system, muscular system, and nervous system. Prerequisites: Grade of 'C' or better in (BIO156 or BIO156XT or BIO181 or BIO181XT or one year of high school biology) and RDG100 or higher or eligibility for CRE101. CHM130 or higher or one year of high school chemistry suggested but not required.

\section*{BIO202 Human Anatomy and Physiology II} SG
4 Credits 3 Periods
Continuation of structure and function of the human body. Topics include endocrine, circulatory, lymphatic, respiratory, digestive, urinary, and reproductive systems; and fluid and electrolyte balance. Prerequisites: A grade of 'C' or better in BIO 201 or BIO201XT.

\section*{BIO205 Microbiology}

\section*{SG}

\section*{4 Credits 3 Periods}

Study of microorganisms and their relationship to health, ecology, and related fields. Prerequisites: Grade of 'C' or better in (BIO156 or BIO156XT or BIO181 or BIO181XT or one year of high school biology) and RDG100 or higher or eligibility for CRE101. CHM130 or higher or one year of high school chemistry suggested but not required.

\section*{BIO211AA Biotechnology Seminar: Biomedical Applications}

\section*{1 Credit 1 Period}

Special topics in biotechnology with an emphasis on current issues not covered in other life science courses. Prerequisites: None. BIO211AA may be repeated for a total of two (2) credit hours.

\section*{BIO212AB Biotechnology II}

\section*{5 Credits 3 Periods}

Intensive introduction to biotechnology, including protein biochemistry, techniques for handling and purifying proteins, recombinant deoxyribonucleic acid (DNA), sequencing deoxyribonucleic acid (DNA), testing deoxyribonucleic acid (DNA) fragments for promoter activity and analysis of deoxyribonucleic acid (DNA) for open reading frames, promoters, and homology. Prerequisites: A grade of 'C' or better in BIO212AA.

\section*{BIO220 Biology of Microorganisms}

\section*{4 Credits 3 Periods}

Detailed study of microbial cells, their structure, genetics, physiology and taxonomy. Prerequisites: A grade of 'C' or better in \(\mathrm{BIO181}\). Corequisites: (CHM152 and CHM152LL) or (CHM154 and CHM154LL).

\section*{BIO240 General Genetics}

\section*{4 Credits 4 Periods}

Intensive introduction to the field of genetics including historical perspective, Mendelian insights and patterns of inheritance, exceptions to expected Mendelian ratios, quantitative genetics, non-Mendelian inheritance, pedigree analysis, molecular levels of gene expression, genetic control of metabolic pathways, analytic dissection of molecular mechanisms behind DNA replication, transcription, translation, and gene regulation in both prokaryotes and eukaryotes, population genetics, genetics of behavior, and genetics of evolution and speciation. Prerequisites: A grade of ' C ' or better in BIO 181.

\section*{BIO244 General Genetics Laboratory}

\section*{1 Credit 3 Periods}

Introductory laboratory course in support of BIO 240 . Designed to familiarize students with basic laboratory skills and equipment used in genetic research. Prerequisites: A grade of 'C' or better in BIO181. Corequisites: BIO240.

\section*{BIO249 Applied Biosciences:}

Biotechnology Internship
4 Credits 4 Periods
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 needed to work in a biotechnology laboratory.Requires a minimum of 320 clock hours in the biotechnology laboratory setting. Prerequisites: A grade of 'C' or better in BIO247 or permission of Instructor.

\section*{BIO280 Animal Behavior}

3 Credits 3 Periods
A study of the genetics, physiology, ecology, and evolutionary history of animal behavior. Prerequisites: A grade of 'C' or better in BIO 100 , or BIO 105, or BIO181, or equivalent, or permission of instructor.

\section*{BIO282AA Service-Learning Experience in Biology}

\section*{1 Credit 1 Period}

Unpaid Service-Learning (SL) experience, completed with approved community partner. BIO282AA may be repeated for a total of six (6) credit hours. Standard grading available according to procedures outlined in catalog. Prerequisites: Permission of Instructor.

\section*{BIO298AA Special Projects}

\section*{1 Credit 1 Period}

Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: Permission of Program Director or Instructor.

\section*{BIO298AB Special Projects}

\section*{2 Credits 2 Periods}

Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development.

Prerequisites: Permission of Program Director or Instructor.

\section*{BIO298AC Special Projects}

3 Credits 3 Periods
Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: Permission of Program Director or Instructor.

\section*{Business-Personal Computers}

\section*{BPC101AA Introduction to Computers I}

\section*{1 Credits 2 Periods}

Computer software applications for the personal computer, including electronic spreadsheet and word processing, keyboarding review, and a desktop environment. Prerequisites: None.

\section*{BPC106AH MS Outlook: Level I}

\section*{. 5 Credits . 5 Periods}

Messaging and word processing functions of a Microsoft Outlook electronic work state. Prerequisites: None.

\section*{BPC106BH Microsoft Outlook: Level II . 5 Credits . 5 Periods}

Microsoft Outlook features including sort, filter and group items; templates and forms; information sharing by public folders and Net Folders; share and fax contacts; and record activities in the

Journal. Outlook environment customization also covered. Prerequisites: A grade of ' \(C\) ' or better in BPC106AH, or permission of Instructor.

\section*{BPC110 Computer Usage and Applications CS}

\section*{3 Credits 4 Periods}

Introduction to business and personal computer operations and usage. Software applications for analyzing and solving business problems including word processing, spreadsheet, database, and presentation graphics. Prerequisites: None.

\section*{BPC111AA Computer Keyboarding I}

\section*{1 Credit 1.7 Periods}

Mastery of essential microcomputer keyboarding skills. Emphasis on touch typing of alphabetic and numeric keys and symbols. Prerequisites: None.

\section*{BPC128AF Introduction To Desktop Publishing: MS Publisher \\ 1 Credit 2 Periods}

Presents basic concepts of commercially prepared software used to do desktop publishing. Incorporates a combination of narrative and pictorial/ graphic creation and presentation, including set-up, text entry, graphic generation, text and graphic merging, and other computer-based functions. Prerequisites: None.

\section*{BPC170 A+ Exam Prep: Computer Hardware Configuration and Support}

\section*{3 Credits 4 Periods}

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 troubleshooting. Helps prepare students for the CompTIA A+ examinations. Prerequisites: A grade of ' \(C\) ' or better in CIS105 or permission of Instructor.

\section*{BPC210 Advanced Computer Usage and Applications}

3 Credits 4 Periods
Advanced application of software for business and personal computers including word processing, spreadsheet, database, and presentation. Includes integration of applications and Internet. Prerequisites: A grade of 'C' or better in BPC110, or permission of Instructor.

\section*{BPC270 A+ Exam Prep: Operating System Configuration and Support}

\section*{3 Credits 4 Periods}

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 students for the CompTIA A+ examinations. Prerequisites: A grade of ' \(C\) ' or better in CIS105 or permission of Instructor.

\section*{Caterpillar Technician Training}

\section*{CTT110 Introduction to \\ Caterpillar Service Industry \\ 3 Credits 5 Periods}

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.

\section*{CTT111 Caterpillar Engine Fundamentals}

4 Credits 8 Periods
Introduction to diesel engine theory and service procedures. Focuses on Caterpillar engine systems
and applications. Prerequisites: A grade of ' C ' or better in CTT110.

\section*{CTT112 Hydraulic Fundamentals}

\section*{3 Credits 5 Periods}

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 hydraulic symbols. Prerequisites: A grade of ' \(C\) ' or better in CTT110.

\section*{CTT113 Fuel Systems}

3 Credits 5 Periods
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, Nippondenso, and Zexel fuel systems. Prerequisites: A grade of ' \(C\) ' or better in CTT110.

\section*{CTT114 Basic Electrical Fundamentals}

3 Credits 5 Periods
Basic electrical and electronic principles used by the technician to diagnose and repair electrical systems in Caterpillar machines. Prerequisites: A grade of ' C ' or better in CTT110.

\section*{CTT115 Air Conditioning Fundamentals} 3 Credits 5 Periods
Introduction to principles, systems, components, and servicing of air conditioning systems used in Caterpillar products. Prerequisites: A grade of ' \(C\) ' or better in CTT110.

\section*{CTT116 Power Train I}

3 Credits 5 Periods
Basic components and operations of power train systems used in Caterpillar machines. Covers basic components, clutches, manual shift transmissions, and power shift transmissions. Prerequisites: A grade of 'C' or better in CTT110.

\section*{Course Descriptions}

\section*{CTT117 Machine Hydraulic Systems \\ 3 Credits 5 Periods}

Operation, testing, and adjustment procedures for pilot operated hydraulic systems, load sensing pressure compensated (LSPC) hydraulic systems, electro-hydraulic systems, and hydrostatic systems. Components of hydraulic systems and oil flow through the system. Prerequisites: A grade of ' \(C\) ' or better in CTT110.

CTT118 Caterpillar Dealer Internship I 3 Credits 3 Periods
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 logbook, and be evaluated by dealership supervisor and internship coordinator. Prerequisites: A grade of 'C' or better in CTT110.

CTT119 Caterpillar Dealer Internship II 3 Credits 3 Periods
Application of skills and knowledge gained in CTT coursework in an internship in a dealership en-
vironment. 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 by dealership supervisor and internship coordinator. Prerequisites: A grade of 'C' or better in CTT110.

\section*{CTT200 Power Train II}

\section*{3 Credits 5 Periods}

Methods of transferring power. Hydraulic-driven machines and mechanical power train components, including differentials, brakes, final drives, and undercarriage. Prerequisites: A grade of 'C' or better in CTT110.

\section*{CTT201 Machine Electronics}

\section*{3 Credits 5 Periods}

Introduction to machine electronic systems and diagnostic tooling used to diagnose and repair the complex electrical/electronic systems installed in Caterpillar machines. Prerequisites: A grade of ' \(C^{\prime}\) or better in CTT110.

\section*{CTT202 Engine Diagnostics and Repair 3 Credits 5 Periods}

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 fuel systems. Prerequisites: A grade of ' C ' or better in CTT110.

\section*{CTT203 Machine Diagnostics}

\section*{3 Credits 5 Periods}

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 Service Technician Workbench (STW) applications. Prerequisites: A grade of 'C' or better in CTT110.

\section*{CTT204 Machine Specific Systems}

\section*{3 Credits 5 Periods}

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 graders. Prerequisites: A grade of ' C ' or better in CTT110.

\section*{CTT205 Caterpillar Dealer Internship III} 3 Credits 3 Periods
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, and be evaluated by dealership supervisor and internship coordinator. Prerequisites: A grade of ' \(C\) ' or better in CTT110.

\section*{CTT206 Caterpillar Dealer Internship IV}

\section*{3 Credits 3 Periods}

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 experi-
ence 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 complete a list of learning objectives, keep a logbook, and be evaluated by dealership supervisor and internship coordinator. Prerequisites: A grade of ' C ' or better in CTT110.

\section*{Chemistry}

\section*{CHM130 Fundamental Chemistry \\ SQ}

\section*{3 Credits 3 Periods}

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. Designed to meet needs of students in such diverse areas as agriculture, nursing, home economics, physical education and water technology. General Education Designation: Natural Sciences (Quantitative) - [SQ] in combination with: CHM130LL. Prerequisites: 'C' or better in [CHM090 or MAT090 or MAT091 or MAT092 or (MAT1 03AA \& MAT103AB) or higher or satisfactory placement] and [RDG100 or higher or eligibility for CRE101], or permission of the Instructor/Department/Division Chair.

\section*{CHM130LL Fundamental Chemistry Laboratory} SQ

\section*{1 Credit 3 Periods}

Laboratory experience in support of CHM130. General Education Designation: Natural Sciences (Quantitative) - [SQ] in combination with: CHM130.

Prerequisites or Corequisites: A grade of ' C ' or better in CHM130.

\section*{CHM138 Chemistry for Allied Health} SQ

\section*{3 Credits 3 Periods}

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 MCCD. May not be applicable to other allied health programs or transferable. Prerequisites: 'C' or better in [CHM090 or MAT090 or MAT091 or MAT092 or (MAT103AA \& MAT103AB) or higher or satisfactory math placement] or 1 yr high school chemistry taken within the last 5 yrs with C or better or permission of Instructor/Dept/ Div Chair.

CHM138LL Chemistry for
Allied Health Laboratory 1 Credit 3 Periods
Laboratory experience in support of CHM138, Chemistry for Allied Health. Prerequisites: None. Corequisites: CHM138.

CHM151 General Chemistry I
SQ

\section*{3 Credits 3 Periods}

Detailed study of principles of chemistry for science majors and students in pre-professional curricula. Completion of all prerequisites within the last two years is recommended. Student may receive credit for only one of the following: CHM150 and CHM151LL, or CHM151 and CHM151LL, or CHM150AA, or CHM151AA. Prerequisites: 'C' or better in [(CHM130 and CHM130LL), or CHM130AA, or 1 yr high school chemistry taken in last 5 yrs] and (C or better in MAT151 or higher level math course, or satisfactory placement), or permission of Instructor/Departmnt/Division Chair.

\section*{CHM151LL General Chemistry I Laboratory}

\section*{SQ}

\section*{1 Credit 3 Periods}

Laboratory experience in support of CHM150 or CHM151. Student may receive credit for only one of the following: CHM150 and CHM151LL, or CHM151 and CHM151LL, or CHM150AA, or CHM151AA. General Education Designation: Natural Sciences (Quantitative) - [SQ] in combination with: CHM150 or CHM151. Prerequisites: A grade of ' \(C\) ' or better in CHM150 or CHM151 or Corequisites: CHM150 or CHM151.

\section*{CHM152 General Chemistry II}

\section*{SQ}

\section*{3 Credits 3 Periods}

A study of the chemical properties of the major groups of elements, equilibrium theory, thermodynamics, electrochemistry, and other selected topics. Completion of prerequisites within the last two years recommended. Completion of CHM152LL required to meet the Natural Science requirement. Student may receive credit for only one of the following: CHM152 and CHM152LL, or CHM152AA. Prerequisites: A grade of ' \(C\) ' or better in [(CHM150 or CHM151) and CHM151LL], or CHM150AA, or CHM151AA, or permission of the Instructor, or Department or Division Chair.

\section*{CHM152LL General Chemistry II Laboratory}

SQ

\section*{1 Credit 3 Periods}

Laboratory experience in support of CHM152. Student may receive credit for only one of the following: CHM152 and CHM152LL, or CHM152AA. General Education Designation: Natural Sciences (Quantitative) - [SQ] in combination with: CHM152. Prerequisites: A grade of ' C ' or better in CHM152 or Corequisites: CHM152.

\section*{Course Descriptions}

\section*{CHM230 Fundamental Organic Chemistry} SQ
3 Credits 3 Periods
Chemistry of representative groups of organic compounds, emphasizing biological applications.Completion of prerequisites within the last two years recommended. CHM230 course content is designed to meet the needs of students in such areas as agriculture, home economics, nursing, pre-physician assistant, and physical education among others. Prerequisites: A grade of 'C' or better in (CHM130 and CHM130LL) or (CHM150 or CHM151 and CHM\(151 \mathrm{LL})\), or permission of the Instructor, or Department or Division Chair.

\section*{CHM230LL Fundamental Organic} Chemistry Laboratory
SQ
1 Credit 3 Periods
Laboratory experience in support of CHM230. General Education Designation: Natural Sciences (Quantitative) - [SQ] in combination with: CHM230. Prerequisites: A grade of 'C' or better in CHM130LL or CHM151LL, or equivalent. Prerequisites or Corequisites: CHM230.

\section*{CHM235 General Organic Chemistry I} 3 Credits 3 Periods
Rigorous introduction to chemistry of carbon-containing compounds. Reaction mechanisms and recent methods of synthesis emphasized. Completion of prerequisites within the last two years recommended. Prerequisites: A grade of 'C' or better in (CHM152 and CHM152LL), or CHM152AA, or (CHM154 and CHM154LL), or permission of the Instructor, or Department or Division Chair.

\section*{CHM235LL General Organic Chemistry I Laboratory \\ 1 Credit 4 Periods}

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.

\section*{CHM236 General Organic Chemistry IIA} 3 Credits 3 Periods
Study of chemistry of carbon-containing compounds continued. Structural determination and additional reaction mechanisms and modern methods of synthesis emphasized. Completion of pre-

requisites within the last two years recommended. Prerequisites: A grade of 'C' or better in CHM235 and CHM235LL, or permission of the Instructor, or Department or Division Chair.

\section*{CHM236LL General Organic Chemistry IIA Laboratory}

\section*{1 Credit 4 Periods}

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.

CHM260 Fundamental Biochemistry
3 Credits 3 Periods
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. Completion of prerequisites within the last two years recommended. Designed for students in agriculture, dental hygiene, home economics, nursing, and physical therapy. Prerequisites: A grade of ' \(C\) ' or better in (CHM230 and CHM230LL) or (CHM235 and CHM\(235 \mathrm{LL})\), or permission of the Instructor, or Department or Division Chair.

CHM260LL Fundamental Biochemistry Laboratory
1 Credit 3 Periods
Laboratory experience in support of CHM260. Prerequisites: A grade of 'C' or better in CHM260 or Corerequisites: CHM260. Completion of prerequisites within the last two years recommended.

CHM282AA Service-Learning Experience in Chemistry 1 Credit 1 Period
Unpaid Service-Learning (SL) experience, completed with approved community partner. CHM282AA may be repeated for a total of six (6) credit hours. Standard grading is available according to proce-
dures outlined in catalog. Prerequisites: Permission of Instructor.

\section*{CHM282AB Service-Learning Experience in Chemistry \\ 2 Credits 2 Periods}

Unpaid Service-Learning (SL) experience, completed with approved community partner. CHM282AB may be repeated for a total of six (6) credit hours. Standard grading is available according to procedures outlined in catalog. Prerequisites: Permission of Instructor.

\section*{CHM282AC Service-Learning Experience in Chemistry}

\section*{3 Credits 3 Periods}

Unpaid Service-Learning (SL) experience, completed with approved community partner. CHM282AC may be repeated for a total of six (6) credit hours. Standard grading is available according to procedures outlined in catalog. Prerequisites: Permission of Instructor.

\section*{CHM298AA Special Projects}

\section*{1 Credit 1 Period}

Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: Permission of Program Director or Instructor.

\section*{CHM298AB Special Projects}

\section*{2 Credits 2 Periods}

Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment
available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: Permission of Program Director or Instructor.

\section*{CHM298AC Special Projects}

\section*{3 Credits 3 Periods}

Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: Permission of Program Director or Instructor.

\section*{Chicana and Chicano Studies}

\section*{CCS101 Chicana and Chicano Studies}

C, HU
3 Credits 3 Periods
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, testimonies, and films. Prerequisites: A grade of ' C ' or better in ENG101, or ENG107, or equivalent.

\section*{Child/Family Studies}

\section*{CFS123 Health and Nutrition in} Early Childhood Settings

\section*{C, HU}

1 Credit 1 Period
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, resources, and innovative practices. Prerequisites: None.

\section*{CFS125 Safety In Early Childhood Settings}

C, HU

\section*{1 Credit 1 Period}

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 resources, current topics, and innovative practices. Prerequisites: None.

\section*{CFS157 Marriage and Family Life}

SB

\section*{3 Credits 3 Periods}

Study of marriage and the family as a social system, including models of family analysis, intrapersonal and interpersonal relations, and cross-cultural and historical patterns. Prerequisites: None.

\section*{CFS176 Child Development}

SB
3 Credits 3 Periods
Study of the science of human development from conception through adolescence. Includes observation skills, parent and adult roles in the lives of children, and contemporary issues. Prerequisites: None.

\section*{CFS179 Child Care: A Multifaceted Career}

1 Credit 1 Period
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 practices. Prerequisites: None.

\section*{CFS205 Human Development}

SB

\section*{3 Credits 3 Periods}

Explores the growth and development process over the human life span. Research and theoretical approaches; physical, cognitive, social, and personality development from birth through adulthood and death. Prerequisites: None.sanitation practices. Prerequisites: None.

\section*{Chinese}

\section*{CHI101 Elementary Chinese (Mandarin) I} G

\section*{5 Credits 6 Periods}

Introduction to the basic grammar, pronunciation and vocabulary of the Mandarin Chinese language. Includes the study of Chinese culture, practice of listening, speaking, reading, and writing skills. Prerequisites: None.

CHI102 Elementary Chinese (Mandarin) II G
5 Credits 6 Periods
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 years is required.

\section*{CHI201 Intermediate Chinese I}

\section*{G}

\section*{5 Credits 6 Periods}

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 years is required.

\section*{CHI202 Intermediate Chinese II G}

\section*{5 Credits 6 Periods}

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 years is required.

\section*{Cisco Network Technology}

\section*{CNT140AA Introduction to Networks 4 Credits 6 Periods}

Introduces the architecture, structure, functions, components, and models of the Internet and other computer networks. The 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 routers and switches, and implement IP addressing schemes. Preparation for Cisco certification examination. Prerequisites: None.

\section*{CNT140AB Introduction to Networks}

\section*{4 Credits 6 Periods}

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 routers and switches, and implement IP addressing schemes. Preparation for Cisco certification examination. Prerequisites: None.

\section*{CNT150AA Cisco -}

\section*{Routing and Switching Essentials}

\section*{4 Credits 6 Periods}

Architecture, components, and operations of routers and switches in a small network. Students learn how to configure a router and a switch for basic functionality. Configuration and troubleshooting routers and switches and resolving common issues with RIPv1, RIPng, single-area and multi-area OSPF, virtual LANs, and inter-VLAN routing in both IPv4 and IPv6 networks. Preparation for Cisco certification examination. Prerequisites: A grade of ' \(C\) ' or better in CNT140AA or permission of Instructor.

\section*{CNT150AB Switching, Routing, and Wireless Essentials}

\section*{4 Credits 6 Periods}

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 (WLAN) is also covered. Preparation for Cisco certification examination. Prerequisites: A grade of 'C' or better in CNT140AB or permission of Instructor.

\section*{CNT160AA Scaling Networks}

\section*{4 Credits 6 Periods}

Architecture, components, and operations of routers and switches in large and complex networks. Configuring routers and switches for advanced functionality. Configuring and troubleshooting routers and switches and resolving common issues with OSPF, EIGRP, and STP in both IPv4 and IPv6 networks. Developing the knowledge and skills needed to implement a WLAN in a small-to-medium network. Preparation for Cisco certification examination. Prerequisites: A grade of 'C' or better in CNT150AA, or permission of Instructor.

\section*{CNT160AB Enterprise Networking, Security, and Automation}

\section*{4 Credits 6 Periods}

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, troubleshooting, virtualization, and automation. Preparation for Cisco certification examination. Prerequisites: A grade of ' C ' or better in CNT150AB or permission of Instructor.

\section*{CNT170AA Cisco - Connecting Networks}

\section*{4 Credits 6 Periods}

Wide Area Network (WAN) technologies and network services required by converged applications in a complex network. Criteria selection of network devices and WAN technologies to meet network requirements. Configuring and troubleshooting network devices, and resolving common issues with data link protocols issues, and developing the knowledge and skills needed to implement Internet Protocol Security (IPSec) and Virtual Private Network (VPN) operations. Preparation for Cisco certification examination. Prerequisites: A grade of ' \(C\) ' or better in CNT160AA, or permission of Instructor.

\section*{CNT200 CCNP ROUTE:}

\section*{Implementing Cisco IP Routing}

\section*{4 Credits 6 Periods}

Development of knowledge and skills needed to manage Internet Protocol (IP) traffic and access, understand scalable internetworks configure advanced routing protocols Border Gateway Protocol [BGP], Enhanced Interior Gateway Routing Protocol [EIGRP], Open Shortest Path First [OSPF], as well as Internet Protocol (IPv6), and configuration of secure routing solutions to support branch offices and mobile workers. Comprehensive labs emphasize hands-on learning and practice to reinforce configuration skills. Preparation for Cisco Certified Network Professional (CCNP) exam. Prerequisites: A grade of 'C' or better in CNT170AA, or CCNA industry certification, or permission of Instructor. Corequisites: CNT220.

\section*{CNT205 Cisco Certified}

\section*{Network Associate Security}

\section*{4 Credits 6 Periods}

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. Competency in the technologies that Cisco uses in its security structure. Prerequisites: A grade of 'C' or better in CNT170AA or Certified Cisco Networking Associate (CCNA) certification or permission of Instructor.

\section*{CNT220 CCNP SWITCH:}

\section*{Implementing Cisco IP Switching}

\section*{4 Credits 6 Periods}

Development of knowledge and skills in building, monitoring, and maintaining switching in converged enterprise networks using advanced and multi-lay-
er switching technologies. Planning, configuring, securing and verifying the implementation of complex enterprise switching solutions. Hands-on learning and practice to reinforce configuration skills.Preparation for Cisco Certified Network Professional (CCNP) exam. Prerequisites: A grade of ' \(C\) ' or better in CNT170AA, or CCNA industry certification, or permission of Instructor. Corequisites: CNT200.

\section*{CNT231 CCNP TSHOOT: Maintaining and Troubleshooting Cisco IP Networks}

\section*{4 Credits 6 Periods}

Development of knowledge and skills in monitoring and maintaining complex enterprise routed and switched Internet Protocol (IP) networks. Skills learned include the planning and execution of regular network maintenance, as well as support and troubleshooting using technology-based processes and best practices, in a systematic approach. Extensive labs emphasize hands-on learning and practice to reinforce configuration skills. Preparation for Cisco Certified Network Professional (CCNP) exam. Prerequisites: A grade of 'C' or better in CNT200 and CNT220, or permission of Instructor.

\section*{Clothing \& Textiles}

\section*{TEC103 Developing Your Fashion Business} 2 Credits 2 Periods
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 successful fashion business development. Prerequisites: None.

\section*{TEC105 Cultural Aspects of Clothing}

HU

\section*{3 Credits 3 Periods}

Psychological, aesthetic, and economic factors applied to the systematic study of dress and adornment in relationship to world cultures and the global fashion industry. Prerequisites: None.

\section*{TEC106 History of Fashion}

HU
3 Credits 3 Periods
Consideration of historic factors influencing fashion and fashion change with special emphasis on historic costume. Prerequisites: None.

\section*{TEC109 Introduction to}

Fashion Merchandising

\section*{3 Credits 3 Periods}

Explores the various levels and specialized segment of the fashion industry, the principles of fashion, the fundamentals of merchandising apparel, consumers' influence on demand and marketing activities. Prerequisites: None.

\section*{TEC110 Basic Sewing Skills}

\section*{3 Credits 5 Periods}

Basic clothing construction techniques. Use of commercial patterns and sewing machine in the construction of basic garments. Prerequisites: None.

\section*{TEC111 Clothing Construction}

\section*{3 Credits 5 Periods}

Construction of garments applying basic construction principles and techniques using patterns suitable for the individuals and their capabilities. If student has no previous sewing experience, TEC110 Basic Sewing Skills should be taken prior to and not during this course. May be repeated for a total of 12 credit hours with permission of instructor. Prerequisites: A grade of ' C ' or better in TEC110 or permission of Instructor.

\section*{TEC112AB Alteration of Ready Made Garments}

\section*{2 Credits 2 Periods}

Knowledge, skills, and techniques of altering ready made garments for personal or professional use. Experience using a sewing machine assumed. Prerequisites: None.

\section*{TEC113 Textiles: Dyeing}

\section*{1 Credit 1.5 Periods}

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-dyeing, shibori dyeing and batik dyeing. Prerequisites: None. May be repeated for a total of three (3) credits.

\section*{TEC114 Textiles: Block Printing/ Silk Screening}

1 Credit 2 Periods
Block printing and silk screening techniques used to create designs on fabric for apparel and interiors. Prerequisites: None. May be repeated for a total of three (3) credits.

\section*{TEC115 Textiles: Hand Painting}

1 Credit 1.5 Periods
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. Includes color theory and design development. Prerequisites: None. May be repeated for a total of three (3) credits.

\section*{TEC116 Textiles:}

\section*{Stitchery and Embellishment}

\section*{1 Credit 1.5 Periods}

Materials and techniques used for stitchery and embellishment on textiles. Includes color schemes and design development. Prerequisites: None. May be repeated for a total of three (3) credits.

\section*{TEC120 Intermediate Clothing Construction}

\section*{3 Credits 5 Periods}

Application of intermediate clothing and fitting techniques. Emphasis on improving basic construction skills. May be repeated for a total of 8 credit hours with permission of instructor. Prerequisites: A grade of 'C' or better in TEC111 or permission of Instructor.

\section*{TEC121 Creative Sewing Machine Use}

\section*{3 Credits 3 Periods}

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 or purchased by the user. Prerequisites: None.

\section*{TEC122 Sewing with Knits}

\section*{3 Credits 5 Periods}

Skills and techniques used in the construction of garments made from knit fabrics. Prerequisites: A grade of 'C' or better in TEC111 or permission of Instructor.

\section*{TEC124 Advanced Clothing Construction}

\section*{3 Credits 5 Periods}

Advanced garment construction techniques, pattern alteration and fit and techniques used on specialty fabrics. May be repeated for a total of 12 credit hours with permission of instructor. Prerequisites: A grade of 'C' or better in TEC111 or permission of Instructor.

\section*{TEC125 Fashion Design}

\section*{3 Credits 3 Periods}

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' design and manufacturing specialties. Prerequisites: None.

\section*{TEC129 Sewing with a Serger}

\section*{3 Credits 5 Periods}

Operation of a home serger. Use in constructing, finishing, and decorating garments and home decorations. Home serger required. Prerequisites: A grade of 'C' or better in TEC110 or TEC111 or permission of Instructor.

\section*{TEC130 Alteration of Ready Made Garments}

\section*{3 Credits 4 Periods}

Knowledge, skills, and techniques of altering ready-made garments for personal or professional use. Experience using a sewing machine and constructing garments assumed. Prerequisites: A grade of 'C' or better in TEC111 or permission of Instructor.

\section*{TEC134 Fashion Illustration I}

\section*{3 Credits 5 Periods}

Proportions and techniques used in drawing fashion figures and clothing. Introduction of media and illustrative styles for portfolio design, trade sketches, and fashion advertisements. Prerequisites: None.

\section*{TEC150 Fashion Show Production}

\section*{2 Credits 4 Periods}

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, dTcor, staging, and production. Prerequisites: None. TEC150 may be repeated for a total of six (6) credit hours.

\section*{TEC151 Display and Visual Merchandising} 3 Credits 4 Periods
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 trips, and individual projects. Prerequisites: None.

\section*{TEC200 Retail Buying}

\section*{3 Credits 3 Periods}

Examines management/buyer role in investment, pricing, planning, controlling sales and inventories. Prerequisites: None. Any BPC/CIS spreadsheet course recommended.

\section*{TEC221 Computer-Assisted Fashion Design}

\section*{3 Credits 5 Periods}

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 and developing a portfolio. Prerequisites: A grade of 'C' or better in (TEC125 and TEC134) or permission of Instructor.

\section*{TEC222 Textiles}

3 Credits 4 Periods
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 global sustainability efforts. Prerequisites: None.

\section*{TEC223 Tailoring}

3 Credits 6 Periods
Principles of tailoring as applied in the construction of a coat or suit. Alteration of patterns and fitting techniques. TEC223 may be repeated for a total of 12 credit hours with permission of instructor. Prerequisites: A grade of ' C ' or better in TEC124 or permission of Instructor.

\section*{TEC224 Pattern Drafting}

\section*{2 Credits 3 Periods}

Draft patterns from measurements of dress forms and human figures. Development of slopers and garment patterns. Design and produce an original garment using pattern drafting techniques. Prerequisites: A grade of 'C' or better in TEC111 or permission of Instructor.

\section*{TEC225 Pattern Design I}

\section*{3 Credits 5 Periods}

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 permission of Instructor.

\section*{TEC226 Draping for Fashion Design}

\section*{3 Credits 5 Periods}

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 design. Prerequisites: A grade of ' C ' or better in TEC111 or permission of Instructor.

\section*{TEC227 Couture Sewing}

\section*{3 Credits 5 Periods}

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 skirts, pants, blouses, dresses, sleeves, pockets, jackets, coats, and evening wear. May be repeated for a total of 12 credit hours with permission of instructor. Prerequisites: A grade of 'C' or better in TEC111 or permission of Instructor.

\section*{TEC228 Advanced Draping for Fashion Design}

\section*{3 Credits 5 Periods}

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 fabrics. Drape and construct an original design. Prerequisites: A grade of 'C' or better in TEC226 or permission of Instructor.

\section*{TEC229 Advanced Serging}

3 Credits 5 Periods
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.

\section*{TEC236 Portfolio Development}

\section*{1 Credit 3 Periods}

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, presentation boards, and other required components in the field of portfolio development. TEC236 may be repeated for a total of three (3) credits. Prerequisites: A grade of ' \(C\) ' or better in TEC134 and permission of Department or Division. TEC221 is recommended.

\section*{TEC241 Advanced Computer-Assisted Fashion Design}

3 Credits 5 Periods
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 patterns, grading, and markers. Create storyboards for product development and personal portfolio. Prerequisites: A grade of 'C' or better in TEC124 and TEC221.

\section*{TEC245 Wardrobe Strategies}

3 Credits 3 Periods
Methods of clothing selection, coordination, evaluation, and planning to meet men's and women's wardrobe needs. Prerequisites: None.

\section*{TEC250 Apparel Quality Analysis}

\section*{3 Credits 3 Periods}

Quality analysis of construction components that affect the appearance, function, and cost of ready-to-wear apparel. Prerequisites: None.

\section*{TEC255 Fashion Retail Merchandising 3 Credits 3 Periods}

Surveys the structure and operation of fashion retail organizations. Emphasizes the global nature of fashion merchandising and techniques of merchandising for the fashion merchandising major. Prerequisites: A grade of 'C' or better in MKT/TEC109.

\section*{TEC260 Fashion Sales Management}

\section*{3 Credits 3 Periods}

Emphasizes the fashion aspects of sales, and the application and management of a sales force for the fashion industry. Prerequisites: A grade of ' \(C\) ' or better in MKT/TEC109.

\section*{TEC271AA Fashion Design Internship 1 Credit 5 Periods}

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 coordinator. TEC271AA may be repeated for a total of three (3) credit hours. Prerequisites: Permission of Department or Division.

\section*{TEC271AC Fashion Design Internship} 3 Credits 15 Periods
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.

\section*{TEC272AA Retail}

Merchandising Internship

\section*{1 Credit 1 Period}

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); or permission of Instructor.

\section*{TEC272AC Retail Merchandising Internship} 3 Credits 3 Periods
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); or permission of Instructor.

\section*{TEC274AA Fashion}

Merchandising Study Tour

\section*{1 Credit 5 Periods}

A tour of the fashion merchandising industry outside the metropolitan Phoenix area. Includes a variety of experiences and activities to enhance awareness of this multifaceted career. Prerequisites: Permission of Department or Division.

\section*{TEC275AA Image Consultant Internship} 1 Credit 1 Period
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); or permission of Instructor.

\section*{TEC275AC Image Consultant Internship}

\section*{3 Credits 3 Periods}

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); or permission of Instructor.

\section*{TEC277AA Alteration Internship}

\section*{1 Credit 1 Period}

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); or permission of Instructor.

\section*{TEC277AC Alteration Internship}

\section*{3 Credits 3 Periods}

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); or permission of Instructor.

\section*{TEC278AA Costume Design and Production Internship}

\section*{1 Credit 1 Period}

Costume Design and Production work experience in a business or industry. Supervision and evaluation by an internship coordinator. Eighty hours of desig-
nated 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); or permission of Instructor.

\section*{TEC278AC Costume Design and Production Internship}

\section*{3 Credits 3 Periods}

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); or permission of Instructor.

\section*{Communication}

\section*{COM100 Introduction to} Human Communication
SB

\section*{3 Credits 3 Periods}

Introduces the theory and practice of human communication. Surveys communication topics related to interpersonal, small group, and public communication. Prerequisites: None.

\section*{COM110 Interpersonal Communication SB}

\section*{3 Credits 3 Periods}

Theory and practice of communication skills which affect day-to-day interactions with other persons. Topics may include using verbal and nonverbal symbols, interactive listening, resolving interper-
sonal conflict, developing and maintaining personal and professional relationships. Prerequisites: None.

\section*{COM207 Introduction to Communication Inquiry SB}

\section*{3 Credits 3 Periods}

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 research process. Recommended for the communication major. Prerequisites: A grade of 'C' or better in ENG101 or ENG107 or equivalent, and COM100 or equivalent, or permission of Instructor.

\section*{COM225 Public Speaking L}

3 Credits 3 Periods
Designed to enhance the student's ability to present public speeches confidently and competently. Also designed to improve information literacy and critical thinking skills. Prerequisites: A grade of ' C ' or better in ENG101, or ENG107, or equivalent.

\section*{COM230 Small Group Communication} SB

\section*{3 Credits 3 Periods}

Principles and processes of small groups and development of skills for participation and leadership in small group settings. Practice in problem solving, decision making, and information sharing. Prerequisites: None.

\section*{COM259 Communication in Business and Professions \\ 3 Credits 3 Periods}

Interpersonal, group, and public communication in business and professional organizations. Emphasis on oral communication. Prerequisites: A grade of ' \(C\) ' or better in ENG101, or ENG107, or equivalent.

\section*{COM263 Elements of Intercultural Communication}

C, G, SB
3 Credits 3 Periods
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 emphasized. Prerequisites: None.

\section*{COM271 Voice and Diction}

\section*{3 Credits 3 Periods}

Exercises and techniques to free the voice and improve projection, resonance, and articulation. Covers international phonetic alphabet and standard stage speech. Prerequisites: None.

\section*{COM282AA Service-Learning} Experience in Communication
1 Credit 1 Period
Unpaid Service-Learning (SL) experience, completed with approved community partner. COM282AA may be repeated for a total of six (6) credit hours. Standard grading available according to procedures outlined in catalog. Prerequisites: Permission of Instructor.

\section*{COM282AB Service-Learning} Experience in Communication 2 Credits 2 Periods
Unpaid Service-Learning (SL) experience, completed with approved community partner. COM282AB may be repeated for a total of six (6) credit hours. Standard grading available according to procedures outlined in catalog. Prerequisites: Permission of Instructor.

COM282AC Service-Learning Experience in Communication
3 Credits 3 Periods
Unpaid Service-Learning (SL) experience, completed with approved community partner. COM282AC
may be repeated for a total of six (6) credit hours. Standard grading available according to procedures outlined in catalog. Prerequisites: Permission of Instructor.

\section*{COM298AA Special Projects}

1 Credit 1 Period
Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: Permission of Program Director or Instructor.

\section*{Computer Information Systems}

\section*{CIS103 Introduction to Social Media} 3 Credits 4 Periods
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 security issues. Prerequisites: None.

\section*{CIS105 Survey of Computer Information Systems \\ CS \\ 3 Credits 4 Periods \\ 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 effective problem solving. Exploration of relevant emerging technologies. Prerequisites: None.

\section*{CIS107 The Electronic Game Industry} 3 Credits 4 Periods
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, and networking. Prerequisites: A grade of 'C' or better in CIS105 or permission of Instructor.

\section*{CIS108 Electronic Portfolio Development}

\section*{1 Credit 2 Periods}

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 portfolio for evaluation. Prerequisites: A grade of 'C' or better in CIS105 or BPC110 or permission of Instructor.

\section*{CIS109AM Networking Technology I 2 Credits 2 Periods}

Computer networking basics. Network services, transmission media, and connectivity devices covered. Open Systems Interconnection (OSI) Reference Model. Prerequisites: None.

CIS113AE Microsoft Word: Word Processing Level I
1 Credit 2 Periods
Using word processing software to create, name and manage files, edit text, and do basic formatting of documents. Prerequisites: None.

\section*{CIS113BE Microsoft Word: Word Processing Level II}

\section*{1 Credit 1 Period}

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.

\section*{CIS113CE Microsoft Word: Word Processing Level III}

\section*{1 Credit 1 Period}

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.

\section*{CIS114AE Excel: Level I}

\section*{1 Credit 2 Periods}

Computer spreadsheet skills for solving business problems using Excel, including calculations, forecasting, and projections. Prerequisites: None.

\section*{CIS114BE Excel: Level II}

\section*{1 Credit 1 Period}

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.

\section*{CIS114CE Excel: Level III}

\section*{1 Credit 1 Period}

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.

\section*{CIS114DE Excel Spreadsheet}

\section*{3 Credits 4 Periods}

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 design using multiple, integrated spreadsheets. Prerequisites: None.

\section*{CIS117AM Database Management: Microsoft Access - Level I}

\section*{1 Credit 2 Periods}

Introduction to the basic elements of a current version of the Microsoft Access database management program, for casual and beginning users. Prerequisites: None.

\section*{CIS117BM Database Management: Microsoft Access - Level II}

1 Credit 1 Period
Exploration of additional components of the Microsoft Access database management program. Prerequisites: A grade of 'C' or better in CIS117AM or permission of Instructor.

\section*{CIS117CM Database Management: \\ Microsoft Access - Level III}

\section*{1 Credit 1 Period}

Application of the features of the Microsoft Access program to some common database management problems. Prerequisites: A grade of ' \(C\) ' or better in CIS117BM.

\section*{CIS117DM Microsoft Access:}

\section*{Database Management}

3 Credits 4 Periods
Introduction to the basic elements, exploration of additional components and common database management problems related to the Microsoft Access program. Prerequisites: None. Combines the contents of BPC/CIS117AM and BPC/CIS117BM and BPC/CIS117CM.

\section*{CIS118AB Powerpoint: Level I}

1 Credit 2 Periods
Use of PowerPoint software to produce profession-al-quality presentation visuals. Prerequisites: None.

\section*{CIS118BB PowerPoint: Level II}

1 Credit 1 Period
Use of PowerPoint software to add movement and sound to desktop presentations to enhance audience attention. Prerequisites: A grade of ' \(C\) ' or better in CIS118AB.

\section*{CIS120DA Introduction to Digital Video Editing: Adobe Premiere}

3 Credits 4 Periods
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 video. Helps students prepare for the Adobe Certifications related to Adobe Premiere. Prerequisites: None.

\section*{CIS120DB Computer Graphics:}

\section*{Adobe Illustrator}

3 Credits 4 Periods
Provides students with the capability 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 web and print; utilize tools to optimize graphics and create a PDF file. Prerequisites: None.

\section*{CIS120DC Adobe Animate:}

\section*{Digital Animation}

3 Credits 4 Periods
Focuses on entry-level skill expectations for digital animation using Adobe Animate. Covers basic animation techniques used in the creation, manipu-

Iation, and editing of animation graphics. Helps students prepare for the Adobe certifications related to Adobe Animate. Prerequisites: None.

\section*{CIS120DF Adobe Photoshop Level I: Digital Imaging}

3 Credits 4 Periods
Focuses on entry-level skill expectations for digital imaging using Adobe Photoshop. Helps students prepare for the Adobe Certifications related to Photoshop. Prerequisites: None.

\section*{CIS120DK Introduction to Digital Video Editing \\ 3 Credits 4 Periods}

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, capturing, editing, rendering and outputting digital video. Prerequisites: None.

\section*{CIS120DL Digital Video Compositing:}

\section*{After Effects}

3 Credits 4 Periods
Includes creating visual effects for video projects. Techniques and methodologies used to create shots for big budget special effects will be explored. Topics such as color and light matching, keying, motion tracking, rotoscoping and working with film will be discussed. Prerequisites: A grade of 'C' or better in CIS120DA, or CIS120DK, or permission of Instructor.

\section*{CIS121AE Windows Operating System: Level I}

\section*{1 Credit 2 Periods}

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, security, and searching, including advanced search techniques, keyboard shortcuts, and current topics. Prerequisites: None.

\section*{CIS121AI Mac Operating System}

\section*{1 Credit 2 Periods}

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 network; and maintaining the Mac. Prerequisites: None.

\section*{CIS126RH Red Hat System Administration I 3 Credits 4 Periods}

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 curriculum. Prerequisites: None.

\section*{CIS130DA 3D Studio Max: Modeling}

3 Credits 4 Periods
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 object modeling. Introduction to basic lighting, texturing and rendering techniques. Prerequisites: A grade of 'C' or better in CIS105.

\section*{CIS130DB 3D Studio Max: Animation}

\section*{3 Credits 4 Periods}

Introduction to three-dimensional animation tools and principles, with an emphasis on character construction and animation. 3D Studio Max will be the primary application for use in this class. Prerequisites: A grade of 'C' or better in CIS105.

\section*{CIS131AA Doing Business on the Internet}

1 Credit 1 Period
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; establishing a World Wide Web site. Some previous computer experience preferred. Prerequisites: None.

\section*{CIS133AA Internet/}

Web Development Level I-A

\section*{1 Credit 2 Periods}

Overview of the Internet and its resources. Hands-on experience with various Internet communication tools. Prerequisites: None.

\section*{CIS133DA Internet/}

Web Development Level I
3 Credits 4 Periods
Overview of the Internet/WWW and its resources. Hands-on experience with various Internet/WWW communication, resource discovery, and information retrieval tools. Web page development also included. Prerequisites: None.

\section*{CIS136 Content Management Systems: WordPress}

3 Credits 4 Periods
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 best practices for web site/blog creation. Prerequisites: None.

\section*{CIS150AB Object-Oriented}

Programming Fundamentals

\section*{3 Credits 4 Periods}

Structured and Object-Oriented design and logic tools. Use of computer problems to demonstrate
and teach concepts using an appropriate programming language. Prerequisites: A grade of ' \(C^{\prime}\) ' or better in CIS105 or permission of Instructor.

\section*{CIS151 Computer Game Development -Level I}

3 Credits 4 Periods
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 using windows based object oriented developments tools. Prerequisites: A grade of 'C' or better in CIS105 or permission of Instructor.

\section*{CIS156 Python Programming: Level I}

3 Credits 4 Periods
Use of the Python programming language to solve problems using suitable examples from business or other disciplines. Prerequisites: A grade of ' \(C\) ' or better in CIS105 or permission of Instructor.

\section*{CIS159 Visual Basic Programming I \\ 3 Credits 4 Periods}

Use of the Visual Basic programming language to solve problems using suitable examples from business or other disciplines. Prerequisites: A grade of 'C' or better in CIS105 or permission of Instructor.

\section*{CIS162AB C++: Level I}

CS

\section*{3 Credits 4 Periods}

Introduction to C++ programming including general concepts, program design, development, data types, operators, expressions, flow control, functions, classes, input and output operations, debugging, structured programming, and object-oriented programming. Prerequisites: A grade of 'C' or better in CIS105 or permission of Instructor.

\section*{CIS162AD C\#: Level I}

\section*{CS}

\section*{3 Credits 4 Periods}

Introduction to C\# programming including general concepts, program design, development, data types, operators, expressions, flow control, functions, classes, input and output operations, debugging, structured programming, and object-oriented programming. Prerequisites: A grade of 'C' or better in CIS105 or permission of Instructor.

\section*{CIS163AA Java Programming: Level I CS}

3 Credits 4 Periods
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 programming. Prerequisites: A grade of 'C' or better in CIS105 or permission of Instructor.

\section*{CIS165 Introduction to IOS \\ Application Development}

3 Credits 4 Periods
Introduction to iOS device programming utilizing the 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 to final product delivery. Prerequisites: A grade of 'C' or better in (CIS150++ or CIS159, or CIS162++ or CIS163AA) or permission of Instructor.

\section*{CIS165DA Android}

Mobile Device Programming 3 Credits 4 Periods
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 inter-
face, working with activities, intents and views, to using databases, providing data persistence, accessing device features and services, to debugging and publishing applications. Prerequisites: A grade of 'C' or better in CIS163AA or permission of Instructor.

\section*{CIS166AA Introduction to Javascripting} 3 Credits 4 Periods
Introduction to basic JavaScript programming concepts including syntax. Covers Hypertext Markup Language (HTML), programming logic and debugging, as well as forms manipulation and animation. Prerequisites: A grade of ' \(C\) ' or better in CIS133CA or CIS133DA, or permission of the Instructor.

\section*{CIS166AE Web Scripting with PHP:} Hypertext Preprocessor (PHP)

\section*{3 Credits 4 Periods}

Introduction to web scripting with PHP (PHP: Hypertext Preprocessor). Web application development using Hypertext Markup Language (HTML), PHP, programming logic, and Structured Query Language (SQL). Prerequisites: A grade of 'C' or better in CIS133DA or permission of Instructor.

\section*{CIS171 Survey of Blockchain Technology} 3 Credits 4 Periods
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 Internet are recommended. Prerequisites: None.

\section*{CIS189 Virtualization and IT Solutions for Digital Businesses \\ 3 Credits 4 Periods}

Introduction to Virtualization course is designed to teach basic virtualization computing concepts
to learners. It then expands on the basic technical introduction provided and explores the concepts in more detail with an emphasis on mapping the technologies to business needs and solutions. This course is suitable for anyone who wants to know more about terms like "cloud" and "virtualization." It will serve as a foundation to build upon when students learn how to design, install and configure various cloud technologies. Prerequisites: None.

\section*{CIS197 VMware ESXI Server Enterprise} 3 Credits 4 Periods
Introduction to vSphere 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. Prerequisites: A grade of 'C' or better in (CIS126DL or MST150 (any module)) and (CIS190 or MST140), or permission of Instructor.

\section*{CIS198 VMware vSphere:}

Optimize and Scale
3 Credits 4 Periods
VMware vSphere: Optimize and Scale is designed for experienced VMware vSphere users. It teaches advanced skills for configuring and maintaining a highly available and scalable virtual infrastructure. Through a mix of lecture and hands-on labs, you will configure and optimize the vSphere features that build a foundation for a truly scalable infrastructure and discuss when and where these features have the greatest effect. It enables you to understand vSphere at a deeper level and how to use advanced features and controls. Prerequisites: A grade of ' \(C\) ' or better in CIS197.

CIS200 VMware NSX:
Install, Configure, Manage
3 Credits 4 Periods
This comprehensive, fast-paced training course
focuses on installing, configuring, and managing VMware NSX. This course covers NSX as a part of the software-defined data center platform, implementation use cases along with features of NSX, and functionality operating at Layer 2 through Layer 7 of the OSI model. Lecture and hands-on lab activities support the student's understanding of NSX features, functionality, and on-going management and control. Prerequisites: A grade of ' C ' or better in CIS197.

\section*{CIS213DE Advanced Microsoft Word: Word Processing}

\section*{3 Credits 4 Periods}

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.

\section*{CIS220DC Flash:}

\section*{Advanced Animation and ActionScript} 3 Credits 4 Periods
Advanced Flash programming, action scripting, tweening, advanced buttons and user input, movie clips, using dynamic sound and text, managing information flow, Object-Oriented Programming concepts in relation to Flash. Prerequisites: A grade of ' \(C\) ' or better in CIS120DC, or permission of Instructor.

\section*{CIS220DF Adobe Photoshop Level II: Advanced Digital Imaging}

3 Credits 4 Periods
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.

\section*{CIS220DK Advanced Digital Video Production: Premiere}

\section*{3 Credits 4 Periods}

Includes an in-depth study of digital video editing using premiere, including preproduction, production and post production. Advanced techniques into a capstone project. Emphasis placed on enhanced workflow processes, integration of other applications into Premiere, multiple output formats, time-saving quick key setup and advanced production and editing tools. Prerequisites: A grade of ' C ' or better in CIS120DA, or CIS120DK, or permission of Instructor.

\section*{CIS224 Project Management Microsoft Project for Windows}

\section*{3 Credits 4 Periods}

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 software packages such as Excel, Word, Powerpoint, and cc Mail. Prerequisites: None.

\section*{CIS226AL Internet/Intranet} Server Administration-Linux

\section*{3 Credits 4 Periods}

Configuration and management of internet/intranet services, including the Apache web server, Simple Mail Transfer Protocol servers (SMTP), Structured Query Language (SQL server), File Transfer Protocol (FTP), Network Time Protocol (NTP), and other network services used in home and small business environments. Covers basic security configuration and testing. Prerequisites: A grade of ' C ' or better in CIS126 (any module), or permission of Instructor.

\section*{CIS230DA 3D Studio Max: Materials}

3 Credits 4 Periods
Emphasis on creating and applying materials and textures to three-dimensional environments.
Techniques for creating skins, surfaces, and shad-
ing types for objects, environments and characters will be explored. Original textures, both life-like and imaginary, will be created using 3D Studio Max and a 2D computer graphics software application. Prerequisites: A grade of 'C' or better in CIS130DA, or CIS120DF, or CIS120DG, or permission of Instructor.

\section*{CIS230DB 3D Studio Max: Lighting and Rendering 3 Credits 4 Periods}

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 3D Studio Max. Prerequisites: A grade of 'C' or better in CIS130DA, or permission of instructor.

\section*{CIS231 Ethereum}

\section*{Blockchain Application Development} 3 Credits 4 Periods
Exploration of the theory behind Ethereum blockchain technology and the development of Ethereum smart contracts. In-depth emphasis on programming concepts relating to the creation and eventual deployment of smart contracts to the Ethereum blockchain. Prerequisites: A grade of ' C ' or better in CIS171 or permission of Instructor.

\section*{CIS233DA Internet/ \\ Web Development Level II}

\section*{3 Credits 4 Periods}

Design and create pages on the World Wide Web with a variety of markup languages, programming languages, scripts, and multimedia. Hands-on experience authoring and preparing sophisticated web documents. Exploration of best practices/issues for web design and publishing and careers in web development and e-commerce. Prerequisites: A grade of 'C' or better in CIS133DA or permission of Instructor.

CIS233DC Internet Web Development: Dreamweaver

\section*{3 Credits 4 Periods}

Design and development of comprehensive and interactive websites using Dreamweaver. Hands-on experience designing, developing, testing, and publishing web documents that contain various client-side web technologies. Assists in preparing students for the Adobe Certifications related to Adobe Dreamweaver. Prerequisites: A grade of ' \(C\) ' or better in CIS132, or CIS133DA, or permission of Instructor.

\section*{CIS234 XML Application Development}

\section*{3 Credits 4 Periods}

The use of Extensible Markup Language (XML) to make documents smarter, simplify Web automation, and to communicate between databases, both within and between corporations. Includes techniques for XML generation, data extraction and sharing, and transformation and managing of XML files. Prerequisites: A grade of 'C' or better in CIS133DA or permission of Instructor.

\section*{CIS235 E-Commerce}

\section*{3 Credits 4 Periods}

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 current issues in e-commerce. Prerequisites: A grade of 'C' or better in CIS133DA or permission of Instructor.

\section*{CIS238RH Red Hat}

System Administration II
3 Credits 4 Periods
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-focused curriculum. Prerequisites: A grade of 'C' or better in CIS126RH, or CIS126DL, or permission of Instructor.

\section*{CIS239DL Linux Shell Scripting \\ 3 Credits 4 Periods}

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 competitors. Prerequisites: A grade of ' C ' or better in CIS126DL or CIS126RH or permission of Instructor.

\section*{CIS240DL Linux Network Administration 3 Credits 4 Periods}

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), the Red Hat Certified Engineer (RHCE) and the Linux Professional Institute (LPIC-1). Prerequisites: A grade of 'C' or better in CIS126DL or CIS126RH or permission of Instructor.

\section*{CIS240RH Red Hat System Administration III}

3 Credits 4 Periods
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 Engineer (RHCE - EX294) exam, a professional certification. Prerequisites: A grade of 'C' or better in CIS238RH or permission of Instructor.

\section*{CIS243 Internet/}

\section*{Web Development Level III}

\section*{3 Credits 4 Periods}

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 and accessibility optimization, and intuitive user interfaces. Prerequisites: A grade of ' \(C\) ' or better in CIS233DA, or permission of Instructor.

\section*{CIS250 Management of Information Systems}

\section*{3 Credits 4 Periods}

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 organizations and their management. Prerequisites: A grade of ' C ' or better in CIS105.

\section*{CIS251 Computer Game Development - Level II}

\section*{3 Credits 4 Periods}

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 programming (scripting) techniques, and decision logic using object oriented techniques. Prerequisites: A grade of ' \(C\) ' or better in CIS151, or permission of Instructor.

\section*{CIS261 Hyperledger}

Blockchain Application Development
3 Credits 4 Periods
Exploration of the theory behind Hyperledger
blockchain technology and the development of

Hyperledger smart contracts. In-depth emphasis on programming concepts relating to the creation and eventual deployment of smart contracts to the Hyperledger blockchain. Prerequisites: A grade of 'C' or better in CIS231 or permission of Instructor.

\section*{CIS262AD C\# Level II}

\section*{3 Credits 4 Periods}

Advanced C\# programming with emphasis on data structures, dynamic memory allocation, object-oriented programming, user interfaces, and database processing. Overview of web applications, network programming, and reporting tools. Prerequisites: A grade of 'C' or better in CIS162AD, or permission of Instructor.

\section*{CIS263AA Java Programming: Level II 3 Credits 4 Periods}

Intermediate Java programming. Includes features needed to construct object-oriented programming, multithreading, multimedia, files, streams and data structure. Prerequisites: A grade of ' \(C\) ' or better in CIS163AA or permission of Instructor.

\section*{CIS265 Advanced iOS Application Development 3 Credits 4 Periods}

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 to final product delivery. Prerequisites: A grade of 'C' or better in CIS150++ and CIS165, or permission of Instructor.

\section*{CIS266 Network Integration Capstone 3 Credits 5 Periods}

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 and CIS240DL) or CNT170AA or (MST155DA and MST157DA) and (CIS270 or CIS271DL or CNT205) or associated industry certifications or permission of Instructor.

\section*{CIS270 Essentials of}

\section*{Network and Information Security}

3 Credits 4 Periods
Threats to security of information systems; responsibilities and basic tools for information security, including communication security, infrastructure security, organizational security and basic cryptography. Introduction to the language of network security and hardware, software and firmware components of an information security system for local, metropolitan, enterprise, and wide area networks. Helps prepare participants for the Comptia Security+ exam and the GIAC Security Essentials Certificate (GSEC). Prerequisites: A grade of ' \(C\) ' or better in CNT150 or any MST150 course, or permission of Instructor.

\section*{CIS271DL Linux Security}

\section*{3 Credits 4 Periods}

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 as the SAIR/GNU LCP and LCA certificates, CompTIA's Linux+, RHCT, RHCE, and LPIC. Prerequisites: A grade of 'C' or better in CIS240DL or permission of Instructor.

\section*{CIS276DA MySQL Database}

\section*{3 Credits 4 Periods}

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 develop backup/restore strategies. Prerequisites: A grade of 'C' or better in CIS105 or permission of Instructor.

\section*{CIS276DB SQL Server Database}

3 Credits 4 Periods
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, and develop backup/restore strategies. Prerequisites: A grade of 'C' or better in CIS105 or permission of Instructor.

\section*{CIS284 Certified Internet Web (Ciw) Associate Certification Preparation Course} 3 Credits 4 Periods
Explain and implement Internet technologies, network infrastructure, and protocols. Utilize a variety of markup languages and web technologies to design web pages. Utilize job skills such as project management. Explore best practices/issues for web design, publishing, and e-commerce. Prepare for Certified Internet Web (CIW) Associate Examinations. Prerequisites: A grade of 'C' or better in CIS233DA, or permission of Instructor.

\section*{CIS290AA Computer Information Systems Internship \\ 1 Credit 6 Periods}

Work experience in business or industry. Prerequisites: Permission of Instructor.

CIS290AB Computer Information Systems Internship
2 Credits 12 Periods
Work experience in business or industry. Prerequisites: Permission of Instructor.

\section*{Course Descriptions}

\section*{CIS290AC Computer Information Systems Internship}

\section*{3 Credits 18 Periods}

Work experience in business or industry. Prerequisites: Permission of Instructor.

\section*{CIS298AA Special Projects}

1 Credit 1 Period
Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: Permission of Program Director or Instructor.

\section*{CIS298AC Special Projects}

3 Credits 3 Periods
Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: Permission of Program Director or Instructor.

\section*{Computer Science}

\section*{CSC100AB Introduction to Computer Science (C++) CS \\ 4 Credits 4 Periods}

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. General Education Designation: Computer/Statistics/Quantitative Applications - [CS]. Prerequisites: A grade of 'C' or better in MAT120 or MAT121 or MAT122.

\section*{CSC110 Introduction to Computer Science (Java) CS}

\section*{3 Credits 3 Periods}

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 MAT120 or MAT121 or MAT122.

\section*{CSC110AB Introduction to}

Computer Science (Java)
CS

\section*{4 Credits 4 Periods}

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 MAT120 or MAT121 or MAT122.

\section*{CSC120 Digital Design Fundamentals}

\section*{4 Credits 6 Periods}

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, ROMs, PLDs, synchronous and asynchronous sequential circuits, and state reduction techniques. Building physical circuits. Prerequisites: A grade of 'C' or better in CSC100 or CSC110 or CSC181 or ELE181 or NET181 or equivalent or permission of Instructor.

\section*{CSC205 Object Oriented Programming and Data Structures}

CS
3 Credits 3 Periods
Covers Object-Oriented design and programming; elementary data structures; arrays; lists; stacks; queues; binary trees; recursion; searching and sorting algorithms. Prerequisites: A grade of ' C ' or better in CSC110 or permission of Instructor.

\section*{CSC205AB Object Oriented Programming and Data Structures}

CS
4 Credits 4 Periods
Covers Object-Oriented design and programming; elementary data structures; arrays; lists; stacks; queues; binary trees; recursion; searching and sort-
ing algorithms. Prerequisites: A grade of ' \(C\) ' or better in CSC110 or permission of Instructor.

\section*{CSC230 Computer Organization and Assembly Language CS}

4 Credits 5 Periods
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. Memory organization with cache and virtual memory. Prerequisites: A grade of ' C ' or better in [(CSC100 or CSC110) and CSC/EEE120], or permission of Instructor or Division or Department Chair.

\section*{CSC240AA Introduction to Different Programming Languages}

\section*{4 Credits 4 Periods}

Introduction to procedural (C/C++), applicative (LISP), and declarative (Prolog) languages. Prerequisites: A grade of 'C' or better in CSC205 or permission of Instructor.

\section*{Computer-Aided Drafting/Design}

\section*{CAD167 Architectural Drawings I (Revit): Residential CAD}

3 Credits 6 Periods
Use of Revit architectural modeling software to develop 3-D architectural models, working drawings, construction documentation, and renderings. Emphasis on residential working drawings. Prerequisites: A grade of 'C' or better in CAD105, or permission of Department or Division.

\section*{Construction}

\section*{CNS282AC Volunteerism for Construction: \\ A Service Learning Experience}

3 Credits 3 Periods
Service-learning field experience within private/ public agencies and citizen volunteer groups. May not repeat specific assignment for more than three (3) credit hours. Standard grading available according to procedures outlined in college catalog.Prerequisites: Permission of Department or Division.

\section*{CNS290AC Construction Internship}

3 Credits 18 Periods
Construction internship office/field experience with private/public agencies or citizen volunteer groups. Two hundred and forty (240) hours of designated work. Standard grading available according to procedures outlined in college catalog. Prerequisites: Permission of Department or Division.

\section*{CNS296WC Cooperative Education}

\section*{3 Credits 15 Periods}

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: 12 college credits, 2.6 GPA min \& ability to obtain a position related to academic or career goals; or permission of instructor. Corequisites: Enrolled in at least 1 class related to major or career interest or permission of instructor.

\section*{CNS298AA Special Projects}

1 Credit 1 Period
Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment
available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: Permission of Program Director or Instructor.

\section*{CNS298AC Special Projects}

3 Credits 3 Periods
Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: Permission of Program Director or Instructor.

\section*{Counseling and Personal Development}

\section*{CPD102AB Career Exploration \\ 2 Credits 2 Periods}

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 individualized educational/career goals and action plan. Prerequisites: None. CPD102AB may be repeated for a total of six (6) credit hours.

\section*{CPD102AD Growth and Transformation Strategies \\ 2 Credits 2 Periods}

Designed to help students adopt a growth mindset

\section*{Course Descriptions}
within a holistic framework in order to transform patterns that prevent them from achieving their goals. Prerequisites: None.

\section*{CPD102AH Stress Management 2 Credits 2 Periods}

Reviews the sources of stress, the physiological effects and the psychological impact of stress on the individual. Provides strategies to reduce stress. Prerequisites: None

\section*{CPD103BE Native American Cultural Pride And Awareness \\ 2 Credits 2 Periods}

Develop an awareness of cultural roots, history, and traditions with emphasis on the shaping of personal identity, social, career, and educational decisions. Prerequisites: None.

\section*{CPD104 Career and Personal Development 3 Credits 3 Periods}

An overview of the holistic process of career/life planning through self-awareness and understand-
ing of the world of work. Exploration and application of behavioral, social, and cultural factors leading to college, career, and personal success with emphasis on assessment, applied behavior management, motivation, self-care, and career development. Prerequisites: None.

\section*{CPD120 Introduction to Counseling} SB

\section*{3 Credits 3 Periods}

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 practices. Prerequisites: None.

CPD150 Strategies for College Success 3 Credits 3 Periods
Focus on increasing student success through college orientation and personal growth, study skills development, and educational and career planning. Prerequisites: None.


\section*{CPD150AA College Orientation and Personal Growth}

\section*{1 Credit 1 Period}

Emphasis on increasing student success through college orientation, identification of learning style and the use of time management, goal-setting, and interpersonal communication strategies. Prerequisites: None.

\section*{CPD150AB Study Skills Development}

1 Credit 1 Period
Emphasis on increasing student success through the use of study strategies including materials organization, note-taking, reading, test-taking, memory, and critical and creative thinking. Prerequisites: None.

\section*{CPD150AC Educational and Career Planning}

\section*{1 Credit 1 Period}

Emphasis on increasing student success through educational and career planning. Prerequisites: None.

\section*{CPD160 Introduction to Multiculturalism} C,L
3 Credits 3 Periods
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 psychological factors impacting conflict and accord between diverse cultures through written and oral discourse. Prerequisites: A grade of 'C' or better in ENG101 or ENG107, or permission of Instructor.

CPD282AA Volunteerism for Counseling and Personal Development:
A Service Learning Experience
1 Credit 1 Period

Service-learning field experience within private/ public agencies, and citizen volunteer groups. CPD282AA may be repeated for a total of six (6) CPD282 credit hours. Standard grading available according to procedures outlined in catalog. Prerequisites: Permission of Instructor.

\section*{CPD282AB Volunteerism for Counseling and Personal Development:}

A Service Learning Experience
2 Credits 2 Periods
Service-learning field experience within private/ public agencies, and citizen volunteer groups. CPD282AB may be repeated for a total of six (6) CPD282 credit hours. Standard grading available according to procedures outlined in catalog. Prerequisites: Permission of Instructor.

\section*{CPD282AC Volunteerism for Counseling and Personal Development:}

A Service Learning Experience 3 Credits 3 Periods
Service-learning field experience within private/ public agencies, and citizen volunteer groups. CPD282AC may be repeated for a total of six (6) CPD282 credit hours. Standard grading available according to procedures outlined in catalog. Prerequisites: Permission of Instructor.

\section*{CPD298AC Special Projects}

\section*{3 Credits 3 Periods}

Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: Permission of Program Director or Instructor.

\section*{Creative Writing}

\section*{CRW150 Introduction to Creative Writing} 3 Credits 3 Periods
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 practices and evaluation. Introduction to literature's role in society. Prerequisites: None.

\section*{CRW160 Introduction to Writing Poetry}

\section*{3 Credits 3 Periods}

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 of finished, marketable poems. Prerequisites: None. CRW150 recommended but not required.

\section*{CRW170 Introduction to Writing Fiction} 3 Credits 3 Periods
Practice in writing fiction through a process of prewriting (invention and discovery), writing, analysis and evaluation (in workshop), and revision; practice in manipulating various elements and forms of fiction. Prerequisites: None. CRW150 recommended but not required.

\section*{CRW190 Introduction to Screenwriting} 3 Credits 3 Periods
Overview of screenwriting elements; introduction to screenwriting techniques. Prerequisites: None. CRW150 recommended but not required.

\section*{CRW200 Readings for Writers}

1 Credit 1 Period
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 elements. One-on-one meetings between student and instructor. Prerequisites: A grade of ' C ' or better in CRW150 or permission of Instructor.

\section*{CRW201 Portfolio}

1 Credit 1 Period
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. CRW201 may be repeated for a total of two (2) credit hours. Prerequisites: Acceptance to Creative Writing(CRW) program, completion of nine (9) credit hours of CRW course work, or permission of Program Coordinator.

\section*{CRW260 Intermediate Poetry Writing} 3 Credits 3 Periods
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 intensive workshops. Prerequisites: A grade of 'C' or better in CRW160 or permission of Instructor.

CRW270 Intermediate Fiction Writing 3 Credits 3 Periods
Writing original short stories; analysis of works of fiction; concentration on revising students' fiction through intensive workshops. Prerequisites: A grade of 'C' or better in CRW170.

\section*{CRW272 Planning and Structuring the Novel}

\section*{3 Credits 3 Periods}

Focus on planning, structuring, and beginning a novel; prewriting, writing, analysis, evaluation, and revision of novel plans and excerpts. Prerequisites: A grade of 'C' or better in CRW150 or permission of Instructor.

\section*{CRW273 Writing the Novel}

3 Credits 3 Periods
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-focused in-class forums, novel writing, peer and instructor critiques. Prerequisites: A grade of ' \(C\) ' or better in CRW272 or permission of Instructor.

\section*{Critical Reading}

\section*{CRE101 College Critical Reading and Critical Thinking}

L
3 Credits 3 Periods
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 (appropriate reading placement test score or a grade of C or better in RDG095 or RDG100 or RDG111 or RDG112 or RDG113 or permission of Instructor).

\section*{CRE101HS College Critical Reading and Critical Thinking in Health Sciences}

\section*{L}

3 Credits 3 Periods
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 (RDG095, or

RDG100, or RDG100LL, or RDG111, or RDG112, or RDG113, or an appropriate district placement, or permission of Instructor).

\section*{Dance Performing Arts}

\section*{DAN101AA Social Dance: Ballroom L}

1 Credit 2 Periods
Theory and practice of Ballroom dance. Development of movement quality and performance skills individually, with a partner or in a group setting. Prerequisites: None.

\section*{DAN102AA Hip Hop I}

\section*{1 Credit 3 Periods}

Theory and practice of Hip Hop dance at the beginning level. Development of movement quality and performance skills. Prerequisites: None. DAN102AA may be repeated for credit.

\section*{DAN102AB Hip Hop II}

1 Credit 3 Periods
Theory and practice of Hip Hop dance at the advanced beginning level. Development of movement quality and performance skills. Prerequisites: A grade of 'C' or better in DAN102AA or permission of Instructor.

\section*{DAN102AB Hip Hop II}

1 Credit 3 Periods
Theory and practice of Hip Hop dance at the advanced beginning level. Development of movement quality and performance skills. Prerequisites: A grade of 'C' or better in DAN102AA or permission of Instructor.

\section*{DAN104AA Ballroom I}

\section*{1 Credit 3 Periods}

Theory and practice of Ballroom dance at the beginning level. Development of movement quality and performance skills. Prerequisites: None.

\section*{DAN104AB Ballroom II}

\section*{1 Credit 3 Periods}

Theory and practice of Ballroom dance at the advanced beginning level. Development of movement quality and performance skills. Prerequisites: A
grade of 'C' or better in DAN104AA or permission of Instructor.

\section*{DAN106AA Latin I}

\section*{1 Credit 3 Periods}

Theory and practice of Latin dance at the beginning level. Development of movement quality and performance skills. Prerequisites: None.

\section*{DAN106AB Latin II}

\section*{1 Credit 3 Periods}

Theory and practice of Latin dance at the advanced beginning level. Development of movement quality and performance skills. Prerequisites: A grade of 'C' or better in DAN1 06AA or permission of Instructor.

\section*{DAN131 Ballet I}

1 Credit 3 Periods
Introduction to the theory and practice of ballet at the beginning level. Development of movement quality and performance skills. Prerequisites: None.

\section*{DAN131 Ballet I}

1 Credit 3 Periods
Introduction to the theory and practice of ballet at the beginning level. Development of movement quality and performance skills. Prerequisites: None. DAN131 may be repeated for credit.

\section*{DAN132 Modern Dance I}

1 Credit 3 Periods
Introduction to the theory and practice of modern dance at the beginning level. Development of movement quality and performance skills. Prerequisites: None. DAN132 may be repeated for credit.

\section*{DAN133 Jazz Dance I}

\section*{1 Credit 3 Periods}

Introduction to the theory and practice of jazz dance at the beginning level. Development of movement quality and performance skills. Prerequisites: None. DAN133 may be repeated for credit.


\section*{DAN134 Ballet II}

1 Credit 3 Periods
Theory and practice of ballet at the advanced beginning level. Development of movement quality and performance skills. DAN134 may be repeated for credit. Prerequisites: A grade of ' C ' or better in DAN131 or permission of Instructor.

\section*{DAN135 Modern Dance II}

\section*{1 Credit 3 Periods}

Theory and practice of modern dance at the advanced beginning level. Development of movement quality and performance skills. DAN135 may be repeated for credit. Prerequisites: A grade of ' \(C\) ' or better in DAN132 or permission of Instructor.

\section*{DAN136 Jazz Dance II}

\section*{1 Credit 3 Periods}

Theory and practice of jazz dance at the advanced beginning level. Development of movement quality and performance skills. DAN136 may be repeated for credit. Prerequisites: A grade of ' \(C\) ' or better in DAN133 or permission of Instructor.

\section*{DAN140 Tap Dance I}

\section*{1 Credit 3 Periods}

An introduction to the theory and practice of tap dance. Prerequisites: None. DAN140 may be repeated for credit.

\section*{DAN141 Dance Workshop}

\section*{1 Credit 3 Periods}

An intensive experience in the process of choreography, performance, and production elements. Prerequisites: None. DAN141 may be repeated for credit.

\section*{DAN145 Tap Dance II}

\section*{1 Credit 3 Periods}

Theory and practice of tap dance at an advanced beginning level. DAN145 may be repeated for credit. Prerequisites: A grade of 'C' or better in DAN140 or permission of Instructor.

\section*{DAN146 Tap Dance Ensemble \\ 1 Credit 3 Periods}

Introduction to the process and practice of dance performance, specific to the genre of tap dance. DAN146 may be repeated for credit. Prerequisites: A grade of ' \(C\) ' or better in DAN140 or permission of Instructor.

\section*{DAN150 Dance Performance I}

1 Credit 3 Periods
An introduction to the process and practice of dance performance. Prerequisites: None. DAN150 may be repeated for credit. Corequisites: Any level of any of the following dance technique courses with a DAN prefix: ballet, modern, jazz, hip hop, tap, social, or world dance.

\section*{DAN155 Dance Performance II}

1 Credit 3 Periods
Continued study of the process and practice of dance performance at advanced beginning level. DAN155 may be repeated for credit. 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 world dance.

\section*{DAN201AA Special Topics: Dance 1 Credit 1 Period}

Exploration of current topics, issues and activities related to one or more aspects of dance. Designed to offer special topics and/or specialized training for students in dance. Includes activities for portfolio enhancement. Prerequisites: Permission of Instructor.

\section*{DAN210 Dance Production I}

\section*{3 Credits 3 Periods}

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.

\section*{DAN222 Rhythmic Awareness II}

3 Credits 3 Periods
Study at the intermediate level of rhythm and how it can be applied in dance and choreography. Emphasis on awareness of rhythm in everyday life as well as creative practice in rhythm and movement. Prerequisites: A grade of 'C' or better in DAN221 or permission of Instructor.

\section*{DAN231 Ballet III}

1 Credit 3 Periods
Theory and practice of ballet at the beginning intermediate level. Development of movement quality and performance skills. DAN231 may be repeated for credit. Prerequisites: A grade of 'C' or better in DAN134 or permission of Instructor.

\section*{DAN232 Modern Dance III}

1 Credit 3 Periods
Theory and practice of modern dance at the beginning intermediate level. Development of movement
quality and performance skills. DAN232 may be repeated for credit. Prerequisites: A grade of ' \(C\) ' or better in DAN135 or permission of Instructor.

\section*{DAN233 Jazz Dance III}

\section*{1 Credit 3 Periods}

Theory and practice of jazz dance at the beginning intermediate level. Development of movement quality and performance skills. DAN233 may be repeated for credit. Prerequisites: A grade of ' \(C\) ' or better in DAN136 or permission of Instructor.

\section*{DAN234 Ballet IV}

1 Credit 3 Periods
Theory and practice of ballet at the intermediate level. Development of movement quality and performance skills. DAN234 may be repeated for credit. Prerequisites: A grade of 'C' or better in DAN231 or permission of Instructor.

\section*{DAN235 Modern Dance IV}

1 Credit 3 Periods
Theory and practice of modern dance at the intermediate level. Development of movement quality

and performance skills. DAN235 may be repeated for credit. Prerequisites: A grade of ' C ' or better in DAN232 or permission of Instructor.

\section*{DAN236 Jazz Dance IV}

\section*{1 Credit 3 Periods}

Theory and practice of jazz dance at the intermediate level. Development of movement quality and performance skills. DAN236 may be repeated for credit. Prerequisites: A grade of ' \(C\) ' or better in DAN233 or permission of Instructor.

\section*{DAN250 Dance Performance III}

\section*{1 Credit 3 Periods}

Continued study of the process and practice of dance performance at beginning intermediate level. DAN250 may be repeated for credit. 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 world dance.

\section*{DAN255 Dance Performance IV}

\section*{1 Credit 3 Periods}

Continued study of the process and practice of dance performance at the intermediate level. DAN255 may be repeated for credit. 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 world dance.

\section*{DAN264 Choreography I}

\section*{3 Credits 3 Periods}

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 energy. Prerequisites: None.

\section*{DAN265 Choreography II}

\section*{3 Credits 3 Periods}

Exploration of choreography at the intermediate level. Experimentation with the various approaches to creative practice as established by 20th and 21 st century artists. Prerequisites: A grade of ' \(C\) ' or better in DAN264 or permission of Instructor.

\section*{DAN280 Dance Practicum}

2 Credits 3 Periods
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 encountered throughout the project.Prerequisites: Permission of Instructor.

\section*{DAN282AA Service-Learning Experience in Dance}

\section*{1 Credit 1 Period}

Unpaid Service-Learning (SL) experience, completed with approved community partner. DAN282AA may be repeated for a total of six (6) credit hours. Standard grading available according to procedures outlined in catalog. Prerequisites: Permission of Instructor.

\section*{DAN290AB Dance Conservatory I}

\section*{2 Credits 6 Periods}

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 technique and performance skills. Prerequisites: None. May be repeated for a total of six (6) credit hours.

\section*{Dance Humanities}

\section*{DAH100 Introduction to Dance}

HU
3 Credits 3 Periods
Overview of the field of dance focusing on origins, historical development, and cultural characteristics of the various styles of dance. Prerequisites: None.

\section*{DAH201 World Dance Studies}

G, HU
3 Credits 3 Periods
Exploration, analysis, synthesis, and evaluation of the role of dance in various cultures around the world. Prerequisites: None. DAH1 00 strongly suggested but not required.

DAH250 Dance in Popular Culture
C, HU
3 Credits 3 Periods
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 diverse cultural influences in U.S. popular culture. Prerequisites: None.

\section*{Dental Hygiene Education}

\author{
DHE110 Pharmacology \\ 3 Credits 3 Periods
}

Study of the principles of pharmacology and drugs affecting dental treatment. Topics include drug interactions, oral manifestations, drugs used in dentistry and complementary medicine. Prerequisites: Admission to the Dental Hygiene Program or permission of Instructor.

\section*{DHE112 Oral Pathology}

\section*{3 Credits 3 Periods}

Identification, classification, etiology and treatment of lesions of the oral mucosa and atypical conditions of the oral cavity and supporting structures. Understanding of abnormal conditions to recognize the parameters of comprehensive dental hygiene care. Multi-media resources are used extensively for identification of oral lesions. Prerequisites: Admission to the Dental Hygiene Program or permission of Instructor.

\section*{DHE115 Emergency Medicine}

2 Credits 2 Periods
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 environment. Prerequisites: Admission to the Dental Hygiene Program.

\section*{DHE117 Dental Radiography 2 Credits 2 Periods}

Physics of radiography, theory of radiation production, exposure techniques, radiation protection, film processing, mounting, and interpretation of radiography. Course activities include multi-media resources. Prerequisites: Admission to the Dental Hygiene Program or permission of Instructor.

\section*{DHE119 Head and Neck Anatomy 3 Credits 3 Periods \\ 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 resources. Prerequisites: Admission to the Dental Hygiene Program or permission of Instructor.

\section*{DHE120 Pre-Clinical Dental Hygiene}

\section*{6 Credits 12 Periods}

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 to self assessment skills and quality improvement. Prerequisites: Admission to the Dental Hygiene Program or permission of Instructor.

\section*{DHE121 Dental Anatomy, Embryology and Histology}

\section*{2 Credits 3 Periods}

Includes the histology and embryology of oral tissues; developmental disturbances of the face, oral cavity, and related structures; tooth composition and morphology; eruption patterns and occlusal evaluation. Use of skulls, models and multimedia resources also covered. Prerequisites: Admission to the Dental Hygiene Program.

\section*{DHE125 Dental Radiography Laboratory} 1 Credit 3 Periods
Radiation safety and infection control procedures for operator and patient. Film placement, exposure, development, mounting and evaluation of dental radiographs. Operation and maintenance of X-ray and processing equipment. Interpretation of radiographic findings. Prerequisites or Corequisites: (DHE117 and admission to the Dental Hygiene Program) or permission of instructor.

DHE127 Prevention of Dental Disease
3 Credits 3 Periods
Introduction to preventive aids, agents, and coach-
ing to help patients achieve optimum oral health, reduce incidence of disease, and minimize risk of oral injury. Instills critical thinking in etiologic agents, cariology, fluorides, sealants, nutrition, and their oral and systemic implications. Prerequisites: Admission to the Dental Hygiene Program or permission of Instructor.

\section*{DHE132 Dental Hygiene Theory I 3 Credits 5 Periods}

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 professional accountability. Prerequisites: A grade of 'C' or better in (DHE120 and admission to the Dental Hygiene Program) or permission of Instructor. Corequisites: DHE133.

\section*{DHE133 Dental Hygiene Clinic I \\ 3 Credits 9 Periods}

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 CPR card.

\section*{DHE201 Dental Materials}

\section*{2 Credits 2 Periods}

Composition, properties and criteria for use of dental materials. Principles of mixing techniques of restorative, preventative, and laboratory dental materials. Prerequisites: Admission to the Dental Hygiene Program or permission of instructor. Corequisites: DHE202.

\section*{DHE202 Dental Materials Laboratory 1 Credit 3 Periods}

Manipulate permanent and temporary restor-

\section*{Course Descriptions}
ative materials, impression material, dental waxes, cements, periodontal dressings, bases and liners. Fabricate mouth protectors and study models. Laboratory proficiency in margination of permanent restorative materials. Prerequisites: Admission to the Dental Hygiene Program or permission of Instructor. Corequisites: DHE201.

\section*{DHE212 Dental Hygiene Theory II 2 Credits 2 Periods}

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.

\section*{DHE213 Dental Hygiene Clinic II 5 Credits 15 Periods}

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.

\section*{DHE219 Practice Management} 2 Credits 2 Periods
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, ethical and legal issues. Prerequisites: Admission to the Dental Hygiene Program or permission of Instructor.

\section*{DHE225 Periodontics}

3 Credits 3 Periods
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 literature and multi-media resources are used extensively. Prerequisites: Admission to the Dental Hygiene Program or permission of Instructor.


\section*{Course Descriptions}

\section*{DHE227 Dental Anesthesia}

2 Credits 2 Periods
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 hands-on experience administering local anesthetics and nitrous oxide in a clinical setting. Prerequisites: A grade of 'C' or better in DHE119.

\section*{DHE229 Community Oral Health 3 Credits 3 Periods}

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, psychological and economic factors affecting utilization within the system.

Prerequisites: Admission to the Dental Hygiene Program or permission of Instructor.

\section*{DHE232 Dental Hygiene Theory III 2 Credits 3 Periods}

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.

\section*{DHE233 Dental Hygiene Clinic III 5 Credits 15 Periods}

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.


\section*{Drafting Technology}

\section*{DFT105AA Computer Aided Drafting I: AutoCAD}

CS
3 Credits 6 Periods
Industrial use of AUTOCAD equipment (hardware and software) in the areas of mechanical, electronic and construction drawings. Prerequisites: None. General Education Designation: Computer/ Stats/Quantitative Apps - [CS] in combination with: CSC100 or CSC100AA or CSC100AB.

\section*{DFT110 Introduction to Drafting}

3 Credits 6 Periods
Fundamentals of drafting including lettering, basic drawing concepts, geometric construction and multiview projection. Prerequisites: None.

\section*{DFT111 Intermediate Drafting}

\section*{3 Credits 6 Periods}

Dimensioning and tolerancing, sectional views and auxiliary views. Prerequisites: A grade of ' \(C\) ' or better in DFT105AA, or DFT110, or equivalent.

\section*{DFT112 Advanced Drafting}

3 Credits 6 Periods
Detail and assembly drawings, dimensioning and tolerancing per current manufacturing standards. Prerequisites: A grade of 'C' or better in (DFT111 and DFT254AA) or equivalent.

\section*{DFT114 Machine Trades Blueprint Reading} 3 Credits 3 Periods
Analysis and interpretation of technical drawings, common to manufacturing and the machine trades. Prerequisites: None.

\section*{DFT115 Geometric Dimensioning and Tolerancing \\ 3 Credits 3 Periods}

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 related to contracts with the U.S. Government. Prerequisites or Corequisites: DFT110, or MET109, or permission of Department or Division.

\section*{DFT254AA Computer Aided Drafting II: AutoCAD}

3 Credits 6 Periods
Advanced AutoCAD techniques in constructing three-dimensional objects and symbols, dimensioning and text; advanced techniques for projection, rotation, and translation of objects; advanced plotter use. Prerequisites: A grade of 'C' or better in DFT105AA or equivalent or permission of Department or Division.

\section*{DFT255 3D Printing/ Additive Manufacturing 4 Credits 4 Periods}

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 maintenance, part design and analysis, adapting stereolithography files, printing models, and post-processing. Prerequisites: A grade of 'C' or better in DFT254AA, or MFG254, or permission of Department or Division.

\section*{DFT296WA Cooperative Education}

\section*{1 Credit 5 Periods}

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 12 college credits, min. 2.6 GPA and obtain a position related to academic or career goals or permission of Instructor. Corequisites: At least 1 class related to major or career interest or with permission of the Instructor.

\section*{DFT296WC Cooperative Education}

3 Credits 15 Periods
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 12 college credits, min 2.6 GPA and obtain a position related to academic or career goals or permission of Instructor. Corequisites: At least 1 class related to major or career interest or with permission of the Instructor.

\section*{Early Childhood Education}

\section*{ECH128 Early Learning: Play And The Arts 3 Credits 3 Periods \\ Examines theory, research and practices relating to play and the creative arts in early childhood. Considers practical constraints and alternative perspectives. Prerequisites: None.}

\section*{ECH176 Child Development \\ SB}

3 Credits 3 Periods
Study of the science of human development from
conception through adolescence. Includes observation skills, parent and adult roles in the lives of children, and contemporary issues. Prerequisites: None.

\section*{ECH270 Observing Young Children \\ 1 Credit 1 Period}

Introduction to techniques of observing young children. Recording methods, interpretation and use of collected information including legal and ethical implications. Prerequisites: None.

\section*{ECH271 Arranging the Environment 1 Credit 1 Period \\ Exploration of the influence of the environment on the behavior of young children. Indoor and outdoor spaces considered and analysis of environments practiced. Prerequisites: None.}

\section*{ECH275 Literacy Development and the Young Child \\ 1 Credit 1 Period}

Literacy from birth through the early childhood years. Focus on developmentally appropriate ways to encourage speaking, listening, writing, and reading in the home and classroom. Prerequisites: None.

\section*{ECH279 Early Childhood Curriculum Development 1 Credit 1 Period}

An intensive focus on the process of building curriculum units appropriate to the developmental needs and abilities of the young child. Design, use and evaluation of materials and activities. Prerequisites: None. ECH279 may be repeated for a total of four (4) credit hours.

\section*{ECH282 Discipline/ \\ Guidance of Child Groups}

1 Credit 1 Period
Exploration of techniques for guiding children in
groups with focus on individual child and adult needs for a disciplined environment. Prerequisites: None.

\section*{ECH298AA Special Projects}

1 Credit 1 Period
Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: Permission of Program Director or Instructor.

\section*{Early Education}

\section*{EED111 Multimedia and the \\ Early Childhood Education Classroom \\ 3 Credits 3 Periods}

Explore theories and teaching strategies of utilizing multimedia with children birth through 8 years of age. Examine usage of various multimedia in early childhood education settings. Explore ways to integrate appropriate multimedia usage into learning. Explore the use of multimedia and ECE professional growth. Prerequisites: None.

\section*{EED200 Foundations of Early Childhood Education SB}

\section*{3 Credits 3 Periods}

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 experience. Prerequisites: None. EED200 requires a minimum of 30 hours of field experience in birth to age eight environments.

\section*{EED205 The Developing Child: Prenatal to Age Eight}

\section*{SB}

3 Credits 3 Periods
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 experience. Prerequisites: None.

\section*{EED212 Guidance, Management and the Environment \\ 3 Credits 3 Periods}

Principles for guiding young children in early care and education environments. Exploration of guidance, management, and how the environment impacts the lives of young children. Includes observation of classrooms of children ages birth to age eight. Prerequisites: None.

\section*{EED215 Early Learning:}

Health, Safety, Nutrition and Fitness
3 Credits 3 Periods
Consideration of public health issues and safety procedures within early childhood settings, serving young children birth to age eight. Overview of nutritional needs and issues of physical fitness and well-being in young children. Includes field experiences. Prerequisites: None.

\section*{EED220 Child, Family, Community and Culture}

\section*{3 Credits 3 Periods}

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 emotional experiences and their impact on the developing brain. Prerequisites: None.

\section*{EED222 Introduction to the Exceptional Young Child: Birth to Age Eight}

C, SB
3 Credits 3 Periods
Overview of the exceptional learner (birth - age 5 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 giftedness. Includes field experience. Prerequisites: None.

\section*{EED222 Introduction to the Exceptional Young Child: Birth to Age Eight C, SB}

3 Credits 3 Periods
Overview of the exceptional learner (birth - age 5 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 giftedness. Includes field experience. Prerequisites: None.

\section*{EED245 Early Learning: Language Acquisition and Literacy Development}

3 Credits 3 Periods
Overview of language acquisition and development, emergent literacy, early literacy development, and appropriate early experiences with books, reading, and writing for typical and atypical children birth to age eight. Emphasis placed on reading and writing readiness, methods to enhance literacy development, and strategies for selecting and using children's books. Prerequisites: None.

\section*{EED255 Portfolio Development and Writing for the Profession}

\section*{3 Credits 3 Periods}

Portfolio development, completion, and presentation. Self-assessment and educational short-term and long-term planning, professional development, writing and critical learning included. Prerequisites: A grade of ' \(C\) ' or better in completion of twelve (12) credit hours of EED Early Education coursework and permission of Program Coordinator.

\section*{EED260 Early Childhood Infant/ Toddler Internship \\ 1 Credit 1 Period}

Work experience with infants and toddlers in early care and education settings. Eighty (80) hours of designated work per credit. May be repeated for a total of six (6) credit hours. Prerequisites: Permission of Department or Division.

\section*{EED261 Early Childhood Preschool Internship}

\section*{1 Credit 1 Period}

Work experience with preschoolers in early care and education settings. Eighty (80) hours of designated work per credit. May be repeated for a total of six (6) credit hours. Prerequisites: Permission of Department or Division.

\section*{EED265 Early Childhood Internship: K-3 4 Credits 5 Periods}

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 outcome awareness. Prerequisites: A grade of 'C' or better in EED200, EED212, EED215, EED220, EED222, EED270, EED275, and EED280.

\section*{EED272 Early Childhood Educational Psychology}

\section*{3 Credits 3 Periods}

Focus on the study and application of psychological principles, theories, and methodologies related to early childhood teaching and learning. Emphasis on early childhood developmental, learning, and motivational theories. Current trends also covered. Prerequisites: None.

\section*{EED278 Early Learning: Curriculum and} Instruction - Birth/Preschool
3 Credits 3 Periods
Considerations and evaluations of curriculum appropriate to the developmental characteristics of learners, birth through five years. Includes how early childhood standards, philosophies, and program settings relate to the teaching, learning, and assessment process. Includes field experience. Prerequisites: A grade of 'C' or better in EED200.

\section*{EED280 Standards, Observation and Assessment of Typical/Atypical Behaviors of Young Children Birth to Age 8}

3 Credits 3 Periods
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.

\section*{EED282AA Service-Learning Experience in Early Childhood Education}

\section*{1 Credit 1 Period}

Unpaid Service-Learning (SL) experience, completed with approved community partner. EED282AA may be repeated for a total of six (6) credit hours. Standard grading is available according to procedures outlined in catalog. Prerequisites: Permission of Instructor.

\section*{Economics}

\section*{ECN160 Economic History of the United States}

H, SB
3 Credits 3 Periods
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 economic impact of government. Prerequisites: None.

\section*{ECN208 Microeconomics Issues}

3 Credits 3 Periods
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 the economic way of thinking. Prerequisites: None.

\section*{ECN211 Macroeconomic Principles}

SB

\section*{3 Credits 3 Periods}

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, unemployment, inflation and monetary and fiscal policies. Prerequisites: None.

\section*{ECN212 Microeconomic Principles}

SB

\section*{3 Credits 3 Periods}

Microeconomic analysis including the theory of consumer choice, price determination, resource allo-
cation and income distribution. Includes non-competitive market structures such as monopoly and oligopoly; and the effects of government regulation. Prerequisites: None.

\section*{ECN250 World Economic Systems G, SB}

3 Credits 3 Periods
A descriptive analysis of capitalist, socialist and mixed economies. Some consideration also given to the problems of less developed economies. Prerequisites: None.

\section*{Education}

\section*{EDU110 Education in Film}

\section*{3 Credits 3 Periods}

Analysis of the portrayal of teaching, schooling and learning in mass media films, including documentary, feature length and emerging platforms. Considers historical, cultural, national and global perspectives on teaching, learning and schooling. Emphasis on identifying factors that contribute to successes as well as failures of schooling within a society. Prerequisites: None.

\section*{EDU220 Introduction to Serving English Language Learners (ELL)}

3 Credits 3 Periods
Rationale for and current educational and legal issues for serving English Language Learners (ELL). Comparison and evaluation of various types of language educational models including Structured English Immersion (SEI), English as a Second Language (ESL) and bilingual/Dual Language Immersion (DLI). Includes SEI, ESL, and bilingual/DLI strategies. Prerequisites: None. Approved school-based practicum is required. EDU220 incorporates the 45-clock hour curricular framework for provisional

SEl endorsement through the Arizona Department of Education.

\section*{EDU221 Introduction to Education}

SB

\section*{3 Credits 3 Periods}

Overview of the historical, political, economic, social, and philosophical factors that influence education and make it so complex. Opportunity for students to assess their interest and suitability for teaching. Prerequisites: None. Requires minimum of 30 hours of field experience in elementary or secondary classroom environment.

\section*{EDU222 Introduction to the Exceptional Learner}

\section*{C, SB}

3 Credits 3 Periods
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 students who are gifted. Prerequisites: None. EDU222 requires an approved field experience.

\section*{EDU230 Cultural Diversity In Education} C

\section*{3 Credits 3 Periods}

Examination of the relationship of cultural values to the formation of self-concept and learning styles. Examination of the role of prejudice, stereotyping and cultural incompatibilities in education. Emphasis on teacher preparation (preservice and/or inservice) to offer an equal educational opportunity to students of all cultural groups. Prerequisites: None.

\author{
EDU250 Teaching and Learning in the Community College \\ C \\ 3 Credits 3 Periods
}

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 Maricopa County Community College District. Prerequisites: None.

\section*{EDU282AA Service-Learning Experience in Education}

1 Credit 1 Period
Unpaid Service-Learning (SL) experience, completed with approved community partner. EDU282AA may be repeated for a total of six (6) credit hours. Standard grading available according to procedures outlined in catalog. Prerequisites: Permission of Instructor.

\section*{EDU291 Children's Literature HU}

\section*{3 Credits 3 Periods}

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.

\section*{EDU292 The Art of Storytelling C, HU}

\section*{3 Credits 3 Periods}

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 environment in the classroom. Prerequisites: None.

\title{
Electrical Engineering
}

\section*{EEE120 Digital Design Fundamentals}

CS

\section*{4 Credits 6 Periods}

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, ROMs, PLDs, synchronous and asynchronous sequential circuits, and state reduction techniques. Building physical circuits. Prerequisites: A grade of 'C' or better in CSC100 or CSC110 or CSC181 or ELE181 or NET181 or equivalent or permission of Instructor.

\section*{EEE202 Circuits and Devices}

5 Credits 3 Periods
Introduction to circuits and devices. Component models, transient analysis, steady state analysis, Laplace transform, and active and passive filter networks. Prerequisites: A grade of 'C' or better in PHY116 or PHY131 or permission of Instructor or Division or Department Chair. Corequisites: MAT276 or permission of Instructor or Division or Department Chair.

\section*{EEE230 Computer Organization and Assembly Language 4 Credits 5 Periods}

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. Memory organization with cache and virtual memory. Prerequisites: A grade of ' \(C\) ' or
better in [(CSC100 or CSC110) and CSC/EEE120], or permission of Instructor or Division or Department Chair.

\section*{Electronics}

\section*{ELE100 Concepts of Electricity and Electronics \\ 3 Credits 4 Periods}

Principles of electric circuits, magnetism and electromagnetism including basic motors and generators. Use of basic measuring instruments. Includes an overview of electronics in the modern world.
Prerequisites: None.

\section*{ELE111 Circuit Analysis I}

\section*{4 Credits 6 Periods}

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 and inductance. Prerequisites: None. Corequisites: ELE105, or MAT120, or

MAT121, or MAT122, or equivalent.

\section*{ELE112 Circuit Analysis II \\ 4 Credits 6 Periods}

Alternating current (AC) and direct current (DC) circuits containing resistance and reactance. Detailed coverage of AC/DC circuit parameters, including theorems, impedance matching, and resonance. Prerequisites: A grade of 'C' or better in ELE111.

\section*{ELE121 Solid-State Devices And Circuits I 4 Credits 6 Periods}

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 signal and power amplifiers. Prerequisites: A grade of 'C' or better in ELE111.

\section*{ELE131 Digital Logic and Circuits 3 Credits 6 Periods}

Number systems, binary arithmetic, and Boolean algebra, combinational and sequential logic circuits, and memory elements. Prerequisites: Score of 19 on Technical Mathematics placement test, or grade of 'C' or better in GTC107, or MAT082, or equivalent.


\section*{ELE173 Fabrication Techniques}

3 Credits 6 Periods
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 procedures, basic soldering/desoldering, prototype and troubleshooting. Prerequisites: None.

\section*{ELE181 Computer Programming for Technology}

\section*{3 Credits 5 Periods}

Elementary computer programming techniques. Hands-on computer usage. Prerequisites: None.

\section*{ELE222 Solid-State Devices and Circuits II}

\section*{4 Credits 6 Periods}

Theory and application of differential and operational amplifiers. Power supplies and regulators; special devices and circuits. Prerequisites: A grade of ' \(C\) ' or better in ELE112 and ELE121.

\section*{ELE241 Microprocessor Concepts}

\section*{4 Credits 6 Periods}

Architectures of selected microprocessors. Presentation of machine and assembly language programming. Prerequisites: A grade of ' C ' or better in ELE131.

\section*{ELE243 Microprocessor Applications}

\section*{3 Credits 5 Periods}

Presents the microprocessor in computing and control applications. System hardware and software used to control the microprocessor system to perform input/output operations. Prerequisites: A grade of 'C' or better in ELE241 or ELT241.

\section*{ELE245 Advanced}

\section*{Microprocessors and Systems}

\section*{3 Credits 3 Periods}

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.

\section*{ELE251 Electronic Measurements}

\section*{3 Credits 5 Periods}

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 reports and documentation are emphasized. Prerequisites: A grade of ' C ' or better in ELE121.

\section*{ELE261 Communication Systems} 4 Credits 6 Periods
Communication systems. Amplitude modulation (AM), frequency modulation (FM), single-sideband (SSB), radio receivers, pulse systems, radiation, antennas and wave propagation. Prerequisites: A grade of 'C' or better in ELE121 and ELE131. Corequisites: ELE222.

\section*{ELE263 Digital Data Communications}

\section*{4 Credits 6 Periods}

Overview of modern telephone system. Telephone switching and modulation techniques. Familiarization with AM (amplitude modulation) and FM (frequency modulaation) circuits. Operation of asynchronous and sychronous modems. Prerequisites: A grade of ' \(C\) ' or better in ELE121 and ELE241.

\section*{Electronics Technology}

\section*{ELT298AB Special Projects}

\section*{2 Credits 2 Periods}

Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: Permission of Program Director or Instructor.

\section*{Emergency Medical Technology}

\section*{EMT101 Basic Life Support/ Cardiopulmonary Resuscitation (CPR) for Health Care Providers . 5 Credits . 5 Periods}

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. EMT101 may be repeated for credit.

\author{
EMT104 Emergency Medical Technology 9 Credits 11.4 Periods \\ 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, and medical operations, IV monitoring, patient-assisted medication administration, automated external defibrillators (AEDs), and blood-glucose monitoring. EMT104 Students are required to complete additional hours in a com-petency-based clinical, vehicular, and/or scenario based experience. This may be completed through EMT104AB or program director-approved rotation. Students must meet National Registry of EMTs requirements for certification. Additional information available at nremt.org. Prerequisites: 'C' or better in EMT101 or current validation in BLS Health Care Provider/Professional Rescuer \& (approp Reading placement test score to demonstrate min 10th grd level reading or completed Associates degree or higher from accred inst).

\section*{EMT104AA Practical Skills Testing . 5 Credits . 5 Periods}

Manipulative skills testing of specific skills identified by the scope of practice for EMT Basic Students.
Successful completion qualifies the student for EMT Basic Written Exam for National Certification. Prerequisites: None. Corequisites: EMT/FSC104.

\section*{EMT104AB Applied Practical Studies for Emergency Medical Technology}

\section*{. 5 Credits . 5 Periods}

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, semi-automatic external defibrillator and blood glucose monitoring. Students function in outside, scenario based environment. Prerequisites: None. Corequisites: EMT/

FSC104, or EMT200, or (EMT272AA, EMT272AB, and EMT272LL), or EMT273, or certified EMT Basic, IEMT, or Paramedic in the State of Arizona, or permission of Instructor.

\section*{EMT104LL Emergency Medical Technology Practicum}

\section*{2 Credits 3.5 Periods}

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 techniques of emergency medical care in accordance with national and state curriculum.EMT104LL may be repeated for credit. Students must meet National Registry of EMT requirements for certification. Additional information available at nremt.org. Prerequisites: A grade of ' \(C\) ' or better in EMT104 or permission of Instructor or Corequisites: EMT104.

\section*{EMT200 Refresher Course for Certified Emergency Medical Technicians}

\section*{2 Credits 2.7 Periods}

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 competencies. Prerequisites: Current validation in Basic Life Support (BLS) Health Care Provider/Professional Rescuer or permission of Instructor.

\section*{EMT235 Basic ECG Rhythm Analysis and Interpretation in the Emergency Setting} 3 Credits 3 Periods
Designed to provide the allied healthcare provider with basic skills in analysis and interpretation of sinus, atrial, junctional and ventricular rhythms from
electrocardiographs (ECG) in the emergency setting. Also addresses heart block and electronically paced rhythms. Prerequisites: Current basic life support (BLS) healthcare provider/professional rescuer card and a grade of 'C' or better in (EMT/FSC104 or permission of Instructor).

\section*{EMT236 Pharmacology in an Emergency Setting}

\section*{3 Credits 3 Periods}

Designed for the allied healthcare provider to integrate knowledge of pharmacology and pharmacologic agents to formulate a management plan in the emergency setting. Includes principles of pharmacology, pharmacokinetics, pharmacodynamics, physiology of pharmacology, calculating medication dosages, and medication profiles. Prerequisites: Current basic life support (BLS) healthcare provider/professional rescuer card and a grade of ' \(C^{\prime}\) ' or better in (EMT/FSC104 or permission of Instructor). MAT082 or higher suggested but not required.

\section*{EMT240 Advanced Cardiac Life Support (ACLS)}

\section*{2 Credits 4 Periods}

Designed for the allied healthcare provider who initiates, directs, or participates in the management of cardiopulmonary arrest and other cardiovascular emergencies. Provides the allied healthcare provider with the knowledge and skills to recognize and manage cardiopulmonary arrest, acute arrhythmia, stroke, and Acute Coronary Syndromes (ACS) according to current advanced Emergency Cardiovascular Care (ECC) guidelines. Requires prior knowledge of basic electrocardiograph rhythm interpretation, pharmacologic agents, and other interventions used in Advanced Cardiac Life Support (ACLS). Prerequisites: Current Basic Life Support (BLS) healthcare provider/professional rescuer card and a grade of 'C' or better in (EMT235 and EMT236, or permission of Instructor).

\section*{EMT242 Pediatric Advanced}

Life Support (PALS)

\section*{1 Credit 2 Periods}

Designed for the allied healthcare provider who initiates, directs, or participates in the management of an infant or child in respiratory compromise, circulatory compromise, or cardiopulmonary arrest according to current CPR and Emergency Cardiovascular Care (ECC) guidelines. Requires prior knowledge of basic electrocardiograph rhythm interpretation, pharmacologic agents, and other interventions used in Pediatric Advanced Life Support (PALS).EMT242 is required for American Heart Association Provider approval and validation. Prerequisites: Current Basic Life Support (BLS) healthcare provider/professional rescuer card and a grade of 'C' or better in (EMT235 and EMT236, or permission of Instructor).

\section*{EMT245 Trauma Management I}

2 Credits 3.5 Periods
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 stabilization, transportation of the victim to an emergency care facility, and documentation. Prerequisites: Basic EMT certification or nurse with emergency room experience, or permission of Department or Division.

\section*{EMT249 12 Lead ECG Rhythm Analysis}

\section*{. 5 Credits . 5 Periods}

Designed to acquaint all levels of emergency care providers with electrocardiographic (ECG) rhythm analysis and interpretation using the 12-lead electrocardiogram (ECG). Required content for identification and treatment of myocardial infarction and its complications. Prerequisites: A grade of 'C' or better in EMT235, or permission of Instructor.

\section*{EMT265 Pediatric Education for Prehospital Providers: Advanced}

\section*{1 Credit 1.4 Periods}

An interactive, scenario based course designed for Advanced EMTs who practice in the field. Enables providers to perform a rapid assessment of sick and injured children in variety of circumstances. Includes scene management, use of pediatric assessment triangle, developmental differences, injury prevention, airway management techniques, intravenous and intraosseous access and monitoring, ECG arrhythmia recognition, synchronized and unsynchronized cardioversion, pediatric trauma and mechanism of injury, submersion events, children with special health care needs, child abuse and neglect, child and family interactions, use of specialized equipment, documentation of signs, symptoms, care and transportation, special issues in pediatric transportation. Treatment to children is in accordance with recommendations of the American Academy of Pediatrics. Prerequisites: Advanced cardiac life support course or emergency cardiac care course, and EMT-Paramedic certification, and current employment as an EMT Paramedic, or permission of Instructor.

\section*{EMT272AA Advanced Emergency Medical Technology}

\subsection*{12.5 Credits 17.4 Periods}

Designed to provide the emergency medical technician with advanced knowledge about the acute critical differences in physiology, pathophysiology, and clinical symptoms, as they pertain to prehospital emergency care. Emphasis on developing diagnostic and advanced emergency treatment skills necessary to care for the acutely ill and seriously injured. Prerequisites: 'C' or better in prereqs [Valid AZ EMT cert. \& (MAT090 or higher or satisfactory score on placement exam), (ENG101 or ENG107), EMT235 \& EMT236] or permission of Program Director. Comp written, oral \& practical evaluation on all prereqs.

\section*{EMT272AB Advanced Emergency Medical Technology}

\subsection*{12.5 Credits 17.4 Periods}

Designed to provide the emergency medical technician with advanced knowledge about the acute critical differences in physiology, pathophysiology, and clinical symptoms, as they pertain to prehospital emergency care. Emphasis on developing diagnostic and advanced emergency treatment skills necessary to care for the acutely ill and seriously injured. Prerequisites: Valid Arizona EMT certification and a grade of 'C' or better in EMT272AA. Comprehensive written, oral and practical evaluation on EMT272AA.

\section*{EMT272LL Advanced Emergency Medical Technology Practicum}

\subsection*{7.5 Credits 37.5 Periods}

Clinical and vehicular practicum using diagnostic and advanced emergency medical treatment skills learned in the classroom. Emphasis on hands-on application of skills to real-life scenarios involving acute illness and serious injuries. Prerequisites or Corequisites: EMT272AA and EMT272AB.

\section*{EMT296WA Cooperative Education}

\section*{1 Credit 5 Periods}

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 12 college credits, min. 2.6 GPA and obtain a position related to academic or career goals or permission of Instructor. Corequisites: At least 1 class related to major or career interest or with permission of the Instructor.

\section*{EMT296WB Cooperative Education}

2 Credits 10 Periods
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 12 college credits, min. 2.6 GPA and obtain a position related to academic or career goals or permission of Instructor. Corequisites: At least 1 class related to major or career interest or with permission of the Instructor.

\section*{EMT298AA Special Projects}

1 Credit 1 Periods
Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: Permission of Program Director or Instructor.

\section*{Engineering Science}

\section*{ECE102 Engineering Analysis Tools and Techniques \\ 2 Credits 4 Periods}

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 is required in all Prerequisites. Prerequisites or Corequisites: MAT182, or higher level mathematics course, or permission of Instructor or Department or Division Chair.

\author{
ECE103 Engineering Problem Solving and Design \\ 2 Credits 4 Periods \\ Fundamentals of the design process: engineering
}
modeling, communication and problem-solving skills in a team environment. Emphasis on pro-cess-based improvements to the design process. Introduction to engineering as a profession.
Student may receive credit for only one of the following: ECE103AB, or ECE103, or ECE103EP. Prerequisites: A grade of 'C' or better in (ECE102 or ECE102AA) and (high school physics, or PHY111, or PHY111AA).

\section*{ECE103EP Engineering Problem Solving and Design (with EPICS projects) \\ 2 Credits 4 Periods}

Fundamentals of the design process: engineering modeling, communication and problem-solving skills in a team environment. Emphasis on pro-cess-based improvements to the design process. Introduction to engineering as a profession. Student may receive credit for only one of the following: ECE103, or ECE103AB, or ECE103EP. Prerequisites: A grade of 'C' or better in (ECE102 or ECE102AA) and (high school physics, or PHY111, or

PHY111AA) or permission of Department or Division.

\section*{ECE211 Engineering Mechanics-Statics} 3 Credits 2 Periods
Mathematical treatment of the basic physical principles of statics. Methods of vector algebra and vector calculus. Prerequisites: A grade of 'C' or better in PHY115 or PHY121 or permission of Instructor or Division or Department Chair. Corequisites: MAT230 or MAT231 or permission of Instructor or Division or Department Chair.

\section*{ECE212 Engineering Mechanics - Dynamics 3 Credits 2 Periods}

Kinematics and kinetics of particles, translating and rotating coordinate systems, rigid body kinematics, dynamics of systems of particles and rigid bodies, and energy and momentum principles. Prerequisites: A grade of ' \(C\) ' or better in ECE211 and (MAT240 or MAT241).


\section*{English}

\section*{ENG091 Preparatory Academic Writing III 3 Credits 3 Periods}

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: Appropriate writing placement test score, or a grade of ' \(C\) ' or better in ENG081 or ESL087, or permission of Department or Division.

\section*{ENG101 First-Year Composition}

FYC
3 Credits 3 Periods
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 or a grade of 'C' or better in ENG091 or ESL097.

\section*{ENG101LL First-Year Composition Lab 3 Credit 3 Periods}

Supplemental instruction for composition courses. Focus on developing effective writing processes to address a range of rhetorical situations. Prerequisites: WritePlacer score of \(0,1,2,3\) or 4 . Corequisites: ENG101.

\section*{ENG102 First-Year Composition}

FYC
3 Credits 3 Periods
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 comprising at least 4,000 words in total. Prerequisites: Grade of 'C' or better in ENG101.

\section*{ENG107 First-Year Composition for ESL FYC}

3 Credits 3 Periods
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, or a grade of 'C' or better in ENG091 or ESL097.

\section*{ENG107LL First-Year Composition Lab for ESL}

\section*{1 Credit 3 Periods}

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 situations. Prerequisites: WritePlacer score of 0, 1, 2, 3 or 4. Corequisites: ENG107.

\section*{ENG108 First-Year Composition for ESL FYC}

\section*{3 Credits 3 Periods}

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 through three or more writing projects comprising at least 4,000 words in total. Prerequisites: A grade of 'C' or better in ENG107.

\section*{ENG108 First-Year Composition for ESL FYC}

\section*{3 Credits 3 Periods}

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 through three or more writing projects comprising at least 4,000 words in total. Prerequisites: A grade of 'C' or better in ENG107.

\section*{ENG111 Technical and Professional Writing L \\ 3 Credits 3 Periods}

Covers analyzing, planning, organizing, researching, and writing correspondence, reports, and presentations for specific work-related audiences. Includes integrating data and graphics into work-related documents and presentations. Prerequisites: ENG101 with a grade of ' \(C\) ', or better, or permission of Instructor.

\section*{ENG111 Technical and Professional Writing L \\ 3 Credits 3 Periods}

Covers analyzing, planning, organizing, researching, and writing correspondence, reports, and presentations for specific work-related audiences. Includes integrating data and graphics into work-related documents and presentations. Prerequisites: ENG101 with a grade of 'C', or better, or permission of Instructor.

\section*{ENG200 Reading and Writing} About Literature
HU, L
3 Credits 3 Periods
Emphasis on critical analysis of various genres of literature; includes study of necessary terminology, introduction to methods of literary criticism, and practice in interpretation and evaluation. Prerequisites: A grade of 'C' or better in ENG102.

ENG213 Introduction to the
Study of Language

\section*{HU, SB}

3 Credits 3 Periods
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.

\section*{ENG215 Strategies of Academic Writing L}

3 Credits 3 Periods
Advanced course in techniques of analyzing and writing academic expository prose. Writing to be research based. General Education Designation: Literacy and Critical Inquiry - [L]. Prerequisites: A grade of 'C' or better in ENG102, or ENG111, or permission of Instructor.

\section*{ENG216 Persuasive Writing on Public Issues}

L
3 Credits 3 Periods
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.

\section*{ENG217 Personal and Exploratory Writing L}

3 Credits 3 Periods
Using writing to explore one's self and the world one lives in; emphasis on journal writing as a source and inspiration for public writing. Prerequisites: A grade of 'C' or better in ENG101, or ENG107, or equivalent.

\section*{English Humanities}

\section*{ENH110 Introduction to Literature}

C, HU
3 Credits 3 Periods

Introduction to international literature through various forms of literary expression; e.g., poetry, drama, essay, biography, autobiography, 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 Native Americans. Prerequisites: None.

\section*{ENH112 Chicano Literature}

C, HU

\section*{3 Credits 3 Periods}

Introduction to the works of Mexican-American writers of the Southwest. Samples poetry, fiction, and essays viewed in their relationship to American cultural heritage and to contemporary culture. Prerequisites: None.

\section*{ENH140AA Sports in Literature and Film HU}

\section*{3 Credits 3 Periods}

Explores how sports are and have been represented in narrative literature and film, using examples from a range of U.S. media. Investigates the ways in which narrative representation engages changing cultural and historical contexts, and shapes of how fields of human endeavor are perceived. Focus on analysis of narratives' form and content, and the construction of meaning. Prerequisites: Appropriate reading placement and eligibility for ENG101 as indicated by appropriate writing placement.

ENH214 Poetry Study
HU

\section*{3 Credits 3 Periods}

Involves reading, discussing, and analyzing poetry of various forms and from selected periods. Prerequisites: None.

\section*{ENH221 Survey of English Literature Before 1800}

HU
3 Credits 3 Periods

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, or equivalent.

\section*{ENH222 Survey Of English Literature After 1800 \\ H, HU \\ 3 Credits 3 Periods}

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, or equivalent.

\section*{ENH235 Survey Of Gothic Literature} HU
3 Credits 3 Periods
A study of the origins, common elements and characteristics, and historical development of Gothic literature with an exploration of the literary techniques and psychological aspects of the genre. Prerequisites: None.

\section*{ENH241 American Literature Before 1860} HU
3 Credits 3 Periods
Includes literature written prior to 1860 in the United States. Prerequisites: A grade of ' \(C\) ' or better in ENG101.

\section*{ENH242 American Literature After 1860} HU
3 Credits 3 Periods
Includes literature written after 1860 in the United States. Prerequisites: None.

\section*{ENH251 Mythology}

G, HU
3 Credits 3 Periods
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 cultures. Prerequisites: None.

\section*{ENH254 Literature and Film}

HU, L
3 Credits 3 Periods
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 equivalent.

\section*{ENH255 Contemporary}

\section*{U.S. Literature and Film \\ C, HU, L}

\section*{3 Credits 3 Periods}

Strengths and weaknesses of literature and film. Challenges of adapting literature to film. Addressing racial, ethnic, gender, class and religious differences between cultures and mediums. Use of narrative in each medium and how it translates various cultural values and assumptions. Specific genres present in literature and film. Cultural metaphors and symbols used in literature and film. Prerequisites: A grade of 'C' or better in ENG101.

\section*{ENH275 Modern Fiction}

HU

\section*{3 Credits 3 Periods}

Includes novels and short stories of modern writers which reflect significant themes of our time. Prerequisites: None.

\section*{ENH277AE Tour of Duty: War Narrative} G, HU, L
3 Credits 3 Periods
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 of key texts and their contexts. Prerequisites: A grade of 'C' or better in ENG101 or ENG107. ENH110 or ENG200 suggested but not required.

\section*{ENH291 Children's Literature HU}

3 Credits 3 Periods
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.

\section*{ENH295 Banned Books and Censorship C, HU \\ 3 Credits 3 Periods \\ 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.}

\section*{English Second Language - General}

\section*{ESL097 Preparatory} Academic Writing III for ESL

\section*{3 Credits 3 Periods}

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: Appropriate writing placement score, or a grade of ' \(C\) ' or better in ESL087 or ENG081, or permission of Department or Division.

ESL298AC Special Projects
3 Credits 3 Periods

Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: Permission of Program Director or Instructor.

\section*{English Second Language - Level I}

\section*{ESL010 English as a Second Language I: Grammar}

3 Credits 3 Periods
First level of English as a Second Language (ESL). Emphasis on basic conversational skills, pronunciation, vocabulary building and grammar. Some reading and sentence level writing. ESL010 may be repeated for a maximum of six (6) credits. Credit (P) or no credit (Z). Standard grading available according to procedures outlined in catalog. Prerequisites: Appropriate ESL placement test score.

\section*{ESL011 English as a Second Language I: Listening and Speaking}

3 Credits 3 Periods
Emphasis on listening and speaking skills involving survival skills. Asking and answering questions related to work, shopping, and personal safety.ESL011 may be repeated for a total of six (6) credit hours. Prerequisites: Appropriate ESL placement test score or ESLOO2.

\footnotetext{
ESL012 ESL I-Writing with Oral Practice 3 Credits 3 Periods
Emphasis on basic conventions of writing in English.
}

Includes introduction to the alphabet, capitalization, punctuation, and simple sentence structure.ESL012 may be repeated for a total of six (6) credit hours. Prerequisites: Appropriate ESL placement test score or permission of instructor.

\section*{English Second Language - Level II}

\section*{ESL020 English as a Second Language II: Grammar}

3 Credits 3 Periods
Second level of English as a Second Language (ESL). Continued emphasis on conversational skills, pronunciation, vocabulary building and grammar with some reading and sentence level writing. ESLO20 may be repeated for a maximum of six (6) credits. Credit (P) or no credit (Z). Standard grading available according to procedures outlined in catalog.Prerequisites: Appropriate ESL placement test score or a grade of 'P' or 'C' or better in ESL010.

\section*{ESL021 English as a Second Language II: Listening and Speaking}

3 Credits 3 Periods
Emphasis on listening and speaking skills involving social exchange. Asking and answering questions, using tag questions. Practice with question and answer patterns. Polite questions and responses. ESL021 may be repeated for a total of six (6) credit hours. Prerequisites: Appropriate ESL placement test score, or a grade of 'C' or better in ESL010, or ESL011, or ESL012, or ESL/RDG016.

\author{
ESL022 ESL II-Writing With Oral Practice 3 Credits 3 Periods \\ Emphasis on basic writing skills, accompanied by recitation of short writings. Sentence patterns and
}

\section*{Course Descriptions}
introduction of paragraph writing. May be repeated for a maximum of six (6) credits. Prerequisites: Appropriate ESL course placement score, or a grade of 'C' or better in ESL012, or permission of instructor.

\section*{English Second Language - Level III}

\section*{ESL030 English as a Second Language III: Grammar}

3 Credits 3 Periods
Third level of English as a Second Language (ESL). Emphasis on sentence structure and paragraph building. Extensive grammar study and writing practice. ESL030 may be repeated for a maximum of six (6) credits. Credit (P) or no credit (Z). Standard grading available according to procedures outlined in catalog. Prerequisites: Appropriate ESL placement test score or a grade of 'P' or 'C' or better in ESL020.

ESL031 English as a Second Language III: Listening and Speaking
3 Credits 3 Periods

Emphasis on listening and speaking skills related primarily to the academic environment. Asking questions, working in small groups, using college resources, informal oral presentation. ESL031 may be repeated for a total of six (6) credit hours. Prerequisites: Appropriate ESL placement test score, or ESL020, or ESL021, or ESL022, or ESL/RDG026.

\section*{ESL032 ESL III-Writing With Oral Practice 3 Credits 3 Periods}

Emphasis on complex sentence patterns in writing and speech. Introduction to the prewriting and writing process in a college setting. May be repeated for a maximum of six (6) credits. Prerequisites: Appropriate ESL course placement score, or a grade of 'C' or better in ESL022, or permission of instructor.

\section*{English Second Language - Level IV}

\section*{ESL040 English as a Second Language IV: Grammar}

\section*{3 Credits 3 Periods}

Fourth-level of English as a Second Language (ESL).

Continued emphasis on sentence structure and paragraph building. Extensive grammar study and writing practice. ESL040 may be repeated for a maximum of six (6) credits. Credit (P) or no credit (Z). Standard grading available according to procedures outlined in catalog. Prerequisites: Appropriate ESL placement test score or a grade of 'P' or 'C' or better in ESL030.

\section*{ESL041 English as a Second Language IV: Listening and Speaking}

3 Credits 3 Periods
Emphasis on academic skills. Listening to lectures, note-taking, peer interaction, accessing and using media resources, formal oral presentations. ESL041 may be repeated for a total of six (6) credit hours. Prerequisites: Appropriate ESL placement test score, or ESL030, or ESL031, or ESL032, or ESL/ RDG036.

\section*{ESL042 ESL IV-Writing With Oral Practice} 3 Credits 3 Periods
Emphasis on paragraph writing and oral recitation of complex sentences and paragraphs. Introduction to the prewriting and writing process for short essays. May be repeated for a maximum of six
(6) credits. Prerequisites: Appropriate ESL course placement score, or a grade of 'C' or better in ESL032, or permission of instructor.

\section*{Entrepreneurial Studies}

\section*{EPS150 Introduction to Entrepreneurship 3 Credits 3 Periods \\ Overview of entrepreneurship. Includes the entrepreneurial process and the skills required to be successful, including starting, planning, financing,}
marketing, and managing a business. Prerequisites: None.

\section*{EPS160 New Venture Creation}

2 Credits 2 Periods
Process of starting a new venture including evaluating specific business opportunities identifying financing alternatives, and defining start-up issues. Prerequisites: None.

\section*{EPS195 Business Start-Up and Planning} 2 Credits 2 Periods
Development of a feasibility approach to strategic decision making concerning new venture start-up. Includes development of a business feasibility study and a preliminary business plan. Prerequisites: None.

\section*{Equine Science}

\section*{EQS105 Principles of Equine Science 3 Credits 3 Periods}

Breeds, colors and markings; horse selection; basic conformation; form to function; structures of the hoof; footfall sequences; vision, managed health program; nutrition principles and management practices. Prerequisites: None.

\section*{EQS298AA Special Projects}

\section*{1 Credit 1 Period}

Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: Permission of Program Director or Instructor.

\section*{EQS298AA Special Projects}

1 Credit 1 Period
Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: Permission of Program Director or Instructor.

\section*{Excellence/ Teaching/Learning}

\section*{ETL220 Online Teaching and Learning I}

3 Credits 3 Periods
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 in content building, course design and delivery. Prerequisites: Permission of Instructor.

\section*{ETL221 Online Teaching and Learning II 3 Credits 3 Periods}

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 discussions, creating assignments and administering assessments in the online environment. Prerequisites: A grade of ' C ' or better in ETL220 or permission or Instructor.

\section*{Exercise Science}

\section*{EXS101 Introduction to Exercise Science 3 Credits 3 Periods}

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 career options will also be examined. Prerequisites: None.

\section*{EXS112 Professional Applications of Fitness Principles}

\section*{3 Credits 3 Periods}

Basic principles of fitness for the prospective fitness professional and characteristics of quality communication and fitness leadership. Topics include behavior modification, enhancing motivation components of fitness, fitness assessment, risk stratification, exercise programming and modifications. Prerequisites: None.

\section*{EXS125 Introduction to}

\section*{Exercise Physiology}

\section*{3 Credits 3 Periods}

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 anatomy. A grade of 'C' or better required in all Prerequisites. Prerequisites or Corequisites: EXS101 or permission of Instructor.

\section*{EXS130 Strength Fitness-Physiological Principles and Training Techniques} 3 Credits 3 Periods
Principles and techniques of strength training including strength physiology, performance factors, training recommendations, exercise techniques, and program design and management. Prerequisites: None.

EXS132 Cardiovascular Fitness: Physiological Principles and Training Techniques 3 Credits 3 Periods
Covers principles and techniques of aerobic training and the application of these to the development of aerobic training programs. Includes instructional techniques and safety, and stresses injury prevention. Prerequisites: None.

EXS145 Guidelines for Exercise Testing and Prescription
3 Credits 4.5 Periods
Follows the current ACSM guidelines for health appraisal, risk assessment, safety of exercise, exercise testing, and exercise prescription. Prerequisites: None

EXS210 Assessment and Program Design: Muscular Fitness

\section*{2 Credits 3 Periods}

Principles of muscular fitness training including evaluation of movement patterns, selection and interpretation of assessment techniques and evidence-based program design for healthy and special populations. Prerequisites: A grade of 'C' or better in EXS125.

EXS211 Assessment and Program Design: Flexibility and Balance
2 Credits 3 Periods
Principles of flexibility and balance including evaluation of movement patterns, selection and interpretation of assessment techniques and evidence-based program design for healthy and special populations. Prerequisites: A grade of ' C ' or better in EXS125.

EXS212 Assessment and Program Design: Cardiorespiratory Fitness
2 Credits 3 Periods
Principles of cardiorespiratory fitness training including evaluation of client needs and health,

selection and interpretation of safe and effective assessment techniques and evidence-based program design for healthy and special populations. Prerequisites: A grade of 'C' or better in EXS125 and eligibility for MAT120 or MAT121 or MAT122 or MAT150 or MAT151 or MAT152 or MAT156 or higher level mathematics course.

\section*{EXS213 Assessment and Program Design: Weight Management and Motivation} 2 Credits 3 Periods
Principles of weight management including evi-dence-based program design and interpretation of assessments for various populations as well as explanation of theories of motivation and behavior modification. Prerequisites: A grade of ' \(C\) ' or better in EXS125 and eligibility for MAT120 or MAT121 or MAT122 or MAT150 or MAT151 or MAT152 or MAT156 or higher level mathematics course.

\section*{EXS214 Instructional Competency:} Flexibility and Mind-Body Exercises
2 Credits 3 Periods
Fundamental methods of instructing and leading fitness activities including flexibility activities. Core competencies identified by professional certification agencies. Prerequisites: None.

EXS216 Instructional Competency: Muscular Strength and Conditioning 2 Credits 3 Periods Fundamental methods of instructing and leading fitness activities including strength and conditioning activities. Core competencies identified by professional certification agencies. Prerequisites: None.

EXS218 Instructional Competency: Cardiorespiratory Exercises and Activities 2 Credits 3 Periods
Fundamental methods of instructing and leading fitness activities including cardiorespiratory exercises and activities. Core competencies identified by
professional certification agencies. Prerequisites: None.

\section*{EXS239 Practical Applications of Personal Training Skills and Techniques Internship} 3 Credits 5.4 Periods
Work experience in a fitness or health related facility. Eighty (80) hours of designated work per credit. CPR certification must be current through the duration of the internship. EXS239 may be repeated for a maximum of six (6) credits. Prerequisites: Completion of nine (9) credits of EXS courses required for the (AAS in Exercise Science and Personal Training, or CCL in Personal Training Specialist, or CCL in Personal Trainer), current CPR card, and permission of Department or Division.

\section*{EXS239AA Practical Applications of Personal Training Skills and Techniques Internship}

\section*{1 Credit 1.8 Periods}

Work experience in a fitness or health related facility. Eighty (80) hours of designated work per credit. CPR certification must be current through the duration of the internship. EXS239AA may be repeated for a maximum of six (6) credits. Prerequisites: Completion of nine (9) credits of EXS courses required for the (AAS in Exercise Science and Personal Training, or CCL in Personal Training Specialist, or CCL in Personal Trainer), current CPR card, and permission of Department or Division.

\section*{EXS239AB Practical Applications of Personal Training Skills and Techniques Internship}

\section*{2 Credits 3.6 Periods}

Work experience in a fitness or health related facility. Eighty (80) hours of designated work per credit. CPR certification must be current through the duration of the internship. EXS239AB may be repeated for a maximum of six (6) credits. Prerequisites: Completion of nine (9) credits of EXS
courses required for the (AAS in Exercise Science and Personal Training, or CCL in Personal Training Specialist, or CCL in Personal Trainer), current CPR card, and permission of Department or Division.

\section*{EXS265BA Baseball Theory of Coaching}

\section*{3 Credits 3 Periods}

Reviews the principles, philosophy, strategies and theory of coaching baseball, as a competitive sport. Prerequisites: None. EXS265BA may not be repeated for credit.

\section*{EXS265BB Basketball Theory of Coaching} 3 Credits 3 Periods
Reviews the principles, philosophy, strategies and theory of coaching basketball, as a competitive sport. Prerequisites: None. EXS265BB may not be repeated for credit.

\section*{EXS265FB Football Theory of Coaching} 3 Credits 3 Periods
Reviews the principles, philosophy, strategies and theory of coaching football, as a competitive sport. Prerequisites: None. EXS265FB may not be repeated for credit.

\section*{EXS281BA Baseball Methods of Coaching}

3 Credits 3 Periods
Overview of the art and science of coaching baseball including: identifying various coaching styles, elements of effective communication, methods and techniques of coaching baseball. Prerequisites: None. EXS281BA may not be repeated for credit.

\section*{EXS281FB Football Methods of Coaching} 3 Credits 3 Periods
Overview of the art and science of coaching football including: identifying various coaching styles, elements of effective communication, methods and techniques of coaching football. Prerequisites: None. EXS281FB may not be repeated for credit.

\section*{EXS282AC Service-Learning Experience in Exercise Science}

\section*{3 Credits 3 Periods}

Unpaid Service-Learning (SL) experience, completed with approved community partner. EXS282AC may be repeated for a total of six (6) credit hours. Standard grading available according to procedures outlined in catalog. Prerequisites: Permission of Instructor.

\section*{EXS290 Introduction to Evidence-Based Practice} L

\section*{3 Credits 3 Periods}

Introduction to best practices in the acquisition, analysis, synthesis, and potential application of research in the discipline of exercise science. Specific emphasis on the application of research-based evidence for applied problem solving in exercise science. Prerequisites: A grade of 'C' or better in (RDG100 or RDG111 or RDG112 or RDG113 or satisfactory reading placement) and (MAT090 or MAT091 or MAT092 or satisfactory math placement) and (ENG101 or ENG107) or permission of Instructor. EXS101 recommended.

\section*{EXS298AC Special Projects}

\section*{3 Credits 3 Periods}

Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: Permission of Program Director or Instructor.

\section*{EXS298AC Special Projects}

L
3 Credits 3 Periods
Organized and tailored around the interests and
needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: Permission of Program Director or Instructor.

\section*{Fire Science Technology}

\section*{FSC101 Introduction to}

\section*{Fire Service Selection}

\section*{3 Credits 4 Periods}

Overview of the application and selection processes used by various fire departments and fire service organizations. 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 preparation techniques, behaviors, and the importance of the interview in the pre-employment process. Preparation for on-site experiences at a fire station. General components of the selection process, the importance of general education, and components of lifelong learning in career choices. Prerequisites: None.

\section*{FSC102 Fire Department Operations}

\section*{11 Credits 19.6 Periods}

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. Prerequisites: A grade of 'C' or better in (EMT/FSC104, FSC105, and FSC130), and permission of Instructor. Corequisites: FSC134.

\section*{FSC105 Hazardous Materials/ First Responder}

\section*{3 Credits 3 Periods}

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. Confined space operations in accordance with the National Fire Protection Agency. Prerequisites: None.

\section*{FSC106 Introduction To Fire Protection} 3 Credits 3 Periods
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 medical services and fire prevention. Prerequisites: None.

\section*{FSC108 Fundamentals of Fire Prevention}

\section*{3 Credits 3 Periods}

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 included. Prerequisites: None.

\section*{FSC110 Wildland Firefighter}

\section*{3 Credits 3 Periods}

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. Prerequisites: None.

\section*{FSC113 Introduction to Fire Suppression}

3 Credits 3 Periods
Characteristics and behavior of fire, fire hazard properties of ordinary materials, extinguishing agents, fire suppression organization and equipment, basic fire fighting tactics, and public relations as affected by fire suppression. Prerequisites: None.

\section*{FSC117 Fire Apparatus}

\section*{3 Credits 3 Periods}

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 producing effective fire streams. Prerequisites: None.

\section*{FSC118 Fire Hydraulics}

\section*{3 Credits 3 Periods}

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 pumpers. Prerequisites: None.

\section*{FSC119 Introduction Fire Service Ethics} 3 Credits 3 Periods
Ethical issues, standards, and philosophical consideration of moral problems encountered in fire service. Ethical responsibility of fire service personnel and those they serve. Prerequisites: None.

\section*{FSC130 Fitness for Firefighters/CPAT}

\section*{1 Credit 1.5 Periods}

Skills and abilities required for entry level position in the fire service including physical ability, and stamina. Opportunity to take the International Association of Fire Fighters (IAFF) Candidate Physical Ability Test (CPAT) at the end of the course. Prerequisites: None. Offered as credit ( \(P\) ) or no credit (Z) basis. Standard grading available according to procedures outlined in catalog.

\section*{FSC134 Fitness and Conditioning for Firefighters}

3 Credits 4.6 Periods
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-employment, evaluation, and lifelong fitness and conditioning. Prerequisites: None.

\section*{FSC139 Emergency Response to Terrorism} 3 Credits 3 Periods
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 threats. Coordination of responding agencies. Prerequisites: None.

\section*{FSC146 Disaster Recovery Operations 3 Credits 3 Periods}

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 disasters. Prerequisites: None.

\section*{FSC148 Fundamentals of Emergency Management \\ 3 Credits 3 Periods}

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 emergency management systems since evolution from World War II. Prerequisites: None.

\section*{Course Descriptions}

\section*{FSC149 Hazard Mitigation}

\section*{3 Credits 3 Periods}

Knowledge and skills required to develop programs to reduce losses from future disasters, emergencies, and other extreme events caused by natural and man-made hazards. Prerequisites: None.

\section*{FSC174 Functions of Command}

\subsection*{1.8 Credits 1.8 Periods}

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-enhanced simulations. Prerequisites: Permission of Instructor.

\section*{FSC202 Supervisory Training For Firefighters}

\section*{3 Credits 3 Periods}

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 departments. Prerequisites: None.

\section*{FSC204 Firefighting Tactics And Strategy}

\section*{3 Credits 3 Periods}

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 equivalent.

\section*{FSC205 Command Strategies For Major Emergencies}

3 Credits 3 Periods
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 managing the effective interaction between numerous agencies to achieve control. Prerequisites: A grade of 'C' or better in FSC204.

\author{
FSC208 Firefighter Safety and Building Construction \\ 3 Credits 3 Periods \\ Actions necessary to provide for the safety of fire-
}

fighters 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 equivalent.

\section*{FSC214 Human Resource Management in Fire Service}

\section*{3 Credits 3 Periods}

Management of fire service personnel functions. Includes selection procedures, employee discipline, performance ratings, elements of supervision. Labor relations and related personnel responsibilities. Prerequisites: A grade of 'C' or better in FSC202 or four years in the fire service.

\section*{FSC215 Customer Service in}

\section*{the Public Sector}

\section*{3 Credits 3 Periods}

Examines the personal and practical skills needed to enhance customer service in the public sector with an emphasis on application, basic management requirements, and training. Prerequisites: None.

\section*{FSC224 Incident Command Systems}

\section*{3 Credits 3 Periods}

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, and environment. Prerequisites: None.

\section*{FSC258 Victimology and}

Crisis Management
C, SB
3 Credits 3 Periods
Victimology, the criminal justice system, techniques of crisis intervention, and the importance of a multicultural and global perspective. Includes sexual assault, family violence, post-traumatic stress dis-
order, the role of substance abuse, effective coping skills, appropriate community resources and the responsiveness of the justice system. Prerequisites: None.

\section*{FSC298AC Special Projects}

\section*{3 Credits 3 Periods}

Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: Permission of Program Director or Instructor.

\section*{Food and Nutrition}

\section*{FON100 Introductory Nutrition}

\section*{3 Credits 3 Periods}

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 worldview of nutrition are included. Emphasis is on personal dietary behavior change for a holistic life of wellness. Prerequisites: None.

FON125 Introduction to Professions in Food, Nutrition, and Dietetics

\section*{1 Credit 1 Period}

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 Dietetic Technician Registered. Prerequisites: None.

\section*{FON142AB Science of Food}

\section*{3 Credits 5 Periods}

Exploration and Application of Scientific Principles of Food; experiences with ingredient functionality and application in cooking techniques. Prerequisites: None.

\section*{FON143 Food and Culture}

\section*{G}

3 Credits 3 Periods
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 habits. Health and social impact of changes in diet. Preparation and serving of foods from many cultures. Prerequisites: None. FON143 may be repeated for a total of six (6) credit hours.

\section*{FON165 Food Entrepreneurship}

\section*{3 Credits 3 Periods}

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. Also covers available resources for small food business support. Prerequisites: None.

\section*{FON210 Sports Nutrition and} Supplements for Physical Activity

\section*{3 Credits 3 Periods}

Principles of nutrition applied to fitness, exercise, and sports. Dietary fundamentals as applied to body fuels, 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. Emphasis on maximizing fitness, performance, and safety. Discussion of supplements and their effects on metabolic enhancement. Discussion of anabolic, catabolic, and energy-producing agents. Addresses current supplements on the market. Prerequisites: A grade of 'C' or better in FON100 or FON241.

\section*{FON241 Principles of Human Nutrition} SG

\section*{3 Credits 3 Periods}

Scientific principles of human nutrition. Emphasis on scientific literacy and the study of nutrients for disease prevention. Includes micro and macro nutrients, 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-related health conditions. Prerequisites: None. General Education Designation: Natural Sciences (General) - [SG] in combination with: FON241 LL

\section*{FON241LL Principles of Human Nutrition Laboratory}

SG

\section*{1 Credit 3 Periods}

Self-evaluative laboratory experience to complement FON241, Principles of Human Nutrition using anthropometric, biochemical, clinical, dietary analysis, and ecological/economical assessments. Includes the use of qualitative and quantitative methodology to determine nutritional status and evaluate methodological applications. Prerequisites: A grade of 'C' or better in FON241 or Corequisites: FON241.

\section*{FON247 Weight Management Science 3 Credits 3 Periods}

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 healthful long-term weight management strategies. Prerequisites: A grade of 'C' or better in FON100 or FON241 or permission of Instructor.

\section*{French}

\section*{FRE101 Elementary French I}

G
4 Credits 4 Periods
Basic grammar, pronunciation and vocabulary of the French Ianguage. Includes the study of French culture, practice of listening, speaking, reading and writing skills. Prerequisites: None.

\section*{FRE102 Elementary French II}

G
4 Credits 4 Periods
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.

\section*{FRE201 Intermediate French I}

G
4 Credits 4 Periods
Review of essential grammar of the French language and study of French culture. Continued practice and development of reading, writing, and speaking skills.

Prerequisites: (FRE102 or FRE102AA with a grade of ' \(C\) ' or better), or two years of high school French with an average of 'C' or better, or permission of Department or Division. Completion of prerequisites within the last three years is required.

\section*{FRE202 Intermediate French II}

\section*{G}

\section*{4 Credits 4 Periods}

Review of grammar, continued development of French language skills, and continued study of the French culture. Prerequisites: FRE201 with a grade of 'C' or better, or three years of high school French with an average of 'C' or better. Completion of prerequisites within the last three years is required.

\section*{General Business}

\section*{GBS110 Human Relations in} Business and Industry 3 Credits 3 Periods
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 an organization. Prerequisites: None.

\section*{GBS120 Workplace Communication Skills 3 Credits 3 Periods}

Reviews planning, organization, development, and evaluation of written and oral communication in business settings, including informative and persuasive messages. Prerequisites: None.

\section*{GBS131 Business Calculations}

\section*{3 Credits 3 Periods}

Review of basic arithmetic and application of mathematics to business problems, includes percentage, interest, discount, and markups. Prerequisites: None.

\section*{GBS132 Personal and Family Financial Security}

\section*{3 Credits 3 Periods}

Principles and practices of personal and family financial planning, includes savings, budgeting, credit, buying versus renting, and general principles of consumerism. Prerequisites: None.

\section*{GBS151 Introduction to Business}

3 Credits 3 Periods
Characteristics and activities of current local, national, and international business. An overview of economics, marketing, management and finance. Prerequisites: None.

\section*{GBS175 Professional Development}

3 Credits 3 Periods
Examines personal qualities and professional skills needed to find a good job. Explores techniques required to build a successful career. Prerequisites: None.

\section*{GBS205 Legal, Ethical, and Regulatory Issues in Business}

3 Credits 3 Periods
Legal theories, ethical issues and regulatory climate affecting business policies and decisions. Prerequisites: None.

\section*{GBS211 Legal, Ethical and Regulatory Issues of the Internet Studies}

\section*{3 Credits 4 Periods}

Legal, ethical and regulatory issues of the Internet environment, including personal, commercial and business electronic transactions in cyberspace. Prerequisites: None.

\section*{GBS221 Business Statistics}

CS
3 Credits 3 Periods
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.

\section*{GBS233 Business Communication}

\section*{L}

\section*{3 Credits 3 Periods}

Internal and external business communications, including verbal and nonverbal techniques. Prerequisites: ENG101 or ENG107 with grade of 'C' or better, or permission of Department or Division.

\section*{GBS270AC Business Internship}

\section*{3 Credits 3 Periods}

General business work experience in a business or industry. Eighty hours of designated work per credit. GBS270AC may be repeated for a total of six (6) credits. Prerequisites: Permission of Department or Division.

\section*{GBS282AA Volunteerism General Business: Service Learning Experience}

\section*{1 Credit 1 Period}

Service learning field experience within private/ public agencies, educational institution, and citizen volunteer groups. GBS282AA may be repeated for a total of six (6) GBS282 credit hours. Standard grading available according to procedures outlined in catalog. Prerequisites: A grade of 'C' or better in GBS151 and permission of Instructor.

\section*{General Technology}

\author{
GTC104 Manufacturing Processes \\ 4 Credits 7 Periods \\ 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 applications. Prerequisites: None.

\section*{GTC106 Industrial Safety}

\section*{2 Credits 2 Periods}

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 hazards accident prevention, management responsibilities, and OSHA 10 certification. Prerequisites: None.

\section*{GTC107 Technical Mathematics}

\section*{3 Credits 3 Periods}

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 related problems. Prerequisites: None.

\section*{GTC108 Technical Mathematics II}

\section*{3 Credits 3 Periods}

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 right and oblique triangles. Prerequisites: A grade of 'C' or better in GTC107 or permission of Instructor.

\section*{GTC127 Beginning Woodworking}

\section*{3 Credits 4 Periods}

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 por-
table power tools. Class projects develop a working project plan, identify material needs, cost analysis, basic construction of the project, and basic finishing techniques. Prerequisites: None.

\section*{GTC128 Intermediate Woodworking}

\section*{3 Credits 4 Periods}

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 finishing, and wood carving. Prerequisites: A grade of 'C' or better in GTC127 or previous woodworking experience.

\section*{GTC129 Manufacturing Welding 3 Credits 8 Periods}

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 (TIG) and plasma cutting. Prerequisites: None.

\section*{GTC130 Furniture Construction I} 3 Credits 6 Periods
Process of building a piece of furniture including calculating and buying needed material, using tools properly and safely (hand tools and machines), jointery, wood preparation and basic finishing techniques. Prerequisites: A grade of 'C' or better in GTC128 or previous woodworking experience and permission of instructor.

\section*{GTC144 Introduction to Cabinetmaking} 3 Credits 5 Periods
Techniques and projects to produce complex cabinet projects. Includes project planning, working from plans, material cost analysis, and advanced finishing techniques. Prerequisites: GTC130 and permission of instructor.

\section*{GTC216 Properties of Materials}

\section*{3 Credits 3 Periods}

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.

\section*{GTC296WC Cooperative Education}

\section*{3 Credits 15 Periods}

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 12 college credits, min. 2.6 GPA and obtain a position related to academic or career goals or permission of Instructor. Corequisites: At least 1 class related to major or career interest or with permission of the Instructor.

\section*{GTC298AA Special Projects}

\section*{1 Credit 1 Period}

Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: Permission of Program Director or Instructor.

\section*{GTC298AB Special Projects}

\section*{2 Credits 2 Periods}

Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning
to be combined to maximize student development. Prerequisites: Permission of Program Director or Instructor.

\section*{GTC298AC Special Projects}

3 Credits 3 Periods
Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: Permission of Program Director or Instructor.

\section*{Geography: Cultural}

\section*{GCU102 Introduction to Human Geography \\ G, SB \\ 3 Credits 3 Periods \\ Systematic study of human use of the earth. Spatial organization of economic, social, political, and perceptual environments. Prerequisites: None.}

\section*{GCU121 World Geography I: \\ Eastern Hemisphere}

G, SB
3 Credits 3 Periods
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, North Africa, and Asia. Prerequisites: None.

\section*{GCU121 World Geography I: \\ Eastern Hemisphere}

G, SB
3 Credits 3 Periods
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, North Africa, and Asia. Prerequisites: None.

\section*{GCU122 World Geography II: \\ Western Hemisphere}

G, SB
3 Credits 3 Periods
Description and analysis of variations in social, economic, and political phenomena in major world regions. Emphasis on Sub-Saharan Africa, Latin America, and Anglo America. Prerequisites: None.

\section*{GCU221 Arizona Geography}

C, H, SB
3 Credits 3 Periods
The historical to modern development of Arizona. The interplay between the physical, cultural and economic factors affecting Arizona today. Prerequisites: None.

\section*{Geography: Physical}

\section*{GPH113 Introduction to Physical Geography \\ SQ}

\section*{4 Credits 3 Periods}

Spatial and functional relationships among climates, landforms, soils, water, and plants. Prerequisites: None.

\section*{GPH210 Society and Environment \\ G}

3 Credits 3 Periods
Principles of physical geography relating to environmental problems pertinent to contemporary society. Pollution, maladjusted land use, resource exploitation. Prerequisites: A grade of ' \(C\) ' or better in ENG101, or ENG107, or equivalent.

\section*{GPH211 Landform Processes}

\section*{SQ}

4 Credits 3 Periods
Geographic characteristics of landforms and earth surface processes emphasizing erosion, transportation, deposition and implications for human management of the environment. Prerequisites: A grade of 'C' or better in ENG101, or ENG107, or equivalent.

\section*{GPH212 Introduction to Meteorology I SQ}

3 Credits 3 Periods
Atmospheric processes and elements. General and local circulation, heat exchange and atmospheric moisture. Prerequisites: None. General Education Designation: Natural Sciences (Quantitative) - [SQ] in combination with: GPH214

\section*{GPH213 Climate and Weather \\ SG}

3 Credits 3 Periods
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 and human landscape. Prerequisites: None. General Education Designation: Natural Sciences (General) - [SG] in combination with: GPH215.

\section*{GPH214 Introduction to Meteorology Laboratory I SQ \\ 1 Credit 3 Periods}

Basic meteorological and climatological measurements. General Education Designation: Natural Sciences (Quantitative) - [SQ] in combination with: GPH212. Prerequisites: None. Corequisites: GPH212.

\section*{GPH215 Climate and Weather Laboratory SG}

1 Credit 3 Periods
A mathematical, statistical, and spatial analysis of climatological phenomena. General Education Designation: Natural Sciences (General) - [SG] in combination with: GPH213. Prerequisites: None. Corequisites: GPH213.

\section*{GPH267 Extreme Weather and Climate} L

3 Credits 3 Periods
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.

\section*{GPH282AA Service-Learning Experience in Physical Geography}

\section*{1 Credit 1 Period}

Unpaid Service-Learning (SL) experience, completed with approved community partner. GPH282AA may be repeated for a total of six (6) credit hours. Standard grading available according to procedures outlined in catalog. Prerequisites: Permission of Instructor.

\section*{GPH282AB Service-Learning Experience in Physical Geography}

\section*{2 Credits 2 Periods}

Unpaid Service-Learning (SL) experience, completed with approved community partner. GPH282AB may be repeated for a total of six (6) credit hours. Standard grading available according to procedures outlined in catalog. Prerequisites: Permission of Instructor.

\section*{GPH282AC Service-Learning Experience in Physical Geography}

\section*{3 Credits 3 Periods}

Unpaid Service-Learning (SL) experience, completed with approved community partner. GPH282AC may be repeated for a total of six (6) credit hours. Standard grading available according to procedures outlined in catalog. Prerequisites: Permission of Instructor.

\section*{GPH298AA Special Projects}

\section*{1 Credit 1 Period}

Organized and tailored around the interests and needs of 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 maximize student development. Prerequisites: Permission of Program Director or Instructor.

\section*{GPH298AB Special Projects}

\section*{2 Credits 2 Periods}

Organized and tailored around the interests and needs of 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 maximize student development. Prerequisites: Permission of Program Director or Instructor.

\section*{GPH298AC Special Projects}

\section*{3 Credits 3 Periods}

Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guid-
ance. Professional-type facilities and equipment are available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: Permission of Program Director or Instructor.

\section*{Geology}

\section*{GLG101 Introduction to Geology I Physical Lecture \\ SQ \\ 3 Credits 3 Periods}

A study of the kind and arrangement of materials composing the earth's crust and the geological processes at work on and within the earth's surface. Prerequisites: None. General Education Designation: Natural Sciences (Quantitative) - [SQ] in combination with: GLG103

\section*{GLG101IN Introduction to Geology I Physical}

SQ
4 Credits 3 Periods
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 in geology. Prerequisites: None.

\section*{GLG102 Introduction to Geology II Historical Lecture \\ H, SG}

\section*{3 Credits 3 Periods}

Outlines the origin and history of the earth with emphasis on North America--its dynamic, geographic, and climatic changes; animals and plants of the past; the evolution of life. Prerequisites: None. General Education Designation: Natural Sciences (General) - [SG] in combination with: GLG104.

\section*{GLG102IN Introduction to Geology II Historical}

H, SG
4 Credits 3 Periods
The origin and history of the Earth, its dynamic geographic and climatic changes. Evolution and sequence of life recorded in the fossil record; tectonic evolution of major continents through time. Prerequisites: None.

\section*{GLG103 Introduction to Geology I Physical Lab SQ}

\section*{1 Credit 3 Periods}

May accompany GLG101. Study of common rock-forming minerals, rocks, and maps. Prerequisites: None. General Education Designation: Natural Sciences (Quantitative) - [SQ] in combination with: GLG101.

\section*{GLG104 Introduction to Geology II Historical Lab}

\section*{SG}

1 Credit 3 Periods
May accompany GLG102. Study of geological structures and rocks, fossils, and geologic maps. May require field trips. Prerequisites: None. General Education Designation: Natural Sciences (General) [SG] in combination with: GLG102.

\section*{GLG105 Introduction to Planetary Science} SG

\section*{4 Credits 6 Periods}

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.

GLG105 Introduction to Planetary Science SG
4 Credits 6 Periods

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.

\section*{GLG110 Geological Disasters and the Environment}

G, SG
3 Credits 3 Periods
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 environmental impact and use of mineral and energy resources. Prerequisites: None. General Education Designation: Global Awareness - [G] General Education Designation: Natural Sciences (General) - [SG] in combination with: GLG111.

\section*{GLG110IN Geological Disasters and the Environment}

G, SG

\section*{4 Credits 3 Periods}

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 environmental impact and use of mineral and energy resources. Prerequisites: None.

\section*{GLG121 Geology of the Grand Canyon}

\section*{1 Credit 2 Periods}

Introduction to the physiography and geology of the Grand Canyon. Includes a hiking field trip to the Grand Canyon. Prerequisites: None. GLG103 suggested but not required.

\section*{GLG230AA Field Geology of the Southwest} 1 Credit 5 Periods
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. GLG230AA may be repeated for a total of four (4) credit hours.

\section*{GLG282AA Volunteerism for Geology: A Service Learning Experience}

\section*{1 Credit 1 Period}

Service-learning field experience within human service organizations, government offices, public schools, or hospitals. GLG282AA may be repeated for a total of six (6) GLG282 credit hours; may not repeat specific agency assignment for more than three (3) credit hours. Standard grading available according to procedures outlined in catalog. Prerequisites: Permission of Instructor.

\section*{German}

\section*{GER101 Elementary German I}

\section*{G}

\section*{4 Credits 4 Periods}

Basic grammar, pronunciation and vocabulary of the German language. Includes the study of German culture, practice of listening, speaking, reading and writing skills. Prerequisites: None.

\section*{GER102 Elementary German II \\ G}

4 Credits 4 Periods
Continued study of grammar and vocabulary of the German language along with the study of German culture. Emphasis on German Ianguage skills. Prerequisites: A grade of 'C' or better in GER101, or GER101AA, or permission of Department or Division. Completion of prerequisites within the last three years is required.

\section*{GER201 Intermediate German I}

\section*{G}

4 Credits 4 Periods
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 GER102AA, or two years of high school German, or permission of Department or Division. Completion of prerequisites within the last three years is required.

\section*{GER202 Intermediate German II}

G
4 Credits 4 Periods
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 years is required.

\section*{Global}

\section*{Citizenship}

\section*{GLO298AA Special Projects}

\section*{1 Credit 1 Period}

Organized and tailored around the interests and needs of 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 combined to maximize student development. Prerequisites: Permission of Program Director or Instructor.

\section*{GLO298AC Special Projects}

3 Credits 3 Periods
Organized and tailored around the interests and needs of the individual student. Structured to provide an atmoshpere 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 combined to maximize student development. Prerequisites: Permission of Program Director or Instructor.

\section*{Health Care}

\section*{HCC145 Medical Terminology for Health Care Professionals 3 Credits 3 Periods}

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 abbreviations and symbols and term spelling. Prerequisites: None.

\section*{Health Care Related}

\section*{HCR210 Clinical Health Care Ethics}

HU
3 Credits 3 Periods
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 historical and contemporary contexts. Prerequisites: A grade of 'C' or better in ENG102 or ENG108 or permission of Instructor.

\section*{HCR230 Culture And Health}

C, G
3 Credits 3 Periods
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 practices. Prerequisites: None.

\section*{HCR240 Human Pathophysiology}

\section*{4 Credits 4 Periods}

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 therapeutics considered. Prerequisites: A grade of ' C ' or better in BIO 202 or \(\mathrm{BIO205}\), or permission of Instructor.

\section*{Health Science \& First Aid}

\section*{HES100 Healthful Living}

SB
3 Credits 3 Periods
Health and wellness and their application to an optimal life style. Explores current topics of interest such as stress management, nutrition, fitness, and environmental health. Evaluates common risk factors associated with modern lifestyles. Prerequisites: None.

\section*{HES106 Cardiopulmonary Resuscitation (CPR)/Automated External Defibrillator (AED)}

\section*{. 5 Credits . 5 Periods}

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.

\section*{HES154 First Aid/}

Cardiopulmonary Resuscitation 3 Credits 3 Periods
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 procedures required during emergency situation. Prerequisites: None.

\section*{HES201 Substance Abuse and Behavior 3 Credits 3 Periods}

Principles and factual bases of drug use and abuse. Physiological and sociopsychological effects of drug use and law enforcement of drug abuse. Consultants used extensively to enrich course. Prerequisites: None.

\section*{HES210 Cultural Aspects of Health and IIIness \\ C, G \\ 3 Credits 3 Periods}

Examines how culture influences health and illness, health care practices, barriers to health care, interactions with health care professionals, and health disparities in the U.S. Prerequisites: None.

\section*{HES271 Prevention and Treatment of Athletic Injuries \\ 3 Credits 3 Periods \\ Prevention and care of athletic injuries, emphasiz-}
ing use of modern training techniques and support materials. Utilization of preventive taping, strapping, bandaging, cardiopulmonary resuscitation, massage, cryotherapy, hydrotherapy, and practical application of muscle reconditioning. Prerequisites: None.

\section*{HES271 Prevention and Treatment of Athletic Injuries}

\section*{3 Credits 3 Periods}

Prevention and care of athletic injuries, emphasizing use of modern training techniques and support materials. Utilization of preventive taping, strapping, bandaging, cardiopulmonary resuscitation, massage, cryotherapy, hydrotherapy, and practical application of muscle reconditioning. Prerequisites: None.

\section*{HES275 Rehabilitation and Therapeutic Interventions in Sports Medicine}

3 Credits 4 Periods
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 therapeutic exercise techniques. Prerequisites: A grade of 'C' or better in HES271.

\section*{History}

\section*{HIS100 History of Western Civilization} to Middle Ages
H, SB
3 Credits 3 Periods
Survey of the origin and development of Western civilization and its institutions from prehistory through the Ancient World and the Middle Ages. Prerequisites: None.

HIS101 History of Western Civilization Mid-
dle Ages to 1789 dle Ages to 1789
H, HU, SB
3 Credits 3 Periods
Survey of origin and development of Western civilization and its institutions from the Renaissance and Reformation through Age of Enlightenment. Prerequisites: None.

\section*{HIS102 History of Western Civilization 1789 to Present}

G, H, HU, SB
3 Credits 3 Periods
Survey of origin and development of Western civilization and its institutions from French Revolution through the present. Prerequisites: None.

\section*{HIS103 United States History to 1865}

H, HU, SB

\section*{3 Credits 3 Periods}

The political, economic, and social development of the United States from the Pre-Columbian period through the end of the Civil War (1865). Prerequisites: None.

\section*{HIS104 United States History 1865 to Present}

H, SB
3 Credits 3 Periods
The political, economic, and social development of United States from 1865 to the present time. Prerequisites: None.

\section*{HIS106 Southwest History}

C, H, SB
3 Credits 3 Periods
Survey of Hispanic, Anglo, African-American and Native cultures of the peoples who have settled the American Southwest. Emphasis on cattle, mining, fur trade and transportation industries and role development of the region. Prerequisites: None.

\section*{HIS107 Selected Issues in United States History \\ 3 Credits 3 Periods}

Survey of selected major issues in history of United States from early times to present. Prerequisites: None.

\section*{HIS108 United States History 1945 to the Present}

H, HU, SB
3 Credits 3 Periods
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 and foreign policy. Prerequisites: None.

\section*{HIS110 World History to 1500}

H, SB
3 Credits 3 Periods
Survey of the economic, social, cultural, and political elements of world history from the beginning of human civilization to 1500. Prerequisites: None.

\section*{HIS111 World History 1500 to the Present G, H, HU}

3 Credits 3 Periods
Survey of the economic, social, cultural, and political elements of world history from 1500 to the present. Prerequisites: None.

\section*{HIS140 American Indian History}

C, H, SB
3 Credits 3 Periods
Survey of American Indian history with emphasis on the last 200 years including developments in the 20th century. Focuses on selected groups such as the Cherokee, Iroquois Confederation, Navajo, Sioux and Indians of the Southwest in relation to cultural, economic, political and social continuity and changes. Topics include development and
influence of federal policies, past and present issues confronting Native Americans and how Native American individuals and communities maintain their identities as they confront social changes. Prerequisites: None.

\section*{HIS175 Global History of World War II}

C, H, SB
3 Credits 3 Periods
Global survey of World War II (WWII), focusing on its origins, major military confrontations and events, conclusion, and historical significance. Prerequisites: None.

\section*{HIS201 History of Women in America}

C, H, SB
3 Credits 3 Periods
Introduction to women's history from the colonial period to the present. Deals chronologically with changes and developments which have influenced the lives of women. Prerequisites: None.

\section*{HIS251 History of England to 1700 H, HU}

3 Credits 3 Periods
History of England to 1660. Analysis of the major political, cultural, social, and intellectual, and social factors in English historical development from its earliest times till 1660. Prerequisites: None.

\section*{Humanities}

\section*{HUM107 Humanities Through the Arts HU}

3 Credits 3 Periods
Introduction to humanities including film, drama, music, literature, painting, sculpture, and architecture. Prerequisites: None.

\section*{HUM201 Humanities: Universal Themes}

G, HU
3 Credits 3 Periods
Study of worldviews in a variety of historical and contemporary world cultures, including analysis of origin and creation myths, artistic expression, spirituality, and the natural environment. Prerequisites: None.

\section*{HUM202 Humanities: Universal Themes} HU

\section*{3 Credits 3 Periods}

The hero/heroine; fool, the social world, and the future as themes in the humanities. Prerequisites: None.

\section*{HUM205 Introduction to Cinema}

HU
3 Credits 3 Periods
Survey of the history and development of the art of motion pictures, including criticism of aesthetic and technical elements. Prerequisites: None.

\section*{HUM209 Women and Films}

C, HU
3 Credits 3 Periods
Analysis of images of women in films from both historical and contemporary perspectives. Prerequisites: None.

\section*{HUM210 Contemporary Cinema}

HU

\section*{3 Credits 3 Periods}

A study of contemporary films, directors and critics with emphasis on evaluating film as an art form. Prerequisites: None.

\section*{HUM211AA Foreign Films: Classics}

G, HU
3 Credits 3 Periods
Analysis of contributions of foreign directors to the art and history of motion pictures through a study of selected films. Prerequisites: None.

\section*{HUM214 African-Americans in Film C, HU}

\section*{3 Credits 3 Periods}

Study of films featuring African-American performers and directors from the Silent Era to the present. Emphasis on the historical and social elements of African Americans in film and basics of film analysis. Prerequisites: None.

\section*{HUM215 Film Comedy HU}

\section*{3 Credits 3 Periods}

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 essential and unifying force for culture and society. Prerequisites: None.

\section*{HUM225 Introduction to Popular Culture L}

3 Credits 3 Periods
Introduction to major topics in the field of popular culture studies. Includes basic theories, methods, and concepts used to analyze popular culture texts and practices. Prerequisites: A grade of ' C ' or better in ENG101 or ENG107.

\section*{HUM245 Introduction to Holocaust Studies}

\section*{HU}

\section*{3 Credits 3 Periods}

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 and moral debate. Includes
analysis of supplementary visual material and some performing arts. Prerequisites: None. CRE101 or equivalent as indicated by appropriate reading placement recommended but not required.

\section*{HUM250 Ideas and Values in the Humanities}

H, HU
3 Credits 3 Periods
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.

\section*{HUM251 Ideas and Values in the Humanities}

H, HU, L
3 Credits 3 Periods
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.

\section*{HUM292 The Art of Storytelling}

C, HU
3 Credits 3 Periods
Explore the art and origin of storytelling. Provide a variety of storytelling technique

\section*{Information Studies}

\section*{IFS201 Information in a Post-Truth World L, SB}

3 Credits 3 Periods
Development of critical thinking skills in using information. Exploration of how information can
be used as a tool or a weapon. Explanation of the role of information as a consumer and creator. Recognition of the impact of culture and worldview on how information is understood, created, and disseminated. Prerequisites: A grade of 'C' or better in ENG101 or ENG107.

\section*{IFS213 Hacking and Open Source Culture} 3 Credits 3 Periods
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 will be addressed. Prerequisites: None.

\section*{Interior Design}

\section*{INT100 Interior Design Drafting} 3 Credits 6 Periods
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 Computer-Aided Design (CAD) techniques as they relate to manual drafting. Prerequisites: None.

\section*{INT105 Introduction to Interior Design} 3 Credits 3 Periods
Introduction to the profession of interior design, including design process, elements and principles of design, and basic concepts of space planning and furniture layout. Development of design vocabulary relative to architectural details, furnishings, and finishes. Prerequisites: None.

\section*{INT115 Historical Architecture and Furniture}

H, HU
3 Credits 3 Periods
Historical survey of the development of furniture, interiors, and architecture from antiquity to the 19th Century. Prerequisites: None.

\section*{INT120 Modern Architecture and Furniture}

H, HU
3 Credits 3 Periods
Survey of the development of furniture, interiors, and architecture from the 19th Century to the present. Emphasis is on modern architects and designers. Prerequisites: None.

\section*{INT122 Digital Visualization for Design}

3 Credits 6 Periods
Introduction to raster based rendering techniques utilizing interior design and landscape drawings. Comparison of raster based rendering to vector based rendering and presentation techniques utilizing leading industry software such as Adobe Photoshop and Adobe Illustrator. Prerequisites: None.

\section*{INT140 Introduction to CAD for Interior Design}

\section*{3 Credits 6 Periods}

This class focuses on the development of two-dimensional and three-dimensional spatial development through the use of Computer-Aided Design (CAD), computer-aided design for interior design following American Institute of Architects (AIA) guidelines. Prerequisites: None.

\section*{INT145 Drawing and Rendering}

\section*{3 Credits 6 Periods}

Development of basic freehand sketching and perspective drawing skills. Explores styles and techniques with emphasis on quick sketch and presentation type drawings as used by design professionals. Prerequisites: None.

\section*{INT150 Color and Design}

3 Credits 6 Periods
Introduction to the theory and application of color as related to the elements and principles of design. Light and its effect on color. Emphasis on the development of presentation skills for the field of interior design. Prerequisites: None.

\section*{INT160 Fabrics for Interiors}

\section*{3 Credits 3 Periods}

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. Introduction to regulations and codes within the textile industry. Prerequisites: None.

\section*{INT170 Interior Materials}

3 Credits 6 Periods
Properties, performance, maintenance, sustainability and general characteristic of interior finishes, furnishings, and equipment. Emphasis on building a resource file of interior finishes, furnishings, and equipment sources. Prerequisites: A grade of ' \(C\) ' or better in INT105 or permission of Instructor.

\section*{INT175 Custom Design}

\section*{3 Credits 6 Periods}

Custom design for interiors. Creative problem solving using design theory and process. Visualization of concepts through sketching. Prerequisites: A grade of ' \(C\) ' or better in INT1 05 and (ARC121 or INT100).

\section*{INT190 Space Planning}

\section*{3 Credits 6 Periods}

Study of creative, critical, analytical and strategic thinking as it relates to human behavior and the built environment. Emphasis on design theory, process, and application. Stresses creative expression through the utilization of design elements and principles. A grade of ' \(C\) ' or better required in all Prerequisites. Prerequisites: INT105. Prerequisites or Corequisites: ARC141 or INT140.

\section*{INT200 Digital Rendering for Design}

\section*{3 Credits 6 Periods}

Introduction to raster based rendering techniques utilizing interior design and landscape drawings. Comparison of raster based rendering to vector based rendering and presentation techniques utilizing leading industry software such as Adobe Photoshop and Adobe Illustrator. Prerequisites: None.

\section*{INT205 Residential Design}

\section*{3 Credits 6 Periods}

Use of design process to create design solutions for residential spaces. Functional and aesthetic analysis of interior components. Includes kitchen and bath design; residential furnishings, fixtures, and equipment (FF\&E); and environmental considerations. Refinement of presentation skills. Prerequisites: A grade of 'C' or better in INT145, INT190, and INT200.

\section*{INT211 Interior Materials and Specifications}

\section*{3 Credits 6 Periods}

Properties, performance, maintenance, sustainability and general characteristics of interior finishes. Emphasis on selection, basic estimating, and writing specifications. Prerequisites: A grade of 'C' or better in ARC141, or INT140, or permission of Instructor. Corequisites: MAT140, or MAT141, or MAT142, or MAT146, or higher-level mathematics course.

\section*{INT215 Professional Practices}

\section*{3 Credits 5 Periods}

Marketing and business processes used in interior design studios. Ethical issues facing interiors industry. Development of business plan. Prerequisites: None.

\section*{INT230 Presentation Techniques}

\section*{3 Credits 6 Periods}

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 and (INT140 or ARC141). Prerequisites or Corequisites: INT200 or ARC142.

\section*{INT240 Kitchen and Bath Design 3 Credits 6 Periods}

Exploration into the specific requirements associated with kitchen and bath design. Emphasis on the design process and computer-based tools for interior design. Prerequisites: A grade of ' \(C\) ' or better in INT190 and (ARC141 or INT140).

\section*{INT251 Sketchup I: \\ Introduction to Sketchup}

\section*{3 Credits 6 Periods}

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 three-dimensional schematic and rendered interior and exterior building views. Prerequisites: None. Previous CAD experience recommended but not required. ARC265/INT251 may be repeated for a total of six (6) credit hours.

\section*{INT260 Interior Codes and Regulations}

\section*{3 Credits 6 Periods}

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 as it pertains to the application of interior design projects. A grade of 'C' or better required in all Prerequisites. Prerequisites or Coreq-
uisites: INT140 or ARC141 or permission of Program Director.

\section*{INT268 Lighting Design}

3 Credits 6 Periods
Study of interior lighting design and its impact on the health, safety and welfare of the public. Prerequisites: AAS Degree in Interior Design or permission of Department or Division.

\section*{INT271AA Interior Design Internship}

\section*{1 Credit 5 Periods}

Interior design work experience in the interiors industry. Required to work 80 hours. Supervised and evaluated by a faculty coordinator. May be repeated for a total of four (4) credits with department permission. Prerequisites: Permission of Department or Division.

\section*{INT271AB Interior Design Internship} 2 Credits 10 Periods
Interior design work experience in the interiors industry. Required to work 160 hours. Supervised and evaluated by a faculty coordinator. May be repeated
for a total of four (4) credits with department permission. Prerequisites: Permission of Department or Division.

\section*{INT271AC Interior Design Internship 3 Credits 15 Periods}

Interior design work experience in the interiors industry. Required to work 240 hours. Supervised and evaluated by a faculty coordinator. Prerequisites: Permission of Department or Division.

\section*{International Business}

\author{
IBS101 Introduction to International Business G \\ \section*{3 Credits 6 Periods} \\ 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 applications. Prerequisites: None.

\section*{IBS109 Cultural Dimension for International Trade}

G, SB
3 Credits 3 Periods
The importance of cultural sensitivity in international business relations investigated by studying the impact of geography, history, religion, politics, customs and cross-cultural communications on society. Prerequisites: None.

\section*{IBS116 Export/Import Management}

\section*{3 Credits 3 Periods}

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 negotiation, and execution of international contracts. Prerequisites: A grade of 'C' or better in IBS101, or permission of Instructor.

\section*{IBS118 International \\ Marketing Management}

\section*{3 Credits 3 Periods}

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 distribution strategies. Prerequisites: A grade of ' \(C\) ' or better in IBS101, or permission of Instructor.

\section*{IBS123 U.S. Customs and Export Licensing Regulations \\ 3 Credits 3 Periods \\ 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 (ECCN), export licenses, and governmental requirements regarding exports. Prerequisites: A grade of 'C' or better in IBS101, or permission of Instructor.

\section*{IBS140 \\ International Financial Management 3 Credits 3 Periods}

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 payment methods. Prerequisites: A grade of 'C' or better in IBS101, or permission of Instructor.

\section*{Italian}

\section*{ITA101 Elementary Italian I}

G
4 Credits 4 Periods
Introduction to basic grammar, pronunciation, and vocabulary of Italian. Development of speaking, listening, reading, and writing skills. Study of the Italian culture. Prerequisites: None.

\section*{Japanese}

\section*{JPN101 Elementary Japanese I}

\section*{G}

5 Credits 6 Periods
Basic grammar, pronunciation, and vocabulary of Japanese. Study of Japanese culture. Development
of speaking, listening, reading and writing skills. Prerequisites: None.

\section*{JPN102 Elementary Japanese II}

\section*{G}

\section*{5 Credits 6 Periods}

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 years is required.

\section*{JPN115 Beginning Japanese Conversation I} G

\section*{3 Credits 3 Periods}

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 emphasis on grammar, reading, or writing. Prerequisites: None.

\section*{JPN116 Beginning Japanese Conversation II G}

\section*{3 Credits 3 Periods}

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.

\section*{JPN201 Intermediate Japanese I}

G
5 Credits 6 Periods
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 years is required.

\section*{JPN202 Intermediate Japanese II}

G
5 Credits 6 Periods
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 years is required.

\section*{Journalism}

\section*{JRN125 Photo Editing}

\section*{3 Credits 3 Periods}

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 and the impact of photos on typography. Prerequisites: None.

\section*{JRN201 News Writing \\ L \\ 3 Credits 5 Periods}

Writing and producing news for the media. Associated Press editing style, writing skills, and organizational structure for news. Prerequisites: A grade of 'C' or better in ENG101 or ENG107.

\section*{JRN205 Copyediting}

3 Credits 3 Periods
Specific skills and techniques of copyediting. Understanding of editing skills to enhance a writer's abilities whether one's own or someone else's. Critically evaluate word usage and meaning to achieve the 3 Cs of writing clarity, completeness and conciseness. Prerequisites: A grade of 'C' or better in ENG101 or permission of Instructor.

\section*{JRN215 News Production}

\section*{L}

\section*{3 Credits 5 Periods}

Writing, editing, and publishing the student newspaper on multiple platforms. Emphasis may vary according to student goals. JRN215 may be repeated for a total of nine (9) credit hours. Prerequisites: A grade of ' C ' or better in JRN201 or [(ENG101 or ENG107) and permission of Program Director or Instructor].

\section*{JRN225 Photojournalism}

\section*{3 Credits 3 Periods}

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 software. Prerequisites: None.

\section*{JRN240AA Journalism Internship}

\section*{1 Credit 1 Period}

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 JRN215.

\section*{JRN240AC Journalism Internship}

\section*{3 Credits 3 Periods}

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 JRN215.

\section*{JRN298AB Special Projects}

\section*{2 Credits 2 Periods}

Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: Permission of Program Director or Instructor.

\section*{JRN298AC Special Projects}

\section*{3 Credits 3 Periods}

Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: Permission of Program Director or Instructor.

\section*{Judicial Studies}

\section*{JUD111 Sentencing Misdemeanants}

\section*{1 Credit 1 Period}

Alternatives, methods, laws, rules and practices governing the sentencing of persons convicted of misdemeanors under Arizona law. Prerequisites: None.

\section*{JUD115 Injunctive Actions}

\section*{2 Credits 2 Periods}

Injunctive actions (Orders of Protection and Injunctions Prohibiting Harassment), including philosophy
and practical applications of the governing statutes and judicial responsibilities and limitations of powers as related to injunctive orders. Prerequisites: None.

\section*{Management}

\section*{MGT101 Techniques of Supervision}

\section*{3 Credits 3 Periods}

Overview of the foundations of supervision and how to get things done within an organization through other people. The functions of planning, organizing, staffing, motivating and controlling presented. Prerequisites: None.

\section*{MGT147 Supply Chain Management}

\section*{3 Credits 3 Periods}

Supply chain management, including basic concepts and underlying principles of logistics and inventory management. Prerequisites: None.

\section*{MGT175 Business Organization and Management}

\section*{3 Credits 3 Periods}

Covers basic principles of managing quality and performance in organizations. Covers management functions: planning, organizing, leading, and controlling. Emphasizes continual improvement, ethics, and social responsibility. Prerequisites: None.

\section*{MGT229 Management and Leadership I}

\section*{3 Credits 3 Periods}

Covers management concepts and applications for business, industry, and government organizations. Prerequisites: None.

\section*{MGT230 Management and Leadership II SB}

3 Credits 3 Periods
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.

\section*{MGT242 Project Scope and Procurement Management}

\section*{2 Credits 2 Periods}

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, and contract closeout. Prerequisites: A grade of 'C' or better in TQM240 or permission of Instructor.

\section*{MGT243 Project Time and Cost Management}

2 Credits 2 Periods
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, cost estimation, cost budgeting, and cost control. Prerequisites: A grade of 'C' or better in TQM240 or permission of Instructor.

\section*{MGT244 Project Risk and Quality Management}

2 Credits 2 Periods
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. Concepts of quality systems and their applicability to project management. Prerequisites: None.

\section*{MGT245 Project, Human Resources And Communications Management}

2 Credits 2 Periods
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, performance reporting, and project closeout. Prerequisites: None.

\section*{MGT246 Principles of Project Management} 3 Credits 3 Periods
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 management. Prerequisites: A grade of 'C' or better in TQM240 or permission of Instructor.

\section*{MGT251 Human Relations in Business}

\section*{3 Credits 3 Periods}

Analysis of motivation, leadership, communications, and other human factors. Cultural differences that may create conflict and affect morale individually and within organizations. Prerequisites: None. MGT101 or MGT175 or MGT229 suggested, but not required.

\section*{MGT253 Owning and Operating}

\section*{a Small Business}

\section*{3 Credits 3 Periods}

Starting, organizing, and operating a small business, including location, finance management processes, advertisement and promotion, credit, inventory control and ethics. Prerequisites: None.

MGT270AC Management Internship
3 Credits 3 Periods
Management work experience in a business or
industry. 80 hours of designated work per credit. MGT270AC may be repeated for a total of six (6) credits. Prerequisites: Permission of Department or Division.

\section*{MGT276 Personnel/}

\section*{Human Resources Management}

\section*{3 Credits 3 Periods}

Human resource planning, staffing, training, compensating, and appraising employees in labor management relationships. Prerequisites: None. MGT101, or MGT175, or MGT229 suggested but not required.

\section*{MGT298AC Special Projects}

\section*{3 Credits 3 Periods}

Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: Permission of Program Director or Instructor.

\section*{Manufacturing Technology}

\section*{MET112 Inspection Techniques}

\section*{3 Credits 5 Periods}

Set up and use of inspection tools, equipment, per industry standards including the use of surface plates, right angle blocks, cylindrical squares, V-Blocks, and related equipment. Selection, completion and interpretation of information from inspection forms. Inspection alternatives, tool control
activities, and application of geometric dimensioning and tolerance. Prerequisites: (District placement into MAT090 or MAT091 or MAT092 or higher) or permission of Department or Division. A grade of ' \(C\) ' or better required in all Prerequisites. Prerequisites or Corequisites: MET109.

\section*{Marketing}

\section*{MKT101 Introduction to Public Relations 3 Credits 3 Periods}

Emphasizes public relations techniques used both within and outside the business organization, including operation of a PR counseling firm. Prerequisites: None.

\section*{MKT109 Introduction to}

\section*{Fashion Merchandising}

3 Credits 3 Periods
Explores the various levels and specialized segment of the fashion industry, the principles of fashion, the fundamentals of merchandising apparel, consumers' influence on demand and marketing activities. Prerequisites: None.

\section*{MKT110 Marketing and Social Networking} 3 Credits 3 Periods
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 other marketing tools used to create a social media campaigns. Prerequisites: None.

MKT111 Applied Marketing
and Social Networking
3 Credits 4 Periods
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 media marketing campaigns, and development of metrics to measure effectiveness. Prerequisites: A grade of 'C' or better in MKT110.

\section*{MKT151 Display and Visual Merchandising 3 Credits 4 Periods}

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 trips, and individual projects. Prerequisites: None.

\section*{MKT200 Retail Buying}

3 Credits 3 Periods
Examines management/buyer role in investment, pricing, planning, controlling sales and inventories. Prerequisites: None. Any BPC/CIS spreadsheet course recommended.

\section*{MKT263 Advertising Principles}

\section*{3 Credits 3 Periods}

Introduces the advertising function within business, including media study, creative strategies, and advertising campaigns. Prerequisites: None. MKT271 suggested, but not required.

\section*{MKT267 Principles of Sales}

3 Credits 3 Periods
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.

\section*{MKT268 Merchandising}

\section*{3 Credits 3 Periods}

Surveys structure and operation of retail organizations. Emphasizes merchandising to include price, location, time promotion and quantity. Prerequisites: None. MKT271 suggested but not required.

\section*{MKT271 Principles of Marketing}

\section*{3 Credits 3 Periods}

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.

\section*{MKT273 Marketing Research}

\section*{3 Credits 3 Periods}

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 techniques, and evaluation of data. Prerequisites: A grade of 'C' or better in MKT271 or permission of Instructor.

\section*{MKT277 Advanced Sales}

\section*{3 Credits 3 Periods}

Advanced selling and communication techniques. Prerequisites: A grade of 'C' or better in MKT267 or permission of Department or Division.

\section*{MKT280AA Marketing Internship}

\section*{1 Credit 1 Period}

Marketing work experience in a business or industry. 80 hours of designated work per credit. Prerequisites: Permission of Department or Division.

\section*{MKT280AB Marketing Internship}

\section*{2 Credits 2 Periods}

Marketing work experience in a business or industry. 80 hours of designated work per credit. Prerequisites: Permission of Department or Division.

\section*{MKT280AC Marketing Internship}

\section*{3 Credits 3 Periods}

Marketing work experience in a business or industry. 80 hours of designated work per credit. Prerequisites: Permission of Department or Division.

\section*{MKT296WA Cooperative Education}

\section*{1 Credit 5 Periods}

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 12 college credits, min. 2.6 GPA and obtain a position related to academic or career goals or permission of Instructor. Corequisites: At least 1 class related to major or career interest or with permission of the Instructor.

\section*{MKT296WC Cooperative Education}

\section*{3 Credits 15 Periods}

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 12 college credits, min. 2.6 GPA and obtain a position related to academic or career goals or permission of Instructor. Corequisites: At least 1 class related to major or career interest or with permission of the Instructor.

\section*{MKT298AC Special Projects}

\section*{3 Credits 3 Periods}

Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: Permission of Program Director or Instructor.

\title{
Mass \\ Communication
}

\section*{MCO120 Media and Society}

SB

\section*{3 Credits 3 Periods}

Study of historical and contemporary roles of media and its pervasiveness in society as it relates to culture, politics and education. Prerequisites: A grade of 'C' or better in ENG101 or ENG107.

\section*{MCO220 Cultural Diversity and the Media C, L}

3 Credits 3 Periods
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 the United States. Prerequisites: A grade of 'C' or better in ENG101 or ENG107.

\section*{Mathematics}

\section*{MAT081 Basic Arithmetic}

\section*{4 Credits 4 Periods}

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 additive and multiplicative reasoning. Prerequisites: None. Student
may receive credit for only one of the following: (MAT051 and MAT052 and MAT053), OR MAT081, OR MAT082, OR MAT085.

\section*{MAT090 Introductory Algebra 5 Credits 5 Periods}

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 function relationships numerically, analytically, graphically and verbally and connect the different representations. Model and solve real world problems involving constant rate of change. Students may receive credit for only one of the following: MAT090, MAT091, MAT092, or MAT093. MAT102, completed with a grade of 'C' or better prior to Fall 2015, meets course prerequisite. Prerequisites: An appropriate diagnostic score, or a grade of C or better in each of the following courses: MAT051, MAT052, and MAT053 OR (an appropriate mathematics placement score, or a grade of 'C' or better for MAT081 or MAT082).

\section*{MAT091 Introductory Algebra}

\section*{4 Credits 4 Periods}

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 function relationships numerically, analytically, graphically and verbally and connect the different representations. Model and solve real world problems involving constant rate of change. Student may receive credit for only one of the following: (MAT055 and MAT056 and MAT057), OR MAT090, OR MAT091, OR MAT092, OR MAT095, OR MAT096. Prerequisites: A grade of 'C' or better in each of the following courses: (MAT051, MAT052, and MAT053), OR a grade of 'C' or better in MAT08+, OR an appropriate district placement.

\section*{MAT092 Introductory Algebra}

\section*{3 Credits 3 Periods}

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 function relationships numerically, analytically, graphically and verbally and connect the different representations. Model and solve real world problems involv-
ing constant rate of change. Student may receive credit for only one of the following: MAT055 and MAT056 and MAT057, or MAT090, or MAT091, or MAT092. Prerequisites: An appropriate diagnostic score, or a grade of 'C' or better in each of the following courses: MAT051, MAT052, and MAT053 OR (an appropriate mathematics placement score, or a grade of 'C' or better for MAT081 or MAT082).

\section*{MAT108 Tutored Mathematics}

\section*{2 Credits 2 Periods}

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. MAT108 may be repeated for a total of ten (10) credits. Prerequisites: None. Corequisites: MAT051 or higher OR MAT15+, OR permission of Department or Division Chair.

\section*{MAT112 Mathematical Concepts and Applications}

\section*{3 Credits 3 Periods}

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, practical geometry, statistics, finance, and unit conversions. Prerequisites: An appropriate mathematics placement score, OR a grade of 'C' or better for MAT090, or MAT091, or MAT092, OR (an appropriate diagnostic score, or a grade of 'C' or better in each of the following courses: MAT055, MAT056, and MAT057).

\section*{MAT120 Intermediate Algebra}

\section*{5 Credits 5 Periods}

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. May receive credit for only one of the
following: MAT120, MAT121, or MAT122. Prerequisites: An appropriate mathematics placement score, OR a grade of 'C' or better for MAT090, or MAT091, or MAT092, OR (an appropriate diagnostic score, or a grade of 'C' or better in each of the following courses: MAT055, MAT056, and MAT057).

\section*{MAT121 Intermediate Algebra}

\section*{4 Credits 4 Periods}

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. May receive credit for only one of the following: MAT120, MAT121, or MAT122. Prerequisites: An appropriate mathematics placement score, OR a grade of 'C' or better for MAT090, or MAT091, or MAT092, OR (an appropriate diagnostic score, or a grade of 'C' or better in each of the following courses: MAT055, MAT056, and MAT057).

\section*{MAT122 Intermediate Algebra}

\section*{3 Credits 3 Periods}

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. May receive credit for only one of the following: MAT120, MAT121, or MAT122. Prerequisites: An appropriate mathematics placement score, OR a grade of 'B' or better for MAT090, or MAT091, or MAT092, OR (an appropriate diagnostic score, or a grade of 'B' or better in each of the following courses: MAT055, MAT056, and MAT057).

\section*{MAT126 Intermediate Algebra with Review}

6 Credits 6 Periods
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. Students may
receive credit for only one of the following: MAT120, OR MAT121, OR MAT122, OR MAT126. This course is designed for students that do not qualify for MAT120, MAT121, or MAT122, but need MAT12+ Intermediate Algebra to fulfill a degree requirement OR intend to complete MAT15+ College Algebra for their degree path. Review of MAT08+ Basic Arithmetic and/or MAT09+ Introductory Algebra as needed.

\section*{MAT140 College Mathematics}

\section*{5 Credits 5 Periods}

College-level mathematics and its applications to real-life problems. Emphasis on understanding mathematical concepts and their applications. Topics include set theory, probability, statistics, finance, and geometry. Students may receive credit for only one of the following: MAT140, MAT141, or MAT142. Prerequisites: Appropriate math score OR grade of 'C' or better for MAT090 or MAT091 or MAT092 OR (appropriate diagnostic score or grade of 'C' or better in each of the following courses: MAT055 \& MAT056 \& MAT057) or grade of 'C' or better in MAT120/121/122.

\section*{MAT141 College Mathematics} MA

\section*{4 Credits 4 Periods}

Working knowledge of college-level mathematics and its applications to real-life problems. Emphasis on understanding mathematical concepts and their applications. Topics include set theory, probability, statistics, finance, and geometry. Appropriate for the student whose major does not require college algebra or precalculus. Prerequisites: An appropriate district placement, or a grade of ' \(C\) ' or better in (MAT055, MAT056, and MAT057), or MAT085, or MAT09+.

\section*{MAT142 College Mathematics}

\section*{MA}

3 Credits 3 Periods
College-level mathematics and its applications to real-life problems. Emphasis on understanding
mathematical concepts and their applications. Topics include set theory, probability, statistics, finance, and geometry. Appropriate for the student whose major does not require college algebra or precalculus. Prerequisites: Appropriate math placement score, OR grade of 'B' or better for MAT090 or MAT091, or MAT092 OR (appropriate diagnostic score or grade of 'B' or better in each of MAT055, MAT056 \& MAT057), or grade of 'C' or better in MAT120 or MAT121 or MAT122.

\section*{MAT146 College Mathematics with Review MA}

\section*{6 Credits 6 Periods}

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 review of arithmetic and introductory algebra, as needed. Prerequisites: None. MAT146 students may receive credit for only one of the following: MAT140, MAT141, MAT142, MAT145, or MAT146. This course is designed for students that do not qualify for MAT141 or MAT142, but intend to complete MAT14+ College Mathematics for their degree path. Review of Basic Arithmetic and Introductory Algebra as needed.

\section*{MAT150 College Algebra/Functions} MA

\section*{5 Credits 5 Periods}

Analysis and interpretation of the behavior and nature of functions including polynomial, rational, exponential, logarithmic, power, absolute value, and piecewise-defined functions; systems of equations, using multiple methods including matrices, modeling and solving real world problems, and defining and illustrating sequences and series. May receive credit for only one of the following: MAT150, MAT151, MAT152, or MAT187. General Education Designation: Mathematics - [MA]. Prerequisites:

A grade of 'C' or better in MAT120, or MAT121, or MAT122, or satisfactory score on District placement exam.

\section*{MAT151 College Algebra/Functions} MA

\section*{4 Credits 4 Periods}

Analysis and interpretation of the behavior and nature of functions including polynomial, rational, exponential, logarithmic, power, absolute value, and piecewise-defined functions; systems of equations, using multiple methods including matrices, modeling and solving real world problems, and defining and illustrating sequences and series. May re-
ceive credit for only one of the following: MAT150, MAT151, MAT152, or MAT187.General Education Designation: Mathematics - [MA] in combination with: MAT182. Prerequisites: A grade of 'C' or better in MAT120, or MAT121, or MAT122, or satisfactory score on District placement exam.

\section*{MAT152 College Algebra/Functions MA}

\section*{3 Credits 3 Periods}

Analysis and interpretation of the behavior and nature of functions including polynomial, rational, exponential, logarithmic, power, absolute value, and piecewise-defined functions; systems of equations, using multiple methods including matrices, modeling and solving real world problems, and defining and illustrating sequences and series. May receive credit for only one of the following: MAT150, OR MAT151, OR MAT152, OR MAT155, OR MAT156, OR MAT187. Prerequisites: A grade of 'B' or better in MAT12+, OR an appropriate district placement.

\section*{MAT156 College Algebra/ Functions with Review}

\section*{MA}

\section*{6 Credits 6 Periods}

Analysis and interpretation of the behavior and nature of functions including linear, quadratic, high-

\section*{Course Descriptions}
er-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. MAT156 students may receive credit for only one of the following: MAT150, OR MAT151, OR MAT152, OR MAT155, OR MAT156, OR MAT187. This course is designed for students that do not qualify for MAT150 or MAT151 or MAT152, but intend to complete MAT15+ College Algebra for their degree path. Review of MAT12+ Intermediate Algebra as needed. Prerequisites: A grade of C or better in (MAT055, MAT056, and MAT057), OR a grade of C or better in MAT09+ or MAT114 or MAT115, OR an appropriate district placement for MAT120 or MAT121 or MAT122, OR permission of Department or Division Chair.

MAT182 Plane Trigonometry MA
3 Credits 3 Periods

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. General Education Designation: Mathematics - [MA] in combination with: MAT150 or MAT 151 or MAT152. Prerequisites: Grade of 'C' or better in MAT150, or MAT151, or MAT152, or equivalent, or concurrent registration in MAT150, or MAT151, MAT152, or satisfactory score on District placement exam.

\section*{MAT187 Precalculus \\ MA \\ 5 Credits 5 Periods}

A precalculus course combining topics from college algebra and trigonometry. Preparation for analytic geometry and calculus. May receive credit for only one of the following: MAT150, MAT151, MAT152, or MAT187. Prerequisites: Grade of 'B' or better in

MAT120, or MAT121, or MAT122, or equivalent, or satisfactory score on a placement test.

\section*{MAT206 Elements of Statistics}

CS

\section*{3 Credits 3 Periods}

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 equivalent, or satisfactory District placement, or permission of
Department or Division Chair.

\section*{MAT212 Brief Calculus}

\section*{MA}

\section*{3 Credits 3 Periods}

Introduction to the theory, techniques and applications of the differential and integral calculus of functions with problems related to business, life, and the social sciences. Students may receive credit for only one of the following: MAT212 or MAT213. Prerequisites: A grade of 'C' or better in MAT150 or MAT151 or MAT152 or MAT187 or appropriate Math placement.

\section*{MAT213 Brief Calculus}

\section*{MA}

4 Credits 4 Periods
Introduction to the theory, techniques, and applications of the differential and integral calculus of functions with problems related to business, life, and the social sciences. Students may receive credit for only one of the following: MAT212 or MAT213. Prerequisites: A grade of ' C ' or better in MAT15+, or MAT187, or an appropriate District placement.

\section*{MAT218 Mathematical Analysis for Business}

\section*{4 Credits 4 Periods}

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 distributions. Prerequisites: Grade of ' \(C\) ' or better in MAT212 or MAT213.

\section*{MAT220 Calculus with Analytic Geometry I MA}

\section*{5 Credits 5 Periods}

Limits, continuity, differential and integral calculus of functions of one variable. MAT220 students may receive credit for only one of the following: MAT220 or MAT221. Prerequisites: A grade of 'C' or better in [MAT182 and (MAT150, MAT151 or MAT152)] or MAT187 or appropriate Math placement.

\section*{MAT221 Calculus with Analytic Geometry I MA}

4 Credits 4 Periods
Limits, continuity, differential and integral calculus of functions of one variable. Student may receive credit for only one of the following: MAT220 or MAT221. Prerequisites: A grade of ' \(C\) ' or better in [MAT182 and (MAT150, MAT151 or MAT152)] or MAT187 or appropriate Math placement.

\section*{MAT225 Elementary Linear Algebra}

\section*{3 Credits 3 Periods}

Introduction to matrices, systems of linear equations, determinants, vector spaces, linear transformations and eigenvalues. Emphasizes the development of computational skills. Prerequisites: Grade of ' \(C\) ' or better in MAT212 or MAT220, or MAT221, or equivalent.

\section*{MAT227 Discrete Mathematical Structures}

\section*{3 Credits 3 Periods}

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 algorithms. Prerequisites: A grade of 'C' or better in MAT212, or MAT213, or MAT220, or MAT221, or permission of Department or Division Chair.

\section*{MAT231 Calculus}

\section*{with Analytic Geometry II}

MA

\section*{4 Credits 4 Periods}

Techniques of integration for both proper and improper integrals with applications to the physical and social sciences, elements of analytic geometry, and the analysis of sequences and series. Student may receive credit for only one of the following: MAT230 or MAT231. Prerequisites: Grade of ' \(C\) ' or better in MAT220, or MAT221, or equivalent.

MAT241 Calculus with
Analytic Geometry III MA

\section*{4 Credits 4 Periods}

Multivariate calculus including vectors, vector- valued functions, partial differentiation, multiple integration and an introduction to vector fields. Student may receive credit for only one of the following: MAT240 or MAT241. Prerequisites: Grade of 'C' or better in MAT230 or MAT231.

\section*{MAT256 Investigating Quantity: Number, Operations and Numeration Systems}

4 Credits 4 Periods
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: Grade of 'C'/better in (MAT150/151/152/ higher) OR Grade of C/better in [(MAT120/121/122) \& (MAT1 40/141/142/higher)] OR Grade of 'C'/better in [(MAT140/141/142) \& satisfactory score on District placement exam in (MAT150/151/152/higher)].

MAT257 Investigating Geometry, Probability and Statistics
4 Credits 4 Periods

Explores geometry, measurement, probability and statistics. Uses visualization, technologies, problem solving, reasoning and proof to develop a conceptual understanding of these topics. Prerequisites: A grade of 'C' or better in MAT256 or permission of Instructor.

\section*{MAT276}

Modern Differential Equations
MA
4 Credits 4 Periods
Introduces differential equations, theoretical and practical solution techniques with applications. Problem-solving using MATLAB. Students may receive credit for only one of the following: MAT276 or MAT277. Prerequisites: A grade of ' \(C\) ' or better in MAT230 or MAT231 or permission of Department/ Division Chair.

\section*{MAT282AA Service-Learning Experience in Mathematics} MA
1 Credit 1 Period
Unpaid Service-Learning (SL) experience, completed with approved community partner. MAT282AA may be repeated for a total of six (6) credit hours. Standard grading is available according to procedures outlined in catalog. Prerequisites: Permission of Instructor.

\section*{MAT282AC Service-Learning Experience in Mathematics}

3 Credits 3 Periods
Unpaid Service-Learning (SL) experience, completed with approved community partner. MAT282AC may be repeated for a total of six (6) credit hours. Standard grading is available according to procedures outlined in catalog. Prerequisites: Permission of Instructor.

MAT282AC Service-Learning Experience in Mathematics
3 Credits 3 Periods

Unpaid Service-Learning (SL) experience, completed with approved community partner. MAT282AC may be repeated for a total of six (6) credit hours. Standard grading is available according to procedures outlined in catalog. Prerequisites: Permission of Instructor.

\section*{MAT298AA Special Projects}

1 Credit 1 Period
Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: Permission of Program Director or Instructor.

\section*{Microsoft Technology}

\section*{MST150WT Installing and Configuring Microsoft Windows 10}

\section*{3 Credits 4 Periods}

In-depth exploration of how to effectively install and configure Windows 10. Includes features of Windows 10, virtualization improvements, network connectivity, access to resources, monitor and maintain Windows clients and backup and recovery. Designed to prepare students for the Microsoft Windows 10 certification examination. Prerequisites: None. CIS190, or CNT140AA, or MST140 suggested but not required.

\section*{MST155DC Installation, Storage, and Compute with Windows Server 4 Credits 5 Periods}

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 installation, Hyper-V deployments and storage options in relation to this new cloud based reality. Prerequisites: A grade of 'C' or better in MST150++ or permission of Instructor.

\section*{MST157DC Networking with Windows Server \\ 4 Credits 5 Periods}

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 Internet Protocol Address Management (IPAM). This course helps prepare for the 70-741 industry certification test. Prerequisites: A grade of 'C' or better in MST155DC or permission of Instructor.

\section*{MST158DC Identity Management with Windows Server 2016}

\section*{4 Credits 5 Periods}

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 Microsoft exam, Identity with Windows Server 2016-70-742. Prerequisites: A grade of 'C' or better in MST157DC.

\section*{Military Science}

\section*{MIS101 Introduction to the United States Army}

\section*{4 Credits 2 Periods}

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 purpose in the Army, and its advantages for the student. Includes physical training assessments, tactical training, as well as lecture-based instruction. Prerequisites: None.

\section*{MIS102 Foundation of Agile and Adaptive Leadership}

\section*{4 Credits 2 Periods}

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 using critical communication skills. Includes physical training assessments,
tactical training, as well as lecture-based instruction. Prerequisites: A grade of ' C ' or better in MIS101.

\section*{MIS201 Army Leadership and Decision Making 4 Credits 2 Periods}

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 exam. Also includes physical training assessments, tactical training, as well as lecture-based instruction. Prerequisites: A grade of 'C' or better in MIS101 and MIS102.

\section*{MIS202 Army Doctrine and Team Development 4 Credits 2 Periods}

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 preparation for development in becoming a successful future officer. Also includes physical training assessment, tactical training, as well as lecture-based instruction. Prerequisites: A grade of 'C' or better in MIS101, MIS102, and MIS201.

\title{
Music: Commercial/ Business
}

\section*{MUC109 Music Business:}

\section*{Merchandising and the Law}

\section*{3 Credits 3 Periods}

Operation, scope, and career opportunities in the music business. Focuses on music in the marketplace, songwriting, publishing, copyright procedures, and business affairs, agents, artist management, and concert production. Prerequisites: None.

\section*{MUC110 Music Business:}

\section*{Recording and Mass Media}

\section*{3 Credits 3 Periods}

The operation, scope, and career opportunities in the music business. Focuses on the record industry; environmental music; uses of music in radio, telecommunications, and film; and career options. Prerequisites: None.

\section*{MUC111 Digital Audio Workstation I (DAW I)}

3 Credits 5 Periods
Use of digital mixing and automation software in conjunction with editing and recording. Includes computer operation, troubleshooting, and file management. Prerequisites: MUC195, or MUP195AA, or TCM/VPT105, or permission of Instructor.

\section*{MUC112 Digital Audio Workstation II (DAW II)}

\section*{3 Credits 5 Periods}

Use of digital mixing and automation software in conjunction with editing and recording. Includes computer operation, troubleshooting, and file man-
agement. Prerequisites: A grade of ' C ' or better in MUC111, and (MUC195 or MUC195AA).

\section*{MUC122 Sound Design I}

\section*{3 Credits 5 Periods}

Introduction to Sound Design and Audio Post-Production for Multimedia. Includes creating and editing Sound Effects, ADR, Foley, Music, and Ambience, for multiple mediums such as Film, TV, Video Gaming, Theatre, and Dance. Emphasis on computer assisted production using Digital Audio Workstations and sound design techniques using industry-standard equipment. Prerequisites: A grade of 'C' or better in MTC191 or TCM/VPT105. Prerequisites or Corequisites: A grade of C or better in MUC111 or permission of Instructor.

\section*{MUC135 Introduction to Disc Jockey Techniques}

\section*{3 Credits 3 Periods}

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 performance DJ and strategies for soliciting employment in the field. Prerequisites: None. MUC135 may be repeated for a total of six (6) credits.

\section*{MUC138 Disc Jockey Laboratory 1 Credit 1 Period}

Operation, scope, roles and responsibilities in the commercial music production process. Prerequisites: None. MUC138 may be repeated for a total of six (6) credit hours.

\section*{MUC145 Recording Studio Business Operations}

\section*{2 Credits 2 Periods}

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, equipment acquisition, staffing and employment. Prerequisites: None.

\section*{MUC180 Computer Literacy for the Music Business \\ CS}

1 Credit 3 Periods
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 Chair.

\section*{MUC194 Introduction to}

Audio Mixing Techniques
3 Credits 3 Periods
Approaches in final mixing for different musical genres. Develop critical listening skills, and applying these techniques to students' projects. Profession-al-type facilities and equipment available for student use. Prerequisites: A grade of ' \(C\) ' or better in MUC112 and MUC195 or permission of instructor.

\section*{MUC195 Studio Music Recording I}

\section*{3 Credits 5 Periods}

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.

\section*{MUC195AA Studio Music Recording I}

\section*{3 Credits 2 Periods}

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.

\section*{MUC196 Studio Music Recording II} 3 Credits 5 Periods
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 session. Prerequisites: A grade of 'C' or better in MUC195 or MUC195AA.

\section*{MUC197 Live Sound Reinforcement I}

3 Credits 3 Periods
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 mixing live music. Prerequisites: None.

\section*{MUC198 Live Sound Reinforcement II 3 Credits 3 Periods}

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 styles of music. In addition to mixing at alternate locations. Prerequisites: A grade of ' \(C\) ' or better in MUC197.

\section*{MUC209 Music Industry Entrepreneurship 3 Credits 3 Periods \\ Operation, scope, and career opportunities in the music business. Focuses on music in the areas of entrepreneurship, visionary development and the collaboration process. Prerequisites: A grade of ' C ' or better in (MUC109 and MUC110) or permission of Instructor.}

\section*{MUC210 Advanced Industry Topics: Concert Promotion and Touring}

3 Credits 3 Periods
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 music-performance stage shows. Prerequisites: A grade of 'C' or better in MUC109, or permission of Instructor or Department or Division Chair.

\section*{MUC211 Advanced Industry Topics: Artist Management and Development}

\section*{3 Credits 3 Periods}

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 management techniques for Artist Managers. Prerequisites: A grade of ' \(C\) ' or better in MUC109, or permission of Instructor or Department or Division Chair.

\section*{MUC215 Music Industry Seminar: Innovation in Music Technology} 1 Credit 1 Period
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. MUC215 may be repeated for credit.

\section*{MUC222 Sound Design II}

\section*{3 Credits 5 Periods}

Intermediate level Sound Design and Audio Post-Production for Multimedia. Topics include: creating and editing Sound Effects, Automated Dialogue Replacement, Foley, Music, and Ambience for multiple mediums such as Film, TV, Video Gaming, Theatre, and Dance. Emphasis on computer assisted production using Digital Audio Workstations and acoustic forces. Prerequisites: A grade of 'C' or
better in MUC122 or MTC/TCM120 or permission of Instructor.

\section*{MUC241 Business Principles of Music Production}

3 Credits 3 Periods
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, publishing percentages and career strategies. Prerequisites: A grade of 'C' or better in (MUC109 and MUC110) or permission of Instructor.

\section*{MUC242 Music Genres and Styles}

\section*{2 Credits 2 Periods}

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, funk, and hip-hop. Study of the thematic organization of popular musical styles. Prerequisites: None.

\section*{MUC280 Recording Studio Maintenance} 3 Credits 3 Periods
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.

\section*{MUC290AA Music Business Internship 1 Credit 1 Period}

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 work per credit. MUC290AA may be
repeated for a total of twelve (12) credit hours. Prerequisites: Permission of Department or Division.

\section*{MUC292 Sound Design III}

3 Credits 6 Periods
Sound Design Production for Multimedia: includes Sound Effects, Music Composition/Arranging, and Studio Recording Production for one or more mediums such as Film, TV, Gaming, Theatre, and Dance. Emphasis on computer assisted production using Digital Audio Workstations and acoustic forces. Structured to provide an atmosphere of team research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Prerequisites: A grade of 'C' or better in (MTC192, MTC/TCM220, MUC112, MUC196, and MUC222), or permission of Instructor.

\section*{MUC293 Self Promotion for Music}

\section*{1 Credit 1 Period}

Career goal development. Includes self-presentation and communication skills, keeping files and records, and developing self-promotional materials. Prerequisites: None.

\section*{MUC295 Studio Music Recording III}

\section*{3 Credits 6 Periods}

Producing and engineering a recording project. Covers how recording studios work and how recording projects are organized from pre-production through delivery of the final mix. Prerequisites: A grade of 'C' or better in MUC196 and (MUC111 or permission of Instructor).

\section*{MUC296WA Cooperative Education}

\section*{1 Credit 5 Periods}

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 12 college credits, min. 2.6 GPA and obtain a position related to academic or career goals or permission of Instructor. Corequisites: At least 1 class related to major or career interest or with permission of the Instructor.

\section*{MUC297AA Music Internship}

\section*{1 Credit 1 Period}

Music Internship work experience in a business or industry. Eighty (80) hours of designated work per credit. MUC297AA may be repeated for a total of twelve (12) credit hours. Prerequisites: Permission of Department or Division.

\section*{MUC298AA Special Projects}

\section*{1 Credit 1 Period}

Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: Permission of Program Director or Instructor.

\section*{MUC298AC Special Projects}

\section*{3 Credits 3 Periods}

Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: Permission of Program Director or Instructor.

\section*{Music: Education}

\section*{MUE107 Woodwinds Methods I}

\section*{1 Credit 3 Periods}

Practical class with emphasis on techniques of playing and teaching woodwind instruments including embouchure, breath control, tone, mouthpiece selection, and literature. Prerequisites: None.

\section*{MUE108 Percussion Methods I}

2 Credits 3 Periods
Practical class with emphasis on techniques of playing and teaching percussion instruments including hand position, rudiments, stick control, and elements of reading rhythms. Prerequisites: None.

\section*{MUE109 Brass Methods I}

\section*{1 Credit 3 Periods}

Practical class with emphasis on techniques of playing and teaching brass instruments including embouchure, breath control, tone, and literature. Prerequisites: None.

\section*{MUE110 Strings Methods I}

\section*{1 Credit 3 Periods}

Practical class with emphasis on techniques of playing and teaching string instruments including tone control and literature. Prerequisites: None.

\section*{MUE235 Percussion Methods I}

\section*{2 Credits 3 Periods}

Practical class with emphasis on techniques of playing and teaching percussion instruments including hand position, rudiments, stick control, and elements of reading rhythms. Prerequisites: None.

\section*{MUE240 Introduction to Choral Methods 2 Credits 3 Periods}

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 and choral performance practices. Prerequisites: None.

\section*{MUE250 Vocal Pedagogy/Voice Methods} 2 Credits 3 Periods
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 singing. Prerequisites: None.

\section*{Music: \\ History/Literature}

\section*{MHL140 Survey of Music History \\ HU}

3 Credits 3 Periods
Study of composers, compositions, styles, and periods in music history. Prerequisites: None.

\section*{MHL143 Music in World Cultures}

G, HU
3 Credits 3 Periods
Non-European musical traditions including the study of music in rituals, musical instruments and the impact of cultures on musical styles. Prerequisites: None.

\section*{MHL145 American Jazz and Popular Music}

C, HU
3 Credits 3 Periods
The study of cultural and social contributions to the
evolution of American jazz and popular music from the mid-1800's to present. Prerequisites: None.

\section*{MHL146 Survey of Broadway Musicals} HU

\section*{3 Credits 3 Periods}

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.

\section*{MHL153 Rock Music and Culture}

H, HU
3 Credits 3 Periods
History of Rock music and how cultural, social, political, and economic conditions have shaped its evolution. Prerequisites: None.

\section*{MHL155 Survey of American Music}

C, H, HU
3 Credits 3 Periods
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 influence our modern American musical sense. Prerequisites: None.

\section*{MHL204 Hip-Hop Music and Culture}

C, HU, L
3 Credits 3 Periods
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.

\section*{MHL241 Music History and Literature to 1750}

HU
3 Credits 3 Periods
In-depth study of music history from the primitive
era through the Baroque period. Prerequisites or Corequisites: A grade of 'C' or better in MTC155 and MTC156, or permission of Instructor.

\section*{MHL242 Music History and Literature 1750 to Present}

HU
3 Credits 3 Periods
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.

\section*{Music: Performance}

\section*{MUP101BN Private Instruction: Bassoon 1 Credit . 6 Periods}

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, percussion, and harp. Prerequisites: None. MUP101BN may be repeated for credit.

\section*{MUP101BT Private Instruction: Violin 1 Credit . 6 Periods}

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, percussion, and harp. Prerequisites: None. MUP101BT may be repeated for credit.

\section*{MUP101CF Private Instruction:}

\section*{Bass Guitar}

\section*{1 Credit . 6 Periods}

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, percussion, and harp. Prerequisites: None. MUP101CF may be repeated for credit.

\section*{MUP101CI Private Instruction: Percussion}

\section*{1 Credit . 6 Periods}

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, percussion, and harp. May be repeated for credit. Prerequisites: None. MUP101CI may be repeated for credit.

\section*{MUP102AV Private Instruction: Trombone}

\section*{2 Credits 1.2 Periods}

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, violoncello, contrabass, bass guitar, percussion, and harp. Prerequisites: None. MUP102AV may be repeated for credit.

\section*{MUP102BQ Private Instruction: Saxophone}

\section*{2 Credits 1.2 Periods}

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, violoncello, contrabass, bass guitar, percussion, and harp. Prerequisites: None. MUP102BQ may be repeated for credit.

\section*{MUP102BW Private Instruction: Viola} 2 Credits 1.2 Periods
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, violoncello, contrabass, bass guitar, percussion, and harp. Prerequisites: None. MUP102BW may be repeated for credit.

\section*{MUP102BZ Private Instruction: Violoncello 2 Credits 1.2 Periods}

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, violoncello, con-
trabass, bass guitar, percussion, and harp. Prerequisites: None. MUP102BZ may be repeated for credit.

\section*{MUP102CF Private Instruction: Bass Guitar}

\section*{2 Credits 1.2 Periods}

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, violoncello, contrabass, bass guitar, percussion, and harp. Prerequisites: None. MUP102CF may be repeated for credit.

\section*{MUP123AA Studio Class/Piano}

\section*{. 5 Credits . 5 Periods}

Performance and laboratory class for students enrolled in private piano instruction. Emphasis on demonstration and discussion of specific piano problems. Prerequisites: None. MUP123AA may be repeated for credit. Corequisites: Private Piano Instruction.

\section*{MUP127 Class Guitar I}

2 Credits 3 Periods
Emphasis on note-reading and folk-style harmonic accompaniment. Includes finger-style playing. Stresses development of efficient practice techniques and proper sitting and hand positions. Prerequisites: None.

\section*{MUP128 Class Guitar II}

\section*{2 Credits 3 Periods}

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.

\section*{MUP130 Beginning Group Piano}

2 Credits 3 Periods
Basic introduction to playing piano through music reading, chords, rhythmic, and written activities. Designed for those with little or no piano experience. Prerequisites: None.

\section*{MUP131 Class Piano I}

\section*{2 Credits 3 Periods}

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 including the I, IV, V7 chords. Prerequisites: None.

\section*{MUP132 Class Piano II}

\section*{2 Credits 3 Periods}

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.

\section*{MUP133 Class Voice I}

1 Credit 3 Periods
Introduction to the fundamentals of vocal production. Emphasis on breathing techniques, tone production and performances in class of solo vocal literature. Prerequisites: None.

\section*{MUP134 Class Voice II}

\section*{1 Credit 3 Periods}

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 Instructor.

\section*{MUP140 Elementary Piano Pedagogy \\ 2 Credits 2 Periods \\ An overview of techniques, methods, materials, stylistic characteristics, and repertoire used in teaching}
piano to students at the early and late elementary levels including creating a studio policy, simulated teaching, and observing private instruction and group piano classes. Prerequisites: Permission of Program Director or Instructor.

\section*{MUP141 Intermediate Piano Pedagogy}

\section*{2 Credits 2 Periods}

Overview of techniques, methods, materials, stylistic characteristics, and repertoire used in teaching piano students at the intermediate and early advanced levels including simulated teaching, performance and competition preparation, and observing private instruction and group piano classes. Prerequisites: Permission of Program Director or Instructor.

\section*{MUP150 Community Chorus}

\section*{1 Credit 3 Periods}

A mixed chorus with emphasis on college/community participation and preparation of a variety of choral literature for public performance. Auditions may be required. Prerequisites: None. MUP150 may be repeated for credit.

\section*{MUP151AJ Private Instruction: Organ}

\section*{1 Credit . 6 Periods}

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, percussion, and harp. MUP151AJ may be repeated for credit. Prerequisites: A grade of 'C' or better in MUP101AJ.

\section*{MUP151AS Private Instruction:}

French Horn

\section*{1 Credit . 6 Periods}

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, percussion, and harp. MUP151AS may be repeated for credit. Prerequisites: A grade of 'C' or better in MUP101AS.

\section*{MUP151BK Private Instruction: Clarinet}

\section*{1 Credit . 6 Periods}

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, percussion, and harp. MUP151BK may be repeated for credit. Prerequisites: A grade of 'C' or better in MUP101BK.

\section*{MUP151BT Private Instruction: Violin 1 Credit . 6 Periods}

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, percussion, and harp. MUP151BT may be repeated for credit. Prerequisites: A grade of 'C' or better in MUP101BT.

\section*{MUP151BT Private Instruction: Violin}

\section*{1 Credit . 6 Periods}

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, percussion, and harp. MUP151BT may be repeated for credit. Prerequisites: A grade of 'C' or better in MUP101BT.

\section*{MUP151BZ Private Instruction: Violoncello \\ 1 Credit . 6 Periods}

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, percussion, and harp. MUP151 BZ may be repeated for credit. Prerequisites: A grade of 'C' or better in MUP101BZ.

\section*{MUP151CF Private Instruction: Bass Guitar} 1 Credit . 6 Periods
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, percussion, and harp. MUP151CF may be repeated for credit. Prerequisites: A grade of 'C' or better in MUP101CF.

\section*{MUP152AS Private Instruction:}

\section*{French Horn}

\section*{2 Credits 1.2 Periods}

Private Instruction emphasizing musicianship, liter-
ature, 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, violoncello, contrabass, bass guitar, percussion, and harp. MUP152AS may be repeated for credit. Prerequisites: A grade of ' C ' or better in MUP102AS.

\section*{MUP152AY Private Instruction:}

\section*{Euphonium}

2 Credits 1.2 Periods
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, violoncello, contrabass, bass guitar, percussion, and harp. MUP152AY may be repeated for credit. Prerequisites: A grade of ' \(C\) ' or better in MUP102AY.

\section*{MUP152BT Private Instruction: Violin} 2 Credits 1.2 Periods
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, violoncello, contrabass, bass guitar, percussion, and harp. MUP152BT may be repeated for credit. Prerequisites: A grade of ' \(C\) ' or better in MUP102BT.

\section*{MUP152BW Private Instruction: Viola 2 Credits 1.2 Periods}

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, violoncello, contrabass, bass guitar, percussion, and harp. MUP152BW may be repeated for credit. Prerequisites: A grade of ' \(C\) ' or better in MUP102BW.

\section*{MUP152BZ Private Instruction: Violoncello} 2 Credits 1.2 Periods
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, violoncello, contrabass, bass guitar, percussion, and harp. MUP152BZ may be repeated for credit. Prerequisites: A grade of ' \(C\) ' or better in MUP102BZ.

\section*{MUP152CF Private Instruction:}

\section*{Bass Guitar}

\section*{2 Credits 1.2 Periods}

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, violoncello, contrabass, bass guitar, percussion, and harp. MUP152CF may be repeated for credit. Prerequisites: A grade of 'C' or better in MUP102CF.

\section*{MUP153 Concert Choir}

\section*{1 Credit 5 Periods}

A mixed choir designed to emphasize choral techniques and performance of all styles of choral literature. Public performances are scheduled each semester. Prerequisites: None. Auditions may be required. MUP153 may be repeated for credit.

\section*{MUP159 Community Orchestra}

\section*{1 Credit 3 Periods}

Emphasis on college/community participation and the preparation of orchestral literature for public performance. Prerequisites: None. MUP159 may be repeated for credit. Auditions may be required.

\section*{MUP161 Community Band}

\section*{1 Credit 3 Periods}

Emphasis on college/community participation and the preparation of band literature for public performance. Prerequisites: None. MUP161 may be repeated for credit. Auditions may be required.

\section*{MUP162 Band}

\section*{1 Credit 5 Periods}

Emphasis on college/community participation and the preparation of band literature for public performance. Prerequisites: None. MUP161 may be repeated for credit. Auditions may be required.

\section*{MUP163 Jazz Ensemble}

\section*{1 Credit 3 Periods}

Practical and performance experience in various jazz styles. Prerequisites: None. MUP163 may be repeated for credit. Open to all students on the basis of auditions. Auditions may be required.

\section*{MUP164 Jazz Improvisation I}

\section*{2 Credits 3 Periods}

Theoretical and performance skills in many styles of jazz improvisation. Prerequisites: None. MUP164 may be repeated for a total of six (6) credit hours.

\section*{MUP165 Jazz Improvisation II}

\section*{2 Credits 3 Periods}

Intermediate theoretical and performance skills in many styles of jazz improvisation. MUP165 may be repeated for a total of six (6) credit hours. Prerequisites: A grade of 'C' or better in MUP164 or permission of Instructor.

\section*{MUP166 Jazz Piano I}

\section*{1 Credit 2 Periods}

Introduction to basic jazz piano skills, including chord construction, chord voicings, accompanying and solo piano arrangements. MUP166 may be repeated for a total of four (4) credit hours. Prerequisites: A grade of ' \(C\) ' or better in MUP131 or permission of Instructor.

\section*{MUP167 Jazz Piano II}

\section*{1 Credit 2 Periods}

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.

\section*{MUP169 Guitar Ensemble}

\section*{1 Credit 3 Periods}

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 preparation, conducting and performance cues, and performance experience in various guitar styles. Concerts presented throughout the semester. Prerequisites: None. Auditions may be required. MUP169 may be repeated for credit.

\section*{MUP181 Chamber Music Ensembles}

\section*{1 Credit 2 Periods}

Practical and performance experience in instrumental, vocal, and mixed ensembles. Prerequisites: None. MUP181 may be repeated for credit.

\section*{MUP182 Chamber Singers}

\section*{1 Credit 3 Periods}

Practical and performance experience in various styles of vocal music. Prerequisites: None. MUP182 may be repeated for credit. Open to all students on the basis of auditions. Auditions may be required.

\section*{MUP185 Flute Choir}

\section*{1 Credit 3 Periods}

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 various musical periods. MUP185 may be repeated for credit. Prerequisites: Audition or permission of Instructor.

\section*{MUP190 Percussion Ensemble}

\section*{1 Credit 3 Periods}

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 skills, increased aesthetic discrimination. Informed performance practice and skills on all percussion instruments and traditions. Prerequisites: None. May be repeated for credit.

\section*{MUP201AM Private Instruction: Guitar}

\section*{1 Credit . 6 Periods}

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, percussion, and harp. MUP201AM may be repeated for credit. Prerequisites: A grade of 'C' or better in MUP151AM.

\section*{MUP201CC Private Instruction:}

\section*{Contrabass}

1 Credit . 6 Periods
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, percussion, and harp. MUP201CC may be repeated for credit. Prerequisites: A grade of 'C' or better in MUP151CC.

\section*{MUP202AS Private Instruction:}

\section*{French Horn}

\section*{2 Credits 1.2 Periods}

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, violoncello, contrabass, bass guitar, percussion, and harp. MUP202AS may be repeated for credit. Prerequisites: A grade of 'C' or better in MUP152AS.

\section*{MUP202AY Private Instruction: Euphonium}

\section*{2 Credits 1.2 Periods}

Private Instruction emphasizing musicianship, literature, technique and performance. Four-course sequence designed for university transfer equiv-
alency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, euphonium, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar, percussion, and harp. MUP202AY may be repeated for credit. Prerequisites: A grade of 'C' or better in MUP152AY.

\section*{MUP202BK Private Instruction: Clarinet 2 Credits 1.2 Periods}

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, violoncello, contrabass, bass guitar, percussion, and harp. MUP202BK may be repeated for credit. Prerequisites: A grade of 'C' or better in MUP152BK.

\section*{MUP202BQ Private Instruction: Saxophone}

\section*{2 Credits 1.2 Periods}

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, violoncello, contrabass, bass guitar, percussion, and harp. MUP202BQ may be repeated for credit. Prerequisites: A grade of 'C' or better in MUP152BQ.

\section*{MUP202CF Private Instruction: Bass Guitar}

2 Credits 1.2 Periods
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, violoncello, contrabass, bass guitar, percussion, and harp. MUP202CF may be repeated for credit. Prerequisites: A grade of 'C' or better in MUP152CF.

\section*{MUP209 Elements of Conducting} 2 Credits 2 Periods
Essentials of conducting techniques used in choral and instrumental ensembles including terminology, interpretation, and styles. Prerequisites: None.

\section*{MUP217 Music Theatre: Broadway Solos}

2 Credits 3 Periods
Study and in-class performance of scenes and solos from Broadway musical literature. Prerequisites: None. MUP217 may be repeated for credit.

\section*{MUP218 Audition Techniques:}

\section*{Music Theater}

1 Credit 3 Periods
Practice in the techniques of auditioning for musical theater. Identification and illustration techniques of the vocal and acting music theater audition. Prerequisites: None.

\section*{MUP225 Class Guitar I}

\section*{2 Credits 3 Periods}

Emphasis on note-reading and folk-style harmonic accompaniment. Includes finger-style playing. Stresses development of efficient practice techniques and proper sitting and hand positions. Prerequisites: None.

\section*{MUP226 Class Guitar II}

\section*{2 Credits 3 Periods}

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.

\section*{MUP227 Class Guitar III}

\section*{1 Credit 3 Periods}

Additional fingerboard positions. Ensemble techniques and performance. Prerequisites: A grade of 'C' or better in MUP128 or permission of Instructor.

\section*{MUP228 Class Guitar IV}

\section*{1 Credit 3 Periods}

Advanced fingerboard positions. Duet and trio performances. Advanced ensemble techniques. MUP228 may be repeated for credit. Prerequisites: A grade of 'C' or better in MUP227 or permission of Instructor.

\section*{MUP231 Class Piano III}

\section*{2 Credits 3 Periods}

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.

\section*{MUP232 Class Piano IV}

\section*{2 Credits 3 Periods}

Continuation of Piano III including modulation techniques, improvisation of piano accompaniments, advanced chromatic harmony, and sight reading of advanced literature. Prerequisites: A grade of ' \(C\) ' or better in MUP231 or permission of Instructor.

\section*{MUP233 Class Voice III}

\section*{1 Credit 3 Periods}

Interpretive singing through a closer examination of coloring, tone production, dynamics, and tempo indications. Prerequisites: A grade of ' \(C\) ' or better in MUP134.

\section*{MUP234 Class Voice IV}

\section*{1 Credit 3 Periods}

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. MUP234
may be repeated for credit. Prerequisites: A grade of 'C' or better in MUP233 or permission of Instructor.

\section*{MUP240 Piano Literature}

\section*{2 Credits 2 Periods}

Survey of solo literature written for the piano or for other keyboard instruments (i.e. harpsichord, clavichord) but suitable for performance on the piano. Emphasis on stylistic characteristics information correlating the composer's life and period with compositional techniques used. Prerequisites: A grade of 'C' or better in MUP140 or permission of Instructor.

\section*{MUP241 Piano Artistry}

\section*{2 Credits 2 Periods}

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 expression, finesse and artistry.
Prerequisites: A grade of 'C' or better in MUP240 or permission of Instructor.

\section*{MUP250AA Survey Of Diction For Singers (English)}

1 Credit 2 Periods
Introduction to the use of phonetics in the study of English song literature. Prerequisites: None.

\section*{MUP250AB Survey Of Diction For Singers (Italian/Latin)}

\section*{1 Credit 2 Periods}

Introduction to the use of phonetics in the study of Italian/Latin song literature. Prerequisites: None.

\section*{MUP250AC Survey Of Diction For Singers (German)}

\section*{1 Credit 2 Periods}

Introduction to the use of phonetics in the study of German song literature. Prerequisites: None.

\section*{MUP250AD Survey Of Diction For Singers (French)}

\section*{1 Credit 2 Periods}

Introduction to the use of phonetics in the study of French song literature. Prerequisites: None.

\section*{MUP251AP Private Instruction: Trumpet} 1 Credit . 6 Periods
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, percussion, and harp. MUP251AP may be repeated for credit. Prerequisites: A grade of 'C' or better in MUP201AP.

\section*{MUP251AV Private Instruction: Trombone 1 Credit . 6 Periods}

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, percussion, and harp. MUP251AV may be repeated for credit. Prerequisites: A grade of 'C' or better in MUP201AV.

\section*{MUP251BE Private Instruction: Flute}

\section*{1 Credit . 6 Periods}

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, percussion, and harp. MUP251 BE may be repeated for credit. Prerequisites: A grade of 'C' or better in MUP201BE.

\section*{MUP251BK Private Instruction: Clarinet}

\section*{1 Credit . 6 Periods}

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, percussion, and harp. MUP251BK may be repeated for credit. Prerequisites: A grade of 'C' or better in MUP201BK.

\section*{MUP251CI Private Instruction: Percussion}

\section*{1 Credit . 6 Periods}

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, percussion, and harp. MUP251 CI may be repeated for credit. Prerequisites: A grade of 'C' or better in MUP201CI.

\section*{MUP252AS Private Instruction:}

\section*{French Horn}

2 Credits 1.2 Periods
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, violoncello, contrabass, bass guitar, percussion, and harp. MUP252AS may be repeated for credit. Prerequisites: A grade of 'C' or better in MUP202AS.

\section*{MUP252BB Private Instruction: Tuba}

\section*{2 Credits 1.2 Periods}

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, violoncello, contrabass, bass guitar, percussion, and harp. MUP252BB may be repeated for credit. Prerequisites: A grade of ' \(C\) ' or better in MUP202BB.

\section*{MUP252BH Private Instruction: Oboe}

\section*{2 Credits 1.2 Periods}

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, violoncello, contrabass, bass guitar, percussion, and harp. MUP252BH may be repeated for credit. Prerequisites: A grade of ' C ' or better in MUP202BH.

\section*{MUP252BT Private Instruction: Violin}

\section*{2 Credits 1.2 Periods}

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, violoncello, contrabass, bass guitar, percussion, and harp. MUP252BT may be repeated for credit. Prerequisites: A grade of 'C' or better in MUP202BT.

\section*{MUP252BW Private Instruction: Viola}

\section*{2 Credits 1.2 Periods}

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, violoncello, contrabass, bass guitar, percussion, and harp. MUP252BW may be repeated for credit. Prerequisites: A grade of ' \(C\) ' or better in MUP202BW.

\section*{MUP252CF Private Instruction:}

\section*{Bass Guitar}

\section*{2 Credits 1.2 Periods}

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, violoncello, contrabass, bass guitar, percussion, and harp. MUP252CF may be repeated for credit. Prerequisites: A grade of 'C' or better in MUP202CF.

\section*{MUP270 Musical Theatre Workshop}

\section*{2 Credits 5 Periods}

Workshop in the study and performance of Musical Theatre repertoire. Including audition techniques, talent evaluation criticism, rehearsal techniques, vocal acting styles, stage movement, and performance. Prerequisites: None. MUP/THP270 may be repeated for credit.

\section*{MUP273 Musical Theatre Production} 1 Credit 5 Periods
Principles and techniques for musical theatre production performance. Includes audition techniques, stage directions, character role development, rehearsal techniques, vocal acting styles and vocal
technique, stage movement, crew roles, and performance. Prerequisites: By audition.

\section*{MUP282AA Volunteerism For Music: A Service Learning Experience 1 Credit 1 Period}

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 catalog. Prerequisites: None. May be repeated for a total of six (6) MUP282 credit hours; may not repeat specific agency assignment for more than four (4) credit hours.

\section*{Music: Theory/ Composition}

\section*{MTC101 Introduction to Music Theory \\ 3 Credits 3 Periods}

Designed to develop written and aural skills necessary for advanced study of music theory and skills. Recommended for music majors. Prerequisites: None.

\section*{MTC103 Introduction to Aural Perception 1 Credits 2 Periods}

An introduction to the aural skills necessary to hear relationships of intervals, rhythms, melody, and harmony in music. Prerequisites: None. MTC103 may be repeated for a total of two (2) credit hours.

\section*{MTC105 Music Theory I}

\section*{3 Credits 3 Periods}

The chronological study of music theory including: harmony, melody, texture, structure and timbre through analysis, original compositions and basic exercises to demonstrate musical concepts.

Prerequisites: A grade of 'C' or better in MTC100, or MTC101, or permission of Instructor. Corequisites: MTC106.

\section*{MTC106 Aural Perception I}

\section*{1 Credit 2 Periods}

The development of listening and performing skills through dictation, sight-singing and keyboard harmony. Prerequisites: None. Corequisites: MTC1 05.

\section*{MTC111 Lyric Writing}

\section*{1 Credit 1 Period}

Lyric writing and its relationship to song structure and rhythm. Emphasis on basic poetic forms, meter, rhyme schemes, analysis of song lyrics for content and clarity, and use of lyric writing tools. Prerequisites: None. Basic note reading and/or music theory is advisable. MTC111 may be repeated for credit.

\section*{MTC113 Songwriting Techniques}

\section*{1 Credit 1 Period}

Introduction to pop melody writing and harmonic settings. Development of short ideas into complete songs with the use of contrast, variation, and repetition. Consideration of the pros and cons of writing songs with a partner or small group. Prerequisites: None. Basic note reading and/or music theory is advisable. MTC113 may be repeated for credit.

\section*{MTC130 Jazz Theory}

\section*{2 Credits 2 Periods}

Develop written and aural theory skills necessary in the jazz idiom. MTC130 is recommended for students taking jazz improvisation, jazz composition and jazz combo. Prerequisites: A grade of ' C ' or better in (MTC101 and MTC103), or permission of Instructor.

\section*{MTC130 Jazz Theory}

\section*{2 Credits 2 Periods}

Develop written and aural theory skills necessary in the jazz idiom. MTC130 is recommended for stu-
dents taking jazz improvisation, jazz composition and jazz combo. Prerequisites: A grade of ' \(C\) ' or better in (MTC101 and MTC1 03), or permission of Instructor.

\section*{MTC155 Music Theory II}

3 Credits 3 Periods
Prerequisites: A grade of 'C' or better in MTC105. Corequisites: MTC156.

\section*{MTC156 Aural Perception II}

1 Credit 2 Periods
A continuation of Aural Perception I, including harmonic practices. Prerequisites: None. Corequisites: MTC155.

\section*{MTC180 Computer Literacy for Musicians CS}

\section*{3 Credits 4 Periods}

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 of Instructor.

\section*{MTC191 Electronic Music I}

\section*{3 Credits 4 Periods}

An introduction to producing music with Musical Instrument Digital Interface (MIDI) configurations consisting of computers, printers, synthesizers, and other compatible MIDI instruments. Prerequisites: None.

\section*{MTC192 Electronic Music II}

\section*{3 Credits 4 Periods}

Continued study of the production of music with Musical Instrument Digital Interface (MIDI) configurations. Emphasis on more complex configurations and their applications in song arrangements. Prerequisites: A grade of 'C' or better in MTC191.

\section*{MTC203 Jazz Composition}

\section*{3 Credits 3 Periods}

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.

\section*{MTC205 Music Theory III}

3 Credits 3 Periods
The study of chromatic harmony and melody, modulation techniques and expanded chords. The analysis of formal structure. Prerequisites: A grade of 'C' or better in MTC155. Corequisites: MTC206.

\section*{MTC206 Aural Perception III}

\section*{1 Credit 2 Periods}

A development of listening and performing skills, including an introduction of chromatic harmonic techniques and concepts of style. Prerequisites: None. Corequisites: MTC205.

\section*{MTC240 Composition}

\section*{3 Credits . 6 Periods}

Introduction to the basics of music composition, stressing techniques and procedures for developing original ideas. MTC240 may be repeated for a total of twelve (12) credit hours. Prerequisites: A grade of 'C' or better in (MTC1 05 and MTC106, or equivalent), and permission of Instructor.

\section*{MTC255 Music Theory IV \\ 3 Credits 3 Periods \\ A continuation of Music Theory III, including 20th century theories and techniques. Prerequisites: A grade of ' \(C\) ' or better in MTC205. Corequisites: MTC256.}

\section*{MTC256 Aural Perception IV}

1 Credit 2 Periods
A continuation of Aural Perception III, including extended chords. Prerequisites: None. Corequisites: MTC255.

\title{
Navajo
}

\section*{NAV115 Beginning Navajo Conversation I 3 Credits 3 Periods}

Beginning conversational Navajo with emphasis on basic listening and speaking skills, including basic pronunciation, vocabulary, sentence structure, and cultural awareness. Prerequisites: None.

\section*{Nursing}

\section*{NUR104AB Structured Nursing Review}

\section*{1 Credit 1 Period}

Structured nursing tutorial assistance and nursing study skills to help students achieve success in their respective block of nursing courses. Nursing process and critical thinking application skills emphasized. Prerequisites: None. Corequisites: Concurrent enrollment in the Nursing program or permission of Department Chair. Course offered as Credit (P) No credit (Z) basis. NUR104AB may be repeated for a total of eight (8) credits. Corequisites: Concurrent enrollment in the Nursing program or permission of Department Chair.

\section*{NUR106 Nursing Theory and Science Transition (Paramedic Bridge)}

\section*{9 Credits 5.5 Periods}

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. NUR106 is intended for experienced paramedics seeking advanced placement to Maricopa Nursing.

\section*{Course Descriptions}

Prerequisites: (AZ or National Paramedic Registry Certificate), acceptance into MCCD Nursing adv placemt, grade of 'C' or better in NUR187, and (1 yr current work experience utilizing Paramedic scope of practice or permission of Nursing Dept. Chairperson).

\section*{NUR152 Nursing Theory and Science I 9 Credits 4 Periods}

Introduction of Nurse of the Future competencies as a foundational framework for development of the professional nurse. Basic care concepts and the nursing process are utilized to meet the needs of adult and older adult patients. Prerequisites: Admission into the Nursing Program.

\section*{NUR158 Nurse Assisting}

6 Credits 4 Periods
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 essential for the nursing assistant, interventions to ensure the needs and safety of the client, specific types of diseases, conditions and alterations in behavior of the client, and principles
of nutrition and fluid balance. Focus is on special needs of the elder client in the acute and long-term care settings, and basic emergency care skills and procedures. Provides opportunity for the development of clinical competency in the performance of selected nurse assisting skills and procedures through participation in the care of clients. Prerequisites: (RDG100 or higher or CRE101 test score, or 75\% HESI-A2 exam English Composite AND (MAT082 or MAT090 test score, or \(75 \%\) HESI-A2 exam Math). Level One DPS Fingerprint Clearance Card, MCCCD Background Check, and health \& safety documentation.

\section*{NUR172 Nursing Theory and Science II 9 Credits 5.5 Periods}

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. Prerequisites: A grade of 'C' or better in (BIO202 and NUR152) or permission of Nursing Department Chair.

NUR187 Pharmacology and Medication Administration
1.5 Credits 1.5 Periods


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 physical, biological, and social sciences. Prerequisites: Permission of Nursing Department/Division Chair.

\section*{NUR252 Nursing Theory and Science III} 9 Credits 5.5 Periods
Application of critical thinking strategies 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, communication, health promotion, and pathophysiology into nursing care. Prerequisites: A grade of ' \(C\) ' or better in [(CRE101 or appropriate district placement) and NUR172 and PSY101] or permission of Nursing Department Chair.

\section*{NUR267 Pharmacology and Medication Administration III}

\section*{1 Credit 2 Periods}

Provides the knowledge and skills to safely prepare and administer intravenous medications and solutions. Emphasizes management of clients receiving complex therapies such as blood and blood products, parenteral nutrition, and advanced pain management. Requires application of previous knowledge of physical, biological, and social sciences. Includes an overview of medications used in selected client situations with emphasis on pharmacokinetics, safe preparation and administration, monitoring, and documentation of client responses.

Prerequisites: A grade of 'C' or better in (NUR181, NUR185, NUR187 and NUR189) and (HCR240 or (HCR240AA and HCR240AB)). NCE214OP required for advanced placement students.

\section*{NUR283 Nursing Theory and Science IV 9 Credits 5.5 Periods}

Applies Nurse of the Future competencies 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.

\section*{NUR295 Registered Nurse Refresher 10 Credits 6 Periods}

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 supervision of a registered nurse with faculty guidance. Individualized teaching and learning opportunities to build confidence, competence and an increased level of independent functioning. Prerequisites: Permission of Instructor.

\section*{NUR298AC Special Projects}

\section*{3 Credits 3 Periods}

Organized and tailored around the interests and needs of 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 combined to maximize student development. Prerequisites: Permission of Program Director or Instructor.

\title{
Nursing: Continuing Education
}

\section*{NCE203 Interpretation of Laboratory Diagnostic Examinations}

\section*{. 5 Credits . 5 Periods}

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 therapy for patients with specific conditions. Prerequisites: Registered Nurse or Licensed Practical Nurse, Nursing students, or permission of Instructor.

\section*{NCE2140P Orientation to Nursing Program}

3 Credits 5 Periods
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; prob-
lem-solving strategies, the communication process; psychiatric nursing competencies and role transition between LPN and RN scope of practice. NCE2140P designed for advanced placement students (i.e., transfer students, returning students, and/or Practical Nurses). Prerequisites: Designee/ advanced placement into the Nursing Program or permission of the Nursing Director.

\section*{NCE267 IV Medication Administration and Advanced Metrology \\ 1 Credit 2 Periods}

Knowledge and skills to safely prepare and administer intravenous medications and solutions. Includes advanced metrology to accurately calculate IV drug dosages and infusion rates. NCE267 may be repeated for a total of five (5.0) credits. Prerequisites: Current Arizona Registered Nurse (RN) license or Licensed Practical Nurse (LPN) license or permission of Instructor.

\section*{NCE282AA Volunteerism For Nursing: A Service Learning Experience}

\section*{1 Credit 1 Period}

Service-learning field experience within human service organization/agency. NCE282AA may be repeated for a total of six (6) NCE282 credit hours; may not repeat specific agency assignment for more than three (3) credit hours. Standard grading available according to procedures outlined in catalog. Prerequisites: Permission of Instructor.

\section*{NCE292 Simulation for Patient Care Experiences 2 Credits 90 Periods}

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 nurse or permission of Instructor.

\section*{Office}

\section*{Automation}

Systems

OAS101 Computer Typing I:
Keyboarding and Formatting
3 Credits 5 Periods
Keyboard mastery; letters, tables, and reports; office production; and manuscripts. Prerequisites: None.

OAS101AA Computer Typing I:
Keyboard Mastery
1 Credit 1.7 Periods
Incorporates correct touch typing principles. Prerequisites: None.

\section*{OAS108 Business English}

3 Credits 3 Periods
Comprehensive coverage of correct use of English grammar including spelling, punctuation, capitalization, and number style mechanics in a business context. Prerequisites: None.

OAS118 10-Key By Touch 1 Credit 1.7 Periods
Touch system of numeric keys on ten-key pads. Prerequisites: None.

\section*{OAS125 Introduction to the Professional Office}

3 Credits 3 Periods
Expectations of the professional in the electronic office of today. Realistic and practical coverage of roles, responsibilities, and environment. Prerequisites: None.

\section*{OTHER}

\author{
AAA115 Creating College Success \\ 1 Credit 1 Period
}

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 students' educational experience. Prerequisites: None.

\section*{AAA150 Strategies for College Success}

3 Credits 3 Periods
Focus on increasing student success through college orientation and personal growth, study skills development, and educational and career planning. Prerequisites: None.

\section*{AHU245 Arabic Culture and Islam}

G, HU
3 Credits 3 Periods
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 heritage. Prerequisites: None.

\section*{AIT100 Industrial Safety}

1 Credit 1 Period
Safety requirements for all National Institute for Metalworking Skills (NIMS) duty areas. Prerequisites: None.

\section*{AIT105 Maintenance Operations}

\section*{3 Credits 2 Periods}

Overview of the area of maintenance operations of a manufacturing facility. Preparation to sit for the NIMS Duty Area 1: Maintenance Operations Certification Exam. Prerequisites: None.

\section*{AIT110 Mechanical Systems}

\section*{3 Credits 2 Periods}

Overview of the area of basic mechanical systems of a manufacturing facility. Preparation to sit for the NIMS Duty Area 2: Basic Mechanical Systems Certification Exam. Prerequisite: None.

\section*{AIT115 Hydraulic Systems}

\section*{3 Credits 2 Periods}

Overview of the NIMS areas of hydraulic systems of a manufacturing facility. Preparation to sit for the NIMS Duty Area 3: Basic Hydraulic Systems Certification Exam. Prerequisites: None.

\section*{AIT120 Pneumatic Systems}

\section*{3 Credits 2 Periods}

Overview of the NIMS areas of pneumatic systems of a manufacturing facility. Preparation to sit for the NIMS Duty Area 4: Pneumatic Systems Certification Exam. Prerequisites: None.

\section*{AIT123 Electrical Wiring J-STD Soldering Certification}

\section*{3 Credits 4 Periods}

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, surface mount components, and inspection. Certification is verified by a certified IPC trainer (CIT). Prerequisites: Permission of Instructor.

\section*{AIT125 Electrical Systems 1}

\section*{3 Credits 2 Periods}

Overview of the area of electrical systems of a manufacturing facility. Preparation to sit for the NIMS Duty Area 5: Electrical Systems Certification Exam. Prerequisites: None.

\section*{AIT128 A-620 Cable and Wire Harness \\ Assembly Certification}

\section*{3 Credits 4 Periods}

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 cable assemblies, electrical shielding, wire marking and labeling, and testing methodologies. Certification is verified by a certified IPC trainer (CIT). Prerequisites: None.

\section*{AIT130 Maintenance Piping}

\section*{3 Credits 2 Periods}

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 Certification Exam. Prerequisites: None.

\section*{AIT205 Electronic Control Systems 1}

\section*{3 Credits 2 Periods}

Overview of the area of Electronic Control Systems 1 of a manufacturing or industrial facility. Preparation to sit for the NIMS Duty Area 6: Electronic Control Systems Certification Exam. Prerequisites: A grade of 'C' or better in AIT125, or permission of Instructor.

\section*{AIT210 Electronic Control Systems 2}

\section*{3 Credits 2 Periods}

Overview of the area of Electronic Control Systems 2 of a manufacturing and industrial facility. Preparation to sit for the NIMS Duty Area 6: Electronic Control Systems Certification Exam. Prerequisites:

A grade of C or better in AIT205, or permission of Instructor or Corequisites: AIT205.

\section*{AIT215 Process Control Systems}

\section*{4 Credits 2 Periods}

Overview of the area of Process Control Systems of a manufacturing or industrial facility. Preparation to sit for the NIMS Duty Area 7: Process Control Systems Certification Exam. Prerequisites: A grade of 'C' or better in AIT125, or permission of Instructor.

\section*{AIT225 Electrical Systems 2}

\section*{3 Credits 2 Periods}

Overview of the area of electrical systems of a manufacturing facility. Preparation to sit for the NIMS Duty Area 5: Electrical Systems Certification Exam. Prerequisites: A grade of 'C' or better in AIT125, or permission of Instructor.

\section*{AIT291 Automated Industrial Technology Internship}

\section*{3 Credits 6 Periods}

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 specific manufacturing processes. Prerequisites: A grade of ' \(C\) ' or better in AIT225, or permission of Instructor or Corequisites: AIT225.

\section*{ALT100 Academic Literacy Through Integrated Reading and Writing} 4 Credits 4 Periods
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-related reading and writing tasks. Prerequisites: An appropriate District placement.

\section*{ASE101 Introduction to Automotive}

\section*{2 Credits 3 Periods}

Introduction to the standards of the automotive industry as well as an overview of the major automotive systems, safety practices, workplace habits, tools and equipment. Prerequisites: None.

\section*{ASE102AU Automotive Express Service 2 Credits 1 Period}

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 service. Prerequisites: None.

\section*{ASE111AU Engine Diagnosis and Inspection \\ 2 Credits 1 Period \\ Diagnosis and inspection of automotive internal combustion engines. Prerequisites: None.}

\section*{ASE113 Engine Repair}

\section*{4 Credits 8 Periods}

Diagnosis, disassembly, repair and reassembly of automotive internal combustion engines. Prerequisites: None.

\section*{ASE113AU Engine Repair}

4 Credits 2 Periods
Diagnosis, disassembly, repair and reassembly of automotive internal combustion engines. Prerequisites: None.

\section*{ASE121AU Automatic Transmission and Transaxle \\ 4 Credits 2 Periods}

Principles of automotive operation, servicing and repair procedures for automatic transmissions / transaxles; includes diagnostics and testing of mechanical, electrical, and hydraulic components. Prerequisites: None.

\section*{ASE131AU Manual Drive Trains and Axles}

4 Credits 2 Periods
Operation, diagnosis, service, and repair of the automotive powertrain. Includes manual transmissions/transaxles, clutches, drive axles, driveshafts, differentials, four-wheel drive, and all-wheel drive. Prerequisites: None.

ASE141 Steering, Suspension and Pre-Alignment
2 Credits 4 Periods
Principles and operation of automotive suspension and steering systems. Prerequisites: None.

\section*{ASE141AU Steering, Suspension and Pre-Alignment 2 Credits 1 Period \\ Principles and operation of automotive suspension and steering systems. Prerequisites: None.}

\section*{ASE151 Introduction to Brake Systems} 2 Credits 4 Periods
Fundamentals and operation of automotive braking systems. Includes training in service, testing, and repair of basic brake and brake-related components. Prerequisites: None.

\section*{ASE151AU Introduction to Brake Systems} 2 Credits 1 Period
Fundamentals and operation of automotive braking systems. Includes training in service, testing, and repair of basic brake and brake-related components. Prerequisites: None.

\section*{ASE161 Basic Automotive Electrical/ Electronics}

2 Credits 3 Periods
The basic principles of automotive electricity and electrical systems. Prerequisites: None.

\section*{ASE161AU Basic Automotive Electrical/ Electronics}

2 Credits 1 Period
The basic principles of automotive electricity and electrical systems. Prerequisites: None.

ASE162 Automotive Battery, Starting and Charging Systems
2 Credits 3 Periods
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.

\section*{ASE162 Automotive Battery, Starting and Charging Systems}

2 Credits 3 Periods
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.

ASE162AU Automotive Battery, Starting and Charging Systems
2 Credits 1 Period
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.

ASE171AU Automotive Heating, Ventilation and Air Conditioning Systems 3 Credits 2 Periods
The theory and operation of automotive heating, ventilation and air conditioning systems. Training in diagnosis, service and repair of these systems. Prerequisites: None.

ASE181 Introduction to Engine Performance
2 Credits 4 Periods
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 lubrication and cooling systems. Prerequisites: None.

\section*{ASE181AU Introduction to Engine Performance}

2 Credits 1 Period
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 lubrication and cooling systems. Prerequisites: None.

\section*{ASE182AU Fundamentals of Automotive Fuel/Air and Ignition Systems}

\section*{2 Credits 1 Period}

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.

\section*{ASE241AU Advanced Steering, Suspension and Alignment}

2 Credits 1 Period
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.

\section*{ASE251AU Advanced Brake Systems}

2 Credits 1 Period
The operation, diagnosis, service and repair of advanced automotive brake systems. Prerequisites: A grade of ' \(C\) ' or better in ASE151, or permission of Instructor.

\section*{ASE261AU Automotive Electrical Diagnostics and Repair}

2 Credits 1 Period
Principles of automotive electrical diagnostics and repair. Prerequisites: A grade of ' \(C\) ' or better in ASE162, or permission of Instructor.

\section*{ASE262AU Automotive Electronic Control Systems}

2 Credits 1 Period
Principles and operation of automotive electronics and electronic control systems. Prerequisites: A grade of 'C' or better in ASE261, or permission of Instructor.

\section*{ASE281AU Computerized Automotive Engine Control Systems}

2 Credits 1 Period
The theory of computerized engine control systems as they relate to engine performance and emissions control. Prerequisites: A grade of 'C' or better in ASE182, or permission of Instructor.

\section*{ASE282AU Advanced Engine Performance Diagnosis}

\section*{2 Credits 1 Period}

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.

\section*{ASE298AC Special Projects}

\section*{3 Credits 3 Periods}

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 development. Prerequisites: Permission of Program Director or Instructor.

\section*{ASL101 American Sign Language I}

4 Credits 4 Periods
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 American Sign Language (A.S.L.). Prerequisites: None. ASL103 suggested as a corequisite but not required.

\section*{ASL101 American Sign Language I}

\section*{4 Credits 4 Periods}

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 American Sign Language (A.S.L.). Prerequisites: None. ASL103 suggested as a corequisite but not required.

\section*{ASL102 American Sign Language II}

\section*{4 Credits 4 Periods}

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 stressed with continued development of sign vocabulary. Prerequisites: A grade of ' \(C^{\prime}\) or better in ASL101 or permission of Department or Division. Completion of prerequisites within the last three years is required.

\section*{ASL201 American Sign Language III} 4 Credits 4 Periods
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 the last 3 years is required.

\section*{ASL202 American Sign Language IV} 4 Credits 4 Periods
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: 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 within the last 3 yrs is required.

\section*{ASL298AA Special Projects}

\section*{1 Credit 1 Period}

Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: Permission of Program Director or Instructor.

\section*{ATP100 Introduction to Manufacturing and Programmable Logic Controllers}

\section*{3 Credits 6 Periods}

Explores the origin and basic operation of programmable logic controllers (PLC) in manufacturing processes. Laboratory exercises include ladder logic programming, installation, adjustment, and testing of digital and analog sensors, signal conditioners, and basic troubleshooting concepts. Prerequisites: None.

\section*{ATP106 Industrial Electrical Systems}

3 Credits 6 Periods
Safety for electrical power and control systems, DC and AC circuit analysis, DC power supplies, switches and proximity sensors, inductors and capacitors, electrical and engineering documentation and schematics, digital multimeter and oscilloscope operation, solid state relays, and industrial control transformers. Prerequisites: None.

\section*{ATP111 Mechanical Systems and Maintenance}

\section*{3 Credits 6 Periods}

Examination of mechanical drive systems. Includes fundamentals of direct drives, belt and pulley drives, chain drives and gear drives. Explores calculating and measuring quantities such as power, speed, torque, speed and torque reduction/amplification, and backlash. Also includes hands-on experience assembling and aligning components, testing and troubleshooting systems. Prerequisites: None.

\section*{ATP115 Fluid Power}

\section*{3 Credits 6 Periods}

Fundamental industrial fluid power concepts including hydraulic and pneumatic installation, maintenance, and adjustments for the control of automated manufacturing systems. Prerequisites: None.

\section*{ATP123 Electrical Wiring J-STD Soldering Certification}

\section*{3 Credits 4 Periods}

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, surface mount compo-
nents, and inspection. Certification is verified by a certified IPC trainer (CIT). Prerequisites: Permission of Instructor.

\section*{ATP160 Programmable Logic Controllers 1}
- Introduction to Ladder Logic

\section*{3 Credits 2 Periods}

Introductory lecture and laboratory course explores the origin and basic operation of Programmable Logic Controllers (PLC) with laboratory exercises including wiring of hardware, ladder logic programming and basic troubleshooting concepts. A grade of 'C' or better required in all Prerequisites. Prerequisites or Corequisites: ATP135, or ELC119, or permission of Program Director.

\section*{ATP175 Introduction to Motors and Motor Controls}

\section*{2 Credits 3 Periods}

Introduction to direct current and alternating current (AC) motors, types of direct current (DC) and alternation motors. Prerequisites: A grade of ' \(C\) ' or better in (ATP130 and ATP135) or ELE111.

\section*{ATP190 Industrial Robotics}

\section*{3 Credits 4 Periods}

Introduction to industrial robotics covering topics such as safety, operation, control technology, and programming. Prerequisites: A grade of 'C' or better in GTC108 or higher level math course.

\section*{ATP200 Sensors and Measurement 2 Credits 3 Periods}

Applications of sensors and measurement including correct sizing and application. Prerequisites: A grade of 'C' or better in ATP130 and ATP135, or permission of Instructor.

\section*{ATP201 Programmable Logic Controller (PLC) Systems} 3 Credits 6 Periods
Advanced lecture and laboratory course builds
upon the foundations covered in introductory course, including development and documentation of advanced ladder logic and function block programming, Programmable Logic Controller (PLC) control of variable frequency devices, PLC Networks and the installation and programming of Human Machine Interfaces (HMI). Prerequisites: A grade of 'C' or better in (ATP100 and ATP106) or permission of Instructor.

\section*{ATP205 Electric Motors and Controls}

\section*{3 Credits 6 Periods}

Examination of electrical motor control, power, and protection systems. Includes fundamentals of single and three-phase power, power, control and protection circuits. Also includes variable frequency drive (VFD), silicon controlled rectifier (SCR) control, and programmable logic controller (PLC). Prerequisites: A grade of 'C' or better in (ATP100 and ATP106) or permission of Instructor.

\section*{ATP210 Process Control}

\section*{3 Credits 6 Periods}

Introduction to instrumentation and control systems for wet type (continuous product) and dry type (discrete product) production systems. Includes process control concepts, instrumentation tag information, piping and instrumentation diagrams, level and flow sensing devices, Proportional-Inte-gral-Derivative (PID) controllers, Programmable Logic Controllers (PLC), and final control elements. Prerequisites: A grade of 'C' or better in (ATP100 and ATP106) or permission of Instructor.

\section*{ATP215 Automation System Integration}

\section*{2 Credits 6 Periods}

Capstone course regarding the implementation of the planning, construction, adjustment, and testing of an industrial control system needed for the development of a functional automated system. Prerequisites: A grade of 'C' or better in (ATP201, ATP205, and ATP210) or permission of Instructor.

\section*{ATP225 Robotics Operations and Programming}

\section*{3 Credits 6 Periods}

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 Handling Tool application, test run, and refine the program and production setup. Prerequisites: A grade of 'C' or better in (ATP190, ATP201, and ATP205) or permission of Instructor.

\section*{ATP298AA Special Projects}

\section*{1 Credit 1 Period}

Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: Permission of Program Director or Instructor.

\section*{ATP298AB Special Projects}

\section*{2 Credits 2 Periods}

Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: Permission of Program Director or Instructor.

\section*{ATP298AC Special Projects}

\section*{3 Credits 3 Periods}

Organized and tailored around the interests and
needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: Permission of Program Director or Instructor.

\section*{CLD110 Amazon Web Services Academy Cloud Foundations}

2 Credits 3 Periods
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 to prepare students for the AWS Certified Cloud Practitioner exam. Prerequisites: None. CIS105 suggested but not required.

\section*{CON100 Introduction to Construction}

2 Credits 2 Periods
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 construction project. Prerequisites: None.

\section*{CON101 Construction and Culture}

H, HU
3 Credits 3 Periods
The cultural context of construction, emphasizing the evolution and expansion of constructed environments as expressions of ethical and historical value systems. Prerequisites: None.

\section*{CON106 Foundations of Concrete}

SQ
4 Credits 2 Periods

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 calculations and statistical analysis of strength testing. Prerequisites: None.

\section*{CON130 Computer Aided Design and Drafting}

\section*{3 Credits 6 Periods}

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 computer and board. Prerequisites: None.

\section*{CON181 Cost Estimating}

\section*{3 Credits 3 Periods}

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 Standards and their impact on construction cost. Prerequisites: None.

\section*{CON221 Applied Statics}

\section*{3 Credits 3 Periods}

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, shear and moment diagrams, centroids, and moments of inertia. Prerequisites: None.

\section*{CON223 Strength of Materials}

\section*{3 Credits 3 Periods}

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 and internally. Prerequisites: None.

\section*{CON241 Surveying}

\section*{3 Credits 2 Periods}

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 government engineering agencies. Prerequisites: None.

\section*{CON243 Heavy Construction Equipment, Methods, and Materials}

\section*{3 Credits 3 Periods}

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, maintenance, and programs for construction of dams, tunnels, roads, and excavations of buildings. Prerequisites: None.

CON244 Working Drawing Analysis: Blueprint Reading

\section*{3 Credits 3 Periods}

Detailed analysis and interpretation of construction drawings (blueprint reading); interpretation of symbols, annotations, conventions, terms of trade; and understanding of drawing, dimensioning, plan organization, and specifications. Prerequisites: None.

CON251 Microcomputers for Constructors

\section*{3 Credits 3 Periods}

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 spreadsheet applications in construction. Prerequisites: None.

\section*{CON252 Building Construction Methods, Materials, and Equipment 3 Credits 3 Periods \\ Comprehensive study of construction methods, materials, codes, and equipment used in building construction. Prerequisites: None.}

\section*{CON262 Introduction International Residential Code (IRC)}

3 Credits 3 Periods
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 inspection). Prerequisites: None.

\section*{CON263 Building Codes}

3 Credits 3 Periods
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. Prerequisites: None.

\section*{CON271 Construction Safety}

\section*{3 Credits 3 Periods}

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 (OSHA) standards along with biological aspects of construction safety. Prerequisites: None.

\section*{CON273 Electrical Construction Fundamentals}

3 Credits 3 Periods
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, transformers, electrical installations, codes, cogeneration, energy conservation, estimating, safety and related blueprint readings. Prerequisites: None.

\section*{DIE104 Electrical for Diesel Engines I}

3 Credits 4 Periods
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 schematic reading, interpretation, and testing. Prerequisites: None.

\section*{DIE106 Mobile Hydraulics and Pneumatics 3 Credits 4 Periods}

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 schematic interpretation emphasized. Pneumatic functions discussed. Prerequisites: None.

\section*{DIE108 Heavy Duty Diesel PowerTrains} 3 Credits 4 Periods
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 disassembly will be covered. Prerequisites: None.

\section*{DIE112 General Diesel Engines}

\section*{3 Credits 4 Periods}

Introduction to diesel engine operation and related systems. Concepts include basic engine maintenance, engine tear-down, inspection, reassembly, and all necessary adjustments. Prerequisites: None.

\section*{FMT107 Career Pathways in the Media HU}

3 Credits 3 Periods
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 growth of new communications technologies. Prerequisites: None.

\section*{GIS205 Geographic Information Technologies}

CS

\section*{3 Credits 3 Periods}

Introduces modern geographic information technologies, including cartography, Geographic Information System (GIS), remote sensing, global positioning systems, and statistical analyses. Prerequisites: None.

\section*{GIS211 Geographic Information Science I} CS

\section*{4 Credits 4 Periods}

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 mapping environments. Prerequisites: A grade of 'C' or better in CIS105, or CSC180, or permission of Instructor.

\section*{GIS220 Introduction to ArcPy Scripting}

\section*{3 Credits 3 Periods}

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 tools and order based upon workflow analysis. Prerequisites: A grade of 'C' or better in GIS211.

\section*{GIS222 Geographic Information Science II} 3 Credits 3 Periods
Geographic Information Science (GIS) as a basis for microcomputer spatial analysis and synthesis. Includes digitizing, database organization, spatial retrieval and graphics. Prerequisites: A grade of ' C ' or better in GIS211 or permission of Instructor.

\section*{GST202 Games, Culture and Aesthetics} G, HU
3 Credits 3 Periods
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 conveyed through the global phenomenon of games. 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.

\section*{INS100 Insurance Industry Profession} 3 Credits 3 Periods 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 behavior in the insurance industry. Prerequisites: None.

\section*{INS200 Principles of Property and Liability Insurance}

\section*{3 Credits 3 Periods}

Basic principles of insurance. Introduction to insurance contracts. Overview of company functions and operations including ratemaking, underwriting, claims, adjusting, and marketing. Prerequisites:
None.

\section*{MFG100 Tool Room: Introduction to Machine Processes}

\section*{2 Credits 2 Periods}

Safe practices in the manufacturing environment. Organizational structure of a manufacturing organization. Equipment and processes used in material removal process. Required documentation. Tools and measurement devices used in manufacturing. Applied mathematics used in a manufacturing. Specific coolants, cooling oils and chemical used in the material removal process. Operator certification check sheet. Prerequisites: None.

\section*{MFG102 Machine Processes, Theory and Application}

3 Credits 2 Periods
Study and application of principles and theory of common metal removal processes including drilling, reaming, boring, milling, turning, and grinding. Cutting tool geometry and materials, cutting speeds and feeds, coolants, and precision measurement. Prerequisites: None.

\author{
MFG111 Machine Trades Print Reading and Inspection \\ 4 Credits 2 Periods
}

Analysis and interpretation of technical drawings (prints) common to manufacturing. Types of print formats, line types, and view projections. Mathematical calculations for determining dimensions. Symbols and features present on prints. Introduction to Geometric Dimensioning and Tolerancing (GD\&T) as it relates to prints. Setiup and use of inspection tools, equipment, per industry standards including the use of surface plates, right angle blocks, cylindrical squares, \(\mathrm{V}_{j}\) Blocks, and related equipment. Selection, completion and interpretation of information from inspection forms. Inspection alternatives, tool control activities, and application of geometric dimensioning and tolerance. Prerequisites: (District placement into MAT090 or MAT091 or MAT092 or higher) or permission of Department or Division.

\section*{MFG113 Geometric Tolerancing and Dimensioning Application}

\section*{3 Credits 2 Periods}

This course discusses geometric dimensioning and tolerance (GDT) concepts in blueprints and solid modeling using the current American Society of Mechanical Engineers (ASME) Y14.5 Standard. Using SolidWorks Application this course will demonstrate and evaluate the correctness of GDT applications. Prerequisites: A grade of 'C' or better in (MET109 and MET112) or MFG111 or permission of Program Director.

\section*{MFG206 CNC Programming of Word} Address Language
3 Credits 3 Periods
Computer Numerical Control (CNC) Programming of Word Address Language (G\&M Code) for CNC Machine tools. 2, 3 and \(4 i\) Axis CNC Programming for CNC controlled machines. Computer based tool path verification, CNC controller tool path verification and CNC machine tool program verification. Study of tooling, speeds, feeds and material removal as related to CNC machine tools and CNC
controlled machines. Prerequisites: A grade of 'C' or better in MFG102 or machine shop experience or permission of Program Director.

\section*{MFG214 CNC: Operator Training}

\section*{3 Credits 2 Periods}

Students will learn Computer Numerical Control (CNC) mill and lathe, qualified setup and functioning programs, milling and turning operations, changing of tool values, replacing and qualifying tooling, CNC operator training including machine controls, tooling and operations and proper machine shop safety. Prerequisites: A grade of 'C' or better in MFG102 or permission of Program Director. Corequisites:
MFG206 or permission of Department or Division.

\section*{MFG215 CNC Operator Training II}

\section*{3 Credits 2 Periods}

The focus of this course is on machine programming, advanced long hand G\&M code programming, and set up as it relates to Computer Numerical Control (CNC) machine operations. Prerequisites: A grade of 'C' or better in MFG214 or permission of Instructor.

\section*{MFG236 CAD/Cam Mastercam Programming Level I}

\section*{3 Credits 1 Period}

Includes CAM System Programming for CNC control machine with the use of Master CAM using coding, programming, and tool path geometry. Prerequisites: A grade of 'C' or better in MFG206 or permission of Program Director.

\section*{MFG246 Advanced CAD/CAM CNC Programming: MasterCam \\ 3 Credits 1 Period}

Computer programming of three-dimensional (3D) (3 and 4 axis simultaneous) Computer Numerical Control (CNC) Machines. Tool path generation for CNC mill, lathe, Wire EDM, router, laser, waterjet and hybrid CNC machine tools. Tool path geome-
try creation, importation and modification. Cutting parameters selection and control, including tool geometry, speeds, feeds and tool path optimization. Tool path simulation for material removal verification with solid and wireframe graphics. Produce Word Address (Gcode) CNC tool code production and output verification on Fuji Automatic NUmerical Control (FANUC) and Haas Automation based machine tools. Prerequisites: A grade of 'C' or better in MFG236.

\section*{MFG250 Manual Machining: NIMS Level I Certification Test Preparation}

\section*{6 Credits 2 Periods}

Preparation for latest National Institute for Metalworking Skills (NIMS) Machining Level I certification in Drill Press, Manual Mill, Turning Between Centers, Turning Chucking and Grinding. Prerequisites: A grade of 'C' or better in MFG102.

\section*{MFG254 Solids Modeling-Solidworks}

\section*{3 Credits 2 Periods}

CAD modeling, solid part generation, assembly of parts, and working drawing creation. Applications of CAD/CAM in Computer Integrated Technology (CIM). Prerequisites: None.

\section*{MMT184 Computer Animation}

\section*{3 Credits 6 Periods}

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. Screening and discussion of selected animated short films and videos. Prerequisites: A grade of ' C ' or bettter in ART100 or ART111 or ART116 or permission of Instructor.

\section*{MMT185 3-D Modeling for Animation}

3 Credits 6 Periods
Basic concepts of 3-D modeling. Anatomy of computer geometry; basic elements that make comput-
er models-curves, surfaces, nurbs, and polygons.
3-D translation, shading, materials, and rendering. Prerequisites: A grade of 'C' or better in ADA/ART/ MMT184 or ADA/ART184AC or permission of the Instructor.

\section*{MMT186 Modeling for Digital Media 3 Credits 6 Periods}

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 ADA/ART/MMT184 or permission of Instructor.

\section*{MPT101MP Technical Documentation}

\section*{3 Credits 1 Period}

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.

\section*{MPT110MP Inspection Techniques}

\section*{3 Credits 1 Period}

Setup and use of inspection tools and equipment per current industry standards. Selection, completion and interpretation of information from inspection forms. Prerequisites: None.

\section*{MPT130MP CNC Machine Operator 6 Credits 3 Periods}

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 application, qualifying tooling, and tool offsets to produce a product to industry standards. Prerequisites: None.

\section*{MPT140 Manual CNC Programming}

\section*{3 Credits 2 Periods}

Introduction to Manual Computer Numerical Control (CNC) programming of Word Address Language (G\&M Code) for CNC machine tools. Multi-jaxis CNC programming for CNC controlled machines. Computer based tool path verification, CNC controller tool path verification and CNC machine tool program verification. Prerequisites: A grade of 'C' or better in (MPT131 or MPT131MP), or machine shop experience or permission of Program Director.

\section*{MPT150 Introduction to SolidWorks}

\section*{3 Credits 2 Periods}

Introduction to CAD modeling, solid part generation, assembly of parts, and working drawing creation. Applications of CAD/CAM in Computer Integrated Technology (CIM). Prerequisites: None. Students interested in taking MPT250 Solid Design II: Advanced Part Modeling: SolidWorks are advised to take MPT151 Solid Design I: SolidWorks.

\section*{MPT220 Manual Machining: \\ NIMS Level I Certification}

\section*{6 Credits 6 Periods}

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.

\section*{MPT260MP Computer Aided Manufacturing (CAM) I}

\section*{3 Credits 1 Period}

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, fourth and fifth positioning machining centers, and 2-axis turning centers. Prerequisites: A grade of ' \(C\) ' or better in MPT131 or MPT131MP.

\section*{MPT270 Tooling, Fixtures, and Gauges}

\section*{3 Credits 3 Periods}

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 4 NIMS in CNC Machining or Manual Machining) and (MPT150 or MPT151)), or CAD101, or CAD201, or CAD215, or Certified SolidWorks Associate (CSWA).

\section*{NSONSO New Student Orientation 0 Credits 1 Period}

An orientation for new and returning students and in support of academic courses. Information provided on a variety of instructional programs and campus services, may include student success techniques and tours of specific campus facilities.

\section*{PME190 Introduction to ECG Rhythm Analysis and Interpretation for EMS Professionals}

\section*{3 Credits 3 Periods}

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, analysis, and interpretation of various dysrhythmias and cardiovascular conditions. Prerequisites: None.

\section*{PME191 Introduction to Pharmacology for EMS Professionals}

\section*{3 Credits 3 Periods}

Designed to provide an overview of the principles of pharmacology and pharmacologic agents utilized in patient management plans. Includes pharmacokinetics, pharmacodynamics, physiology of pharmacology, calculating drug dosages, and drug profiles. Prerequisites: None.

\section*{PME201 Advanced Cardiac Life Support} (ACLS) Initial Provider in Paramedicine

\section*{1 Credit 2 Periods}

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, pharmacologic agents, and other interventions used in advanced cardiac life support. Prerequisites: Admission into the Paramedic Education Program.

\section*{PME240 Pharmacology in Paramedicine}

\section*{3 Credits 5 Periods}

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 diagnosis and to implement a management plan for medical emergencies and trauma. Prerequisites: Admission into the Paramedic Education Program.

\section*{PME245 Airway and Ventilatory Management in Paramedicine}

\section*{3 Credits 4 Periods}

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 paramedic scope of practice for assuring airway patency, adequate mechanical ventilation, and respiration for all age groups. Pre-
requisites: Admission into the Paramedic Education Program.

\section*{PME250 Comprehensive Patient Assessment in Paramedicine}

\author{
1 Credit 3 Periods
}

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 emergencies and trauma. Prerequisites: Admission into the Paramedic Education Program.

\section*{PME251 Medical Emergencies in Paramedicine I \\ 4 Credits 8 Periods}

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 scope of practice for respiratory and cardiovascular emergencies. Prerequisites: Admission into the Paramedic Education Program.

\section*{SCT100 Introduction to Sustainable Built Environments}

\section*{3 Credits 3 Periods}

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 and Environmental Design (LEED). Prerequisites: None. SCT100 will not complete the requirements to sit for the LEED Accredited Professional examinations. Additional study is necessary to successfully pass the LEED Green Associates examination.

\section*{SCT100 Introduction to Sustainable Built Environments}

\section*{3 Credits 3 Periods}

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 and Environmental Design (LEED). Prerequisites: None. SCT100 will not complete the requirements to sit for the LEED Accredited Professional examinations. Additional study is necessary to successfully pass the LEED Green Associates examination.

\section*{SPH245 Hispanic Heritage in the Southwest}

C, HU
3 Credits 3 Periods
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.

\section*{SPH298AC Special Projects}

\section*{3 Credits 3 Periods}

Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: Permission of Program Director or Instructor.

\section*{SPH298AC Special Projects}

\section*{3 Credits 3 Periods}

Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guid-
ance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: Permission of Program Director or Instructor.

\section*{SSH111 Sustainable Cities}

\section*{G, HU, SB}

3 Credits 3 Periods
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 contexts. Prerequisites: None.

\section*{SUS100 Introduction to Sustainability G}

3 Credits 3 Periods
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 sustainability challenges and responses at each level. Prerequisites: None.

\section*{SUS110 Sustainable World SB}

3 Credits 3 Periods
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 renewable energy concerns and crises. Prerequisites: None.

\section*{SUS231 Careers in Sustainability}

\section*{1 Credit 1 Period}

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 networking skills and job search assistance. Prerequisites: None.

\section*{SUS232 Professional Skills in Sustainability Practice}

3 Credits 3 Periods
Introduction to professional skills in sustainability through interpersonal competence. Emphasis on teamwork, project management, stakeholder engagement, communication, and continuous learning. Prerequisites: A grade of 'C' or better in SUS110, SSH111, and (ENG101 or ENG107).

\section*{THF115 Makeup for Stage and Screen}

\section*{3 Credits 4 Periods}

Purposes, materials, and techniques of makeup for stage and screen. Prerequisites: None.

\section*{THF205 Introduction to Cinema}

HU
3 Credits 3 Periods
Survey of the history and development of the art of motion pictures, including criticism of aesthetic and technical elements. Prerequisites: None.

\section*{THF209 Acting for the Camera}

\section*{3 Credits 4 Periods}

Survey of the history and development of the art of motion pictures, including criticism of aesthetic and technical elements. Prerequisites: None.

\section*{THF210 Contemporary Cinema}

HU
3 Credits 3 Periods
A study of contemporary films, directors and critics with emphasis on evaluating film as an art form. Prerequisites: None.

THF215 Advanced Makeup Techniques for Stage and Screen
3 Credits 4 Periods

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 THF115.

\section*{THF216 Wig and Hair Production for Theatre and Film}

\section*{3 Credits 4 Periods}

Introduction to wig technology, including the use of tools and techniques for making, ventilating, measuring, and styling period wigs. Prerequisites: None.

\section*{VET101 Introduction to Veterinary Technology}

\section*{3 Credits 2 Periods}

This course introduces the role of the veterinary paraprofessional to the veterinary science industry and professional development including ethics, professionalism and legal applications. Students will gain an introduction into animal husbandry and nutrition, animal behavior, species and breed identification, the human-animal bond, biosecurity, and an introduction into equine medicine, livestock medicine, companion animal medicine, and lab animal medicine. Prerequisites: None.

\section*{VET101LL Animal Care Skills I Laboratory 2 Credits 2 Periods \\ 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 operations of a multi-species veterinary facility. Prerequisites: None. Corequisites: VET101.}

\section*{VET103 Veterinary Assistant I}

\section*{3 Credits 2 Periods}

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 introduce 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, vaccinations and other basic assisting skills. Prerequisites: A grade of ' \(\mathrm{C}^{\prime}\) or better in VET101. High school biology strongly recommended.

\section*{VET109 Veterinary Assistant Internship} 1 Credit 1 Period
This course provides Veterinary Assistant program students with off-campus clinical experience in a small animal general veterinary practice. There is 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. The internship includes instruction and evaluation by veterinarians or veterinary technicians guided by the National Association of Veterinary Technicians in America Veterinary Assistant Student Essential and Recommended Skills list. Prerequisites: A grade of 'C' or better in VET101, VET103, and VET104.

\section*{VET112 Animal Nursing I}

\section*{0 Credit 2 Periods}

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 various types of animal care equipment. Introduction to
laboratory techniques. Professional ethics and the human-animal bond.Prerequisites: A grade of 'C' or better in VET101 and admission to the Veterinary Technology/Animal Health program or permission of Instructor.

\section*{VET132 Veterinary Office Management and Client Communication}

\section*{3 Credits 3 Periods}

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 professionalism. Use of computers for data entry, patient record management and inventory control. Prerequisites: A grade of 'C' or better in VET101 or permission of Instructor.

\section*{VET140 Animal Care Skills II \\ 2 Credits 2 Periods}

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 clinical internships. VET140 may be repeated for a total of four (4) credit hours. Prerequisites. None. Corequisites: VET150 or VET151 and admission to the Veterinary Technology program.

\section*{VET150 Veterinary Anatomy and Physiology I}

\section*{3 Credits 3 Periods}

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 or exemption by district placement, ENG102, MAT120, and VET101) and admission to the Veterinary Technology/Animal Health Program.

\section*{VET150LL Veterinary Anatomy and Physiology Laboratory I}

1 Credit 3 Periods
Laboratory experience in support of VET150. Includes dissection of preserved animal specimens. Prerequisites: None. Corequisites: VET150.

\section*{VET151 Veterinary Anatomy and Physiology II}

\section*{3 Credits 3 Periods}

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, and veterinary treatments. Prerequisites: A grade of 'C' or better in VET150 or permission of Instructor.

\section*{VET200 Veterinary Clinical Pathology Methods}

\section*{3 Credits 3 Periods}

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 equipment, laboratory safety and management, and quality control. Prerequisites:
A grade of 'C' or better in BIO 205 or permission of Instructor. Corequisites: VET223.

\section*{VET201 Animal Care Skills III}

\section*{2 Credits 2 Periods}

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 clinical internships. VET201 may be repeated for a total of four (4) credit hours. Prerequisites: None. Corequisites: VET210 and VET240 and admission to the Veterinary Technology program.

\section*{VET210 Animal Nursing II}

\section*{2 Credits 2 Periods}

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 instruments and packs. Common diagnostic and therapeutic procedures on animals. Prerequisites: A grade of 'C' or better in (VET112 and VET151) or permission of Instructor.

\section*{VET220 Veterinary Pharmacology for the Veterinary Technician \\ 3 Credits 5 Periods}

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 problems and calculating drug doses. Prerequisites: A grade of 'C' or better in VET101 and VET151. Corequisites: VET223.

\section*{VET223 Animal Diseases}

\section*{3 Credits 5 Periods}

Study of common infectious, parasitic, metabolic, immunologic, and degenerative diseases of domestic animals. Infectious disease transmission, mech-
anisms 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. Diagnostic techniques including gross and microscopic identification of common animal pathogens. Prerequisites: A grade of ' C ' or better in VET151. BIO205 recommended.

\section*{VET230 Veterinary Radiology and Imaging for the Veterinary Technician}

\section*{3 Credits 3 Periods}

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 radiographic positioning as taught in lecture. Prerequisites: (A grade of ' C ' or better in VET150 and VET150LL) or permission of Instructor.

\section*{VET235 Veterinary Technician Proficiency}

\section*{2 Credits 2 Periods}

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 Veterinary Medical Association. May included field trips or guest lecturers. Prerequisites: A grade of 'C' or better in VET210, VET220, and VET223. Corequisites: VET240.

VET240 Veterinary Anesthesia, Surgery, and Emergency Nursing
3 Credits 3 Periods
Veterinary surgical nursing skills associated with
aseptic technique and proper protocol in the surgery 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 patients for vital signs. Prerequisites: A grade of ' \(C\) ' or better in VET210 and VET220.

\section*{VET250AA Veterinary Technician Internship}

\section*{. 5 Credits . 5 Periods}

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 Veterinary Medical Association's Veterinary Technology Student Essential and Recommended Skills list. Prerequisites: A grade of 'C' or better in VET112, VET132, and VET151.

\section*{VET250AB Veterinary Technician Internship}

\section*{. 5 Credits . 5 Periods}

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 Veterinary Medical Association's Veterinary Technology Student Essential and Recommended

Skills list. Prerequisites: A grade of 'C' or better in VET250AA.

\section*{VET250AC Veterinary Technician Internship}

\section*{. 5 Credits . 5 Periods}

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 my 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 veterinarians or veterinary technicians guided by the American Veterinary Medical Association's Veterinary Technology Student Essential and Recommended Skills list. Prerequisites: A grade of 'C' or better in VET250AB or permission of Instructor.

\section*{VET250AD Veterinary Technician Internship}

\section*{. 5 Credits . 5 Periods}

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 Association's Veterinary Technology Student Essential and Recommended Skills list. ANH250AD allows the last-semester Veterinary Technology Program student to elect to repeat the off-campus clinical experience of either ANH250AA, ANH250AB, or ANH250AC, depending upon their
career interest. Prerequisites: A grade of ' \(C\) ' or better in VET250AC or permission of Instructor.

\section*{Philosophy}

\section*{PHI101 Introduction to Philosophy}

HU
3 Credits 5 Periods
General consideration of human nature and the nature of the universe. Knowledge, perception, freedom and determinism, and the existence of God. Prerequisites: None.

\section*{PHI103 Introduction to Logic \\ HU, L}

\section*{3 Credits 3 Periods}

Informal logic, logical fallacies, elementary symbolic logic, analysis of argument forms, and construction of proofs for validity. Prerequisites: A grade of 'C' or better in ENG101, or ENG107, or equivalent.

\section*{PHI105 Introduction to Ethics}

HU

\section*{3 Credits 3 Periods}

A survey of ethical theory in Western Philosophy, including the major normative theories and selected metaethical theories. Prerequisites: None.

\section*{PHI201 History of Ancient Philosophy}

H, HU
3 Credits 3 Periods
Historical survey of the intellectual history of the Greco-Roman world, focusing on the philosophical tradition and social/historical context. Prerequisites: None.

\section*{PHI213 Medical and Bio-Ethics}

HU
3 Credits 3 Periods

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.

\section*{PHI218 Philosophy of Sexuality}

\section*{HU, L}

\section*{3 Credits 3 Periods}

Philosophical examination of sexuality in human life. Historical and critical survey of philosophical and theological views. Comparison and evaluation of contemporary theories about the nature of sexual desire and sexual acts. Implications of theories for contemporary moral problems. Course may contain adult content. All students under 18 years old are required to have a signed parental consent form on file, which is on the back of the "Students Under The Age of 18" Enrollment Form. Prerequisites: A grade of 'C' or better in ENG101 or ENG107 or permission of Instructor.

\section*{PHI224 Political Philosophy}

HU, L
3 Credits 3 Periods
Predominant figures and theories in Euro-American political philosophy from Plato to contemporary social/political philosophers. Prerequisites: A grade of 'C' or better in ENG101 or ENG107, or permission of Instructor.

\section*{PHI234AA Plato}

HU
3 Credits 3 Periods
The ideas of Plato and Socrates and their impact on western thought. Prerequisites: None.

\section*{PHI245 Introduction to}

\section*{Eastern Philosophy}

G, HU
3 Credits 3 Periods
Fundamental theories of Indian and Chinese metaphysics, epistemology, ethics and aesthetics. Prerequisites: None.

\section*{Physical Education Activities}

\section*{PED101 Physical Activities: Basic}

\section*{1 Credit 2 Periods}

Individual, dual, or team sports activities at the basic level. PED101 may be repeated for credit.

\section*{PED101AD Aerobic Dance}

\section*{1 Credit 2 Periods}

A cardiovascular workout through dance. Prerequisites: None. PED101AD may be repeated for credit.

\section*{PED101AK Aikido}

\section*{1 Credit 2 Periods}

Covers the fundamentals of Aikido including rules, moves, and traditional discipline of the sport. Prerequisites: None. PED101AK may be repeated for credit.

\section*{PED101BA Baseball}

\section*{1 Credit 2 Periods}

Basic skills and game strategy of baseball. Class emphasis on competition and drills. Prerequisites: None. PED101BA may be repeated for credit.

\section*{PED101BB Basketball}

\section*{1 Credit 2 Periods}

Basic skills and game strategy of baseball. Class emphasis on competition and drills. Prerequisites: None. PED101BA may be repeated for credit.

\section*{PED101BC Boot Camp}

\section*{1 Credit 2 Periods}

Vigorous physical and mental conditioning incorporating cardiovascular, core fitness, strength training, and flexibility. Emphasis will be placed on proper body mechanics and safety. Prerequisites: None. PED101BC may be repeated for credit.

\section*{Course Descriptions}

\section*{PED101BE Belly Dance}

\section*{1 Credit 2 Periods}

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 dance. Belly dance etiquette and attire. Prerequisites: None. PED101BE may be repeated for credit.

\section*{PED101BP Backpacking}

\section*{1 Credit 2 Periods}

Covers basic skills and techniques of backpacking and the application of these to wilderness travel. Prerequisites: None. PED101BP may be repeated for credit.

\section*{PED101CY Cycling - Indoor}

\section*{1 Credit 2 Periods}

Basic skills for bike setup and proper body mechanics. Increase leg strength, lung capacity, and
metabolism. Prerequisites: None. PED101CY may be repeated for credit.

\section*{PED101DF Self Defense}

\section*{1 Credit 2 Periods}

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 endurance enhanced drills. Develops self-confidence. Prerequisites: None. PED101 DF may be repeated for credit.

\section*{PED101FB Football}

\section*{1 Credit 2 Periods}

Basic skills and game strategy of football. Class emphasis on competition and drills. Prerequisites: None. PED101FB may be repeated for credit.

\section*{PED101FE Fencing}

\section*{1 Credit 2 Periods}

Introduction to the sport of fencing. Instruction and practice in proper body mechanics with the use of a foil, saber, and epee. Prerequisites: None. PED101 FE may be repeated for credit.


\section*{PED101FL Fitness For Life}

\section*{1 Credit 2 Periods}

Learn the basics of designing and implementing a personalized fitness program to meet your needs in the areas of Cardiovascular Fitness, Weight Control, Muscular Strength and Flexibility. Prerequisites: None. PED101 FL may be repeated for credit.

\section*{PED101FW Fitness Walking}

\section*{1 Credit 2 Periods}

Development of safe and effective walking skills through proper exercises and use of equipment to enhance a walking program. Prerequisites: None. PED101FW may be repeated for credit.

\section*{PED101GF Group Fitness/Aerobics}

\section*{1 Credit 2 Periods}

Group exercise incorporating a variety of equipment to increase respiration, heart rates, strength, and flexibility. Prerequisites: None. PED101GF may be repeated for credit.

\section*{PED101HH Hip Hop}

\section*{1 Credit 2 Periods}

Basic skills of hip hop with instruction, practice, and performance including proper body mechanics, choreography, and behavioral competencies. Prerequisites: None. PED101 HH may be repeated for credit.

\section*{PED101HK Hiking}

\section*{1 Credit 2 Periods}

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. PED101 HK may be repeated for credit.

\section*{PED101JR Jogging/Running}

\section*{1 Credit 2 Periods}

Introduction to jogging/running. Learn proper technique to decrease injury and increase training
distance. All skill levels welcome. Prerequisites: None. PED101JR may be repeated for credit.

\section*{PED101KB Kickboxing}

\section*{1 Credit 2 Periods}

Techniques to increase muscular endurance and strength, enhance flexibility and increase body awareness and self-confidence. Jabs, kicks, and blocks will be used in this martial arts-based workout. Prerequisites: None. PED101 KB may be repeated for credit.

\section*{PED101LD Latin Dancing}

\section*{1 Credit 2 Periods}

Spicy, energetic style of dance. Cha Cha, Merengue, Salsa, Rumba, and Bolero. Partners rotate. Prerequisites: None. PED101LD may be repeated for credit.

\section*{PED101PS Pilates}

\section*{1 Credit 2 Periods}

Mat-based exercise system focused on improving flexibility and strength for the total body. Teaches core control and stabilization while improving postural alignment. Prerequisites: None. PED101PS may be repeated for credit.

\section*{PED101RC Rock Climbing}

\section*{1 Credit 2 Periods}

Beginning climbing skills including equipment, knots, anchoring, belaying, and climbing techniques in an indoor climbing gym. No previous experience needed. Develop strength and confidence. Prerequisites: None. PED101RC may be repeated for credit.

\section*{PED101SA Salsa}

\section*{1 Credit 2 Periods}

Basic moves for the popular, hot Latin dance Salsa. Partners rotate. Prerequisites: None. PED101SA may be repeated for credit.

\section*{PED101ST Strength Training}

\section*{1 Credit 2 Periods}

Introduction to techniques of basic weight training, concentrating on incorporating an exercise regimen for increased strength. Prerequisites: None. PED101ST may be repeated for credit.

\section*{PED101SU SCUBA Diving}

\subsection*{1.5 Credits 2.5 Periods}

Introduction to the theory and practice of SCUBA diving. Course includes lectures, pool dives, open water dives, and SCUBA Certification. Prerequisites: None. PED101SU may be repeated for credit.

\section*{PED101TC Tai Chi}

\section*{1 Credit 2 Periods}

Fundamentals of Tai Chi including moves, breathing and meditation. Prerequisites: None. PED101TC may be repeated for credit.

\section*{PED101TD Tap Dance}

\section*{1 Credit 2 Periods}

Introduction to Tap a step dance performed with the use of shoes with metal tips making rhythmic sounds. Prerequisites: None. PED101TD may be repeated for credit.

\section*{PED101TF Track and Field}

\section*{1 Credit 2 Periods}

Instruction and practice in track and field events, running, throwing and jumping. Prerequisites: None. PED101TF may be repeated for credit.

\section*{PED101TK Taekwondo}

\section*{1 Credit 2 Periods}

Fundamentals of Taekwondo including the moves, rules, and traditional discipline of the sport. Prerequisites: None. PED101TK may be repeated for credit.

\section*{PED101WT Weight Training}

\section*{1 Credit 2 Periods}

Access to Olympic and Free Weights with a qualified
instructor. Prerequisites: None. PED101WT may be repeated for credit.

\section*{PED101WW Weight Training for Women} 1 Credit 2 Periods
Introduction for women to the use of free weights, strength machines and cardio equipment. Prerequisites: None. PED101WW may be repeated for credit.

\section*{PED101YG Gentle Yoga}

\section*{1 Credit 2 Periods}

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 a slower pace. Prerequisites: None. PED101YG may be repeated for credit.

\section*{PED101YH Hatha Yoga}

\section*{1 Credit 2 Periods}

Combination of traditional and flow style yoga that utilizes breathing, yoga poses, relaxation and meditation to create balance and inner peace. Prerequisites: None. PED101YH may be repeated for credit.

\section*{PED101YO Yoga}

\section*{1 Credit 2 Periods}

Promotion of overall health by strengthening muscles and stimulating glands and organs. Basic postures, breathing and relaxation techniques. Prerequisites: None. PED101YO may be repeated for credit.

\section*{PED101ZU Zumba Fitness}

\section*{1 Credit 2 Periods}

Zumba dynamic fitness program. Features high energy, easy to follow rhythmic moves set to energizing Latin and international beats. Provides an enjoyable way to increase fitness level. Prerequisites: None. PED101ZU may be repeated for a total of four (4) credit hours.

\section*{PED102BA Baseball - Intermediate}

\section*{1 Credit 2 Periods}

To improve upon basic skills and game strategy of baseball at the intermediate level. Class emphasis on competition and drills. Prerequisites: None. PED102BA may be repeated for credit.

\section*{PED102BB Basketball - Intermediate}

\section*{1 Credit 2 Periods}

To improve upon basic skills and game strategy of basketball at the intermediate level. Class emphasis on competition and drills. Prerequisites: None. PED102BB may be repeated for credit.

\section*{PED102BE Belly Dance - Intermediate}

\section*{1 Credit 2 Periods}

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 styles and trends in belly dance. Belly dance etiquette and attire. Prerequisites: None. PED102BE may be repeated for credit.

\section*{PED102DF Self Defense - Intermediate}

\section*{1 Credit 2 Periods}

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 beginners. Prerequisites: None. PED102DF may be repeated for credit.

\section*{PED102FB Football - Intermediate}

\section*{1 Credit 2 Periods}

Improve upon basic skills and game strategy of football at the intermediate level. Class emphasis on competition and drills. Prerequisites: None. Prior experience recommended. PED102FB may be repeated for credit.

\section*{PED102GO Golf - Intermediate}

\section*{1 Credit 2 Periods}

Improving techniques of putting, chipping, the full swing, rules and scoring will be covered in this class. Prerequisites: None. Prior experience recommended. PED102GO may be repeated for credit.

\section*{PED102HH Hip Hop - Intermediate 1 Credit 2 Periods}

Intermediate level dance instruction and practice in the skills of hip hop. Emphasis on performance including proper body mechanics, choreography, and behavioral competencies. Prerequisites: None. Prior experience recommended. PED102HH may be repeated for credit.

\section*{PED102RC Rock Climbing - Intermediate 1 Credit 2 Periods}

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. PED102RC may be repeated for credit.

\section*{PED102SA Salsa - Intermediate \\ 1 Credit 2 Periods}

Learn the intermediate dance moves for Salsa. Not recommended for the beginning Salsa dancer. Prerequisites: None. Prior experience recommended. PED102SA may be repeated for credit.

\section*{PED102TD Tap Dance-Intermediate}

\section*{1 Credit 2 Periods}

Tap dance steps at the intermediate level. Some experience welcomed. Prerequisites: None. Prior experience recommended.

\section*{PED102TF Track and Field - Intermediate 1 Credit 2 Periods}

To improve upon basic track and field event skills at the intermediate level. Class emphasis on competi-
tion and drills. Prerequisites: None. Prior experience recommended. PED102TF may be repeated for credit.

\section*{PED102TK Taekwondo - Intermediate}

\section*{1 Credit 2 Periods}

Intermediate level training in Taekwondo. Prerequisites: None. Prior experience recommended. PED102TK may be repeated for credit.

\section*{PED102WW Weight Training For Women Intermediate}

1 Credit 2 Periods
Intermediate level instruction for women on the use of free weights, strength machines and cardio equipment. Prerequisites: None. Prior experience recommended. PED102WW may be repeated for credit.

\section*{PED102YO Yoga - Intermediate}

\section*{1 Credit 2 Periods}

Yoga for the experienced practitioner. Prerequisites:
None. Prior experience recommended. PED102YO may be repeated for credit.

\section*{PED115 Lifetime Fitness}

\section*{2 Credits 4 Periods}

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 effective and enjoyable. Prerequisites: None. PED115 may be repeated for a total of eight (8) credit hours.

\section*{PED120AF Special Emphasis Activities: Weight Training} 2 Credits 4 Periods
Intensive experience in weight training. Prerequi-
sites: None. PED120AF may be repeated for a total of 8 credits.

\section*{PED201BA Baseball - Advanced}

1 Credit 2 Periods
To improve upon intermediate skills and game strategy of baseball at the advanced level. Class emphasis on competition and drills. Prerequisites: None. Prior experience at competitive level recommended. PED201BA may be repeated for credit.

\section*{PED201BB Basketball - Advanced}

\section*{1 Credit 2 Periods}

To improve upon intermediate skills and game strategy of basketball at the advanced level. Class emphasis on competition and drills. Prerequisites: None. Prior experience at competitive level recommended. PED201BB may be repeated for credit.

\section*{PED201FB Football - Advanced}

\section*{1 Credit 2 Periods}

Improve upon intermediate skills and game strategy of football at the advanced level. Class emphasis on competition and drills. Prerequisites: None. Prior experience at competitive level recommended. PED201FB may be repeated for credit.

\section*{PED201SA Salsa - Advanced}

\section*{1 Credit 2 Periods}

Learn the advanced dance moves for Salsa. Prerequisites: None. Prior experience at competitive level recommended. PED201SA may be repeated for credit.

\section*{PED201TF Track and Field - Advanced 1 Credit 2 Periods}

Advanced level training in track and field events. Class emphasis on competition and drills. Prerequisites: None. Prior experience at competitive level recommended. PED201TF may be repeated for credit.

\section*{PED202BA Baseball - Elite}

\section*{1 Credit 2 Periods}

Improve upon advanced skills and game strategy of baseball at the elite level. Class emphasis on competition and drills. Prerequisites: None. Prior experience at competitive level recommended. PED202BA may be repeated for credit.

\section*{PED202BB Basketball - Elite}

\section*{1 Credit 2 Periods}

Improve upon advanced skills and game strategy of basketball at the elite level. Class emphasis on competition and drills. Prerequisites: None. Prior experience at competitive level recommended. PED202BB may be repeated for credit.

\section*{PED202FB Football - Elite}

\section*{1 Credit 2 Periods}

Improve upon advanced skills and game strategy of football at the elite level. Class emphasis on competition and drills. Prerequisites: None. Prior experience at competitive level recommended. PED202FB may be repeated for credit.

\section*{PED202TF Track and Field - Elite}

\section*{1 Credit 2 Periods}

Improve upon advanced skills and game strategy of track and field at the elite level. Class emphasis on competition and drills. Prerequisites: None. Prior experience at competitive level recommended. PED202TF may be repeated for credit.

\section*{PED287 Physical Education of the Atypical} 2 Credits 2 Periods
Individualized activities programs for students with limited physical capacities. PED287 may be repeated for credit. Prerequisites: Permission of Instructor.

\section*{Physics}

\section*{PHY101 Introduction to Physics \\ SQ}

\section*{4 Credits 3 Periods}

A survey of physics emphasizing applications of physics to modern life. Students may receive credit for only one of the following: PHY101 or PHY101AA. Prerequisites: A grade of ' \(C\) ' or better in MAT090, or MAT091, or MAT092, or equivalent, or satisfactory score on Math placement exam.

\section*{PHY111 General Physics I}

\section*{SQ}

4 Credits 3 Periods
Includes motion, energy, and properties of matter. PHY111 is recommended for preprofessional and suggested for certain other majors. Students may receive credit for only one of the following: PHY111 or PHY111AA. Prerequisites: MAT182 or MAT187 or MAT220 or MAT221 or eligibility for MAT220 as indicated by appropriate placement test score or one year high school Trigonometry with a grade of ' C ' or better or permission of Department or Division.

\section*{PHY112 General Physics II}

\section*{SQ}

\section*{4 Credits 3 Periods}

Includes electricity, electromagnetism, and modern physics. Prerequisites: A grade of 'C' or better in PHY111.

\section*{PHY121 University Physics I: Mechanics SQ}

\section*{4 Credits 3 Periods}

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 or PHY111 and PHY112 suggested but not required.

\section*{PHY131 University Physics II: \\ Electricity and Magnetism \\ SQ}

\section*{4 Credits 3 Periods}

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.

PHY241 University Physics III: Thermodynamics, Optics, and Wave Phenomena 4 Credits 3 Periods
Heat, entropy, and laws of thermodynamics; wave propagation; geometrical and physical optics; introduction to special relativity. Prerequisites: A grade of 'C' or better in PHY116 or PHY131 or permission of Instructor.

\section*{PHY282AA Service-Learning Experience in Physical Science}

1 Credit 1 Period
Unpaid Service-Learning (SL) experience, completed with approved community partner. PHY282AA may be repeated for a total of six (6) credit hours. Standard grading is available according to procedures outlined in catalog. Prerequisites: Permission of Instructor.

\section*{PHY282AC Service-Learning Experience in Physical Science}

\section*{3 Credits 3 Periods}

Unpaid Service-Learning (SL) experience, completed with approved community partner. PHY282AC may be repeated for a total of six (6) credit hours. Standard grading is available according to proce-
dures outlined in catalog. Prerequisites: Permission of Instructor.

\section*{PHY298AA Special Projects}

1 Credit 1 Period
Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: Permission of Program Director or Instructor.

\section*{Political Science}

\section*{POS100 Introduction to Political Science SB}

3 Credits 3 Periods
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.

\section*{POS110 American National Government SB}

3 Credits 3 Periods
Study of the historical backgrounds, governing principles, and institutions, of the national government of the United States. Prerequisites: None.

\section*{POS113 United States and Arizona Social Studies}

H, SB
3 Credits 3 Periods
Overview of government, history, and geography of the United States and Arizona. Includes the relationship of government to the United States economic
system as well as the influences and developments that have shaped U.S. and Arizona history. Also covers geographical systems, regions, and study techniques. Prerequisites: None.

\section*{POS114 World Social Studies}

G, H, SB

\section*{3 Credits 3 Periods}

Introduction to the world from the integrated social science perspectives of history, geography, and government. Prerequisites: None.

\section*{POS120 World Politics}

\section*{G, SB}

3 Credits 3 Periods
Introduction to the principles and issues relating to the study of international relations. Evaluation of the political, economic, national, and transnational rationale for international interactions. Prerequisites: None.

\section*{POS140 Comparative Government}

G, SB
3 Credits 3 Periods
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 governments. Prerequisites: None.

\section*{POS180 United Nations Studies}

G

\section*{3 Credits 3 Periods}

Historical origins, structural makeup, political and operational characteristics, and legal activities of the United Nations. Analysis of the overall institution's ongoing utility, productivity and creativity. Prerequisites: None.

\section*{POS210 Political Ideologies}

SB
3 Credits 3 Periods

Leading political ideas and belief systems, e.g., Marxism, liberalism, conservatism, theories of democracy, and alternative futures. Prerequisites: None.

\section*{POS220 U.S. and Arizona Constitution 3 Credits 3 Periods \\ Examination of the United States Constitution and the constitution and government of the State of Arizona. Prerequisites: None.}

\section*{POS221 Arizona Constitution}

\section*{1 Credit 1 Period}

Examination of the Constitution of the State of Arizona. Equivalent to the second part of POS220. May not enroll in POS220 and POS221 concurrently. Prerequisites: None.

\section*{POS222 U.S. Constitution}

\section*{2 Credits 2 Periods}

Examination of the United States Constitution. Equivalent to the first part of POS220. May not enroll in POS220 and POS222 concurrently. Prerequisites: None. Students may not enroll in POS220 and POS222 concurrently.

\section*{POS223 Civil Rights and Liberties \\ C, SB}

3 Credits 3 Periods
The historic background and current status of major civil rights and civil liberties issues in the United States. Prerequisites: (Grade of 'C' or better in RDG100 or eligibility for CRE101 as indicated by reading placement test score) and (grade of 'C' or better in ENG091 or eligibility for ENG101 as indicated by appropriate writing placement test score).

\section*{POS281AB Public Policy/Service Internship 3 Credits 3 Periods}

Field experience in community service, public policy or public service. POS281AB may be repeated for a total of nine (9) POS281 credit hours; may not re-
peat specific internship assignment. Prerequisites: Minimum of 15 credit hours at college granting internship with minimum GPA of 3.0 and permission of Instructor. Prerequisites or Corequisites: POS280.

\section*{POS282AA Volunteerism for Political Science: A Service Learning Experience 1 Credit 1 Period}

Service-learning field experience within government agencies, political organizations, citizen advocacy groups, and human service organizations/agency. POS282AA may be repeated for a total of four (4) POS282 credit hours; may not repeat specific agency assignment for more than two (2) credit hours. Standard grading available according to procedures outlined in catalog. Prerequisites: Permission of Instructor.

\section*{POS285 Political Issues and Public Policy SB}

\section*{3 Credits 3 Periods}

Introduction to public policy, how policy is made, and how public policy decisions are affected. Prerequisites: None.

\section*{POS298AA Special Projects}

\section*{1 Credit 1 Period}

Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: Permission of Program Director or Instructor.

\section*{POS298AC Special Projects}

\section*{3 Credits 3 Periods}

Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: Permission of Program Director or Instructor.


\section*{Psychology}

\section*{PSY101 Introduction to Psychology} SB
3 Credits 3 Periods
To acquaint the student with basic principles, methods and fields of psychology such as learning, memory, emotion, perception, physiological, developmental, intelligence, social and abnormal. Prerequisites: None.

\section*{PSY102 Introduction to Psychology Lab}

\section*{1 Credit 1 Period}

Optional laboratory designed to accompany PSY101. Application of psychological principles in areas such as learning, memory, emotion, motivation, cognition, language, development, personality, and intelligence. Prerequisites or Corequisites: PSY101 or permission of instructor.

\section*{PSY123 Psychology of Parenting}

\section*{3 Credits 3 Periods}

The demonstration and application of psychological principles to the development and guidance of children and adolescents. Prerequisites: None.

\section*{PSY132 Psychology and Culture}

C, G, SB

\section*{3 Credits 3 Periods}

Presents current knowledge about human diversity in behavior and culture using examples from a variety of contexts within western and global societies. Highlights topics in cross-cultural psychology, such as intergroup relations, diverse cognitive styles, ethnocentrism, gender, personality, emotion, language, communication, work and health. The role of enculturation throughout the lifespan will be explored to increase awareness of how behavioral and cognitive principles affect interactions in a multicultural world. Prerequisites: None.

\section*{PSY156 Understanding Death and Dying}

\section*{3 Credits 3 Periods}

Designed to give the student an understanding of the research and theories of death, dying and the bereavement process. Prerequisites: None.

\section*{PSY210 Educational Psychology}

\section*{3 Credits 3 Periods}

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, and factors influencing effective instruction and learning. Prerequisites: PSY101 with a grade of ' \(C\) ' or better, or permission of Instructor.

\section*{PSY215 Introduction to Sport Psychology} SB

\section*{3 Credits 3 Periods}

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-efficacy, and the general health benefits of sport participation. Prerequisites: PSY101 with a grade of ' \(C\) ' or better, or permission of Instructor.

\section*{PSY230 Introduction to Statistics}

CS

\section*{3 Credits 3 Periods}

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 experimentation. Required of psychology majors. Prerequisites: (A grade of 'C' or better in PSY101 and MAT092 or higher MAT course) or (a grade of 'C' or better in PSY101 and eligibility for MAT112 or higher as indicated by appropriate mathematics placement test score) or permission of Instructor.

\section*{PSY231 Laboratory for Statistics}

\section*{1 Credit 2 Periods}

Applications of inferential and descriptive statistics to computers in the field of psychology. Prerequisites: None. Corequisites: PSY230.

\section*{PSY235 Psychology of Gender}

C, SB

\section*{3 Credits 3 Periods}

To assess historical and psychological perspectives on women and men and to evaluate contemporary viewpoints regarding the psychology of women and men. Prerequisites: PSY101 with a grade of ' C ' or better, or permission of Instructor.

\section*{PSY240 Developmental Psychology}

SB

\section*{3 Credits 3 Periods}

Human development from conception through adulthood. Includes: physical, cognitive, emotional and social capacities that develop at various ages. Recommended for students majoring in nursing, education, pre-med, and psychology. Prerequisites: PSY101 with a grade of ' \(C\) ' or better, or permission of Instructor.

\section*{PSY248 Psychology of Adolescent Development}

\section*{3 Credits 3 Periods}

Explores the highly specialized developmental stage of adolescence. Includes biological, cognitive, psychosexual, and sociocultural factors as well as current theories and research. Prerequisites: PSY101 with a grade of 'C' or better, or permission of Instructor.

\section*{PSY250 Social Psychology}

SB

\section*{3 Credits 3 Periods}

The scientific study of how people's thoughts, feel-
ings, 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 and prejudice. Prerequisites: PSY101 with a grade of ' \(C\) ' or better, or permission of Instructor.

\section*{PSY260 Psychology of Personality} SB
3 Credits 3 Periods
Introduction to theories of personality with emphasis upon application of specific theories towards the understanding of individuals. Prerequisites: PSY101 with a grade of ' \(C\) ' or better, or permission of Instructor.

\section*{PSY266 Abnormal Psychology}

SB

\section*{3 Credits 3 Periods}

Distinguishes between normal behavior and psychological disorders. Subjects may include stress disorders, problems with anxiety and depression, unusual and abnormal sexual behavior, schizophrenia and addictive behaviors. Causes and treatments of psychological problems and disorders are discussed. Prerequisites: PSY101 with a grade of ' C ' or better, or permission of Instructor.

\section*{PSY267 Introduction to Forensic Psychology}

3 Credits 3 Periods
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, eyewitness testimony, child custody, and domestic violence. Prerequisites: A grade of ' C ' or better in PSY101 or permission of Instructor.

\section*{PSY275 Biopsychology}

\section*{SG}

\section*{4 Credits 5 Periods}

Biological foundations of sensation, perception, motivation, emotion, cognition and psychopathology. Designed for students in the life sciences. Prerequisites: PSY101 with a grade of ' \(C^{\prime}\) or better, or permission of Instructor.

\section*{PSY277 Psychology of Human Sexuality SB}

\section*{3 Credits 3 Periods}

Survey of psychological and physiological aspects of human sexual behavior. Emphasis placed on the integration of the cognitive, emotional, and behavioral factors in sexual functioning. PSY277 course may contain adult content. All students under the age of 18 are required to have a signed parental consent form on file, which is on the back of the Under the Age of 18 Enrollment Form. Prerequisites: A grade of 'C' or better in PSY101.

\section*{PSY282AA Volunteerism Service Learning Experience in Psychology}

1 Credit 1 Period
Service learning field experience within private/ public agencies, and citizen volunteer groups. PSY282AA may be repeated for a total of three (3) PSY282 credit hours. Standard grading available according to procedures outlined in catalog. Prerequisites: A grade of ' C ' or better in PSY101 and permission of Instructor.

\section*{PSY282AB Volunteerism Service Learning Experience in Psychology}

2 Credits 2 Periods
Service learning field experience within private/ public agencies, and citizen volunteer groups. PSY282AB may be repeated for a total of three (3) PSY282 credit hours. Standard grading available according to procedures outlined in catalog. Prerequisites: A grade of ' C ' or better in PSY101 and permission of Instructor.

\section*{PSY290AC Research Methods}

\section*{L, SG}

\section*{3 Credits 3 Periods}

Planning, execution, analysis, and written reporting of psychological research using American Psychological Association guidelines (APA). Surveys the literature, procedures, and instruments in representative areas of psychological research. General Education Designation: Literacy \& Critical Inquiry - [L] in combination with: PSY290AC lecture. Literacy \& Critical Inquiry - [L] in combination with: PSY290AC lab. Natural Sciences (General) - [SG] in combination with: PSY290AC lecture. Natural Sciences (General) - [SG] in combination with: PSY290AC lab. A grade of 'C' or better required in all Prerequisites. Prerequisites: ENG101 or ENG107. Prerequisites or Corequisites: PSY230 or permission of Instructor. Corequisites: PSY290AC lab course.

\section*{PSY298AA Special Projects}

\section*{1 Credit 1 Period}

Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: Permission of Program Director or Instructor.

\section*{PSY298AB Special Projects}

\section*{2 Credits 2 Periods}

Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning
to be combined to maximize student development. Prerequisites: Permission of Program Director or Instructor.

\section*{PSY298AC Special Projects}

\section*{3 Credits 3 Periods}

Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: Permission of Program Director or Instructor.

\section*{Reading}

\section*{RDG016 Reading English as a Second Language I}

\section*{3 Credits 3 Periods}

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. Development of reading comprehension skills. Prerequisites: Appropriate ESL placement test score.

\section*{RDG026 Reading English as a \\ Second Language II}

3 Credits 3 Periods
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 grade of 'C' or better in ESL/RDG016, or permission of Instructor.

\section*{RDG036 Reading English as a} Second Language III

\section*{3 Credits 3 Periods}

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 grade of 'C' or better in ESL/RDG026, or permission of Instructor.

\section*{RDG046 Reading English as a Second Language IV 3 Credits 3 Periods}

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 grade of 'C' or better in ESL/RDG036, or permission of Instructor.

\section*{RDG071 Basic Reading}

\section*{3 Credits 3 Periods}

Provide opportunities for practice and application of basic reading skills. Includes phonic analysis, word recognition, structural analysis, use of context clues, and use of dictionary, reinforced through practical application. Development of vocabulary required for success in content area courses. Emphasis on literal comprehension and development of inferential interpretation. RDG071 is recommended for all students with limited reading experiences. Prerequisites: Appropriate reading placement test score, or grade of 'C' or better in ESL/RDG046, or permission of Instructor.

\section*{RDG081 Reading Improvement}

\section*{3 Credits 3 Periods}

Designed to improve basic reading skills. Includes word recognition, interdisciplinary vocabulary development, recognizing patterns of organization, interpreting inference. Reviews interpreting graphic materials. Emphasis on identifying main ideas and
related details. Prerequisites: Appropriate reading placement test score, or grade of ' \(C\) ' or better in RDG071, or permission of Instructor.

\section*{RDG100 Successful College Reading 3 Credits 3 Periods}

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. RDG100 may be repeated for a total of twelve (12) credit hours. Prerequisites: A grade of 'C' or better in RDG081 or appropriate reading placement or permission of Instructor. Corequisites: Any 100-level course in another content area or permission of Instructor.

\section*{RDG282AA Service-Learning Experience in Reading}

\section*{1 Credit 1 Period}

Unpaid Service-Learning (SL) experience, completed with approved community partner. RDG282AA may be repeated for a total of six (6) credit hours. Standard grading is available according to procedures outlined in catalog. Prerequisites: Permission of Instructor.

\section*{Real Estate}

\section*{REA179 Real Estate Principles I \\ 3 Credits 3 Periods}

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, real estate economics, financing and foreclosure, land use, and valuation. Prerequisites: None.

\section*{REA180 Real Estate Principles II}

\section*{3 Credits 3 Periods}

Advanced work in real estate including escrow procedures and title insurance, liens and encumbrances, advanced contracts, water rights, toxic waste and environmental hazards, agency, ethics and professional relationships, real estate code and the Commissioner's rules, investment, property management, and government restrictions. Prerequisites: A grade of 'C' or better in REA179 or permission of Instructor.

\section*{REA270 Basic Appraisal Principles \\ 2 Credits 2 Periods}

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.

\section*{REA271 Basic Appraisal Procedures 2 Credits 2 Periods}

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 procedures including case studies, and examples. Prerequisites: A grade of 'C' or better in REA270 or permission of Instructor.

\section*{REA273 Residential Market Analysis Highest And Best Use}

\section*{1 Credit 1 Period}

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 market examination to the appraisal process. Prerequisites: None.

\section*{REA274 Residential Appraiser Site Valuation And Cost Approach 1 Credit 1 Period \\ 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 plans and specifications. Prerequisites: None.}

\section*{REA275 Residential Sales Comparison and Income Approaches}

2 Credits 2 Periods
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 organizing market data and reconciling value indications. Prerequisites: None.

\section*{REA276AA Residential Report Writing and Case Studies I}

1 Credit 1 Period
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 writing and case studies are applied. Prerequisites: None.

\section*{REA281 Principles Of Real Estate Law}

\section*{3 Credits 3 Periods}

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.

\section*{REA282 Real Estate Finance}

3 Credits 3 Periods
Study of lending institutions, including banks, savings and loans, conventional loans, Federal Housing Administration (FHA), Veterans Administration (VA) for residential, commercial and industrial property. Prerequisites: A grade of 'C' or better in REA179 or permission of Instructor.

\section*{REA283 Property Management \\ 3 Credits 3 Periods}

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 Instructor.

\section*{REA290AH Real Estate Seminar: Contract Writing}
. 5 Credits . 5 Periods
Contract writing skills, techniques, and requirements. Writing of basic real estate contracts, including purchase offers, counter offers, sales listing agreements, and riders. Prerequisites: None.

\section*{Recreation}

\section*{REC120 Leisure and the Quality of Life SB}

\section*{3 Credits 3 Periods}

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 to the quality of life for individuals in today's society. Prerequisites: None.

REC150AA Outdoor Adventure Skills
Field Experience
1 Credit 2 Periods

Practical application of camping and outdoor skills including camping, equipment selection and use, cooking, fire building, camp programs, backpacking, and safety. Prerequisites: None. Course may be repeated for a total of four (4) credits.

\section*{REC150AB Outdoor Adventure Skills}

\section*{3 Credits 3 Periods}

Camping and outdoor skills including types of camping, equipment selection and use, cooking and fire building, camp programs, backpacking, and safety. Prerequisites: None.

\section*{REC155AB Caving}

1 Credit 2 Periods
Basic caving skills. Includes cave ecology, navigation, safety systems, lighting systems and equipment selection. Prerequisites: None.

\section*{REC282AA Volunteerism for Recreation: \\ A Service Learning Experience}

\section*{1 Credit 1 Period}

Service learning field experience within private/ public agencies, educational institution, and citizen volunteer groups. REC282AA may be repeated for a total of six (6) REC282 credit hours; may not repeat specific assignment for more than two (2) credit hours. Standard grading available according to procedures outlined in catalog. Prerequisites: Permission of Instructor.

\section*{REC298AA Special Projects}

\section*{1 Credit 1 Period}

Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: Permission of Program Director or Instructor.

\section*{REC298AC Special Projects}

\section*{3 Credits 3 Periods}

Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: Permission of Program Director or Instructor.

\section*{Religious Studies}

\section*{REL100 World Religions}

\section*{G, HU}

3 Credits 3 Periods
The development of various religions from the prehistoric to modern times. Political, economic, social and geographic relationships among world religions. Consideration of both Eastern and Western religions. Prerequisites: None.

\section*{REL151 Religion in the Hispanic World}

G, HU
3 Credits 3 Periods
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 traditions. Prerequisites: None.

\section*{REL200 Religion and Film \\ HU}

3 Credits 3 Periods
A course examining the relationships between religion and film, with particular attention to representations of religious beliefs, institutions, and practices in film and their reception by various audiences. Prerequisites: None.

\section*{REL203 American Indian Religions}

C, HU, L

\section*{3 Credits 3 Periods}

An examination of the historical and cultural background of diverse life ways and worldviews belonging to the peoples indigenous to the North American continent over time, including a study of modern day American Indian beliefs and practices. Prerequisites: A grade of ' \(C\) ' or better in ENG101, or ENG107, or equivalent.

\section*{REL205 Religion and the Modern World HU, L}

3 Credits 3 Periods
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.

\section*{REL248 Religion, Peace and Violence 3 Credits 3 Periods}

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.

\section*{REL250 Religion in Ireland:}

Neolithic to Early Medieval
H, HU
3 Credits 3 Periods
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 Medieval periods ( \(4000 \mathrm{BCE}-700 \mathrm{CE}\) ). Prerequisites: None.

\section*{REL270 Introduction to Christianity HU}

\section*{3 Credits 3 Periods}

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 denominations. Prerequisites: None.

\section*{REL290 Women and World Religions}

G, HU
3 Credits 3 Periods
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 the world. Prerequisites: None.

\section*{REL291 Religion and Sexuality}

G, HU
3 Credits 3 Periods
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 social norms and structures. Prerequisites: None. Course may contain adult content. All students under 18 years old are required to have a signed parental consent form on file, which is on the back of the Under the age of 18 Enrollment Form.

\section*{Russian}

\section*{RUS101 Elementary Russian I \\ 4 Credits 4 Periods}

Basic grammar, pronunciation, and vocabulary of the Russian language. Practice of listening, speaking, reading, and writing skills. Prerequisites: None.

\section*{RUS102 Elementary Russian II}

4 Credits 4 Periods
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 years is required.

\section*{Sign Language}

\section*{SLG101 American Sign Language I}

\section*{4 Credits 4 Periods}

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 American Sign Language (A.S.L.). Prerequisites: None. SLG103 suggested as a corequisite but not required.

\section*{SLG102 American Sign Language II}

4 Credits 4 Periods
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 stressed with continued development of sign vocabulary. Prerequisites: SLG101 with a grade of 'C' or better, or permission of Department or Division. Completion of prerequisites within the last three years is required.

\section*{SLG103 Introduction to the Deaf Community}

1 Credit 1 Period

History and development of American Sign Language (A.S.L.) 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 Hearing individuals. Prerequisites: None.

\section*{SLG201 American Sign Language III 4 Credits 4 Periods}

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 SLG102 or permission of Department or Division. Suggested but not required: (ENG101 or ENG107) and (CRE101 or exemption by reading placement). Completion of prerequisites within the last three years is required.

\section*{SLG202 American Sign Language IV 4 Credits 4 Periods}

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 SLG201 or permission of Department or Division. Suggested but not required: (ENG101 or ENG107), SLG200, and (CRE101 or exemption by reading placement). Completion of prerequisites within the last 3 yrs is required.

\section*{SLG298AA Special Projects}

\section*{1 Credit 1 Period}

Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects
of independent study and individualized learning to be combined to maximize student development. Prerequisites: Permission of Program Director or Instructor.

\section*{SLG298AB Special Projects}

2 Credits 2 Periods
Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: Permission of Program Director or Instructor.

\section*{SLG298AC Special Projects}

\section*{3 Credits 3 Periods}

Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: Permission of Program Director or Instructor.

\section*{Small Business Management}
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 of daily problems related to inventory control and business expansion. Prerequisites: None.

\section*{SBS204 Small Business Marketing and Advertising}

\section*{2 Credits 2 Periods}

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 marketing and advertising/ promotion plan. Prerequisites: None.

\section*{SBS213 Hiring and Managing Employees}

1 Credit 1 Period
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, benefits, and developing future staffing needs assessment. Prerequisites: None.

\section*{SBS214 Small Business Customer Relations}

\section*{1 Credit 1 Period}

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 customer, supplier, vendor, and distributor loyalty. Prerequisites: None.

\section*{SBS230 Financial and Tax Management for Small Business}

2 Credit 2 Period
An overview of accounting and recordkeeping 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 based on taxation. Prerequisites: None.

\section*{SBS290AA Developing a Practical Small Business Plan}

\section*{. 5 Credits . 5 Periods}

Practical techniques for developing, writing, and implementing a business plan. Designed for the small business owner or manager. Prerequisites: None.

\section*{Social Work}

\section*{SWU130 Addictions and Substance Use Disorders}

3 Credits 3 Periods
Sociological, psychological and physiological aspects of addictive behaviors and chemical abuse. Consideration of a variety of treatment programs offered in community agencies. Prerequisites: None.

\section*{SWU171 Introduction to Social Welfare}

H, SB
3 Credits 3 Periods
Analysis of contemporary social welfare services and professional social work. Prerequisites: (Grade of 'C' or better in RDG100 or eligibility for CRE101
as indicated by reading placement test score) and (grade of 'C' or better in ENG091 or eligibility for ENG101 as indicated by appropriate writing placement test score).

\section*{SWU181 Economics:}

\section*{A Social Issues Perspective}

\section*{3 Credits 3 Periods}

Introduction to economic principles through the lens of contemporary social issues for social work and related fields. Prerequisites: None.

\section*{SWU182 A Social Services Perspective of Government}

\section*{SB}

3 Credits 3 Periods
Government and the role of policy practice in advancing social and economic justice and effective social services within the southwest. Prerequisites: None.

\section*{SWU183 Introductory Ethics: \\ A Social Service Perspective \\ HU}

3 Credits 3 Periods Introductory exploration of ethics from a historical and multicultural perspective viewed through the lens of contemporary social issues. Prerequisites: None.

\author{
SWU225 Statistics for Social Research/ Justice and Government \\ CS \\ 3 Credits 3 Periods \\ 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.
}

\section*{Course Descriptions}

\section*{SWU250 Mindfulness for Stress Management}

SB
3 Credits 3 Periods
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 disease; immune system support, activity management and developing practices that facilitate maintaining living in balance. Prerequisites: None.

\section*{SWU258 Victimology and Crisis Management \\ C, SB}

3 Credits 3 Periods
Victimology, the criminal justice system, techniques of crisis intervention, and the importance of a multicultural and global perspective. Includes sexual assault, family violence, post-traumatic stress disorder, the role of substance abuse, effective coping skills, appropriate community resources and the responsiveness of the justice system. Prerequisites: None.

SWU282AA Volunteerism for Social Work: A Service Learning Experience 1 Credit 1 Period
Service-learning field experience within private/ public agencies, and citizen volunteer groups. SWU282AA may be repeated for a total of six (6) SWU282 credit hours; may not repeat specific assignment for more than three (3) credit hours. Standard grading available according to procedures outlined in catalog. Prerequisites: Permission of Instructor.

\section*{SWU282AB Volunteerism for Social Work: A Service Learning Experience 2 Credits 2 Periods}

Service-learning field experience within private/ public agencies, and citizen volunteer groups. SWU282AB may be repeated for a total of six (6) SWU282 credit hours; may not repeat specific assignment for more than three (3) credit hours. Standard grading available according to procedures outlined in catalog. Prerequisites: Permission of Instructor.

\section*{SWU282AC Volunteerism for Social Work: A Service Learning Experience 3 Credits 3 Periods}

Service-learning field experience within private/

public agencies, and citizen volunteer groups. SWU282AC may be repeated for a total of six (6) SWU282 credit hours; may not repeat specific assignment for more than three (3) credit hours. Standard grading available according to procedures outlined in catalog. Prerequisites: Permission of Instructor.

\section*{SWU291 Social Service Delivery Systems} 3 Credits 3 Periods
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 Corequisites: SWU171.

\section*{SWU295 Effective Helping in a Diverse World \\ C, SB}

3 Credits 3 Periods
Introduction to professional helper communication skills with respect to cross-cultural practice and diversity issues, in a social work setting. Prerequisites: None. SWU171 suggested but not required.

\section*{SWU298AA Special Projects}

\section*{1 Credit 1 Period}

Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: Permission of Program Director or Instructor.

\section*{SWU298AB Special Projects}

\section*{2 Credits 2 Periods}

Organized and tailored around the interests and
needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: Permission of Program Director or Instructor.

\section*{SWU298AC Special Projects}

\section*{3 Credits 3 Periods}

Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: Permission of Program Director or Instructor.

\section*{Society and Business}

\section*{SBU200 Society and Business \\ G, SB}

3 Credits 3 Periods
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 social impact of business responses. Prerequisites: None.

\section*{Sociology}

\section*{SOC101 Introduction to Sociology SB}

\section*{3 Credits 3 Periods}

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 people's attitudes and behaviors. Prerequisites: None.

\section*{SOC130 Human Sexuality}

SB

\section*{3 Credits 3 Periods}

Examination of the physical, social, cultural, and institutional contributions to human sexuality. Examination of facts and myths, literature, and changing mores regarding human sexuality to acquire knowledge about cultural and social events and processes. Explores sexuality in contemporary society. This course contains mature adult content. Prerequisites: None. SOC130 course may contain adult content. All students under the age of 18 are required to have a signed parental consent form on file, which is on the back of the Under the Age of 18 Enrollment Form.

\section*{SOC141 Sovereign Indian Nations}

C, H, SB
3 Credits 3 Periods
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 development, other current issues, and contemporary social problems. Prerequisites: None.

\section*{SOC157 Sociology of Families and Relationships}

\section*{SB}

\section*{3 Credits 3 Periods}

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 crisis within the family, and divorce. Prerequisites: None.

\section*{SOC212 Gender and Society}

\section*{C, SB}

3 Credits 3 Periods
A sociological analysis of the way culture shapes and defines the positions and roles of both men and women in society. Major emphasis on social conditions which may lead to a broadening of gender roles and a reduction of gender role stereotypes and the implications of these changes. Prerequisites: None.

\section*{SOC220 Sport and Society}

SB

\section*{3 Credits 3 Periods}

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 at times played a transformative role in society. Prerequisites: None.

\section*{SOC241 Race and Ethnic Relations}

C, SB
3 Credits 3 Periods
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 States. Prerequisites: None.

\section*{SOC270 The Sociology of Health and Illness}

G, SB
3 Credits 3 Periods
Roles of health care providers and patients, various modalities of treatment and prevention, and the history, current status, and future trends in medicine and medical technology, and complementary health approaches from a cross-cultural and global sociological perspective. Prerequisites: None.

\section*{SOC282AA Service-Learning Experience in Sociology}

\section*{1 Credit 1 Period}

Unpaid Service-Learning (SL) experience, completed with approved community partner. SOC282AA may be repeated for a total of six (6) credit hours. Standard grading is available according to procedures outlined in catalog. Prerequisites: A grade of 'C' or better in SOC101 and permission of Instructor.

\section*{SOC282AB Service-Learning Experience in Sociology}

2 Credits 2 Periods
Unpaid Service-Learning (SL) experience, completed with approved community partner. SOC282AB may be repeated for a total of six (6) credit hours. Standard grading is available according to procedures outlined in catalog. Prerequisites: A grade of 'C' or better in SOC101 and permission of Instructor.

\section*{Spanish}

\author{
SPA055 Fundamentals of \\ Spanish Grammar \\ 1 Credit 1 Period \\ Introduces basic concepts of Spanish pronuncia-
}
tion and grammar for successful study of the language. Emphasis on grammar, sentence structure, and practice of simple dialogues. Prerequisites: None.

\section*{SPA101 Elementary Spanish I}

\section*{4 Credits 4 Periods}

Basic grammar, pronunciation and vocabulary of the Spanish language. Includes the study of the Spanish-speaking cultures. Practice of listening, speaking, reading, and writing skills. Prerequisites: None.

\section*{SPA102 Elementary Spanish II \\ 4 Credits 4 Periods}

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 SPA101AA), or permission of Department or Division. Completion of prerequisites within the last three years is required.

\section*{SPA115 Beginning Spanish Conversation I}

\section*{3 Credits 3 Periods}

Basic pronunciation, vocabulary, sentence structures, and cultural awareness, necessary to develop speaking and listening skills in Spanish. Prerequisites: None.

\section*{SPA117 Health Care Spanish I}

\section*{3 Credits 3 Periods}

Basic conversational Spanish for health care workers or students. Emphasis on basic sentence structure, pronunciation and vocabulary used in health care settings. Prerequisites: None.

\section*{SPA118 Health Care Spanish II}

\section*{3 Credits 3 Periods}

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 years is required.

\section*{SPA201 Intermediate Spanish I}

\section*{G}

4 Credits 4 Periods
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 SPA102AA, or SPA111, or permission of Department or Division. Completion of prerequisites within the last three years is required.

\section*{SPA202 Intermediate Spanish II} G
4 Credits 4 Periods
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 years is required.

\section*{SPA265 Advanced Spanish I \\ HU}

3 Credits 3 Periods
Introduction and study of Spanish and Span-ish-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 years is required.

\section*{SPA266 Advanced Spanish II}

\section*{HU}

\section*{3 Credits 3 Periods}

Further study of Spanish and Spanish-American literature. Reading selections from most Span-ish-speaking countries. All oral reports, discussions, and written reports in Spanish. Graduated level of difficulty from the literature studied in SPA265. Prerequisites: A grade of 'C' or better in SPA265, or permission of Department or Division. Completion of prerequisites within the last three years is required.

\section*{SPA282AC Service-Learning Experience in Spanish}

\section*{3 Credits 3 Periods}

Unpaid Service-Learning (SL) experience, completed with approved community partner. SPA282AC may be repeated for a total of six (6) credit hours. Standard grading is available according to procedures outlined in catalog. Prerequisites: Permission of Instructor.

\section*{SPA298AC Special Projects}

\section*{3 Credits 3 Periods}

Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: Permission of Program Director or Instructor.

\section*{Storytelling}

\section*{STO290 The Irish Storytelling Tradition} G
3 Credits 3 Periods
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 crafting Irish stories for telling. Prerequisites: None.

\section*{Studies in Language and Culture}

\section*{SLC201 Introduction to Linguistics}

HU, SB
3 Credits 3 Periods
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 and second languages. Prerequisites: None.

\section*{Telecommunications}

\section*{TCM107 Career Pathways in the Media} HU
3 Credits 3 Periods

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 growth of new communications technologies. Prerequisites: None.

\section*{Theatre Performing Arts}

\section*{THE111 Introduction to Theatre}

HU
3 Credits 3 Periods
A survey of theatre, including basic elements and principles of production, styles, and/or historical perspectives of theatre, dramatic literature, and criticism. Prerequisites: None.

\section*{THE220 Modern Drama}

HU, L
3 Credits 3 Periods
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.

\section*{THE282AA Service-Learning Experience in Theatre}

1 Credit 1 Period
Unpaid Service-Learning (SL) experience, completed with approved community partner. THE282AA may be repeated for a total of six (6) credit hours. Standard grading is available according to procedures outlined in catalog. Prerequisites: Permission of Instructor.

\section*{Theatre Performance/ Production}

\section*{THP102 Theatre Service Practicum}

1 Credit 2 Periods
Use and develop theatrical skills for service to the community through practical experience. Prerequisites: Permission of Department or Division.

\section*{THP112 Acting I}

3 Credits 4 Periods
Fundamental techniques and terminology of acting through physical and vocal expression, improvisation, and monologue and scene work. Emphasis on characterization. Prerequisites: None.

\section*{THP131 Stage Movement}

3 Credits 4 Periods
Movement skills for the actor to develop a flexible, expressive physical instrument. Includes pantomime, physical isolation, and awareness exercises. Prerequisites: None.

\section*{THP131 Stage Movement}

\section*{3 Credits 4 Periods}

Movement skills for the actor to develop a flexible, expressive physical instrument. Includes pantomime, physical isolation, and awareness exercises. Prerequisites: None.

\section*{THP201AA Theatre Production I}

1 Credit 2 Periods
Designed to give college credit to the cast and technical production crews of college theatre productions. Prerequisites: None. THP201AA may be repeated for a total of four (4) credit hours.

\section*{THP202AA Theatre Production I} Scene Shop
1 Credit 2 Periods
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 made available for student use. Prerequisites: None. THP202AA may be repeated for a total of four (4) credit hours.


\section*{THP202AB Theatre Production I Electrics}

\section*{1 Credit 2 Periods}

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 made available for student use. Prerequisites: None. THP202AB may be repeated for a total of four (4) credit hours.

\section*{THP202AC Theatre Production I} Costume Shop
1 Credit 2 Periods
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 equipment are made available for student use. Prerequisites: None. THP202AC may be repeated for a total of four (4) credit hours.

\section*{THP202AD Theatre Production Advanced Projects}

\section*{1 Credit 2 Periods}

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. Pro-fessional-type facilities and equipment are made available for student use. Prerequisites: None. THP202AD may be repeated for a total of four (4) credit hours.

\section*{THP203 Technical Theatre Production} 3 Credits 6 Periods
Designed to give college credit to the technical
production crews of college theatre productions. Prerequisites: None. TPH203 may be repeated for up to a maximum of nine (9) credits.

\section*{THP206 Introduction to Costume Construction for Theatre}

\section*{3 Credits 4 Periods}

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.

\section*{THP212 Acting II}

\section*{3 Credits 4 Periods}

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.

\section*{THP213 Introduction to Technical Theatre 3 Credits 5 Periods}

Procedures of technical theatre production and demonstration. Topics include design and construction of scenery; lighting and properties. Prerequisites: None.

\section*{THP214 Directing Techniques}

\section*{3 Credits 4 Periods}

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 performing. Prerequisites: A grade of ' \(C\) ' or better in THP112 or THE220, or permission of Instructor.

\section*{THP216 Beginning Stage Lighting 3 Credits 4 Periods}

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 theory, circuiting and control systems, and basic design. Prerequisites: A grade of ' \(C\) ' or better in THP213 or permission of Instructor.

\section*{THP217 Introduction to Design Scenography}

3 Credits 4 Periods
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 audience. Prerequisites: None.

\section*{THP251 Safety Practices in Theatre and Film Production}

\section*{1 Credit 2 Periods}

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, and personal safety practices. Prerequisites: None

\section*{THP266 Production Careers in} Technical Theatre

\section*{1 Credit 2 Periods}

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 professional resume and vitae. Prerequisites: None.

THP267 Painting Techniques for Film, TV and Theatre
3 Credits 4 Periods

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.

\section*{THP268 Opportunities in Production}

\section*{3 Credits 6 Periods}

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 of student work for portfolio development. Prerequisites: Permission of Department or Division.

\section*{THP269 Technical Theatre Portfolio Development \\ 1 Credit 1 Period}

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 updating portfolio materials. Prerequisites: None.

\section*{THP271 Voice and Diction}

\section*{3 Credits 3 Periods}

Exercises and techniques to free the voice and improve projection, resonance, and articulation. Covers international phonetic alphabet and standard stage speech. Prerequisites: None.

\section*{THP281 Production and Acting I}

3 Credits 4 Periods
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 monologues, scenes, and one-act plays. Prerequisites: Permission of Department or Division.

\section*{THP282 Production And Acting II}

\section*{3 Credits 4 Periods}

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 monologues, scenes, and one-act plays. Prerequisites: A grade of ' \(C\) ' or better in THP281, or permission of Department or Division.

\section*{THP298AA Special Projects}

\section*{1 Credit 1 Period}

Organized and tailored around the interests and needs of 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 combined to maximize student development. Prerequisites: Permission of Program Director or Instructor.

\section*{THP298AC Special Projects}

\section*{3 Credits 3 Periods}

Organized and tailored around the interests and needs of 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 combined to maximize student development. Prerequisites: Permission of Program Director or Instructor.

\section*{Total Quality Management}

\section*{TQM101 Quality Customer Service \\ 3 Credits 3 Periods}

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 taught, applied, and practiced. Prerequisites: None.

\section*{TQM220 Leadership and Empowerment Strategies}

\section*{2 Credits 2 Periods}

Methods for facilitating teams and empowering employees which effectively enable all employees to act upon a shared vision. Prerequisites: None.

\section*{TQM230 Teamwork Dynamics}

\section*{2 Credits 2 Periods}

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-solving techniques. Prerequisites: None.

\section*{TQM235 Motivation, Evaluation, and Recognition Systems}

2 Credits 2 Periods
Presents methods for benchmarking, assessing team performance, linking recognition to team performance, and valuing victories and mistakes with all personnel. Prerequisites: None.

\section*{TQM240 Project Management In Quality Organizations}

3 Credits 3 Periods

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 and control projects. Prerequisites: None.

\section*{Welding}

\section*{WLD101 Welding I}

3 Credits 6 Periods
Principles and techniques of electric arc and oxyacetylene welding and cutting. Provides technical theory and basic skill training in these welding processes. Prerequisites: None.

\section*{WLD102 Basic Welding Metal Sculpture}

\section*{3 Credits 6 Periods}

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. WLD102 may be repeated for a total of one hundred fifty (150) credit hours.

\section*{WLD103 Basic Blacksmithing and Metal Shaping}

3 Credits 8 Periods
Selection and safe use of blacksmithing and metal shaping tools and equipment. Material selection and conditioning, practical forging techniques, metal shaping experience, and finishing processes. Prerequisites: None. WLD103 may be repeated for a total of one hundred fifty (150) credit hours.

\section*{WLD106AA Arc Welding}

\section*{5 Credits 8 Periods}

Electric welding with emphasis on metallic arc welding in out-of-position practice and procedures. Prerequisites: None.

\section*{WLD106AB Arc Welding 6010 3G-4G}

\section*{5 Credits 8 Periods}

Electric welding with emphasis on metallic arc welding in out-of-position 3G, 4G practice and procedures using 6010 fast freeze electrodes in fillet and groove welds. Prerequisites: A grade of 'C' or better in WLD106AA or permission of Instructor.

\section*{WLD106AC Arc Welding 7018 3G-4G}

\section*{5 Credits 8 Periods}

Electric welding with emphasis on metallic arc welding in out-of-position 3G, 4G practice and procedures using 7018 fill freeze electrodes in fillet and groove welds. Prerequisites: A grade of ' \(C\) ' or better in WLD1 06AA or permission of Instructor.

\section*{WLD106AD Arc Welding 6010, 7018 5G-6G 5 Credits 8 Periods}

Electric welding with emphasis on metallic arc welding in 5G, 6G out-of-position practice and procedures using 6010 and 7018 electrodes in fillet and groove welds on steel pipe. Prerequisites: A grade of ' \(C\) ' or better in WLD106AA or permission of Instructor.

\section*{WLD150 Welding Blueprint Reading}

3 Credits 3 Periods
Analysis and interpretation of technical drawings common to the metal fabrication and construction trades. Welding blueprint symbols. Prerequisites: None.

\section*{WLD206AA GMAW and GTAW Welding 5 Credits 8 Periods}

Instruction in theory and practice of Gas Metal Arc Welding (GMAW) and Gas Tungsten Arc Welding (GTAW) on tungsten inert gas and wire feed welding. Basic welding procedures on ferrous and nonferrous metals. Set up and operation of all types of machines used in Tungsten Inert Gas (TIG) and Metal Inert Gas (MIG) welding. Prerequisites: A grade of 'C' or better in WLD1 06AA or permission of Instructor.

\section*{Course Descriptions}

\section*{WLD206AB Advanced GMAW and FCAW Welding}

\section*{5 Credits 8 Periods}

Instruction in theory and practice of the wire feed welding process with emphasis on advanced Gas Metal Arc Welding (GMAW) 3G and 4G, Flux-cored arc welding (FCAW) 3G and 4G positions. Welding procedures performed on ferrous (steel) metals. Set up and operation of all types of machines used in Metal Inert Gas (MIG) welding. Prerequisites: A grade of ' \(C\) ' or better in WLD206AA or permission of Instructor.

\section*{WLD206AC Advanced GTAW Non-Ferrous Welding \\ 5 Credits 8 Periods}

Instruction in theory and practice on Tungsten Inert Gas (TIG) with emphasis on Gas Tungsten Arc Welding (GTAW) certification 1G and 3G positions. Welding procedures on nonferrous metals. Set up and operation of all types of machines used in TIG operations. Prerequisites: \(A\) grade of ' \(C\) ' or better in WLD206AA or permission of Instructor.

\section*{WLD206AD Advanced GTAW \\ Ferrous Welding}

5 Credits 8 Periods
Instruction in theory and practice on Tungsten Inert

Gas (TIG) welding with emphasis on Gas Tungsten Arc Welding (GTAW) certifications 1G and 3G positions on ferrous metals. Set up and operation of all types of machines used in TIG welding. Prerequisites: A grade of 'C' or better in WLD206AA or permission of Instructor.

\section*{WLD208AA Advanced Arc Welding 3G Certification \\ 5 Credits 8 Periods}

Advanced metallic arc welding emphasizing 3 G vertical position welding structural steel in preparation for certification. Includes various test methods. Provides training on machine flame cutting and gouging and arc air cutting and gouging. Prerequisites: A grade of ' \(C\) ' or better in WLD106++ or permission of Instructor.

\section*{WLD208AB Advanced Arc Welding 4G Certification}

\section*{5 Credits 8 Periods}

Advanced metallic arc welding emphasizing 4G position welding structural steel in preparation for certification. Includes various test methods. Provides training on machine flame cutting and gouging and arc air cutting and gouging. Prerequisites: A grade of 'C' or better in WLD106++ or permission of Instructor.

\section*{WLD208AC Advanced Arc Welding 5G Pipe Certification}

\section*{5 Credits 8 Periods}

Advanced metallic arc welding emphasizing 5G position welding steel pipe in preparation for certification. Includes various test methods. Provides training on machine flame cutting and gouging and arc air cutting and gouging. Prerequisites: A grade of ' C ' or better in WLD208AB or permission of Instructor.

\section*{WLD208AD Advanced Arc Welding Pipe 6G Certification}

5 Credits 8 Periods
Advanced metallic arc welding emphasizing 6G position welding steel pipe in preparation for certification. Includes various test methods. Provides training on machine flame cutting and gouging and arc air cutting and gouging. Prerequisites: A grade of ' \(C\) ' or better in WLD208AC or permission of Instructor.

\section*{WLD215 Welding Fabrication}

\section*{3 Credits 6 Periods}

Utilize welding skills to produce a major product. Design, plans, procedure sheet, and selected fabrication processes required. Purchase of necessary materials, and completion of a finished usable product. Prerequisites: A grade of ' \(C\) ' or better in WLD101 and WLD206.

\section*{WLD225 Welding Inspection and Quality Control}

\section*{3 Credits 3 Periods}

Welding inspection and quality control standards and practices in the construction and fabrication industries. Welding inspector certification requirements and functions performed in industry. Prerequisites: A grade of ' \(C^{\prime}\) ' or better in WLD106++ or permission of Instructor.

\section*{WLD296WA Cooperative Education}

\section*{1 Credit 5 Periods}

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 12 college credits, min. 2.6 GPA and obtain a position related to academic or career goals or permission of Instructor. Corequisites: At least 1 class related to major or career interest or with permission of the Instructor.

\section*{WLD296WB Cooperative Education}

\section*{2 Credits 10 Periods}

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 12 college credits, min. 2.6 GPA and obtain a position related to academic or career goals or permission of Instructor. Corequisites: At least 1 class related to major or career interest or with permission of the Instructor.

\section*{WLD296WC Cooperative Education}

\section*{3 Credits 15 Periods}

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 12 college credits, min 2.6 GPA and obtain a position related to academic or career goals or permission of Instructor. Corequisites: At least 1 class related to major or career interest or with permission of the Instructor.

\section*{WLD296WD Cooperative Education}

\section*{4 Credits 20 Periods}

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 12 college credits, min. 2.6 GPA and obtain a position related to academic or career goals or permission of Instructor. Corequisites: At least 1 class related to major or career interest or with permission of the Instructor.

\section*{Wellness Education}

\section*{WED110 Principles of Physical Fitness and Wellness \\ SB}

\section*{3 Credits 3 Periods}

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 management of personal health and lifestyle habits to achieve the highest potential for well-being. Prerequisites: None.

\section*{WED162 Meditation and Wellness}

1 Credit 1 Period
Physiology of meditation and its effects on physical and mental health; scholastic abilities and interpersonal relationships; differentiation between meditation and other relaxation techniques. Prerequisites: None.

\section*{Women's Studies}

\section*{WST100 Introduction to Women's and Gender Studies \\ C, SB}

3 Credits 3 Periods
Introduction to critical issues in women's studies.
Prerequisites: None.

\section*{WST209 Women and Films}

C, HU
3 Credits 3 Periods
Analysis of images of women in films from both historical and contemporary perspectives. Prerequisites: None.

\section*{WST282AA Volunteerism for Women's Studies: A Service-Learning Experience 1 Credit 1 Period \\ 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. May be repeated for a total of six (6) WST282 credit hours. Standard grading available according to procedures outlined in catalog. Prerequisites: A grade of ' C ' or better in WST100 and permission of Instructor.}

\section*{WST286 Women and Health: Body/Mind/ Spirit/Connection}

3 Credits 3 Periods
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 health promotion. Prerequisites: None.

\section*{WST290 Women and World Religions}

G, HU
3 Credits 3 Periods
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 the world. Prerequisites: None.


\title{
MCCCD Policies \& Procedures
}

MESA
COMMUNITY COLLEGE
A MARICOPA COMMUNITY COLLEGE

\section*{MCCCD Policies \& Procedures}

\section*{Catalog Common Pages 2020-2021 Maricopa County Community College District}
2.2.2 Admission Information AMENDED through the Administrative Regulation Process, June 30, 2020; 2.2.4 Transfer Credit and Prior Learning Assessment Policy AMENDED through the Administrative Regulation Process, June 30, 2020; 2.3.3 Grading AMENDED through the Administrative Regulation Process, June 30, 2020; S-1 Residency for Tuition Purposes AMENDED through the Administrative Regulation Process, June 30, 2020.

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.

\section*{General Statement, EEO/Non-Discrimination, and Board Policy (Vision, Mission, Values)}

\subsection*{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.

\subsection*{2.4.2 Nondiscrimination}

\section*{(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 by the Chancellor, April 8, 2020
AMENDED per Administrative Regulation Process, January 2, 2020

\subsection*{2.4.3 Equal Opportunity Statement}

\author{
(see 5.1.3 EEO Policy Statement)
}

\begin{abstract}
It is the policy of the Maricopa County Commu nity 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.
\end{abstract}

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 by the Chancellor, April 8, 2020
AMENDED per Administrative Regulation Process, January 2, 2020

\section*{AFFIRMATIVE ACTION STATEMENTS}

\section*{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.

\section*{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.

\title{
Notice of Americans with Disabilities Act (ADA)/ Section 504 of the Rehabilitation Act/Title IX Coordinator
}

\author{
(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.

\section*{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.)

\section*{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 per Administrative Regulation Process, January 2, 2020

\section*{Governing Values (Board Policy 4.1)}

\section*{Our Vision:}

A Community of Colleges-Colleges for the Community-working collectively and responsibly to meet the lifelong learning needs of our diverse students and communities.

\section*{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

\section*{Our Institutional Values:}

The Maricopa Community Colleges are committed to:

\section*{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.

\section*{Excellence}

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

\section*{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.

\section*{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.

\section*{Innovation}

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

\section*{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.

\section*{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.

\section*{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.

\title{
Admissions, Registration, Enrollment
}

\subsection*{2.1 General Regulation}

\section*{1. General Statement}

\section*{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.

\section*{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.

\subsection*{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.

\section*{Admission Classifications}

\section*{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.

\section*{2. Admission of Students Under 18 Years of Age}
A. 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.
B. A community college may limit the number of semester hours in which the student may enroll to not more than six (6) credit hours.
C. Home schooled students are exempt from this sub-section.
D. 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.

\section*{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 student meets 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.

\section*{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 Marianas Islands (CNIMI) 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-ofstate 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.

\section*{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). When completed, the form(s) should be returned 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.

\section*{A. Admission to Academic Programs}

Applicants who wish to enroll in an academic program at the college must present evidence of English language proficiency. If the Test of English as a Foreign Language (TOEFL) is used to satisfy this requirement, the applicant must attain a score of at least 500 (on the paper-based TOEFL) or 61 (on the internet-based TOEFL, known as the iBT). If the International Language Testing System (IELTS) is used to satisfy this requirement, an IELTS overall Band Score of 5.5 or better is required, and a minimum IELTS individual Band Score of 5.0 on each module is recommended. The dean or director of Admissions and Records Office/Office of Student Enrollment Services of the college may accept other proof of English language proficiency for admission purposes, such as the ASSET, ACCUPLACER, COMPASS or CELSA tests.

\section*{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:
i. At least six years of English language instruction as shown by the applicant's school transcript(s);
ii. A minimum TOEFL score of 400 (on the paper-based TOEFL) or 23 (on the internet-based test);
iii. 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; iv. 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.
v. Foreign students under certain types of visas may need special permission to enroll and should contact the appropriate college official.

\section*{C. Financial Support}

Evidence of financial support will be required prior to issuance of the l-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:
\begin{tabular}{|c|c|}
\hline Tuition and Fees & \(\$ 8,010^{1}\) \\
\hline Living Expenses & \(\$ 10,140^{2}\) \\
\hline Books & \(\$ 800^{3}\) \\
\hline Health Insurance & \(\$ 1400^{4}\) \\
\hline Total & \(\$ 20,350^{5}\) \\
\hline
\end{tabular}

Footnotes:
(1) Based on 2016-2017 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 2016-2017 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 \(1-20\) is issued.
D. Dependent Financial Guarantee

Evidence of financial support for dependents of \(\mathrm{F}-1\) and \(\mathrm{M}-1\) 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.

AMENDED by Direct Chancellor Approval, June 4, 2019
AMENDED through the Administrative Regulation Process, June 5, 2017

\subsection*{2.2.2 Admission Information}

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

\section*{1. Student Status}
A. Freshman - A student who has completed fewer than 30 credit hours 100 -level courses and above.
B. Sophomore - A student who has completed 30 credit hours or more in 100 -level courses and above.
C. Unclassified - A student who has an associate degree or higher.

\section*{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.

\section*{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)

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.

\section*{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.

\section*{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 MCCCD 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.

\section*{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 for in-state tuition status and other public benefits must demonstrate lawful presence in the United States by presenting one of the documents listed in this regulation, under the section "Demonstrating Lawful Presence."
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 an in-state student 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 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.

\section*{AMENDMENT TO BE REPEATED IN CORRESPONDING APPENDIX ITEM S-1 - IN-STATE STUDENT STATUS SECTION C}
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: G. A person holding an honor/ able 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 veteran using Chapter 30 or 33 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, may be eligible for immediate classification as an in-state student if he/she meets the provisions of Arizona statute HB 2091, paragraph H: h. A person who, while using educational assistance under 38 United States Code Chapter 30 or Chapter 33, enrolls in a university under the jurisdiction of the Arizona Board of Regents or a community college under the jurisdiction of a community college district governing board within three years after the veteran's discharge from active duty service of ninety or more days or within three years after the service member's death in the line of duty following a period of active duty service of ninety or more days or who remains continuously enrolled beyond the three-year period following the discharge of the veteran or the service member's death shall be granted immediate classification as an in-state student and does not lose in-state student classification if the person has demonstrated objective evidence of intent to be a resident of this state that, for the purposes of this section, includes at least one of the following:

Students are required to submit the following:
1. Certificate of eligibility letter from the VA Awarding Chapter 30 or 33 benefits or the Fry scholarship, or the Dept. of Defense document approving the transfer of CH .33 benefits
2. DD-214 proving a minimum of 90 days service and no more than 3 years since discharge or since death of veteran
3. Students must also provide at least one of the following:
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. In accordance with the Illegal Immigration Reform and Immigrant Responsibility Act of 1996 (P.L. 104-208; 110 Stat. 3009-546), a person who was not a citizen or legal resident of the United States or who is not lawfully present in the United States is not entitled to classification as an in-state student pursuant to ARS §15-1802 or entitled to classification as a county resident
pursuant to ARS §15-1802.01. A student will be assessed out-of-state tuition until such time that documentation of lawful presence 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.
3. 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):
\begin{tabular}{ll} 
A & Foreign Government Official or Adopted Child of a Permanent Resident \\
E & \(=\) Treaty Traders \\
G & Principal Resident Representative of Recognized Foreign Member Government to \\
& International Staff H=H1B AND H4
\end{tabular}
4. Students who hold a current visa and have submitted an I-485 to U.S. Citizenship and Immigration Services (USCIS), may establish residency if other domicile requirements have been met. Residency eligibility for I-485 applicants may be considered one year after the date on the USCIS Notice of Action letter (I-797) confirming application for permanent resident status provided their prior visa status is one that allows the visa holder to establish domicile in the United States. Students must provide required residency documentation in addition to the (I-797) Notice of Action for residency consideration. In establishing domicile, the alien must be in a status that does not prohibit establishing domicile in this state for at least one year immediately preceding the official starting date of the semester. Exception: In the event that an alien student's parent is allowed to claim the student as an exemption for state or federal tax purposes (3C.1.2.A) (E.G., The student is under 23 and not emancipated), the student's residence is deemed to the same as the parent's. If the parent holds a visa that is not listed in section 3 above, he or she would not be eligible to establish residency. In such circumstances, the student would likewise be barred notwithstanding his or her own filing of an I-485.
5. 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.
iii. Proving lawful presence in the United States

All applicants for instate tuition (and other public benefits) must first show at least one of the following documents in accordance with ARS \(\S 1-502\) to demonstrate that they are lawfully present in the United States by presenting to the Registrar at least one of the following documents:
H. An Arizona Driver's license issued after 1996 or an Arizona non-operating identification license or an Arizona Instruction Permit
I. A birth certificate or delayed birth certificate issued in any state, territory, or possession of the United States (A hospital record/certificate and certified Abstract of Birth are not acceptable). .
J. A United States certificate of birth abroad.
K. A United States Passport.
L. A Foreign Passport with a United States Visa.
M. An I-94 Form with a Photograph.
N. 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].
O. A United States Permanent Resident Card
P. A United States Certificate of Naturalization.
Q. A United States Certification of Citizenship.
R. A Tribal Certificate of Indian Blood.
S. 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.
** If you think that this may apply, please contact the Legal Services Department for assistance.
iv. 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.
v. Proof of Residency

When a student's residency is questioned, the following proof will be required.
1. In-State Residency
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

\section*{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 Regulation Process, June 30, 2020
AMENDED through the Administrative Regulation Process, November 5, 2019
AMENDED by Direct Chancellor Approval, September 17, 2018
AMENDED by Direct Chancellor Approval, August 30, 2017
AMENDED by Direct Chancellor Approval, August 30, 2015
AMENDED by Direct Chancellor Approval, May 20, 2015

\subsection*{2.2.3 Other Admission Information}

\section*{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 Withdrawal - Appendix S-7)

\section*{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 student 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.

\section*{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.

\section*{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)

\section*{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)).

AMENDED through the Administrative Regulation Process, October 23, 2019
AMENDED through the Administrative Regulation Process, June 5, 2017

\subsection*{2.2.4 Transfer Credit and Prior Learning Assessment Policy}

\section*{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. 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 associate's degree and certificate requirements.

The Maricopa Community Colleges will evaluate coursework from institutions listed in the database of 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 college(s). Contact your College Admissions and Records/Enrollment Services Office to obtain a list of recommended evaluation services.

\section*{CONDITIONS OF TRANSFER CREDIT:}
- Credits transferred from outside of MCCCD graded on a plus/minus grading scale are converted based on the grading scale of the transferring institution. Only courses with a grade of ' C ' ( 2.0 on a 4.0 scale) or better are transferable. Course credit below 100 level, earned at an MCCCD Institution prior to August 2020 or at a sending institution, cannot be used to calculate grade level.
- Developmental coursework below 100 -level 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.
- Courses with different credit systems (quarter hours, units) are converted to semester hours of credit. The semester conversion of quarter credits is at a rate of .67 semester credit hours for each quarter hour.
- The age of credit may be considered in applying credit toward degrees and certificate programs.

\section*{REVERSE TRANSFER OF CREDIT}

In an effort to assist former Maricopa students who have transferred to a university, the Maricopa Community Colleges offer reverse transfer of credit with participating universities. Former Maricopa students may use this opportunity to fulfill previously incomplete coursework requirements. Interested students at participating universities must meet university criteria to qualify for free transcript exchange when available. Participation in reverse transfer of credit does not guarantee coursework applicability or degree or certificate eligibility. Students participating in reverse transfer of credit must meet all curriculum and college requirements.

\section*{PRIOR LEARNING ASSESSMENT (PLA)}

The Maricopa Community Colleges are committed to the idea that people deserve credit for 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. PLA credit may be awarded if the following standards have been met:
- Student has been admitted to the college.
- Student has declared a pathway (certificate or degree).
- The learning is college level and verifiable.
- PLA credit may be applied toward a degree program, certificate, general education requirements, concentration, 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 satisfy prerequisite requirements using the same policy that applies to other course equivalencies.
- All work assessed for PLA credit was earned with a grade of 'C' or better.

Students may be awarded no more than 30 credit hours through Prior Learning Assessment, unless required by a specific program of study within the Maricopa Community Colleges. Exceptions include evaluated credit from post-secondary institutions and military credit as indicated on joint service transcripts. Credit awarded for Prior Learning does not count as hours in residence for graduation requirements. Exceptions may be granted at some of the Maricopa Community Colleges for unique programs of study. 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.

\section*{PRIOR LEARNING ASSESSMENT FEE SCHEDULE}

No fees are assessed by the college for the following types of Prior Learning Assessment: Transfer credit from nationally recognized institutions, international coursework that has been officially evaluated by a foreign evaluator service (such as Educational Credential Evaluators), 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, Skill Center and clock hour transcripts.
Departmental Challenge Exam and Credit By Evaluation
\$40 administrative fee if awarded transfer credit

\section*{CREDIT BY EXAM (COLLEGE-LEVEL EQUIVALENCY EXAMINATIONS)}

ACE has published credit recommendations for a number of national standardized examinations such as the ones listed below in the Guide to Educational Credit by Examination. 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 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 credit for Prior Learning Assessment policies at any college or university outside of the Maricopa Community Colleges to which they plan to transfer. Credit by exam 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).

\section*{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)
- Departmental Exams (also known as "Challenge Exams")
- Defense Activity For Non-Traditional Education Support [DANTES] Subject Standardized Tests (DSST)
- GED, College Ready + Scores
- International Baccalaureate (IB) Diploma/Certificate
- Pearson VUE Exams

Fees for standardized exams are the responsibility of the student.
Current list of exams and scores.

\section*{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.

\section*{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.

\section*{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.

\section*{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, 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.

\section*{DEPARTMENTAL EXAMS (ALSO KNOWN AS CHALLENGE EXAMS)}

Students may apply for departmental credit by examination in certain courses by obtaining the appropriate form in the Admissions and Records Office, paying the required fee, and completing the examination and other requirements of the college. See fee schedule for appropriate fees. 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.

\section*{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 Examination," a grade and the number of credits will appear on the student's transcript. The grade is used in computing the grade point average.

\section*{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.

The Assessment Center at Rio Salado College is a DSST test site. 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.

\section*{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.

\section*{EDUCATIONAL EXPERIENCES IN THE ARMED SERVICES}

The Maricopa Community Colleges may award credit for military experiences based on the ACE Guide to the Evaluation of Educational Experiences in the Armed Services. 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.

\section*{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.

\section*{CREDIT BY EVALUATION}

\section*{COLLEGE CREDIT RECOMMENDATION SERVICE}

ACE evaluates training programs offered by business, industry, and government and publishes its credit recommendations in The National Guide. If a student has received training that appears in the guide, he or she 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.

\section*{DEPARTMENTAL CREDIT BY EVALUATION}

Students may apply for Departmental Credit by Evaluation in certain courses by obtaining the appropriate form in the Admissions and Records /Enrollment Services Office. The completed Credit by Evaluation form and the required fees are due to the college when the Credit by Evaluation request is submitted.

Some academic departments may have additional requirements that must be met before credit may be granted through Departmental Credit by Evaluation. When credit is granted a notation of "Credit by Evaluation," and the number of credits 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.

\section*{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 Regulation Process, June 30, 2020
AMENDED through the Administrative Regulation Process, November 5, 2019
AMENDED by Direct Chancellor Approval, August 10, 2018
AMENDED by Direct Approval by the Provost, May 8, 2018
AMENDED by Direct Chancellor Approval, June 28, 2017
AMENDED through the Administrative Regulation Process, June 5, 2017
AMENDED by Direct Chancellor Approval, January 4, 2017

\subsection*{2.2.6 Academic Advising, New Student Orientation, and Student Success Course}

\section*{1. Academic Advising}

Students who will be attending college for the first time, and intend to earn an Associate's degree or to transfer to a college/university to complete a Bachelor's degree, will be required to meet with an academic advisor prior to the start of their first semester at a MCCCD college.
i. Recent high school students who received MCCCD credits through Dual/Concurrent Enrollment, ACE, Hoop of Learning, or any MCCCD Early Outreach Program are considered first time to college.

\section*{2. New Student Orientation}

Students who will be attending college for the first time, and intend to earn an Associate's degree or to transfer to a College/university to complete a Bachelor's degree, will be required to attend New Student Orientation prior to the start of their first semester at a MCCCD College.
i. Recent High School students who received MCCCD credits through Dual/Concurrent Enrollment, ACE, Hoop of Learning, or any MCCCD Early Outreach Program are considered first time to college.

\section*{3. Student Success Course}

Students who will be attending college for the first time, and intend to earn and associate's degree or transfer to a college/university to complete a bachelor's degree will be required to successfully complete a college success course (CPD150 or CPD115/AAA115) within the first two semesters at a MCCCD college, unless they have completed high school within the last 10 years with a cumulative, unweighted grade point average of 2.6 or above. colleges have the leeway to determine if a student who is not first-time or enters with a cumulative grade point average of 2.6 or higher should have the college success course (CPD150 or CPD115/AAA115) added to their program requirements.

\subsection*{2.2.7 Student Assessment and Course Placement}

\section*{1. Course Placement}
A. 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 a regionally accredited college.
ii. The student has earned college credits from a regionally 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.

\section*{2. Determining Course Placement}

Maricopa County 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.

\section*{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.

\section*{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 Regulation Process, June 4, 2019

\subsection*{2.2.8 Registration}

Students must register 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 final decision for admission to 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 department chairperson and/or faculty.

\section*{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 my.maricopa.edu 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.

\subsection*{2.2.9 Tuition and Fees Policy}

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 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.)

\section*{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 fee schedule approved by the Maricopa Community Colleges Governing Board.
2. Tuition and Fees Schedule (Effective July 1, 2018 for fall, spring and summer Sessions)*

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 for 2018-2019 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.

Amended through Direct Chancellor Approval, November 21, 2018

\section*{Appendix S-4: Tuition \& Fee Schedule Student Status}
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline 2019-2020 &  &  &  &  &  &  &  \\
\hline & \multicolumn{3}{|c|}{IN-STATE} & \multicolumn{4}{|c|}{OUT-OF-STATE} \\
\hline Credit Hours & A & B & C* & D** & E & F***/+ & G \\
\hline 1 & 85.00 & 110.00 & TBD & 215.00 & 205.00 & 215.00 & 127.50 \\
\hline 2 & 170.00 & 220.00 & TBD & 430.00 & 410.00 & 430.00 & 255.00 \\
\hline 3 & 255.00 & 330.00 & TBD & 645.00 & 615.00 & 645.00 & 382.50 \\
\hline 4 & 340.00 & 440.00 & TBD & 860.00 & 820.00 & 860.00 & 510.00 \\
\hline 5 & 425.00 & 550.00 & TBD & 1,075.00 & 1,025.00 & 1,075.00 & 637.50 \\
\hline 6 & 510.00 & 660.00 & TBD & 1,290.00 & 1,230.00 & 1,290.00 & 765.00 \\
\hline 7 & 595.00 & 770.00 & TBD & 1,505.00 & 1,435.00 & 1,505.00 & 892.50 \\
\hline 8 & 680.00 & 880.00 & TBD & 1,720.00 & 1,640.00 & 1,720.00 & 1,020.00 \\
\hline 9 & 765.00 & 990.00 & TBD & 1,935.00 & 1,845.00 & 1,935.00 & 1,147.50 \\
\hline 10 & 850.00 & 1,100.00 & TBD & 2,150.00 & 2,050.00 & 2,150.00 & 1,275.00 \\
\hline 11 & 935.00 & 1,210.00 & TBD & 2,365.00 & 2,255.00 & 2,365.00 & 1,402.50 \\
\hline 12 & 1,020.00 & 1,320.00 & TBD & 2,580.00 & 2,460.00 & 2,580.00 & 1,530.00 \\
\hline 13 & 1,105.00 & 1,430.00 & TBD & 2,795.00 & 2,665.00 & 2,795.00 & 1,657.50 \\
\hline 14 & 1,190.00 & 1,540.00 & TBD & 3,010.00 & 2,870.00 & 3,010.00 & 1,785.00 \\
\hline 15 & 1,275,.00 & 1,650.00 & TBD & 3,225.00 & 3,090.00 & 3,225.00 & 1,912.50 \\
\hline 16 & 1,360.00 & 1,760.00 & TBD & 3,440.00 & 3,280.00 & 3,440.00 & 2,040.00 \\
\hline 17 & 1,445.00 & 1,870.00 & TBD & 3,655.00 & 3,485.00 & 3,655.00 & 2,167.50 \\
\hline 18 & 1,530.00 & 1,980.00 & TBD & 3,870.00 & 3,690.00 & 3,870.00 & 2,295.00 \\
\hline
\end{tabular}
* Students from any other county in Arizona are considered Maricopa County residents (in county) due to a reciprocal arrangement with that county. Reciprocal agreements allow for in-county tuition rates for residents of all Arizona counties except Apache or Greenlee counties without an Out-of-County Residence Affidavit.
** According to ARS §15-1802F, "A person who is a member of an Indian tribe recognized by the US Department of the Interior whose reservation lies in this state and extends into another state and who is a resident of the reservation is entitled to classification as an in-state student." Therefore, unclassified and out-of-state surcharges do not apply to such students.
*** According to ARS \(\$ 15-1470\), community college districts may offer credit and noncredit courses and services outside of
\(+\quad\) This rate applies to out-of- state resident students who are taking distance learning courses or students who are taking classroom-based credit courses through a contract agreement between MCCCD and the company they work for. This rate does not apply to Study Abroad Programs as there is a separately calculated rate for those students.
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.

\section*{Skill Center Tuition Rates}
Regular \(\$ 5.00\) per clock hour

Nursing Assistant \(\quad \$ 6.00\) per clock hour
Practical Nursing \(\quad \$ 6.00\) per clock hour
Amended through the Administrative Regulation Process, May 5, 2017

\section*{Credit by Examination \& Credit by Evaluation (excludes Allied Health courses)}
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Regular Rate
$\$ 85.00$ per credit hour
Contract Rate
$\$ 42.50$ per credit hour

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\section*{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. MCCCD 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 MCCCD 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.

Admission Criteria to Attend a College within the Maricopa Community College District (MCCCD) 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 MCCCD faculty or staff.

\section*{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 and student activity fees for credit-hour courses for employees and their dependents, and for legislatively mandated groups. Special 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.

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.

\subsection*{2.2.10 Refund Policy}

\section*{1. Refund Policy for Credit/Clock Classes}

Students who officially withdraw from credit/clock classes (in fall, spring, or summer) within the withdrawal deadlines listed below will receive a 100\% refund for tuition, class and registration fees. 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.
\begin{tabular}{|l|l|}
\hline Length of Class & Official Withdrawal Deadlines for 100\% Refund \\
\hline \(1-9\) calendar days & Prior to the class start date \\
\hline \(10-19\) calendar days & 1 calendar day including the class start date \\
\hline \(20-29\) calendar days & 2 calendar days including the class start date \\
\hline \(30-39\) calendar days & 3 calendar days including the class start date \\
\hline \(40-49\) calendar days & 4 calendar days including the class start date \\
\hline \(50-59\) calendar days & 5 calendar days including the class start date \\
\hline \(60-69\) calendar days & 6 calendar days including the class start date \\
\hline \(70+\) calendar days & 7 calendar days including the class start date \\
\hline
\end{tabular}
*Course fees and registration processing fees will be refunded only if the student qualifies for a \(100 \%\) refund. Debts owed to any MCCCD college must be satisfied before any refunds are paid to the student. Refunds for students receiving federal financial assistance are subject to federal guidelines. Requests for exceptions to the refund policy must be filed within one year from the semester in which the course was taken.

\section*{2. Refund Policy for Non-Credit Classes}

Unless otherwise specified, students must drop non-credit classes prior to the course start date to be eligible for a 100\% refund.

\section*{3. Canceled Classes}

When a class is canceled by the college, a \(100 \%\) refund will be made.

\section*{4. Refund Exceptions}

Students withdrawing from a college or from courses for one of the following reasons must submit a written request for a refund exception to the Admissions and Records Office/Office of Student Enrollment Services or designated college official:
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 courses have not been completed.

Requests for a total withdrawal from a college or courses for one of the above reasons may result in a partial prorated refund of tuition, provided courses 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

\section*{5. Refund Policy for Department of Defense Tuition Assistance Funds}

Students who receive tuition assistance (TA) funds for a course or courses 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 exception \(D\), 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 courses 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 college of enrollment.
AMENDED by Direct Approval, January 13, 2020.
AMENDED through the Administrative Regulation Process, May 5, 2017

\subsection*{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.

\section*{Appendix S-5: 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. Only those with a lawful presence in the United States may qualify for federal financial aid or Maricopa County Community College District (MCCCD) scholarships. Under Arizona law, any information the student provides about his or her legal status when applying for financial aid or publicly funded scholarships may be subject to mandatory reporting to federal immigration authorities. This does not apply to applications for the private scholarship funds held in and distributed by the Maricopa Community Colleges Foundation.

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 agen\(c y\), 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.

\section*{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 http://www.fafsa.ed.gov/. 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.

\section*{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. Scholarship opportunities are available year round. However, most scholarships are posted mid-January and most deadlines are the last week of March. Options are available at https://mccedf.org/ or by calling 480-731-8400.

\section*{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.

\section*{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.

\section*{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.

\section*{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 Appendix S-7 for Withdrawal procedures.

\section*{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 my.maricopa.edu. 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 my.maricopa.edu. 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.

\section*{Award Amount and Level of Enrollment}

Award amount is determined, in part, on the level of enrollment. 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.

\section*{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.

\section*{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 MCCCD'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 MCCCD college, including transfer credit hours accepted by the college.

\section*{1. Definitions and Terminology Pertaining to this Policy}
A. Summer: Enrollment in the summer semester includes all courses scheduled within the summer enrollment period with all coursework counted in the SAP evaluation.
B. Non-Standard Session / Clock Hour: Sessions that do not follow the traditional start and end dates for the semester.
C. 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.
D. CGPA [Cumulative Grade Point Average]: The MCCCD grading policy is published in the administrative regulations at 2.3.3. The CGPA does not include credits accepted in transfer.
E. 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 (2/3). Students not meetng maximum timeframe evaluation are not eligible for a warning period.
F. 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.
G. Extenuating Circumstance: A one-time (not on-going) circumstance that is beyond the reasonable control of the student.
H. 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.
I. 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.
J. 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.

\section*{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.
a. Grade Point Average Qualitative Measurement: Students must maintain a 2.0 cumulative Grade Point Average in order to meet SAP GPA requirements.
b. 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.
c. 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.
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
c. 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)

\section*{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.

\section*{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.

\section*{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 ten (10) 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.

\section*{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.

\section*{Treatment of Title IV Aid When a Student Withdraws}

The law specifies how your school must determine the amount of Title IV program assistance that you earn if you withdraw from school. The Title IV programs that are covered by this law are: Federal Pell Grants, National SMART grants, TEACH Grants, Stafford Loans, PLUS Loans, Federal Supplemental Educational Opportunity Grants (FSEOGs), and Federal Perkins Loans.

When you withdraw during your payment period or period of enrollment (you may contact the Financial Aid office to define these for you and tell you which one applies) the amount of Title IV program assistance that you have earned up to that point is determined by a specific formula. If you received (or your school or parent received on your behalf) less assistance than the amount that you earned, you may be able to receive those additional funds. If you received more assistance than you earned, the excess funds must be returned by the school and/or you.

The amount of assistance that you have earned is determined on a pro-rata basis. For example, if you completed \(30 \%\) of your payment period or period of enrollment, you earn \(30 \%\) of the assistance you were originally scheduled to receive. Once you have completed more than \(60 \%\) of the payment period or period of enrollment, you earn all the assistance that you were scheduled to receive for that period.

If you did not receive all of the funds that you earned, you may be due a post-withdrawal disbursement. If your post-withdrawal disbursement includes loan funds, your school must get your permission before it can disburse them. You may choose to decline some or all of the loan funds so that you don't incur additional debt. Your school may automatically use all or a portion of your post-withdrawal disbursement of grant funds for tuition, fees, and room and board charges (as contracted with the school). The school needs your permission to use the post-withdrawal grant disbursement for all other school charges. If you do not give your permission, you will be offered the funds. However, it may be in your best interest to allow the school to keep the funds to reduce your debt at the school.

There are some Title IV funds that you were scheduled to receive that cannot be disbursed to you once you withdraw because of other eligibility requirements. For example, if you are a first-time, first-year undergraduate student and you have not completed the first 30 days of your program before you withdraw, you will not receive any FFEL or Direct loan funds that you would have received had you remained enrolled past the 30th day.

If you receive (or your school or parent receives on your behalf) excess Title IV program funds that must be returned, your school must return a portion of the excess equal to the lesser of:
1. your institutional charges multiplied by the unearned percentage of your funds, OR
2. the entire amount of excess funds. The school must return this amount even if it didn't keep this amount of your Title IV program funds.

If your school is not required to return all of the excess funds, you must return the remaining amount. Any loan funds that you must return, you (or your parent for a PLUS Loan) repay in accordance with the terms of the promissory note. That is, you make scheduled payments to the holder of the loan over a period of time. Any amount of unearned grant funds that you must return is called an overpayment. The maximum amount of a grant overpayment that you must repay is half of the grant funds you received or were scheduled to receive. You must make arrangements with your school or the Department of Education to return the unearned grant funds.

The requirements for Title IV program funds when you withdraw are separate from any refund policy that your school may have. Therefore, you may still owe funds to the school to cover unpaid institutional charges. Your school may also charge you for any Title IV program funds that the school was required to return. You can view the tuition refund policy and requirements and procedures for withdrawing from school at https://district. maricopa.edu/regulations/admin-regs/section-2/2-2

TECHNICAL CHANGE by Legal Counsel, May 6, 2020
AMENDED through DIRECT APPROVAL by the Chancellor, May 5, 2020
AMENDED through the Administrative Regulation Process, June 5, 2017

\subsection*{2.2.12 Vaccinations (As Required By 20 USC §1092(a)(1)(V))}

The Maricopa Country 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.

\subsection*{2.2.13 University Transfer}

\section*{UNIVERSITY TRANSFER}

The Maricopa Community Colleges have developed formal agreements to facilitate the transfer of credit to four-year 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 baccalaure-ate-granting institutions [such as the Maricopa-ASU Pathway Program (MAPP), the UA Bridge Program, 2NAU and 90/30 Transfer Agreements] are official, recognized programs of study that fulfill both associate degree and bachelor's degree requirements. These articulated programs and pathways are designed to aid in a smooth transition for a student planning to transfer to a four-year college or university by identifying the required, transferable, and applicable coursework for that student's specific program of study. A complete list of Maricopa-ASU Pathway Program requirements by major and catalog year is maintained on ASU'S website, at Transfer.

\section*{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 bachelor's degrees. AZ Transfer Course Equivalency Guide

\section*{(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 toward a bachelor's degree. To access a list of institutions with which Maricopa has established articulation agreements, visit: Maricopa University Partner List.

\section*{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.

\section*{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.

ADOPTED through the Administrative Regulation Process, June 4, 2019

\subsection*{2.9 Veterans Services}

The Maricopa Community Colleges' veterans' services offices act as liaisons with the Department of Veterans Affairs 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 deter-
mined 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.

\section*{Veteran's benefits available:}
- Chapter 30 - Montgomery GI Bill®
- Chapter 31 - Vocational Rehabilitation (separately served through the local VA office)
- 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
- Chapter 1607 - REAP Reserve Educational Assistance Program

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.

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.

\section*{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 MCCCD 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 my.maricopa.edu, 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.

\section*{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 3821.4265

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 website, located at: https://curriculum.mar-icopa.edu/transfer-and-articulation

\section*{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 Process, March 6, 2019
AMENDED through the Administrative Regulation Process, June 5, 2017
AMENDED through the Administrative Regulation Process, May 16, 2016

\section*{Scholastic Standards}

\subsection*{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, stu-
dio 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.

\section*{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 Appendix S-7 for Withdrawal Procedures).

\subsection*{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 re-
quirements. 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 Appendix S-7 for Withdrawal Procedures.

\section*{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.

\section*{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.

AMENDED through the Administrative Regulation Process, November 5, 2019

\section*{ND-4 Religious Accommodation Procedure and Request Form}

\section*{Religious Accommodation Procedure}
1. The Maricopa County Community College District will reasonably accommodate the religious needs, observances, and practices of their employees and students, when requested and when said requests are made in accordance with these procedures. An individual's request for reasonable religious accommodations, including requests for time off from work or school activities, is justified unless college, class, or District operations would suffer unduly by granting the individual's request. Requests should be made in writing using the Religious Accommodation Request form.
2. Individuals may not be discriminated against because of their religious beliefs or practices, or because they lack religious beliefs or practices.
a. Faculty and staff who believe they have been discriminated against by the denial of a requested religious accommodation should contact the Equal Employment Opportunity / Affirmative Action Office at 480-731-8473.
b. Students who believe they have been discriminated against by the denial of a requested religious accommodation should contact the Dean of Students, or designee at their respective college.
3. DEFINITIONS:
a. Religion or Creed: includes traditional, organized religions but also religious beliefs, including those that are new, uncommon, not part of a formal church or sect. All aspects of religious belief and observance that are sincerely held will be considered as part of this policy.
i. Religious Practice or Belief: A sincerely held practice or observance that includes moral or ethical beliefs as to what is right and wrong, most commonly in the context of the cause, nature and purpose of the universe. Religion includes not only traditional, organized religions, but also religious beliefs that are new, uncommon, not part of a formal religious institution or sect, or only subscribed to by a small number of people. Social, political, or economic philosophies, as well as mere personal preferences, are not considered to be religious beliefs.
b. Religious Accommodation: A reasonable change in the work or academic environment that enables a
student or employee to practice or otherwise observe a sincerely held religious practice or belief without undue hardship on the college or District.
i. A reasonable religious accommodation may include, but is not limited to:
1. Time for prayer during a work day,
2. The ability to attend religious events or observe a religious holiday, or
3. Any necessary modification to college or District policy, procedure or other requirement for a student's or employee's (or prospective employee's) religious beliefs, observance or practice, provided such accommodation is reasonable and does not cause undue hardship.
c. Undue Hardship: Significant difficulty or expense and related circumstances in relationship to the cost or difficulty of providing a specific accommodation.
i. Undue hardship may refer to financial difficulty in providing an accommodation or accommodations that are unduly expensive, substantial, disruptive, or that would fundamentally alter academic requirements, the nature or operation of the college or district's business, or the essential functions of a job. Accommodations which interfere with the safe and efficient operation of the workplace or campus will often present an undue hardship.

\section*{4. PROCEDURES FOR SEEKING RELIGIOUS ACCOMMODATION:}
a. Students:
i. All students may request a religious accommodation by making a written request for an accommodation to the appropriate faculty member. 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. [Students and employees are encouraged to review the calendar for all holidays/holy days at the beginning of the calendar year (for employees) and semester (for students) and to make accommodation requests as early as possible.]
ii. Faculty members will, upon receiving the request for a religious accommodation, submit the request to the Dean or Academic Chair of his/her department.
iii. In cooperation with the Dean of Students, or designee, the accommodation request will be reviewed and the student's request responded to within a reasonable time.
1. A reasonable time period should take into consideration the timeliness of the request as well as the imminent nature of the request.
iv. Additional information may be necessary, in support of the requested accommodation. In these cases, the additional information should not be overly burdensome and shall not be information more detailed than would be requested for other accommodations (not related to religion).
v. In situations where an accommodation is not granted, the District Compliance Office must review the reasons for the denial within 72 hours (3 business days) after the denial.
b. Employees:
i. All employees may request a religious accommodation by making a written request for an accommodation to their supervisor(s). Employees will be required to complete a Formal Accommodation Request form and may be required to provide other documentation or information supporting the request. (See

Religious Accommodation Request form). Employees who anticipate being absent from work because of a religious observance must submit their request for time off in advance and as soon as they become aware of the need or at least ten (10) business days in advance. Failure to do so, when reasonably unavoidable, will not prevent the granting of the absences.
ii. Supervisors receiving the accommodation request will meet with college (and/or District Human Resources) to seek guidance as to the granting of the accommodation.
1. Additional information may be necessary, in support of the requested accommodation. In these cases, the additional information should not be overly burdensome and shall not be information more detailed that would be requested for other accommodations (not related to religion).
2. In situations where an accommodation is not granted, the District Compliance Office must review the reasons for the denial within 72 hours (3 business days) after the denial.
c. Accommodation request determinations will be made on a case-by-case basis taking into account factors, including but not limited to: the fundamental requirements of the applicable academic program and/or related technical standards, essential functions of an individual's job, the duties of others in the department or job group, the requirements of the department or major, any impact of the accommodation, the duration of the accommodation request, and the availability of alternative accommodations.
d. The college or District will endeavor to protect the requesting student or employee's privacy in evaluating and implementing the accommodation requested to the extent possible. However, following receipt of the request, the college or District official or administrator, supervisor(s) or designee(s) will discuss the accommodation request as necessary with the student or employee, and with select others in order to further evaluate and/or implement the accommodation.
e. Approvals should be provided in writing to the requesting student or employee by filling out the "disposition" section of the Religious Accommodation Request form.
f. Employees with questions about this policy and/or its application may contact Equal Employment Opportunity / Affirmative Action Director, Deric Hall at 480-731-8473 or by e-mail at: deric.hall@domail. maricopa.edu.
g. Students with questions about this policy and/or its application may contact the Vice-President of Student Affairs at their respective college.

\section*{5. ADDITIONAL INFORMATION:}
a. Absences-Student Notice: Students who anticipate being absent from classes because of a religious observance must provide faculty or appropriate designee with advance notice of their absence in accordance with the common pages. Students involved in an internship or clinical placement program must also provide advance notice to their internship or clinical placement supervisor prior to any absence.
i. Students should understand that if an accommodation is granted, missing time from an internship or clinical placement may require the student to make up work or repeat the internship or clinical placement at a later time.
ii. Make up/Extension: If examinations or assignment deadlines are scheduled on the day(s) of a religious observance, any student who provided advance notice of absence will have the opportunity to make up the examination or extend the assignment deadline and will not be penalized for the absence.
iii. Being absent from class or other educational responsibilities does not excuse students from keeping up with any information shared or expectations set during the missed class(es). Students are responsible for obtaining the materials and information provided during any class(es) missed.

\section*{6. ABSENCES-EMPLOYEES (INCLUDING FACULTY AND STAFF):}

The college or District will make reasonable efforts to accommodate an employee's requests for absences to the extent possible by allowing flexible arrival and departure times, floating or optional holidays, flexible work breaks, or considering schedule substitutions with colleagues of substantially similar qualifications which may need to be arranged by or with the assistance of the requesting employee. Employees may request time off from work to observe religious holidays that are not designated college holidays. Such requests will be granted unless it would result in an undue hardship to the department or MCCCD. Employees taking a non-designated religious day off must charge time off to personal time, accrued vacation time, or take time without pay.
a. Please be aware that the college or District is not required to accept a requested preferred accommodation if there is more than one alternative that eliminates the religious conflict.

\section*{7. RELIGIOUS ATTIRE, DRESS, GROOMING AND OTHER REQUIREMENTS:}

Upon request, the college or District will make reasonable efforts to accommodate student and employee attire that is related to their sincerely held religious beliefs and which conflict with any college or district requirement. religious attire is not cultural or traditional dress; it is a requirement of religious observance. religious attire may include, but it is not limited to: hairstyle or beard: Sikh hair and beard, Rastafarian dreadlocks, Jewish payot; yarmulkes, turbans, headscarves (hijab), Rastafari headdress; crucifixes, Star Of David or other items of ceremonial dress.

\section*{8. QUIET SPACES AND PRAYER, UPON REQUEST:}

The college or District will evaluate and where reasonable and available, provide access to quiet, private spaces for meditation, study and/or prayer consistent with the requirements of this policy.

\section*{9. ATHLETIC-RELATED RELIGIOUS ACCOMMODATIONS:}

Upon request, the college or District will make reasonable efforts to accommodate students participating in intercollegiate athletics. The process outlined in this procedure must be followed, with the accommodation request form being delivered to the Head Coach for the intercollegiate sport as well as the Athletic Director.

\section*{10. RETALIATION PROHIBITED:}

The college or District prohibits retaliation against students and employees requesting a religious accommodation, participating in an approved accommodation or otherwise engaging in protected conduct under this policy. Any person who violates this anti-retaliation provision may be subject to disciplinary and/or corrective action.

\section*{11.RECORDKEEPING REQUIREMENT:}
a. Employee religious accommodation requests shall be maintained in the Equal Employment Opportunity / Affirmative Action Office and shall adhere to the applicable records retention schedule, as outlined by the Office of Public Stewardship.
b. Student religious accommodation requests shall be maintained in the Dean of Student's office and shall adhere to the applicable records retention schedule, as outlined by the Office of Public Stewardship.

The Religious Accommodation Request form is located at: RELIGIOUS ACCOMMODATION REQUEST FORM
ADOPTED by Direct Chancellor Approval, March 6, 2019

\subsection*{2.3.3 Grading}

\section*{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.

\section*{Grade Key}
\begin{tabular}{|l|l|l|}
\hline A & Excellent & 4 grade points per credit hour \\
\hline B & Above Average & 3 grade points per credit hour \\
\hline C & Average & 2 grade points per credit hour \\
\hline D & Passing & 1 grade point per credit hour \\
\hline F & Failure & 0 grade points per credit hour \\
\hline I & Incomplete & Not computed in grade point average \\
\hline IP & Course in Progress & Not computed in grade point average \\
\hline N & Audit & Not computed in grade point average \\
\hline P* & Credit & Not computed in grade point average \\
\hline W & Withdrawn, passing & Not computed in grade point average \\
\hline Y & Withdrawn, failing & 0 grade points per credit hour \\
\hline Z & No Credit & Not computed in grade point average \\
\hline
\end{tabular}
* A "P" is judged to be equivalent to a grade of C or higher.

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.

\section*{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, he or she 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.
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.

\section*{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.

\section*{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 AGEC (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.

\section*{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."

\section*{MCCCD Policies \& Procedures}

\section*{6. Important Deadlines for Students (See Appendix S-12)}
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline Class Length & \begin{tabular}{l}
Deadline for \\
Students to \\
Withdraw with \\
Guaranteed \\
Grade of 'W'
\end{tabular} & \begin{tabular}{l}
Deadline for \\
Students to Withdraw from a Course (Instructor Signature Required)
\end{tabular} & 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 \\
\hline One Week or Less (1 to 7 days) & \(1{ }^{\text {st }}\) Day of Class & \(1^{\text {st }}\) Day of Class or Prior to the Last Day of Class & \(1^{\text {st }}\) Day of Class or Prior to the Last Day of Class & \(1{ }^{\text {st }}\) Day of Class & \(1{ }^{\text {st }}\) Day of Class & \(1{ }^{\text {st }}\) Day of Class \\
\hline Two Weeks (8 to 14 days) & \(3{ }^{\text {rd }}\) Calendar Day & \(6^{\text {th }}\) Calendar Day & \(6^{\text {th }}\) Calendar Day & \(1{ }^{\text {st }}\) Day of Class & \(1{ }^{\text {st }}\) Day of Class & \(3{ }^{\text {rd }}\) Calendar Day \\
\hline Three Weeks (15 to 21 days) & \(6^{\text {th }}\) Calendar Day & \(12^{\text {th }}\) Calendar Day & \(12^{\text {th }}\) Calendar Day & \(2{ }^{\text {nd }}\) Calendar Day & \(1{ }^{\text {st }}\) Day of Class & \(5^{\text {th }}\) Calendar Day \\
\hline \[
\begin{aligned}
& \text { Four Weeks } \\
& \text { (22 to } 28 \text { days) }
\end{aligned}
\] & \(9^{\text {th }}\) Calendar Day & \(17^{\text {th }}\) Calendar Day & 17 \({ }^{\text {th }}\) Calendar Day & \(3{ }^{\text {rd }}\) Calendar Day & \(2^{\text {nd }}\) Calendar Day & \(7^{\text {th }}\) Calendar Day \\
\hline Five Weeks (29 to 35 days) & \(12^{\text {th }}\) Calendar Day & 23 \({ }^{\text {rd }}\) Calendar Day & 23 \({ }^{\text {rd }}\) Calendar Day & \(4^{\text {th }}\) Calendar Day & \(2^{\text {nd }}\) Calendar Day & \(9^{\text {th }}\) Calendar Day \\
\hline Six Weeks (36 to 42 days) & \(14^{\text {th }}\) Calendar Day & 29 \({ }^{\text {th }}\) Calendar Day & 29 \({ }^{\text {th }}\) Calendar Day & \(5^{\text {th }}\) Calendar Day & \(3{ }^{\text {rd }}\) Calendar Day & 11 \({ }^{\text {th }}\) Calendar Day \\
\hline Seven Weeks (43 to 49 days) & 17 \({ }^{\text {th }}\) Calendar Day & \(35^{\text {th }}\) Calendar Day & 35 \({ }^{\text {th }}\) Calendar Day & \(5^{\text {th }}\) Calendar Day & \(3{ }^{\text {rd }}\) Calendar Day & \(12^{\text {th }}\) Calendar Day \\
\hline Eight Weeks (50 to 56 days) & 20 \({ }^{\text {th }}\) Calendar Day & \(41^{\text {st }}\) Calendar Day & 41 \({ }^{\text {st }}\) Calendar Day & \(6^{\text {th }}\) Calendar Day & \(3{ }^{\text {rd }}\) Calendar Day & 15 \({ }^{\text {th }}\) Calendar Day \\
\hline \[
\begin{aligned}
& \text { Nine Weeks } \\
& \text { (57 to } 63 \text { days) }
\end{aligned}
\] & 23 \({ }^{\text {rd }}\) Calendar Day & \(46^{\text {th }}\) Calendar Day & \(46^{\text {th }}\) Calendar Day & \(7^{\text {th }}\) Calendar Day & \(4^{\text {th }}\) Calendar Day & 17 \({ }^{\text {th }}\) Calendar Day \\
\hline Ten Weeks (64 to 70 days) & 26 \({ }^{\text {th }}\) Calendar Day & \(52^{\text {nd }}\) Calendar Day & \(52^{\text {nd }}\) Calendar Day & \(8^{\text {th }}\) Calendar Day & \(4^{\text {th }}\) Calendar Day & 19 \({ }^{\text {th }}\) Calendar Day \\
\hline Eleven Weeks (71 to 77 days) & 29 \({ }^{\text {th }}\) Calendar Day & \(58^{\text {th }}\) Calendar Day & \(58^{\text {th }}\) Calendar Day & 9th Calendar Day & \(5^{\text {th }}\) Calendar Day & 21 \({ }^{\text {st }}\) Calendar Day \\
\hline Twelve Weeks (78 to 84 days) & 32 \({ }^{\text {nd }}\) Calendar Day & \(63^{\text {rd }}\) Calendar Day & 63 \({ }^{\text {rd }}\) Calendar Day & \(10^{\text {th }}\) Calendar Day & \(5^{\text {th }}\) Calendar Day & 23 \({ }^{\text {rd }}\) Calendar Day \\
\hline Thirteen Weeks ( 85 to 91 days) & 35 \({ }^{\text {th }}\) Calendar Day & 70h Calendar Day & 70h Calendar Day & \(10^{\text {th }}\) Calendar Day & \(5^{\text {th }}\) Calendar Day & 25 \({ }^{\text {th }}\) Calendar Day \\
\hline Fourteen Weeks (92 to 98 days) & \(38^{\text {th }}\) Calendar Day & \(76^{\text {th }}\) Calendar Day & 76 \({ }^{\text {th }}\) Calendar Day & \(11^{\text {th }}\) Calendar Day & \(6^{\text {th }}\) Calendar Day & 27 \({ }^{\text {th }}\) Calendar Day \\
\hline Fifteen Weeks (99 to 105 days) & 41 \({ }^{\text {st }}\) Calendar Day & 82 \({ }^{\text {nd }}\) Calendar Day & 82 \({ }^{\text {nd }}\) Calendar Day & \(12^{\text {th }}\) Calendar Day & \(6^{\text {th }}\) Calendar Day & 28 \({ }^{\text {th }}\) Calendar Day \\
\hline Sixteen Weeks or more (106 or more days) & End of the 7th 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 \\
\hline \multicolumn{7}{|c|}{Deadlines are based on calendar day and begin with the first day of class.} \\
\hline
\end{tabular}

AMENDED through the Administrative Regulation Process, June 30, 2020
AMENDED through the Administrative Regulation Process, June 5, 2017
AMENDED through the Administrative Regulation Process, June 4, 2018

\subsection*{2.3.4 Academic Probation (Progress)}

\section*{1. Probation}

A student will be placed on academic probation if, after completion of twelve (12) or more credit hours, 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 approved by the Admissions and Standards Committee.2.9

\section*{2. Continued Probation}

A student on academic probation who fails to raise the cumulative grade point average 2.0 will be placed on continued probation and may be limited to taking six (6) credit hours.
Academic probation and continued probation are calculated at the conclusion of every term including summer.

\subsection*{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.

\section*{Appendix S-6: Instructional Grievance Process}

A student who feels that he/she has been treated unfairly or unjustly by a faculty member (full-time or parttime) 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) working days from the time the student knew or reasonably should have known about the unfair or unjust treatment.

This instructional grievance process should not be utilized in a case in which a student feels he/she has experienced discrimination. If the student feels that he/she has experienced discrimination on the basis of race, color, religion, sex, gender identify, national origin, citizenship status (including document abuse), gender, age, disability, veteran status, genetic information, or sexual orientation, the student should refer to the Discrimination Complaint Procedures for Students as administered by the Vice President for Student Affairs.

Steps for students to follow:
1. If, within ten (10) working days of the request for the conference with 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 grievance with the Department/Division Chairperson and appropriate administrative officer at the college/center. This written grievance must be filed within ten working days following the previous deadline. The written grievance will be given to the faculty member five days before any official meetings are convened.
2. Upon receipt of a written grievance, the Department/Division Chair or appropriate college administrative officer will work with the parties in an attempt to resolve the conflict. The faculty may ask that the College Faculty Senate President be in attendance. Every attempt will be made to maintain confidentiality during this process. A faculty member will not be required to respond to a grievance which is not in writing and which, when appropriate, did not have specific documentation including dates, times, materials, etc. The written grievance will be made available to the faculty member.
3. If the grievance is not resolved at this level within ten working days, the student should forward to vice president of academic affairs or designee, a copy of the original written grievance with an explanation regarding action taken at each prior level. The dean of instruction or appropriate college/ center administrative officer will meet with the student, faculty member, the College Faculty Senate President if requested by the faculty member, and Department/Division Chair and attempt to resolve the issues. This level will be the final step in any grievance process regarding grades.
4. If the grievance, other than those concerning grades, is not resolved by the vice president of academic affairs or designee, it may be forwarded in writing by the student to the college president for final resolution. The college president or designee will issue a final written determination in the grievance process.
5. Instructional grievances are resolved at the college level. The district office is not an avenue of appeal for the instructional grievance process.

Note: The grievance process for grades must be initiated no later than sixty (60) calendar days from the date the grade was issued.

\subsection*{2.3.6 Withdrawal}

To withdraw from a course or courses from the college, students must follow approved procedures (See Appendix S-7). The Office of Admissions and Records provides information about the withdrawal process. The official date of withdrawal is the date the withdrawal is received in the Admissions and Records Office/Office of Student Enrollment Services.

Never attending is not an allowable refund exception or an excuse of the debt incurred through registration. Please see the refund policy.

\title{
Appendix S-7: Student and Faculty Withdrawal Procedures
}

\author{
Student Withdrawal Procedures
}

\section*{1. Withdrawal from Specific Courses}

A student may officially withdraw from specific courses in the following ways:
A. 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.
B. After the 7th week*, a student must initiate a withdrawal request with the faculty member. If, after con sultation with the student, the faculty member approves the request, a grade of 'W' (withdrawn, pass-ing--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.
C. 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.
* 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.

\section*{2. 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.
3. Withdrawal of Financial Aid Students

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 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.

\section*{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.
AMENDED through the Administrative Regulation Process, December 12, 2018
AMENDED through the Administrative Regulation Process, February 23, 2010
AMENDED through the Administrative Regulation Process, August 18, 2008
AMENDED through the Administrative Regulation Process, March 5, 2009

\subsection*{2.3.7 Academic Renewal}

Students who are returning to this college after a separation of five (5) years or more from the Maricopa Community College District, may petition for academic renewal. The request must be in writing and submitted to the Admissions and Records Office/Office of Student Enrollment Services at the college where the grades were earned.

Academic renewal at one of the Maricopa Community Colleges does not guarantee that colleges outside the Maricopa Colleges will accept this action. Acceptance of academic renewal is at the discretion of the receiving institution.
1. Prior to petitioning for academic renewal, the student must demonstrate a renewed academic performance by earning a minimum of twelve (12) credit hours and a cumulative grade point average of 2.5 or higher within Maricopa Colleges after reenrollment.
2. Upon approval, all courses taken prior to reenrollment with a grade of 'A,' 'B,' 'C,' 'D,' 'F,' and 'Y' will be annotated as academic renewal on the student's permanent record. All course work affected by academic renewal will not be computed in the grade point average. Courses with grades 'A,' 'B,' or 'C' will have the associated
credit hours counted in the total credit hours earned. Such credit will not be computed in the grade point average.
3. All course work will remain on the student's permanent academic record, ensuring a true and accurate academic history.
4. The academic renewal policy may be used only once at each college and cannot be revoked once approved.
5. Students who have been granted Academic Renewal must also meet the Financial Aid Standards of Academic Progress if they wish to receive financial aid.

\subsection*{2.3.8 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 and available scholarships, including the Chancellor's, Foundation's, and President's Scholarships.

\section*{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.

\subsection*{2.3.9 General Graduation Requirements}

Note: Also see Catalog Under Which a Student Graduates (AR 2.2.5)
All students are required to complete the degree and/or certificate requirements as approved by the MCCCD Governing Board. The college reserves the right to make necessary course and program changes in order to meet current educational standards. In addition, students must:
1. Be credited in the Admissions and Records Office/Office of Student Enrollment with not fewer than: 60 semester credit units in courses numbered 100 or above for the Associate in Arts degree, Associate in Science degree, Associate in Transfer Partnership degree, and Associate in General Studies degree; 60 semester credit units for the Associate in Applied Science degree; 62 semester credits for the Associate in Business degrees. For specific certificate programs, be credited with not fewer than the minimum total of credit units required for the certificate program.

Students not continuously enrolled, as outlined in the Catalog Under Which a Student Graduates policy, must satisfy current graduation requirements.
2. Have earned a minimum of 12 semester credit units toward the degree or certificate at the district college granting the degree or certificate. The 12 hours in the AAS degree curricula may be in the Required Courses area and/or Restricted Electives courses. Courses from the General Education Core and Distribution area are excluded. In cases where the certificate requires fewer than 12 credit units, a minimum of six credit units must be completed at the college awarding the certificate. The minimum of six credit hours in the certificate or degree curricula may be in the Required Courses area and/or the Restricted Electives. Courses from the General Education Core and Distribution areas are excluded.

Shared Programs are programs offered at multiple colleges but not available at all colleges. The requirements are identical at all the colleges offering the program.

A shared program requires a minimum of six credit hours from the total program requirements to be completed with a grade of 'C' or better at the college awarding the certificate or degree. The exception is the Nursing program. For those shared programs with less than six credit hours, the total hours for the program must be completed at the college awarding the certificate.

The same degree or certificate can only be awarded once within the Maricopa Community College District.
3. Have filed an application for the degree or certificate with the Admissions and Records Office/Office of Student Enrollment Services on the date determined by the college/center. Students must apply for graduation from the college where they have successfully completed Block 4 of the Associate in Applied Science in Nursing.
4. Have a minimum cumulative grade point average of 2.000 at the college granting the degree.
5. Have a minimum cumulative grade point average of 2.000 in all courses used to fulfill degree requirements. Some specific programs have higher grade requirements. It is the student's responsibility to be aware of these program requirements.
6. For the Maricopa Nursing program offered at eight of the MCCCD campuses, the cumulative GPA for awarding purposes is calculated based on courses required for the degree or certificate taken at any MCCCD Maricopa Nursing campus and includes pre-requisites, co-requisites, and nursing blocks.
7. Have removed, thirty (30) days after the anticipated graduation date, all deficiencies on the record to use those courses toward program completion.
8. Have removed any indebtedness to any MCCCD college /center.
9. Have paid required degree or certificate application fee.

See fee schedule for charges.

\section*{Graduation with Honors}

All courses used to fulfill graduation requirements, including courses from other accredited institutions, will be entered in the grade point average calculation for honors designations.

Students who have the following grade point averages will graduate with the following distinctions:
- 3.50 to 3.69 "with distinction"
- 3.70 to 3.89 "with high distinction"
- 3.90 to 4.0 "with highest distinction"

\section*{Certificates/Degrees}

The Maricopa Community Colleges offer Certificates of Completion as well as Associate Degrees, one of which is conferred on each student who has completed a program of study. These certificates and degrees are as follows: (1) Certificate of Completion (Career Program Specified); (2) Academic Certificate; (3) General Education Certificate; (4) Associate in Arts; (5) Associate in Science; (6) Associate in Business; (7) Associate in General Studies; (8) Associate in Transfer Partnership; (9) Associate in Applied Science (Career Program Specified).

All candidates for a degree and/or certificate must complete the General Graduation Requirements as approved by the MCCCD Governing Board.

All students are urged to meet with a faculty advisor, program advisor or counselor as soon as possible to determine which program meets their needs and to plan their course of study.

\section*{Licensure Disclaimer}

Maricopa Community Colleges courses and programs prepare students for entry into a variety of professions. Many of these professions require that a person hold an occupational license or certificate in order to work in a particular field. Typically, a person must meet certain legal requirements before obtaining such a license or certificate. These requirements are established by county, state or federal agencies, and often are based on a person's character, or whether the person has been convicted of a criminal offense. It is possible for a student who has obtained a degree or certificate from a community college to be denied the right to work in a particular profession after completing the degree or certificate because of concerns over the student's character or criminal background. Any student preparing to enter a field for which a professional license or certificate is required is strongly advised to consult with the appropriate government agency that issues such credentials. That agency can provide the student complete information about any requirements the law imposes for working in a particular occupation.

\section*{MCCCD General Education Statement}

The general education core of the program of study for an associate degree or a certificate helps students develop a greater understanding of themselves, of their relationship with others, and of the richly diverse world in
which they live. The general education experience provides students with opportunities to explore broad areas of commonly held knowledge and prepares them to contribute to society through personal, social, and professional interactions with others. General education fosters students' personal development by opening them to new directions, perspectives, and processes.

Through its general education requirements, the Maricopa County Community College District is committed to helping students develop qualities and skills that will serve them throughout their lives. General education opportunities encourage students to:
1. Build self-awareness, self-respect, and self-confidence
2. Recognize and respect the beliefs, traditions, abilities, and customs of all people and all cultures
3. Consider the local, global, and environmental impacts of personal, professional, and social decisions and actions
4. Access, evaluate, analyze, synthesize, and use information wisely
5. Communicate effectively personally, socially, and professionally
6. Think critically, make informed decisions, solve problems, and implement decisions
7. Consider the ethical implications of their choices
8. Value the learning process throughout their lives
9. Integrate and connect ideas and events in a historical perspective, and see relationships among the past, the present, and the future
10. Develop a personal sense of aesthetics
11. Use technological resources appropriately and productively
12. Work cooperatively and respectfully with others to serve their communities

The general education experience at MCCCD is composed of specific elements across the curriculum designed to provide the learner with essential knowledge and skills:
- Communication
- Arts and Humanities
- Numeracy
- Scientific Inquiry in the Natural and Social Sciences
- Information Literacy
- Problem-Solving and Critical Thinking
- Cultural Diversity

\section*{General Education Designations (example: (FYC), [SB], [HU], etc.)}

Effective fall 2000 the course evaluation and/or general education designation as listed in the Arizona CEG (Course Equivalency Guide) within the Arizona Course Applicability System (AZCAS) is valid for the term in which the student is awarded credit on the transcript. A course evaluation and/or general education designation may be subject to change. Given that curriculum is dynamic at both MCCCD and the institutions to which MCCCD students transfer, students have the option to petition for general education evaluations and/or general education designations.

The college reserves the right to make necessary course and program changes in order to meet current educational standards.

AMENDED by Direct Approval by the Chancellor, December 6, 2019
AMENDED through the Administrative Regulation Process, June 5, 2017

\subsection*{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 written request only. Those students who want to transfer to other institutions of higher education, including other Maricopa Community Colleges, 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.

Official transcripts will not be issued to students having outstanding debts to any of the Maricopa Community Colleges. The release of transcripts is governed by the guidance of the Family Education Rights and Privacy Act of 1974 (see Records Policy in the Disciplinary Standards section of this manual). There is no charge for unofficial transcripts, or for official transcripts sent between Maricopa Community Colleges. See the Tuition and Fee Schedule for charges for other official transcripts.

AMENDED through the Administrative Regulation Process, June 5, 2017

\subsection*{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.

\section*{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.

\section*{College Environment}

\subsection*{2.4.4 Sexual Harassment Policy for Students}

\section*{I. SEX DISCRIMINATION AND SEXUAL HARASSMENT}
"No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance ...." 20 USC §1681 / 34 C.F.R. part 106

The policy of the Maricopa County Community College District (MCCCD) is to provide an educational, employment, and business environment free of sexual violence, unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct or communications constituting Sexual Harassment as prohibited by state and federal law. Discrimination under this Policy is an unequal treatment of a student based on the student's actual or perceived gender, sexual orientation, or pregnancy. This Policy prohibits Sexual Harassment and Discrimination in any college education program or activity, which means all academic, educational, extracurricular, athletic and other programs. This Policy is subject to Constitutionally protected speech rights and principles of academic freedom. Questions about this Policy may be directed to the MCCCD EEO/affirmative action office.

\section*{A. SEXUAL HARASSMENT}

Any unwelcome verbal or physical conduct of a sexual nature that is sufficiently severe, persistent, or pervasive that it unreasonably interferes with, limits, or deprives a student of the ability to participate in or benefit from any MCCCD educational program or activity. The unwelcome behavior may be based on power differentials, the creation of a Hostile Environment, or retaliation for allegations of Sexual Harassment under this Policy. Sexual Harassment can occur regardless of the relationship, position or respective sex of the parties. Sexual Harassment includes Hostile Environment Harassment, Sexual Assault, Inducing Incapacitation for Sexual Purposes, Sexual Exploitation, Dating Violence, and Stalking. Same sex Sexual Harassment violates this Policy. Sexual Harassment by and between students; employees and students; and campus visitors and students is prohibited by this Policy.

Depending on the particular circumstances, Sexual Harassment may include, but is not limited to, the following:
1. Physical assaults of a sexual nature, such as rape, sexual battery, molestation, or attempts to commit these assaults; and intentional physical conduct that is sexual in nature such as touching, pinching, patting, grabbing, poking, or brushing against another individual's body in a sexual manner.
2. Offering or implying an education-related reward (such as a better grade, a letter of recommendation, favorable treatment in the classroom, assistance in obtaining employment, grants or fellowships, or admission to any educational program or activity) in exchange for sexual favors or submis-
sion to sexual conduct.
3. Threatening or taking a negative educational action (such as giving an unfair grade, withholding a letter of recommendation, or withholding assistance with any educational activity) or intentionally making the individual's academic work more difficult because sexual conduct is rejected.
4. 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.
5. Explicit sexual comments by one or more students about another student, or circulating drawings or other images depicting a student in a sexual manner.
6. 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. Such conduct between peers must be sufficiently severe, persistent, or pervasive that it creates an educational environment that is hostile or abusive. A single incident involving severe misconduct may rise to the level of Sexual Harassment.

\section*{B. HOSTILE ENVIRONMENT HARASSMENT}

Harassment based on sex, pregnancy, gender identity, gender expression, or sexual orientation that is sufficiently serious (i.e., severe, pervasive, or persistent) and objectively offensive so as to deny or limit a person's ability to participate in or benefit from the college's programs, services, opportunities, or activities.

A Hostile Environment can be created by anyone involved in a college program or activity (e.g., administrators, faculty members, students, and campus visitors or contractors). Mere offensiveness is not enough to create a Hostile Environment. Although repeated incidents increase the likelihood that harassment has created a Hostile Environment, a serious incident, such as a sexual assault, even if isolated, can be sufficient.

In determining whether harassment has created a Hostile Environment, consideration will be made not only as to whether the conduct was unwelcome to the person who feels harassed, but also whether a reasonable person in a similar situation would have perceived the conduct as objectively offensive. Also, the following factors will be considered:
a. the degree to which the conduct affected one or more students' education;
b. the nature, scope, frequency, duration, and location of incident or incidents;
c. the identity, number, and relationships of persons involved;
d. the nature of higher education.

\section*{C. SEXUAL ASSAULT}

An act involving forced or coerced sexual penetration or sexual contact.

\section*{D. INDUCING INCAPACITATION FOR SEXUAL PURPOSES}

Using drugs, alcohol, or other means with the intent to affect, or having an actual effect on, the ability of an individual to consent or refuse to consent to sexual contact.

\section*{E. SEXUAL EXPLOITATION}

Taking non-consensual or abusive sexual advantage of another for anyone's advantage or benefit other than the person being exploited, and such behavior does not otherwise constitute a form of Sexual Harassment under this Policy. Examples of behavior that could rise to the level of Sexual Exploitation include:
a. Prostituting another person;
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 his or her genitals;
h. Possessing, distributing, viewing or forcing others to view obscenity.

\section*{F. DATING VIOLENCE}

Violence committed by a person who is or has been in a social relationship of a romantic or intimate nature with the victim and where the existence of such a relationship shall be determined based on a consideration of the following factors:
A. the length of the relationship;
B. the type of relationship;
C. the frequency of interaction between the persons involved in the relationship.

\section*{G. STALKING}

Engaging in a course of conduct directed at a specific person that would cause a reasonable person to fear for his or her safety or the safety of others or suffer substantial emotional distress.

\section*{H. CONSENTING TO SEXUAL ACTIVITY}

Consent is clear, knowing, and voluntary; it is active, not passive. Silence, in and of itself, cannot be interpreted as consent. Consent can be given by words or actions, as long as those words or actions create mutually understandable clear permission regarding willingness to engage in sexual activity.

Consent to one form of sexual activity cannot imply consent to other forms of sexual activity. Previous relationships or consent cannot imply consent in future sexual acts. Consent cannot be procured by use of physical force, compelling threats, intimidating behavior, or coercion.

Coercion is unreasonable pressure for sexual activity. Coercive behavior differs from seductive behavior based on the type of pressure someone uses to get consent from another. When people make clear to
you that they do not want sex, 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 can be coercive. In order to give effective consent, one must be age 18 or older.

If you have sexual activity with someone you know to be - or should know to be - mentally or physically incapacitated, you are in violation of this Policy. Incapacitation is a state where one cannot make a rational, reasonable decision because one lacks the ability to understand the who, what, where, why or how of that person's sexual interaction.

\section*{II. DEFINITIONS}

\section*{Alleged Victim}

The person who is the victim of any alleged Sexual Harassment or Discrimination in violation of this Policy.

\section*{Complaintant}

A person who has experienced or witnessed, or otherwise knows of Sexual Harassment or Discrimination in violation of this Policy and files a Formal Complaint pursuant to this Policy.

\section*{Respondent}

The person who is alleged to have engaged in Sexual Harassment or Discrimination prohibited under this Policy.

\section*{Title IX Coordinator}

The Vice President of Student Affairs serves as each respective college's Title IX Coordinator. The Title IX Coordinator is the individual responsible for providing education and training about Discrimination and Sexual Harassment to the college community and for receiving and investigating allegations of Discrimination and Sexual Harassment in accordance with this Policy. The Title IX Coordinator is authorized to designate other appropriately trained individuals to investigate Discrimination and Sexual Harassment Complaints and reports as deemed appropriate. The contact information for the Title IX Coordinator at each college may be found at https://district.maricopa.edu/consumer-information/title-ix/title-ix-coordinators.

\section*{III. REPORTING DISCRIMINATION}

\section*{A. Bystander}

No student or employee should assume that an official of the college knows about a particular situation. The college encourages any student who feels he or she has been discriminated against or harassed in violation of this Policy to promptly report the incident to the Title IX Coordinator. Any student who knows of Discrimination or Sexual Harassment prohibited under this Policy that is experienced by another student should report that information to the Title IX Coordinator. Before a student reveals information, college employees will try to ensure that the student understands the employee's obligations and, if the student wishes to maintain confidentiality, direct the student to confidential resources. A student may choose to make a full report or request confidentiality as he or she determines.

All members of the college community are expected to adhere to this Policy, to cooperate with the procedures for responding to complaints of Discrimination and Harassment, and to report conduct or behavior they believe to be in violation of this Policy to the Title IX Coordinator. A duty to report conduct or behavior that violates this Policy is imposed on all administrators, supervisors, faculty members, and persons in positions of authority. Such employees perform their duty to report by reporting the conduct or behavior to the Title IX Coordinator.

\section*{B. College Complaints and Reporting}

Any person who has experienced, witnessed, or otherwise knows of Sexual Harassment or Discrimination prohibited under this Policy is to report such conduct to the college's Title IX Coordinator. The Title IX Coordinator is trained to help you find the resources you might need, to explain all reporting options, and to respond appropriately to conduct of concern. Such conduct is to be reported to the Title IX Coordinator as soon as possible after it occurs. The Title IX Coordinator tracks all reports of Sexual Harassment or Discrimination.

There are several avenues available for any person who experiences, witnesses, or otherwise knows of Sexual Harassment or Discrimination to report such conduct:
- Leave a private voice message for the Title IX Coordinator;
- Send a private email to the Title IX Coordinator;
- Mail a letter to the Title IX Coordinator's office;
- Visit the Title IX Coordinator (although it is best to make an appointment first to ensure availability);
- File a Formal Complaint pursuant to this Policy;
- Report to another trusted college official (e.g., faculty member, coach, advisor) who will provide information as required under the Policy to the Title IX Coordinator.

If there is an allegation of conduct in violation of this Policy about the Title IX Coordinator or any staff member who is part of the Vice President of Student Affairs' office, that allegation should be lodged with the President of the college. The President will appoint another trained individual to take the place of the Title IX Coordinator for purposes of the allegation.

\section*{C. Retaliation Prohibited}

Retaliation occurs when adverse action is taken against a student or employee because he or she has engaged in protected activity such as filing a complaint of Discrimination or Harassment. Retaliation may be found even when the underlying charge does not constitute Discrimination or Harassment in violation of this Policy, and all persons who participate in a Discrimination or Harassment proceeding, not only the complaining party, are protected against retaliation. A retaliatory adverse action is an action taken to deter a reasonable person from opposing a discriminatory or harassing practice, or from participating in a Discrimination or Harassment proceeding, or more generally, from pursuing that person's rights.

\section*{D. Criminal Reporting}

Please remember that if someone is in immediate danger or needs immediate medical attention, the first place to report is 911 . You may also report to College Safety or local law enforcement. Some forms of Discrimination and Harassment may also be crimes. For example, sexual assault, stalking and rape are crimes. Criminal reports should be made to law enforcement, even if it is uncertain whether the particular conduct is a crime. Calling local law enforcement can help you: obtain emergency and nonemergency medical care; get immediate law enforcement response for your protection; understand how to provide assistance in a situation that may escalate to more severe criminal behavior; arrange a meeting with victim advocate services; find counseling and support; initiate a criminal investigation; and answer questions about the criminal process.

\section*{E. Confidentiality of Complaints and Reports}

Parties in these processes, including the Alleged Victim, Respondent, Complainant and witnesses, have privacy rights and reasonable expectations of confidentiality in the investigation of matters subject to this Policy. In addition, the integrity of the process depends on ensuring reasonable expectations of confidentiality. The Title IX Coordinator or investigator will keep confidential the Complaint, report, witness statements, and any other information provided by the Alleged Victim, Respondent, Complainant or witnesses, and will disclose this information only to the Alleged Victim, Complainant, Respondent, or witnesses as necessary to give fair notice of the allegations and to conduct the investigation; to law enforcement consistent with state and federal law; to other college officials as necessary for coordinating interim measures or for health, welfare, and safety reasons; and to government agencies who review the college's compliance with federal law. The written investigation report and any written decision will be disclosed only to the Alleged Victim, Complainant, Respondent, Title IX Coordinator, and discipline authority. In the case of employees, the discipline authority is the college administrator with the authority to impose sanctions in accordance with applicable employment policies. In the case of students, the discipline authority is the Vice President for Student Affairs and college officials as necessary to prepare for subsequent proceedings (e.g., college President and MCCCD legal counsel).

\section*{F. Anonymous Reporting}

The Title IX Coordinator accepts anonymous reports of conduct alleged to violate this Policy and will follow up on such reports. The individual making the report is encouraged to provide as much detailed information as possible to allow the Title IX Coordinator or investigator to inquire into or investigate the report, and respond as appropriate. The Title IX Coordinator or investigator may be limited in the ability to follow up on an anonymous report unless sufficient information is furnished to enable the Title IX Coordinator or investigator to conduct a meaningful and fair inquiry or investigation.

\section*{IV. RIGHTS OF PARTIES}
A. ALLEGED VICTIM: The Alleged Victim has the right to:
1. An inquiry and appropriate resolution of all credible allegations of Sexual Harassment, Discrimination, and sexual violence made in good faith to the Title IX Coordinator.
2. Be treated with respect by college officials.
3. Have the same opportunity as the Respondent to have others present (in support or advisory roles) during an investigation.
4. Report Sexual Harassment, Discrimination, and violence to both on-campus and off-campus authorities.
5. Be informed of the investigation findings and imposed sanctions at the same time as the Respondent.
6. Be informed of and afforded access to available counseling, mental health, physical health or student services for victims of Sexual Harassment, Discrimination, and violence.
7. Have notification of and options for, and available assistance in, changing academic and living situations after an alleged act of Sexual Harassment or Discrimination prohibited under this Policy, if so requested by the Alleged Victim and if such changes are reasonably available. No Formal Complaint, or investigation--campus or criminal-- need occur before this option is available. Accommodations may include:
- Change of on-campus student's housing to a different on-campus location;
- Assistance from college support staff in completing relocation;
- Arranging to dissolve a housing contract and pro-rating a refund;
- Exam, paper, or assignment rescheduling;
- Taking an incomplete in a class;
- Transferring class sections;
- Temporary withdraw from institution;
- Alternative course completion options.
8. Not have irrelevant prior sexual history admitted as evidence in an investigation.
9. Make a victim-impact statement available to the investigator and decision-maker.
10. Access to available protection against another student who has engaged in or threatens to engage in stalking, threatening, harassing or other improper behavior that presents a danger to the welfare of the complaining student or others.
11. Have allegations of sexual misconduct that might be criminal in nature responded to quickly and with sensitivity by campus law enforcement.
12. Seek Reconsideration of the finding of the investigation and any sanction imposed.
13. Review all documentary evidence collected, used, and disseminated during the investigation and sanctioning process.
14. Petition that any member of the investigative process be removed on the basis of demonstrated bias.
15. Have an advocate or advisor present at all phases of the investigation.
16. Present relevant witnesses to the investigator and decision-maker, including expert witnesses.
17. Be fully informed of campus conduct rules and procedures as well as the nature and extent of all alleged violations.
18. Have MCCCD compel the presence of student, faculty, and staff witnesses.
19. Written notice of the investigation, findings and sanctions.
20. Challenge documentary evidence obtained during the investigation.
21. Be informed in advance of any public release of information regarding the investigation.
22. Give consent for the release of any personally identifiable information contained in the investigation.

\section*{B. IMMEDIATE ACTION AND INTERIM MEASURES}

The college may take interim measures to assist or protect the parties during the inquiry or investigation process, as necessary and with the Alleged Victim's consent. Such measures for an Alleged Victim may include arranging for changes in class schedules or living arrangements, issuing a no-contact order, obtaining counseling, and modifying test schedules or other class requirements temporarily.

\section*{C. RESPONDENT: The Respondent has the right to:}
1. An inquiry and appropriate resolution of all credible allegations of Sexual Harassment, Discrimination, and sexual violence made in good faith to the Title IX Coordinator.
2. Be treated with respect by college officials.
3. Have the same opportunity as the Alleged Victim to have others present (in support or advisory roles) during an investigation.
4. Be informed of and have access to campus resources for medical, counseling, and advisory services.
5. Be fully informed of the nature, rules, and procedures of the investigation process, and to thorough and timely written notice of all alleged violations, including the full nature of the violation and possible sanctions.
6. Protections of due process required by local, state, or federal law.
7. Not have irrelevant prior sexual history admitted as evidence in an investigation.
8. Make an impact statement available to the investigator and decision-maker.
9. Seek Reconsideration of the finding of the investigation and any sanction imposed.
10. Review all documentary evidence collected, used, and disseminated during the investigation and sanctioning process.
11. Present relevant witnesses to the investigator and decision-maker, including expert witnesses.
12. Petition that any member of the investigative process be removed on the basis of demonstrated bias.
13. Have MCCCD compel the presence of student, faculty, and staff witnesses.
14. Challenge documentary evidence obtained during the investigation.
15. Have an advocate or advisor present at all phases of the investigation.
16. An outcome based solely on evidence presented during the investigation. Such evidence should be credible, relevant, based in fact, and without prejudice.
17. Written notice of the investigation, findings, and sanctions.
18. Be informed in advance of any public release of information regarding the investigation.
19. Give consent for the release of any personally identifiable information contained in the investigation.

\section*{V. DUE PROCESS}

Due process is afforded any employee, student, or visitor accused of Sexual Harassment or Discrimination prohibited under this Policy. On receipt of a Formal Complaint, or upon receipt of credible evidence that Sexual Harassment or Discrimination prohibited under this Policy has occurred, an immediate preliminary inquiry will be conducted to determine if there is reasonable cause to believe this Policy has been violated. A preliminary inquiry shall be concluded within ten working days following the determination that such reasonable cause exists; however, it may be re-opened in the event additional evidence of a violation of this Policy is later discovered. If, following a preliminary inquiry, such reasonable cause is found, a prompt, thorough, impartial investigation will be conducted by a qualified, authorized investigator. An investigation will be conducted using a preponderance of evidence standard. A preponderance of evidence standard means that an investigator will conclude that Sexual Harassment or Discrimination occurred only if the results of the investigation demonstrate it is more likely than not that such conduct took place. If the investigator's final decision is that Sexual Harassment or Discrimination prohibited under this Policy occurred, the college will take immediate action to eliminate the Harassment or Discrimination, prevent its recurrence, and address its effects. Remedies for the victim of Sexual Harassment or Discrimination 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 impacts the educational environment, whether it occurs on or off campus, and covers students, employees, and visitors.

\section*{A. SEX DISCRIMINATION GRIEVANCE PROCEDURES FOR STUDENTS}

The purpose of these procedures is to provide a prompt and equitable resolution for allegations of Discrimination as prohibited under this Policy. Persons believing that they have been subjected to or witnessed, or otherwise know of Discrimination or Harassment on any of these bases may file a Complaint with the college. These procedures address allegations of Discrimination or Sexual Harassment as prohibited under this Policy. The procedures also address allegations of retaliation against those who have opposed practices forbidden under the Policy, those who have made allegations of Discrimination or Harassment under the Policy, and those who have testified or otherwise participated in enforcement of the Policy.

\section*{B. MEDIATION}

Alleged victims who believe they have been discriminated against or harassed may choose in certain circumstances to resolve their allegations through mediation. Mediation is an informal and confidential process where parties can participate in a search for fair and workable solutions. An Alleged Victim may choose to ask the Title IX Coordinator to assist in the mediation process.

Allegations that are addressed through mediation are not required to be made in writing. The parties may agree upon a variety of resolutions such as modification of work assignment, training for a department, or an apology. Parties may agree to a resolution that is oral or embodied in a written agreement. With a written agreement, the parties may elect to file it with the Title IX Coordinator in the event enforcement becomes necessary. Once both parties reach a mediated agreement, it is final and cannot
be the basis of a Request for Reconsideration. The Title IX Coordinator or either party may at any time, prior to a final agreement, decide that attempts at mediation have failed. Upon such notice, the Title IX Coordinator may conduct a preliminary inquiry to determine whether this Policy has been violated. The mediation process may not be used if the alleged conduct constitutes criminal conduct.

\section*{C. FORMAL COMPLAINT PROCESS}

A person who has experienced, witnessed, or otherwise knows of Sexual Harassment or Discrimination in violation of this Policy may file a Formal Complaint by contacting the Title IX Coordinator at each respective college or center. A Complainant may file a Formal Complaint either orally or in writing. The Title IX Coordinator will accept Formal Complaint filings within 300 calendar days of the most recent occurrence of the alleged discriminatory act.

The Complainant's documentation in support of a Formal Complaint should clearly and concisely identify the action, decision, conduct, or other basis that constituted an alleged act or practice of Discrimination prohibited under this Policy. Upon receipt of a Formal Complaint, the Title IX Coordinator will notify the college President and the Office of General Counsel. The Office of General Counsel will assign a case number to the Formal Complaint.

A copy of the Formal Complaint will be shared with the Respondent within five (5) working days of receipt by the Title IX Coordinator. The Respondent will be put on notice that retaliation against the Complainant, Alleged Victim, or potential witnesses will not be tolerated and that an investigation will be conducted.

The Respondent must provide a written response to the Formal Complaint within fifteen (15) calendar days of his or her receipt of the Formal Complaint.

After either accepting a Formal Complaint or receiving credible evidence that Discrimination has occurred, and determining after a preliminary inquiry that there is reasonable cause to believe this Policy has been violated, the Title IX Coordinator will:
- Designate an investigator to conduct a fact-finding investigation, which will include, at a minimum, a review of written evidence (including the Complaint and response) and interviews with appropriate employees and students. The Title IX Coordinator may serve as investigator;
- Determine the identity and contact information of the Complainant;
- Identify the correct policies allegedly violated;
- Conduct a thorough, reliable, and impartial investigation;
- Complete the investigation promptly (within 60 calendar days, unless-owing to the complexity of the investigation or the severity and extent of the alleged conduct--more time is necessary to complete the investigation);
- Make findings based on the preponderance of evidence; and
- Present the findings to the Title IX Coordinator, who will deliver the findings, in writing, within ten (10) working days, to the President, with a recommendation as to the disposition of the matter.

The President shall accept, reject, or modify the recommendation, and provide a written notification of his or her action, along with the findings presented by the Title IX Coordinator, to the Complainant, Alleged Victim, and Respondent within fifteen (15) calendar days of receiving the findings and recommendation from the Title IX Coordinator.

Evidence which is collateral to the allegations of Discrimination or Sexual Harassment and which was obtained during an investigation may be used in subsequent grievance or disciplinary procedures.

\section*{D. MAINTENANCE OF DOCUMENTATION}

Documentation resulting from each level in the Formal Complaint Process (including witness statements, investigative notes, etc.) will be forwarded to and maintained by the Office of General Counsel. Investigative records are not to be maintained with or considered as a part of a student record. Documentation regarding corrective action is considered part of the student's record.

\section*{E. RIGHT TO ASSISTANCE}

A Complainant, Alleged Victim or Respondent may receive the assistance of an attorney or other person at any stage of a Complaint filed under the Formal Complaint Process. Such person may attend any investigative interview and advise the Complainant, Alleged Victim or Respondent but shall not otherwise participate in the interview. The investigator shall direct communications directly to the Complainant, Alleged Victim and Respondent, and not through such individual's attorney or other person providing assistance.

\section*{F. TIME FRAME AND GROUNDS FOR FILING A REQUEST FOR RECONSIDERATION}

A Complainant, Alleged Victim or Respondent who is not satisfied with the decision of the President has ten (10) working days to request, in writing, reconsideration of the decision by the Maricopa Community College District's Executive Vice Chancellor and Provost. There are four grounds upon which a Request for Reconsideration may be made: (1) the party has new information, unavailable at the time of the investigation; (2) the party has procedural concerns that may change or affect the outcome of the determination; (3) the party perceives that there was insufficient evidence to support the investigators findings; or (4) the party perceives any action taken by the President to be too severe. The Executive Vice Chancellor and Provost will review the findings of the investigation and recommendation of the Title IX Coordinator, and respond to the Request for Reconsideration within ten (10) working days from its receipt. The Title IX coordinator shall ensure that, prior to acting on any Request for Reconsideration, the Executive Vice Chancellor and Provost has been fully briefed regarding every component of this Policy. If the Executive Vice Chancellor and Provost determines that the investigation was not conducted in a fair manner, or that the determination is not consistent with the evidence, or that any disciplinary action is not commensurate with the allegations, the case file will be reopened and assigned for further investigation. If the Executive Vice Chancellor and Provost concludes that the investigation was conducted in a proper manner, that the determination is consistent with the evidence, and that any disciplinary action is commensurate with the allegations, he or she will-in writing-- certify that the Executive Vice Chancellor and Provost has read and thoroughly considered all of the information collected in the investigation,
certify that the investigation was conducted in a proper manner and the decision is consistent with the evidence, and deny the Request for Reconsideration. The written certifications and decision by the Executive Vice Chancellor and Provost shall be delivered to the Complainant, Alleged Victim, and Respondent promptly after they are issued. At this point, or if no Request for Reconsideration is made, the investigation into alleged Discrimination under this Policy is concluded.

\section*{G. EXTERNAL FILING OF DISCRIMINATION COMPLAINT}

MCCCD encourages students to use the due process under this Policy 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:

\section*{Office for Civil Rights}
U.S. Department of Education

Denver Office
Cesar E. Chavez Memorial 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

ADOPTED by Direct Chancellor Approval: May 20, 2015

\subsection*{5.1.9 Examples of Policy Violations}

It shall be a violation of MCCCD's Sexual Harassment Policy for any employee, student or campus visitor to:
1. Make unwelcome sexual advances to another employee, student or campus visitor;
2. Make unwelcome requests for sexual favors, whether or not accompanied by promises or threats with regard to the employment or academic relationship;
3. 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:
A. 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
B. Influence his or her grades, participation in or access to academic programs, class standing or other educational opportunities;
4. Engage in verbal or physical conduct of a sexual nature that:
A. 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
B. Creates an intimidating, hostile or offensive work or academic environment;
5. Commit any act of sexual assault or public sexual indecency against any employee or student whether on MCCCD property or in connection with any MCCCD-sponsored activity;
6. 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);
7. Engage in other sexually 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), sexually degrading words to describe an individual, sexually offensive comments, sexually suggestive language or jokes, innuendoes, and sexually suggestive objects, books, magazines, computer software, photographs, cartoons or pictures. Other sexual misconduct may include sexual exploitation, stalking, and gender-based bullying.
8. Treat a complainant or witness of sexual harassment in a manner that could dissuade a reasonable person from pursuing or participating in the complaint and investigation.

\subsection*{5.1.10 Additional Policy Violations}

Supervisors, managers, administrators and faculty who disregard or fail to report allegations of sexual harassment (whether reported by the person who is the subject of the sexual harassment or a witness) are in violation of this policy.

\subsection*{5.1.11 Responsibility for Policy Enforcement}

Employees and students must avoid offensive or inappropriate sexual and/or sexually harassing behavior at work or in the academic environment.

Employees and students are encouraged (but not required) to inform perceived offenders of this policy that the commentary/conduct is offensive and unwelcome.

\subsection*{5.1.12 Complaints}

\section*{1. Employees}

Employees who experience sexual 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 Community Colleges 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 his or her immediate supervisor, the employee may go directly to the Maricopa Community Colleges EEO/AA Office.

\section*{2. Students}

Students who experience sexual harassment or sexual assault in a school's education program and activities (by a faculty member, administrator, campus visitor or other student) are urged to report such conduct to the Title IX Coordinator, who is the vice president of student affairs at each 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 sexual harassment complaints.

\section*{3. General - Applicable to Both Employees and Students}
A. Complaints will be investigated according to procedures established by the MCCCD EEO/AA Office. Copies of these procedures may be obtained in the college president's office, Office of the Vice President of Student Affairs and the MCCCD EEO/AA Office.
B. The college/center/MCCCD will investigate all complaints in a prompt, thorough, and impartial manner.
C. Where investigation confirms the allegations, appropriate responsive action will be taken by the college/ center/MCCCD.

\subsection*{5.1.13 Confidentiality}

Records will be maintained in a confidential manner to the extent permitted by law and insofar as they do not interfere with MCCCD's legal obligation to investigate and resolve issues of sexual harassment.

\subsection*{5.1.14 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 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.

\subsection*{5.1.15 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.

\subsection*{5.1.16 Retaliation Prohibited}

Retaliation against an employee or student for filing a sexual harassment complaint, or participating in the investigation of a complaint, is strictly prohibited. MCCCD will take appropriate disciplinary action, up to and including employment termination or academic dismissal if retaliation occurs.

AMENDED by Direct Chancellor Approval, April 1, 2015

\section*{Discrimination Complaint Procedures for Students}

This procedure provides a means for resolving complaints by students who believe they have been adversely affected by illegal or prohibited discrimination by the Maricopa County Community College District (MCCCD), a member college or center, or their students or employees.

Complaints may be brought under this procedure for discrimination based on race, color, religion, national origin, citizenship status (including document abuse), sex (including pregnancy and sexual harassment), sexual orientation, gender identity, age, veteran status, physical or mental disability, or genetic information. The entire college community should act promptly upon receipt of an allegation of conduct that might constitute discrimination. Any member of the college community should refer a person who might be a victim of such conduct to these procedures, as well as to the college officials responsible for conducting an investigation pursuant to these procedures.

Students who believe they are experiencing sexual harassment may submit a complaint under the Sexual Harassment Policy for Students 2.4.4. If a student has been a victim of sexual assault, a complaint may also be filed with College Public Safety (CPS).

All deadlines prescribed for Report, Informal Resolution and Formal Resolution processes may be extended by the Vice President of Student Affairs for good reason, such as (but not limited to) when classes are not in session or upon mutual agreement by the parties. Notwithstanding any deadline extension, college officials should take all necessary steps to ensure prompt and equitable resolution of any complaint of discrimination.

Information related to MCCCD's Discrimination Complaint Procedure for Students is also available from the Office of General Counsel's Office of Public Stewardship at 480-731-8880.

\section*{Informal Resolution of Discrimination Complaints}

Before filing a formal complaint under this procedure, a student may attempt to resolve the problem through informal discussions with the person claimed to have engaged in discriminatory conduct and that person's supervisor or department head. The supervisor or department head will notify the Vice President of Student Affairs may designate an employee to provide such assistance. If a student alleges discrimination based upon physical or mental disability the Vice President of Student Affairs, who is designated at each college as the ADA/504 Coordinator or the Associate Vice Chancellor of Student Affairs who is designated as the District ADA/504 Coordinator, will assist directly in the informal resolution process. Each Vice President and the Associate Vice Chancellor has knowledge of the ADA/504 regulations applicable to students with disabilities. The Vice President of Student Affairs may modify or reject an informal resolution of a complaint of discriminatory conduct under this process if, in the judgment of the Vice President, the resolution that is proposed is not in the best interests of both the student and the institution. The Vice President shall take such action no later than fifteen (15) calendar days after receiving notice of the informal resolution.

Attempts to informally resolve alleged discrimination should occur within ninety (90) calendar days of the most recent alleged discriminatory act. The college official responsible for this informal resolution process should ensure that the process is concluded promptly. For complaints dealing with alleged discrimination beyond the 90-day timeframe, a student must submit a complaint under the formal resolution procedure of this policy.

If the complaint cannot be informally resolved to the satisfaction of the student, the student has the right to file a complaint and to proceed under formal resolution procedures.

\section*{Formal Resolution of Discrimination Complaints}

A student who contends that unlawful or MCCCD-prohibited discrimination has occurred may file a formal complaint by contacting the Vice President of Student Affairs at each respective college or center. If a student alleges discrimination based upon physical or mental disability he or she may submit a formal complaint with the Vice President of Student Affairs or the District Associate Vice Chancellor of Student Affairs or designee. The Vice President of Student Affairs or District Associate Vice Chancellor of Student Affairs or designee will accept.

A complaint may be submitted by the student verbally or in writing. A student may also contact the Office of General Counsel to obtain the name and phone number of the college or center official designated to respond to discrimination complaints.

The complaint must identify the action, decision, conduct, or other basis that the student believes is unlawful or MCCCD prohibited discrimination.

Upon receipt of a complaint, the Vice President of Student Affairs or the Associate Vice Chancellor will notify the college president or provost and the Office of General Counsel.

A copy of the complaint will be shared with the respondent within five (5) working days of receipt by the Vice President of Student Affairs Respondent will be put on notice that retaliation against the complainant or potential witnesses will not be tolerated and that an investigation will be conducted. If the student submits a written complaint, the Vice President or the District Associate Vice Chancellor need not share with the respondent the actual form submitted by the student, but may paraphrase the allegations sufficiently to allow the respondent to draft a response.

Respondent must provide a written response to allegations within fifteen (15) calendar days of his or her receipt of the complaint.

After accepting a complaint, the Vice President of Student Affairs or the District Associate Vice Chancellor of Student Affairs will designate a complaint investigator to conduct a fact-finding investigation, which will include, at a minimum, a review of written evidence (including the complaint and response), and interviews with appropriate employees and students. The interviews will include all witnesses identified by all parties. If the complaint alleges discrimination based upon mental or physical disability the investigator designated by the Vice President of Student Affairs or the District Associate Vice Chancellor of Student Affairs must have knowledge of ADA/504 regulations applicable to students with disabilities. 34 C.F.R. §104.4 et.seq.; 28 C.F.R. §35. 130 et. seq. The Vice President of Student Affairs or the District Associate Vice Chancellor of Student Affairs may serve as complaint investigator. The complaint investigator shall promptly complete the investigation and deliver to the Vice President of Student Affairs or the District Associate Vice Chancellor of Student Affairs the investigator's written findings and the results of the investigation, including summaries of all interviews and all documents received as part of the investigation. In no event shall this occur later than ninety (90) calendar days following receipt of the complaint. Within ten (10) working days following receipt of the results of the investigation from the complaint investigator, the Vice President of Student Affairs or the District Vice Chancellor of Student Affairs will submit to the President or Provost the investigator's written findings and the Vice President's recommendations as to the disposition of the complaint.

The president or provost will accept, reject, or modify the recommendations and will provide a written notification of his or her action to the student and respondent along with a copy of the investigator's written findings and the vice president's or District Associate Vice Chancellor's recommendations within fifteen (15) calendar days of receiving the written findings and recommendations from the Vice President of Student Affairs or the District Associate Vice Chancellor of Student Affairs.

When the investigation confirms the allegations, appropriate corrective action will be taken. Evidence which is collateral to the allegations of discrimination and/or sexual harassment and which was obtained during an investigation may be used in subsequent grievance or disciplinary procedures. Both complainant and respondent receive notice of the outcome. The institution will take appropriate steps to prevent further occurrences.

\section*{Interim Measures}

If a student alleges discrimination based upon physical or mental disability, the District may take interim measures to assist or protect the student during an investigation. Such measures may include academic adjustments, arranging for changes in class schedules, or other appropriate temporary measures.

\section*{MCCCD Administrative Review Process}

\section*{Request for Reconsideration}

A student or respondent who is not satisfied with the decision of the president or provost has ten (10) working days to request, verbally or in writing, administrative review of the decision by his or her college president or provost. The request for administrative review must state reasons why the complainant or respondent believes the finding was improper. The president or provost will review the results of the investigation and written findings and respond to the request within ten (10) working days from receipt of the request. If the president or provost determines that the decision is not supported by the evidence, the case file will be reopened and assigned for further investigation. If the president or provost determines that the investigation was thorough and complete and that the decision is supported by the evidence, he or she will deny the request for administrative review. At this point, the student has exhausted the Internal Discrimination Complaint Procedure.

\section*{Complaint Process}

Faculty, staff and all other college officials should refer any student seeking to make a complaint of discrimination to the Vice President of Student Affairs or the District Associate Vice Chancellor of Student Affairs. Every student complaint of discrimination shall be investigated under the authority of the Vice President of Student Affairs or the District Associate Vice Chancellor of Student Affairs in accordance with these Procedures. The Vice President of Student Affairs and any complaint investigator who participates in a complaint resolution pursuant to these Procedures shall administer every resolution process in an impartial manner, and shall fully consider all facts discovered in the course of any investigation before a resolution is reached. Each party in any complaint resolution shall have full opportunity to present all information and documentation the party feels is germane to the complaint. At no time shall a student who has made an allegation of discrimination under these Procedures be asked or required in any way by a college official to engage in any direct confrontation with any person alleged to have committed an act of discrimination. The Vice President shall ensure that every effort is made to obtain information from each witness to every act of alleged discrimination or from any other person possessed of information that is relevant and material to the complaint resolution. The Vice President of Student Affairs shall ensure that all appropriate corrective action that is warranted as a result of any complaint resolution will be taken, and shall employ best efforts to ensure that the college prevents recurrence of discrimination in the future.

\section*{Maintenance of Documentation}

Documentation resulting from each level in the Formal Resolution Process (including witness statements, investigative notes, etc.) will be forwarded to and maintained by the Office of General Counsel. Investigative records are not to be maintained with or considered as a part of a student record. Documentation regarding corrective action is considered part of the student's record.

\section*{Right to Assistance}

A student or respondent may receive the assistance of an attorney or other person at any stage of a complaint filed under this Internal Discrimination Complaint Procedure. Such person may attend any investigative interview and advise the complainant or respondent but shall not otherwise participate in the interview. The complaint investigator shall direct communications directly to the complainant and respondent, and not through such individual's attorney or other person providing assistance.

\section*{Confidentiality of Proceedings}

Every effort will be made by the college and MCCCD 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 MCCCD's legal obligation to investigate and resolve issues of discrimination.

\section*{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.

\section*{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.

\section*{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:

\section*{Office for Civil Rights, Region VIII (OCR) Denver Office}
U.S. Department of Education

Federal Building
Cesar E. Chavez Memorial Building
1244 Speer Boulevard, Suite 310 Denver, Colorado 80204-3582

\subsection*{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.

\subsection*{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.

\subsection*{2.4.9 Use of College Grounds by Non-MCCCD-Affiliated Users}

\begin{abstract}
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.
\end{abstract}

\section*{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.

\section*{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.

\section*{Designated Areas:}

Because each College has a limited amount of outdoor space, activities and events sponsored by non-MC-CCD-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.

\section*{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.

\section*{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.

\section*{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:

\section*{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.

\section*{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.

\section*{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

\subsection*{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.

\subsection*{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.

\subsection*{2.4.12 Workplace Violence Prevention}

\section*{Purpose}

It is the policy of the Maricopa County Community College District to promote a safe environment for its employees, students, contractors, and visitors. MCCCD is committed to working with its employees to maintain an environment free from violence, threats of violence, harassment, intimidation, and other disruptive behavior.

\section*{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 MCCCD to report any occurrence of such conduct to MCCCD Public Safety. Every employee, student, contractor, and visitor on MCCCD 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.

\section*{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 MCCCD 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.

\section*{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 MCCCD, 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 MCCCD. 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.

\subsection*{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.

\subsection*{2.4.14 Use of College Grounds by Affiliated Users}

\section*{Introduction}

The colleges of the Maricopa Country Community College District ("MCCCD") are dedicated by law to the purpose of formal education. They are, and have been since their creation, for the educational use and benefit of prospective and enrolled students, the MCCCD employees who serve them, and those who are invited on location by members of the college community to attend or participate in sponsored events. The MCCCD has a long history of supporting expressive activities that are conducted on campuses. For the purposes of avoiding disruption or interference with its educational activities, while protecting the rights of the members of the campus community and their invited guests to express themselves and access information, this administrative regulation governs the use of college grounds by Affiliated Users (as defined in Section 1) for Expressive Activity. Expressive Activity is defined as:
- Meetings and other group activities by registered students and student organizations
- Non-commercial speeches, performances, demonstrations, rallies, vigils and other events that are organized by students or student clubs and organizations.
- Non-commercial leafleting and pamphleting
- Any other student expression that is protected by the First Amendment to the U.S. Constitution

Outdoor campus areas are venues for free expression by Affiliated Users, including speeches, demonstrations, and the distribution of literature, subject to the reasonable time, place and manner restrictions set forth in this regulation.

This regulation will be administered in a manner that is content and viewpoint neutral and seeks to protect the free expression of ideas.

\section*{1. Definitions}

\section*{a. MCCCD Affiliated Users}

Affiliated Users are: 1) individuals employed by MCCCD except when engaging in a commercial activity; 2) individuals contracted by MCCCD who are acting on behalf of or for MCCCD purposes; 3) individuals enrolled via the registrar as students within the MCCCD system; and 4) external entities and/or individuals invited by student clubs and organizations to participate on behalf of the club or organization in an event that is related to the club or organization's purpose.

\section*{b. Non-Affiliated Users}

Non-Affiliated Users are organizations, groups or individuals that are not Affiliated Users. Use of MCCCD grounds or facilities by Non-Affiliated Users is governed by Administrative Regulations 1.5 and 2.4.9.

\section*{c. Substantial Interference}

Substantial Interference includes, but is not limited to, activity that: 1) disrupts instruction, lecture, studying or other academic pursuits; 2) disrupts MCCCD administrative activities; 3) blocks access to buildings or structures; 4) obstructs passageways for vehicles or pedestrians; 5) disrupts previously scheduled events; 6) impairs the health and safety of the college community; 7) is unlawful; and/or 8) otherwise presents a threat to public safety.

The mere potential for Substantial Interference is not sufficient to prohibit or limit Expressive Activity. Instead, it must be reasonably determined that the activity presents a significant likelihood of creating Substantial Interference before Expressive Activity may be prohibited or limited in accordance with this regulation.

\section*{d. Planned Expressive Activity}

Planned Expressive Activity is when participants seek to reserve space for an established point in time and/or use tables, chairs, amplification or other audio-visual equipment and/or temporary structures such as tents or awnings.

\section*{2. Reservation of Campus Space for Planned Expressive Activity}

Affiliated Users may reserve outdoor and indoor campus space, as defined below, for Planned Expressive Activity.Reservations are to be made through the respective college's Office of Student Life and Leadership no less than one business day before the activity is intended to occur. Such reservations will be approved on a first come, first served basis unless the Office of Student Life and Leadership determines, without regard to the content of the proposed Expressive Activity, that the activity constitutes Substantial Interference.If the Office of Student Life and Leadership determines an Expressive Activity constitutes Substantial Interference it will work with the Affiliated User in an effort to find an alternative, if any exists, that allows the Expressive Activity to occur without such interference.
a. Outdoor Space - outdoor space available for reservation by Affiliated Users does not include: parking lots, athletic facilities, meditation or peace gardens, areas designated as outdoor study zones, and child care facilities.
b. Indoor Space - indoor space is available for reservation by Affiliated Users if the space is determined by the college to be a common area that is publically accessible. Buildings housing classrooms and/or administrative offices are not available for reservation.

\section*{3. Spontaneous Expression}

MCCCD recognizes that Expressive Activity may occur in both structured and organic forms. Spontaneous expression by Affiliated Users may be undertaken in outdoor or indoor space, as defined above, without prior reservation as long as the activity does not constitute Substantial Interference.

Direct Approval by the Chancellor, August 24, 2016

\subsection*{2.4.15 Campus Sex Crimes Prevention Act}

Federal legislation requires that the MCCCD 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 Chancellor Approval, March 6, 2019

\section*{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 (MCCCD) will work in collaboration with the Sheriff's Department to identify convicted registered sex offenders enrolled as students at one of MCCCD's colleges or working at the District office or at any of the MCCCD colleges (in paid or unpaid positions).

\section*{GENERAL INFORMATION}
I. In accordance with the CSCPA, the MCCCD 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. § 133821).
a. Level Two and Level Three Offender's Obligation to Notify the College:

\section*{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.

\section*{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).

\section*{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: MCCCD Public Safety will notify the Dean of Student Affairs (or designee) when a RSO has enrolled or expressed a desire to enroll at a MCCCD 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: MCCCD Public Safety will notify District and college Human Resources (or designee) when an RSO has registered due to being offered employment with the MCCCD 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.

\section*{VI. FERPA}

The CSCPA 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.

\section*{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 MCCCD 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.

\section*{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.

\section*{IX. CAMPUS AND COMMUNITY NOTIFICATION OF RSO STATUS}

Pursuant to Arizona law, the MCCCD shall make campus notifications of RSO status, as follows:
a. For level two and level three offenders, the MCCCD 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.
b. The Sex Offender Information and Notification website will host the notification of RSO's employed by or attending a MCCCD college, including employment with the District office.
c. 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.
d. Any criminal activity involving a registered sex offender should be reported to police.

\section*{X. ADMINISTRATIVE OVERSIGHT}
a. 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.
b. 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 Chancellor Approval, March 6, 2019

\section*{Student Rights and Responsibilities}

\subsection*{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.

\subsection*{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.

\section*{What Students Should Know About Copyright}

\section*{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.

\section*{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.

\section*{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."

\section*{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.

\section*{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.

\subsection*{3.4 Taping of Faculty Lectures}

MCCCD acknowledges that faculty members are, by law, afforded copyright protection in their classroom lectures and, therefore, may limit the circumstances under which students may tape (audio/visual) their classes.

Each faculty member shall inform his/her students within the first week of classes to his/her policy with regard to taping. Failure to do so will accord students the right to tape lectures.

Students with disabilities that render them unable to take adequate lecture notes are entitled to reasonable accommodation to remedy this inability. Accommodation may require a faculty member to exempt a student from his/her taping policy.

\subsection*{4.4 Technology Resource Standards}

\section*{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 of-ficials-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."

\section*{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 MCCCD are available to MCCCD Governing Board members, employees, students and, in a limited number of cases, MCCCD 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 MCCCD 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 MCCCD employees are responsible for annually acknowledging receipt of the Blue Book, which contains this regulation. So all users of MCCCD technology resources are presumed to have read and understood the Standards. While the Standards govern use of technology resources MCCCD-wide, an individual community college or center may establish guidelines for technology resource usage that supplement, but do not replace or waive, these Standards.

\section*{Use of Non-MCCCD Technology}

Under Arizona's public records law, MCCCD 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 MCCCD 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-MCCCD technology resources for communication of any type of MCCCD business is heavily discouraged because those records are less capable of being managed according to MCCCD's process for ensuring retention, retrieval and disclosure set forth in Administrative Regulation 4.15 "Retrieval, Disclosure and Retention of Records."

Additionally, an MCCCD employee who receives a communication allegedly from another MCCCD employee using a non- MCCCD 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.

\section*{Acceptable Use}

Use of MCCCD's technology resources, including websites created by MCCCD employees and students, is limited to educational, research, service, operational and management purposes of the MCCCD and its member institutions. Likewise, data, voice, images and links to external sites posted on or transmitted via MCCCD's technology resources are limited to the same purposes.

Frequently, access to MCCCD's technology resources can be obtained only through use of a password known exclusively to the MCCCD employees, Governing Board members or students. It is those users' responsibility to keep a password confidential. While MCCCD 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 MCCCD 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 MCCCD employees are authorized to access information on an MCCCD 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 transmittted 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.

\section*{Incidental Computer and Technology Usage}

Limited incidental personal use of MCCCD technology resources including through use of personal e-mail systems is permitted, except as described in item 16 under "Prohibited Conduct." MCCCD employees are responsible for exercising good judgment about personal use in accordance with this regulation, Colleges' consistent local guidelines and MCCCD ethical standards. Personal use refers to activities which only affect the individual and that are not related to an employee's outside business. MCCCD 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).

\section*{Prohibited Conduct}

The following is prohibited conduct in the use of MCCCD's technology resources
1. Posting to the network, downloading or transporting any material that would constitute a violation of MCCCD 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-MCCCD 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 MCCCD's Governing Board, including, but not limited to, MCCCD'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 MCCCD 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 MCCCD'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 MCCCD'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 MCCCD, and approved by the Vice Chancellor of Information Technology Services, even when the e-mail account copies all outgoing and incoming messages to the MCCCD 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 MCCCD grievance, investigation or review, or other lawful request for the record.
20. Deleting or altering a technology record on an MCCCD device in anticipation or after receipt of a public records request, subpoena or a complaint filed as part of an MCCCD grievance, investigation or review, or other lawful request for the records where the record may demonstrate a misuse of technology resources under this regulation.

\section*{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 MCCCD 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 MCCCD'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."

\section*{Disclaimer}

The home page of an MCCCD web site must display, or link to, the following disclaimer in a conspicuous manner:

All information published online by MCCCD is subject to change without notice. MCCCD 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. MCCCD 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.

\section*{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 MCCCD marks as outlined in the marketing standards handbook and Use of Marks administrative regulation.

\section*{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, MCCCD may unilaterally delete any violative content and terminate the user's access to MCCCD'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 MCCCD's grievance procedures or resolution of controversy.

\subsection*{2.6 Hazing Prevention Regulation}

The Maricopa County Community College District (MCCCD) 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 MCCCD 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 MCCCD is prohibited.
2. "Hazing" is defined as any intentional, knowing or reckless act committed by a student or other person in any MCCCD 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 MCCCD; 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 MCCCD 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 metal 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 MCCCD policies, and local and state laws.

Alleged violations of the MCCCD 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 MCCCD 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 MCCCD policies, and local and state laws.

Any MCCCD faculty or staff member who knowingly permitted, authorized or condoned the alleged hazing activity is subject to disciplinary action in accordance with college and MCCCD 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 MCCCD 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 MCCCD.
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 MCCCD hazing prevention regulation:
"Organization" is defined as an athletic team, association, order, society, corps, cooperative, club or other similar group that is affiliated with MCCCD, whose membership consists primarily of students enrolled at MCCCD and that may also be classroom-related or co-curricular in nature.

\subsection*{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.

\section*{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.

\section*{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 MCCCD premises, while conducting MCCCD business, or at any time which would interfere with the effective conduct of the employee's work for the MCCCD; and use of illegal drugs.

\section*{3. MCCCD 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.

\section*{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 MCCCD 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 dis-trict-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 MCCCD Risk Manager. For events that the Chancellor sponsors, he or she will complete the form, sign it and provide it to the MCCCD 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 MCCCD, 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 MCCCD 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 MCCCD property, the Director the culinary program shall assign an MCCCD 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 TimeFrames).
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.

\section*{5. Other Health Concerns}

\section*{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.

\subsection*{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.

\title{
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.

\subsection*{2.8.1 Eligibility for Accommodations \& Required Disability Documentation}

\section*{Purpose}

To specify the disability documentation requirements that will qualify (i.e., support current and essential needs) Maricopa County Community College District students for reasonable and appropriate academic adjustments through each college's Disability Resources and Services (DRS) office or designated professional.

\section*{General Eligibility Requirements}

DRS applicants must be admitted or enrolled as an MCCCD student, and must provide the Disability Resources and Services (DRS) office with qualifying disability documentation, verifying the nature and extent of the disability prior to requesting or receiving any academic adjustment.

\section*{Who Is Eligible for Services?}

To be eligible for DRS support services, a student must have a disability as it defined by federal law (section 504 of the 1973 Rehabilitation Act, the Americans with Disabilities Act OF 1990 (ADA), and the Americans with Disabilities Act Amendments Act of 2008 (ADAAA)).

\section*{Definitions}
- Disability: A disability is any physical or mental condition which causes substantial limitation to the ability to perform one or more major life activities.
- Academic adjustment: An academic adjustment is a modification of a non-essential academic requirement, an examination, or an institutional rule that is necessary to avoid discriminating on the basis of handicap against qualified students with disabilities. Modifications may include changes in the length of time permitted for the 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.
**Documentation can be transferred within MCCCD for current consideration for eligibility.
**Determination made by another institution or organization does not guarantee eligibility.

\section*{Special Considerations}

Any employee who receives a request for academic adjustment must refer the student to the DRS Office. The DRS Office alone is responsible for evaluating documentation and determining eligibility and academic adjustments. All situations shall be considered on an individual, case-by-case basis, and all requests for academic adjustments from qualified students with a disability shall be considered by DRS. DRS may exercise its right to require additional documentation.

Academic adjustments are determined by the DRS Office through an interactive exchange with the eligible student. The DRS Office will give priority to the request of the student, but will also consider the instructor's perspective when it is offered. The interactive exchange may continue during the course of the year, and the DRS may make reasonable alterations in approved academic adjustments based on input from the student and the faculty member. Academic adjustment determined by the DRS Office are required except when the institution subsequently determines that an adjustment would alter an academic requirements that is essential to the instruction being pursued by the student, or to a directly related licensing requirement. MCCCD is not required to provide "best" or "most desired" accommodations but rather a reasonable accommodation sufficient to meet accessibility needs.

In the event the instructor believes the modification determined by DRS would alter an academic requirement that is essential to the instruction being pursued by the student, or to a directly related licensing requirement, the instructor will first meet with the director of the DRS office within three working days of receipt of the determination and attempt to resolve the issue informally. If the faculty member's concern remains unresolved,
within three days of the above meeting he or she may submit a written request to the college's chief academic officer (or a comparably qualified administrator designated by the college president) for his or her academic judgment on the question.

Any change in the DRS Office's initial recommendation resulting from the above meeting or the Chief Academic Officer's decision will be communicated to the student by the DRS Office. The interactive exchange with the student will continue in an effort to achieve a mutually satisfactory outcome.

If a student is not satisfied with the academic adjustment provided, he or she may file a complaint under the Discrimination Complaint Procedures for Students. In such cases, the Vice President for Student Affairs will assign an investigator whose qualifications and experience include curriculum development and educational accommodations for students with disabilities.

In all cases in which academic adjustments are in controversy, whether as a student discrimination complaint or a faculty member's appeal to the Chief Academic Officer, the ultimate decision will be informed by consultation with the duly appointed faculty representatives who serve in the development of the curriculum for the institution and the program. The committee will study the requested academic adjustment and alternatives, their feasibility, cost and effect on the academic program, and come to a rationally justifiable conclusion as to whether the available alternatives would result either in lowering academic standards or requiring substantial program alteration. This conclusion will be submitted in writing to the Chief Academic Officer, who will consult with the Vice Chancellor and the Office of General Counsel before making the final determination.

Nothing in this policy prohibits a faculty member from making minor, commonsense alterations in the manner in which a course is presented. A student who asks the instructor to change the color of chalk used because he is colorblind may be so accommodated without registering with DSO. However, the faculty member must report making such accommodations to DSO.

\section*{Documentation Guidelines}

Students requesting accommodations must provide documentation of their disability. Documentation consists of an evaluation prepared by a trained and qualified professional that identifies:
- current level of functioning
- current documentation
- all standardized testing must use adult-normed instruments
- age of the documentation may vary for some disabilities, provided the presence of a substantial limitation(s) is adequately established
- how the disability impacts the student's learning
- contain information supportive of the student's request for specific academic support, auxiliary aids, and accommodations

\section*{Specific Eligibility Requirements}

\section*{1. Physical Disabilities}
A. Required Documentation

The student must submit a written, current diagnostic report of any 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, neuropsychologists, audiologists). Disability diagnosis categories include:
i. Orthopedic Disability
ii. Blind or Visual Impairment
iii. Deaf or Hard-of-Hearing
iv. Traumatic Brain Injury
v. Other Health-Related/Systemic Disabilities
B. Diagnostic Report

The diagnostic report must include the following information:
i. A clear disability diagnosis, history, and the date of diagnosis.
ii. A description of any medical and/or behavioral symptoms associated with the disability.
iii. Medications, dosage, frequency, and any adverse side effects attributable to use.
iv. A clear statement specifying functional limitations.
v. A recommendation for accommodation(s).

\section*{2. Specific Learning Disabilities}
A. Required Documentation

Submit a written diagnostic report of specific learning disabilities that is based on age appropriate, comprehensive, psycho educational evaluations using adult normed instruments.

The assessment or evaluation which leads to the diagnosis must be administered by a trained and qualified (i.e., certified and/or licensed) professional (e.g., psychologist, school psychologist, neuropsychologist, or educational diagnostician) who has had direct experience with adolescents and adults with learning disabilities.

An appropriate Psycho Educational Evaluation must include comprehensive measures in each of the following areas:
i. Aptitude: evaluation must contain a complete intellectual assessment, with all sub-tests and standard scores reported.
Examples Of Measures (including but not limited to):
1. Wechsler Adult Intelligence Scale (WAIS-R)
2. Stanford Binet Intelligence Scale
3. Woodcock-Johnson Psycho-Educational Battery
4. Kaufman Adolescent And Adult Intelligence Test
ii. Academic Achievement: evaluation must contain a comprehensive achievement battery with all sub-tests and standard scores reported. The test battery should include current levels of functioning in the relevant area(s).
Examples of Achievement (including but not limited to):
1. Wechsler Individual Achievement Tests (WIAT)
2. Woodcock-Johnson Psycho-Educational Battery
3. Stanford Test of Academic Skills (TASK)
4. Scholastic Abilities Test for Adults (SATA)
iii. Information Processing: evaluation should assess specific information processing areas such as short- and long-term memory, sequential memory, auditory and visual perception/processing, processing speed, executive function, and motor ability.
Examples of Achievement (including but not limited to):
1. Wechsler Individual Achievement Tests (WIAT)
2. Woodcock-Johnson Psycho-Educational Battery
3. Stanford Test of Academic Skills (TASK)
4. Scholastic Abilities Test for Adults (SATA)
B. Diagnostic Report

The diagnostic report must include the following information:
i. A diagnostic interview that addresses relevant historical information, past and current academic achievement, instructional foundation, past performance in areas of difficulty, age at initial diagnosis, and history of accommodations used in past educational settings and their effectiveness.
ii. A list of all instruments used in the test battery.
iii. Discussion of test behavior and specific test results.
iv. A diagnostic summary or statement with the following information:
1. DSM V Classification
2. A clear and direct statement that a learning disability does or does not exist, including a rule-out of alternative explanations for the learning problems. Terms such as "appears," "suggests," or "probable" used in the diagnostic summary statement do not support a conclusive diagnosis.
3. A clear statement specifying the substantial limitations to one or more major life activities.
4. A psychometric summary of scores.
5. A recommendation for accommodations, including rationale.

Diagnosis of specific learning disabilities that do not contain psycho-educational measures may not be sufficient for determining eligibility for academic accommodations. For example, school plans such as individualized education plans (IEP) or 504 plans may not be sufficient documentation. DRS reserves the right to request reassessment when questions regarding previous assessment or previous service provision arise.

\section*{3. Attention Deficit Hyperactivity Disorder (ADHD) / Attention Deficit Disorder (ADD)}
A. Required Documentation

Submit a current diagnosis of attention deficit hyperactivity disorder (ADHD)/attention deficit disorder (ADD) that is based on appropriate diagnostic evaluations.
B. Diagnostic Report

Acceptable documentation must include:
i. DSM V Classification
ii. A summary or statement which includes the following information:
iii. A clear summary or statement specifying evidence of behavior that significantly impairs functioning, including degree of severity.
iv. A recommendation for accommodations, including rationale.

\section*{4. Psychological/Psychiatric Disabilities}
A. Required Documentation
i. Depression and/or bipolar disorder
ii. Generalized anxiety disorders
iii. Post traumatic stress disorder
iv. Psychotic disorders
v. Autism spectrum disorder.
B. Diagnostic Report

If the diagnostic report is not current, a letter from a qualified professional that provides an update of the diagnosis may be requested.

The diagnostic report must include the following:
i. DSM V Classification
ii. A diagnostic summary or statement that includes the following:
1. A clear summary or statement that a disability does or does not exist.
2. A clear summary or statement specifying evidence of behavior that significantly impairs functioning including degree of severity.
3. A discussion of medications and their possible impact on academic functioning.

\section*{5. Neurological Disorders}
A. Required Documentation

Disorders of the central and peripheral nervous system, including but not limited to:
i. Acquired Brain Injury/Traumatic Brain Injury
ii. Epilepsy/Seizure Disorder
iii. Stroke
B. Diagnostic Report

Written statement of diagnosis:
i. Current functional limitations
ii. Information regarding current symptoms
iii. Information regarding prescribed medication(s) and possible side effect and impact on student academic performance
iv. Restrictions on activities imposed by the condition
v. Where learning has been affected, a recent neuro-psychological evaluation is requested

\section*{6. Temporary Disabling Conditions}
A. Required Documentation
i. Temporary disabling conditions as a result of surgery, accident, or serious illness may require accommodations for a limited time. Acceptable documentation must include:
ii. Written statement of diagnosis
iii. List of current symptoms and degree of severity
iv. Information regarding functional limitations and impact within an academic environment v. Medications and possible side effects
vi. Duration of symptoms and estimated length of time services will be needed

AMENDED by Direct Chancellor Approval, January 4, 2017

\subsection*{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.

\section*{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.

\subsection*{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 Chancellor Approval, April 1, 2015

\subsection*{2.3.11 Academic Misconduct}

\section*{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; and (d) fabrication of data, facts, or information.
C. Plagiarism is a form of cheating in which a student falsely represents another person's work as his or her own - 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 agency engaged in the selling of term papers or other academic materials; and (c) information gathered from the internet and not properly identified.

\section*{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.

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.

\section*{3. Disciplinary Sanctions}

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 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.)

\section*{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 can appeal 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.

Amended through Direct Approval by the Chancellor and Executive Vice Chancellor \& Provost on August 7, 2013

\section*{Disciplinary Standards}

\subsection*{2.5.1 Disciplinary Standards}

\section*{1. Disciplinary Probation and Suspension}

According to the laws of the State of Arizona, jurisdiction and control over the Maricopa Community Colleges are vested in the District Governing Board. The Governing Board and its agents-the chancellor, administration and faculty-are granted broad legal authority to regulate student life subject to basic standards of reasonableness.

In developing responsible student conduct, the Maricopa Community Colleges prefer mediation, guidance, admonition and example. However, when these means fail to resolve problems of student conduct and responsibility, appropriate disciplinary procedures will be followed.

Misconduct for which students are subject to disciplinary action falls into the general areas of:
A. Cheating on an examination, assessment tests, laboratory work, written work (plagiarism), falsifying, forging or altering college records
B. Actions or verbal statements which threaten the personal safety of any faculty, staff, students, or others lawfully assembled on the campus, or any conduct which is harmful, obstructive, disruptive to, or interferes with the educational process or institutional functions
C. Violation of Arizona statutes, and/or college regulations and policies
D. Use of college computer resources such as the Internet in violation of Technology Resource Standards (AR 4.4) which may result in notification of law enforcement authorities

\section*{2. Disciplinary Removal from Class}

A faculty member may remove a student from class meetings for disciplinary reasons. If an instructor removes a student for more than one class period, the faculty member shall notify the department/division chair and the appropriate vice president or designee in writing of the problem, action taken by the faculty member, and the faculty member's recommendation. If a resolution of the problem is not reached between the faculty member and the student, the student may be removed permanently pursuant to due process procedures.

\subsection*{2.5.2 Student Conduct Code}

The purpose of this Code is to help ensure a healthy, comfortable and educationally productive environment for students, employees and visitors.

\section*{Article I: Definitions}

The following are definitions of terms or phrases contained within this Code:
1. "Accused student" means any student accused of violating this Student Conduct Code.
2. "Appellate boards" means any person or persons authorized by the college president to consider an appeal from a Student Conduct Board's determination that a student has violated this Student Conduct Code or from the sanctions imposed by the Student Conduct Administrator. The college president may act as the appellate board.
3. "College" means a Maricopa Community College or center.
4. "College premises" means all land, buildings, facilities and other property in the possession of or owned, used or controlled by the college or District.
5. "College official" means any person employed by the college or District, performing assigned administrative or professional responsibilities pursuant to this Student Conduct Code. The college president shall designate the college or center official to be responsible for the administration of the Student Conduct Code.
6. "Complainant" means any person who submits a charge alleging that a student violated this Student Conduct Code. When a student believes that s/he has been a victim of another student's misconduct, the student who believes s/he has 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 charge itself.
7. "Day" means calendar day at a time when college is in session, and shall exclude weekends and holidays.
8. "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.
9. "District" means the Maricopa County Community College District.
10. "Faculty member" means any person hired by the college or District to conduct classroom or teaching activities or who is otherwise considered by the college to be a member of faculty.
11. "May" is used in the permissive sense.
12. "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. A person's status in a particular situation shall be determined by the College President.
13. "Organization" means any number of persons who have complied with the formal requirements for college recognition.
14. "Policy" is defined as the written regulations of the college and/or District as found in, but not limited to, this Student Conduct Code and Governing Board policy.
15. "Shall" is used in the imperative sense.
16. "Student" means any person taking courses at the college whether full-time or part-time. Persons who are not officially enrolled for a particular term but who have a continuing relationship with the college are considered "students".
17. "Student Conduct Administrator" means a college official authorized on a case by case basis 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. A Student Conduct Administrator may serve simultaneously as a Student Conduct Administrator and the sole member or one of the members of a Student Conduct Board. The college official responsible for administration of the Student Conduct Code may authorize the same Student Conduct Administrator to impose sanctions in all cases.
18. "Student Conduct Board" means any person or persons authorized by the college president to determine whether a student has violated this Student Conduct Code and to recommend sanctions that may be imposed when a violation has been committed.
19."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.

\section*{Article II: Judicial Authority}
1. The college official responsible for administration of the Student Conduct Code shall determine the composition of Student Conduct Board and determine which Student Conduct Administrator, Student Conduct Board, and appellate board shall be authorized to hear each case.
2. The college official responsible for administration of the Student Conduct Code shall develop procedures for the administration of the judicial program and rules for the conduct of hearings that are consistent with provisions of this Student Conduct Code.
3. Decisions made by a Student Conduct Board and/or Student Conduct Administrator shall be final, pending the normal appeal process.

\section*{Article III: Prohibited Conduct}

\section*{1. Jurisdiction of the College}

The Student Conduct Code shall apply to conduct that occurs on college or District premises, or at collegeor District-sponsored activities that adversely affects the college community and/or the pursuit of its objectives. Each student shall be responsible for his/her conduct from the time of admission through the actual awarding of a degree, certificate, or similar indicator of completion of a course of study, even though conduct may occur before classes begin or after classes end, as well as during the academic year and during periods between terms of actual enrollment (and even if their conduct is not discovered until after a degree is awarded). The Student Conduct Code shall apply to a student's conduct even if the student withdraws from school while a disciplinary matter is pending.

\section*{2. 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. If the student refuses to leave after being requested to do so, college safety may be summoned. For involuntary removal from more than one class period, the faculty member should invoke the procedures prescribed in the Student Conduct Code.

\section*{3. 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. Furnishing false information to any college official or office.
ii. Forgery, alteration or misuse of any college document, record or instrument of identification.
iii. Tampering with the election of any college- recognized student organization.
B. Obstruction 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, when the conduct occurs on college premises a faculty member may remove a student from a class meeting for disciplinary reasons. If a faculty member removes a student for more than one class period, the faculty member shall notify the college official responsible for administration of the Student Conduct Code in writing of the problem, action taken by the faculty member, and the faculty member's
recommendation. If a resolution of the problem is not reached, the student may be removed permanently pursuant to appropriate due process procedures.
C. Physical abuse, verbal abuse, threats, intimidation, harassment, coercion, conduct which threatens or endangers the health or safety of any person, and/or disruptive behavior as defined in Article II.2. above.
D. Attempted or actual theft of and/or damage to property of the college or property of a member of the college community or other personal or public property.
E. Failure to comply with direction of college officials or law enforcement officers in the performance of their duties and/or failure to identify oneself to these persons when requested to do so.
F. Unauthorized possession, duplication or use of keys to any college premises, or unauthorized entry to or use of college premises.
G. Violation of any college or District policy, rule or regulation published in hard copy such as a college catalog, handbook, etc. or available electronically on the college's or District's website.
H. Violation of federal, state or local law.
I. Use, possession, manufacturing or distribution of illegal or other controlled substances except as expressly permitted by law.
J. Illegal use, possession, manufacturing or distribution of alcoholic beverages or public intoxication.
K. 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.
L. 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.
M. Obstruction of the free flow of pedestrian or vehicular traffic on college premises or at college-sponsored or supervised functions.
N. 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 District premises without his/her prior knowledge, or without his/her 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.
O. 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 viii. Any violation of the District's technology resource standards
ix. Use of technology facilities or resources to illegally download files
P. Abuse of the Student Conduct system, including but not limited to:
i. Falsification, distortion or misrepresentation of information before a Student Conduct Board.
ii. Disruption or interference with the orderly conduct of a Student Conduct Board proceeding.
iii. Invoking a Student Conduct Code proceeding with malicious intent or under false pretenses
iv. Attempting to discourage an individual's proper participation in, or use of, the Student Conduct system
v. Attempting to influence the impartiality of the member of a judicial body prior to, and/or during the course of, the Student Conduct Board proceeding
vi. Harassment, either verbal or physical, and/or intimidation of a member of a Student Conduct Board prior to, during and/or after a Student Conduct Board proceeding
vii. Failure to comply with the sanctions imposed under this Student Conduct Code
viii. Influence or attempting to influence another person to commit an abuse of the Student Conduct Code system
ix. Failure to obey the notice from a Student Conduct Board or college official to appear for a meeting or hearing as part of the Student Conduct system.
Q. Engaging in irresponsible social conduct.
R. Attempt to bribe a college or District employee.
S. Stalking behavior, which occurs if a student intentionally or knowingly maintains visual or physical proximity toward another person on two or more occasions over a period of time and such conduct would cause a reasonable person to fear for his or her safety.

\section*{4. 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 of civil or criminal litigation. 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 his or her status as a student. If the alleged offense is also being processed under this Student Conduct Code, however, the college may advise off campus 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.

\section*{Article IV: Student Conduct Code Procedures}

\section*{1. Charges and Student Conduct Board Hearings}
A. Any member of the college community may file charges against a student for violations of this Student Conduct Code. A charge shall be prepared in writing and directed to the Student Conduct Administrator. Any charge should be submitted as soon as possible after the event takes place, preferably within thirty (30) days following the incident. Misconduct charges of a sexual nature, including sexual harassment and sexual assault, should be sent to the Vice President of Student Affairs who is the designated Title IX Coordinator at each MCCCD college. Title IX protects students from sexual misconduct and other forms of discrimination in connection with all academic, extracurricular, athletic, and other programs sponsored by the college at any college facility or other location. The Title IX Coordinator (or designee) will conduct an investigation that is prompt, thorough, and impartial according to the MCCCD sexual harassment complaint process.
B. The Student Conduct Administrator may conduct a prompt, thorough, and impartial investigation to determine if the charges have merit and/or if they can be disposed of administratively by mutual consent of the parties involved on a basis acceptable to the Student Conduct Administrator. Such disposition shall be final and there shall be no subsequent proceedings. If the charges are not admitted and/or cannot be disposed of by mutual consent, the Student Conduct Administrator will convene the student conduct board. If the student admits violating institutional rules, but sanctions are not agreed to, the hearing shall be limited to determining the appropriate sanction(s).
C. All charges shall be presented to the accused student in written form. The Student Conduct Administrator will provide written notice of the time, date, and location of the student conduct hearing. The notice will describe the evidence of alleged misconduct, the code provisions violated, and the possible sanctions. The student conduct hearing notice, plus a copy of this code, shall be provided to the student accused of misconduct no less than five (5) workdays before the hearing date. The hearing will be held no more than fifteen (15) workdays after the student has been notified unless the Student Conduct Administrator extends the deadline for good cause in his or her sole discretion.
D. Hearings shall be conducted by a Student Conduct Board according to the following guidelines, except as provided by Article IV 1.G below:
i. Student Conduct Board hearings normally shall be conducted in private.
ii. The complainant, accused student and their advisors, if any, shall be allowed to attend the entire portion of the Student Conduct Board hearing at which information is received (excluding deliberations). Admission of any person to the hearing shall be at the discretion of the Student Conduct Board and/or its Student Conduct Administrator.
iii. In Student Conduct Board hearings involving more than one accused student, the Student Conduct Administrator, in his or her discretion, may permit the Student Conduct Board hearing concerning each student to be conducted either separately or jointly.
iv. The complainant and the accused shall have the right to be assisted by any advisor they choose, at their own expense. 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 hearing. The advisor must be a member of the college community and may not be an attorney. Both the complainant and the accused are responsible for presenting their own information and, therefore, advisors are not permitted to speak or participate directly in any Student Conduct Board hearing before a Student Conduct Board.
v. The complainant, the accused student, and the Student Conduct Board may arrange for witnesses to present pertinent information to the Student Conduct Board. The Student Conduct Administrator will try to arrange the attendance of possible witnesses who are members of the college community, if reasonably possible, and who are identified by the complainant and/or accused student at least two days prior to the Student Conduct Board hearing. Witnesses will provide information to and answer questions from the Student Conduct Board. Questions may be suggested by the accused student and/or complainant to be answered by each other or by other witnesses. This will be conducted by the Student Conduct Board with such questions directed to the chairperson, rather than to the witness directly. This method is used to preserve the educational tone of the hearing and to avoid creation of an adversarial environment. Questions of whether potential information will be received shall be resolved in the discretion of the chairperson of the Student Conduct Board.
vi. The Student Conduct Administrator will present the information he or she received.
vii. Pertinent records, exhibits, and written statements may be accepted as information for consideration by a Student Conduct Board at the discretion of the chairperson.
viii. All procedural questions are subject to the final decision of the chairperson of the Student Conduct Board.
ix. After the portion of the Student Conduct Board hearing concludes in which all pertinent information has been received, the Student Conduct Board shall determine (by majority vote if the Student Conduct Board consists of more than one person) whether the accused student violated the section of this Student Conduct Code which the student is charged with violating.
x. The Student Conduct Board's determination shall be made on the basis of whether it is more likely than not that the accused student violated this Student Conduct Code.
E. There shall be a single verbatim record, such as a tape recording, of all Student Conduct Board hearings before a Student Conduct Board (not including deliberations). The record shall be the property of the District.
F. No student may be found to have violated this Student Conduct Code because the student failed to appear before a Student Conduct Board. In all cases, the evidence and support of the charges shall be presented and considered.
G. The Student Conduct Board may accommodate concerns for the personal safety, well-being, and/or fears of confrontation of the complainant, accused student, and/or other witness during the hearing by providing separate facilities, by using a visual screen, and/or by permitting participation by telephone, videophone, closed circuit television, video conferencing, videotape, audio tape, written statement, or other means, where and as determined in the sole judgment of the college official responsible for administration of the Student Conduct Code.

\section*{2. 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. 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.
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 other related discretionary assignments. (Such assignments must have the prior approval of the Student Conduct Administrator.)
vi. College Suspension - separation of the student from all the colleges in the District for a definite period of time, after which the student is eligible to return. Conditions for readmission may be specified.
vii. College Expulsion - permanent separation of the student from all the colleges in the District.
B. More than one of the sanctions listed above may be imposed for any single violation.
C. Other than college expulsion, disciplinary sanction shall not be made part of the student's academic record, but shall become part of the student's disciplinary record. Upon graduation, the student's disciplinary record may be expunged of disciplinary actions upon the student's application to the Student Conduct Administrator. Cases involving the imposition of sanctions other than suspension or expulsion shall be expunged from the student's confidential record five (5) years after final disposition of the case.

In situations involving both an accused student(s) (or group or organization) and a student(s) claiming to be the victim of another student's conduct, the records of the process and of the sanctions imposed, if any, shall be considered to be the education records of both the accused student(s) and the student(s) claiming to be the victim because the educational career and chances of success in the college community of each may be impacted.
D. The following sanctions may be imposed upon groups or organizations:
i. Those sanctions listed above in Article IV 2. A. 1 through 4.
ii. Loss of selected rights and privileges for a specified period of time.
iii. Deactivation - loss of all privileges, including college recognition for a designated period of time.
E. In each case in which a Student Conduct Board determines that a student and/or group or organization has violated the Student Conduct Code, the sanction(s) shall be determined and imposed by the Student Conduct Administrator. In cases in which persons other than, or in addition to, the Student Conduct Administrator have been authorized to serve as the Student Conduct Board, the recommendation of the Student Conduct Board shall be considered by the Student Conduct Administrator in determining and imposing sanctions. The Student Conduct Administrator is not limited to sanctions recommended by members of the Student Conduct Board. Following the Student Conduct Board hearing, the Student Conduct Board and the Student Conduct Administrator shall advise the accused student, group and/or organization (and a complaining student who believes s/he was the victim of another student's conduct) in writing of its determination and of the sanction(s) imposed, if any.

\section*{3. Emergency Suspension}

If a student's actions pose an immediate threat or danger to any member of the college community or the educational processes, a college official responsible for administering the Student Conduct Code may immediately suspend or alter the rights of a student pending a Student Conduct Board hearing. Scheduling the hearing shall not preclude resolution of the matter through mediation or any other dispute resolution process. The decision will be based on whether the continued presence of the student on the college campus reasonably poses a threat to the physical or emotional condition and well-being of any individual, including the student, or for reasons relating to the safety and welfare of any college property, or any college function. When an emergency suspension is imposed, the student conduct administrator will seek to resolve the complaint at the earliest possible date. This suspension is not a sanction but an effort to protect people and property and prevent disruption of college operations.

In imposing an emergency suspension, the college official responsible for administration of the Student Conduct Code may direct that the student immediately leave the college premises and may further direct the student not to return until contacted by that official. An accused student shall be in violation of this policy regardless of whether the person who is the object of the threat observes or receives it, as long as a reasonable person would interpret the communication, conduct or gesture as a serious expression of intent to harm.

\section*{4. Administrative Hold}

The Student Conduct Administrator may place a temporary administrative hold preventing an accused student's registration, financial aid award, transcript release, or graduation if it is necessary to secure the student's cooperation in the investigation or compliance with a direction. This hold is not a sanction but a necessary step to resolve the complaint promptly.

\section*{5. 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. 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 student conduct board, the appeals board, or the student conduct administrator.

\section*{6. Appeals Regarding Student Code of Conduct}
A. A decision reached by the Student Conduct Board judicial body or a sanction imposed by the Student Conduct Administrator may be appealed by accused students or complainants to an Appellate Board within five (5) days of receipt of the decision. Such appeals shall be in writing and shall be delivered to the Student Conduct Administrator.
B. Except as required to explain on the basis of new information, an appeal shall be limited to the review of the verbatim record of the Student Conduct Board hearing and supporting documents for one or more of the following purposes:
i. To determine whether the Student Conduct Board hearing was conducted fairly in light of the charges and information presented, and in conformity with prescribed procedures giving the complainant a reasonable opportunity to prepare and present information that the Student Conduct Code was violated, and giving the accused student a reasonable opportunity to prepare and to present a response to those allegations. Deviations from designated procedures will not be a basis for sustaining an appeal unless significant prejudice results.
ii. To determine whether the decision reached regarding the accused student was based on substantial information, that is, whether there were facts in the case that, if believed by the fact finder, were sufficient to establish that a violation of the Student Conduct Code occurred.
iii. To determine whether the sanction(s) imposed was appropriate to the violation of the Student Conduct Code which the student was found to have committed.
iv. To consider new information, sufficient to alter a decision or other relevant facts not brought out in the original hearing, because such information and/or facts were not known to the person appealing at the time of the original Student Conduct Board hearing.
C. If an appeal is upheld by the appellate board, the matter shall be returned to the original Student Conduct Board and Student Conduct Administrator for reopening of the Student Conduct Board hearing to allow reconsideration of the original determination and/or sanction(s). If an appeal is not upheld, the matter shall be considered final and binding upon all concerned.

\section*{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.

\subsection*{2.5.3 Student Records}

\section*{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:
i. 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
ii. 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
iii. 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.
iv. 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.
v. 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

\section*{2. Records Request}

Official verification of educational records is issued by the Admissions and Records Office/Office of Student Enrollment Services.

\section*{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.

\section*{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 the student handbook:

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 MCCCD offers.

\section*{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:

\section*{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.}
1. Students should submit to the Admissions \& Records Office/Enrollment Services written requests that identify the record(s) they wish to inspect. 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.
2. 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:
a. Parents' financial statements;
b. Letters of recommendation, if the student has waived his or her right of access;
c. 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. The student has an unpaid financial obligation to the college or District;
b. There is an unresolved disciplinary action against the student; or
c. 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 student handbook and in Appendix S-17 of the MCCCD 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.

\section*{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 \(\S 99.31\) 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 MCCCD 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 respon-
sibilities. 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 \(\S 99.31(A)(1)(I)(B)(1)-(A)(1)(I)(B)(2)\) are met. ( \(\S 99.31(A)(1))\)
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 \(\S 99.34\). ( \(\S 99.31\) (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 \(\S 99.35\), 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 \(\S 99.36\). ( \(\$ 99.31\) (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 \(\S 99.39\). 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 polices 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 MCCCD 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.

\section*{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 informationmay be accessed without student consent. For more information on this amendment, please see: FERPA HTTPS://DISTRICT.MARICOPA.EDU/CONSUMER-INFORMATION/FAMILY-EDUCATIONAL-RIGHTS-PRIVA-CY-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. MCCCD 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.

\section*{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.

\section*{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.

\section*{DIRECTORY (PUBLIC) INFORMATION AT MARICOPA COUNTY COMMUNITY COLLEGE DISTRICT AND ITS ASSOCIATED COLLEGES}

\section*{Name}

Address
Phone Number
MCCCD Email Address
Photographs
Electronic Images
Date and Place of Birth
Major Fields of Study
Current Enrollment Status
Participation in Officially Recognized Activities Dates of Attendance
Degrees
Awards and Academic Honors Received
Dean's List Selection
Previous Institutions Attended
Program and promotional materials on participants in various sports and similar public activities, including weights and heights of athletic team members
Directory Information is Considered Public Information.

\section*{PRIVACY OF DIRECTORY (PUBLIC) INFORMATION}

\section*{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.

\section*{ADDITIONAL INFORMATION:}
- If a student blocks directory information, it still may be inspected by those MCCCD 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.

\section*{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 Regulation Process, June 4, 2019
Appendix S-17: FERPA Appeal Process

\section*{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.

\section*{Student Handbook}

\subsection*{2.5.4 Student Employment}

\section*{1. District Student Employees}

\section*{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
i. It shall be the philosophy of Maricopa Community College District that a student may work to aug-
ment 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.
ii. 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.
iii. 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.

\section*{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.

\section*{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.

\section*{E. Student Compensation}

The hourly rate of pay for student employees shall coincide with the policies of the District Salary Schedule.

\section*{F. Employee Contracts and Forms (See Appendix FM-3)}

\section*{G. Student Employee Grievance Procedure}

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)

\section*{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.

\section*{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

\section*{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.

\section*{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.

\subsection*{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 manage-
ment 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.

\section*{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.

\section*{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.

\section*{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.

\section*{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.

\section*{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.

\section*{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.

\section*{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.

\section*{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.

\section*{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.

\section*{10.Final Authority}

In the event of a complete breakdown of the governance body, the college president will serve as the final authority.

\section*{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 MCCCD 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 MCCCD non-discrimination policy is applicable to all other aspects of these student clubs and organizations.

\title{
Appendix S-13: The Maricopa Community College Allied Health or Nursing Program
}

\author{
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.
}

\section*{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).

\section*{MCCCD Required Background Checks}

Students enrolled in an MCCCD allied health or nursing program are required to complete and pass clinical learning experiences, working with children, elderly persons, and other vulnerable populations. MCCCD'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, MCCCD 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 Arizona Revised Statute § 41-1758.07 (https://www.az-leg.gov/viewdocument/?docName=https://www.azleg.gov/ars/41/01758-07.htm). Additionally, students must also obtain a "pass" status on a MCCCD supplemental background check from MCCCD'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 MCCCD'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 MCCCD supplemental background check review may include searches of the following databases and information but MCCCD 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

\section*{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 MCCCD 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.

\section*{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.

\section*{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.

\section*{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.

\section*{Changes to Admission or Background Check Requirements}

MCCCD may change its program admission requirements or background check requirements without notice at any time.

\section*{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 Chancellor Approval, June 1, 2017

\subsection*{4.18 Consensual Relationships}

\section*{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.

\section*{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.

\section*{LANGUAGE ADOPTED BY DIRECT CHANCELLOR APPROVAL}

\section*{Academic Degrees and Policies}

Visit https://curriculum.maricopa.edu/curriculum/degrees-certificates/associate-degrees/academic-policies.


\title{
Faculty \& Administration
}

MESA
COMMUNITY COLLEGE
A MARICOPA COMMUNITY COLLEGE

\title{
Faculty \& Administration
}

\section*{Governing Board Members}

Ms. Marie Sullivan
Mr. Laurin Hendrix
Ms. Jean McGrath
Dr. Tom Nerini
Mr. Dana G. Saar
Dr. Linda Thor
Ms. Kathleen Winn
Ms. Julissa Muñoz

President
Secretary
Board Member
Board Member
Board Member
Board Member
Board Member
Student Board Member

\section*{Mesa Community College Administrators}

Berquam, Lori M., Ph.D. Kendrix, Bradley, M.P.A.

Newland, Carmen J., B.A., M.Ed.

Reyes, Nora Amavisca, B.A., M.Ed., Ed.D.

Achs, Carol J., B.S., M.A.
Voss, Michael J., A.A.S., B.S., M.Ed.

Mitchell, Dennis S.,
B.A., M.P.

Perales, Kathleen, M.Ed.
Bliss, Kristina, B.A., M.Ed.

Interim College President
Interim Executive Vice President

Senior Associate Vice President

Senior Associate Vice
President
Dean of Instruction
Dean of Instruction

Dean of Institutional
Planning and Analysis
Interim Dean of Students
Interim Associate Dean of Students, Red Mountain

\section*{Mesa Community College Residential Faculty}

Adams, Heidi-Christa B.S., M.S., Ed.D.
Afnan Manns, Sheila B.A., M.S., M.L.I.S.
Ahles, Christina B.S., M.A.
Ahn, Emi B.A., M.A., Ph.D.
Al Hashimi, Basil B.A., M.A.

Aldridge, Mary B.A., B.A., M.A., Ph.D.
Allen, Carie B.A., J.D
Allen, Elizabeth B.S.B., B.S.N., M.S.N.
Alsen, Elizabeth B.A., M.Ed., Ed.D.
Alvrus, Annalisa B.A., M.A., Ph.D.
Anderson, Keith B.A., M.F.A., Ph.D.
Appel, Karen B.A., M.A.
Arreguin, Alex B.A., M.Ed., M.A
Atencia-Oliden, Elizabeth B.A., M.A., Ph.D.
Avilez, Adam B.S., M.S.
Baba, Lisa B.S., M.S.
Baldwin, Andrew B.S., M.S., Ph.D
Baron, Robert B.A., M.L.S., M.A.H., Ph.D.
Barto, Michelle B.A., M.Ed.
Bartreau, Nicole B.S.N., M.S.N.
Beckman, Christine B.S., M.A., Ed.D.
Bennett, Glenn B.M., M.M., D.M.A.
Benson, Philip B.A., M.A.

Beshk, John B.S., M.B.A.
Blevins, Karen B.A., M.A.
Bogner, Michael B.S., M.B.A.

Bond, Bryce A.A.S.
Bonura, Robert
Boorse, Graham B.S., Ph.D
Borlongan, Burton B.F.A.

Counseling
Library
Psychology
Languages
Social \& Behavioral
Sciences
English
Business
Nursing
Education
Anthropology
English
Mathematics
English
Languages
Mathematics
Nursing
Life Sciences
English
Languages
Nursing
Speech-Theatre
Music
Social \& Behavioral Sciences

Business
Cultural Science
Computer Informa-
tion Systems
Automotives
Applied Sciences
Life Sciences
Computer Information Systems

\section*{Mesa Community College Residential Faculty (cont.)}
\begin{tabular}{|c|c|}
\hline Borman, Derek B.S., M.A., Ph.D. & Social \& Behavioral Sciences \\
\hline Bowling, Evonne B.S., M.S. & Business \\
\hline Boyce, Mary B.S.N., M.S.N. & Nursing \\
\hline Branch Moore, Cornelia B.A., M.A. & Counseling \\
\hline Brause, Dawn A.S., B.S. & Dental Programs \\
\hline Breed, Diana B.S.N., M.S.N. & Nursing \\
\hline Brewer, Paul B.M.E., M.M.E. & Music \\
\hline Brown, Daniel B.A.Ed., M.A. & Mathematics \\
\hline Brown, Peter B.S., M.S., Ph.D. & Life Sciences \\
\hline Brown, Marie B.A., M.S.L.I.S. & Library \\
\hline Broxham, Kimberly A.A. & Business \\
\hline Broyles, Jeremy B.A., M.A., M.F.A. & English \\
\hline Budge, Steven B.A., M.A., Ed.D. & World Languages \\
\hline Bunte, Melissa B.S., B.S., M.S., Ph.D. & Physical Sciences \\
\hline Burrows, Christopher A.A.S. & Emergency Medical Technology \\
\hline Caldwell, Jennifer B.A., M.Ed. & Mathematics \\
\hline Call, Wynn B.S., M.Ed., Ph.D. & Social \& Behavioral Sciences \\
\hline Callaway, Micheal B.A., MA., Ph.D. & English \\
\hline Cameron, Preston B.S., M.A. & Business \\
\hline Capawana, Sarah B.A., M.F.A. & Art and Photography \\
\hline Casey, Curtis A.A.S. & Welding \\
\hline Cavalcant, Sylwia B.A., M.A., M.Ed & Social \& Behavioral Sciences \\
\hline Ceinaturaga, Shelley B.A., M.A. & Mathematics \\
\hline Cerveny, Niccole B.S., M.A., Ph.D. & Cultural Science \\
\hline Chavez, Lilian B.S., M.A., Ph.D. & Cultural Science \\
\hline Cheroske, Alexander B.A., M.S., Ph.D. & Life Sciences \\
\hline Chowdhury, Madeleine B.S., M.S. & Mathematics \\
\hline Clark, Tina B.S., Ph.D. & Life Sciences \\
\hline Cole, George B.S., M.S., Ph.D. & Mathematics \\
\hline Collins, Nicole B.S., M.S. & Counseling \\
\hline Conden, Peter A.A.S., B.S., M.S. & Applied Sciences \\
\hline Costion, Kirk B.A., M.A., Ph.D. & Cultural Science \\
\hline Crandall, Elizabeth B.S.N., M.S.N. & Nursing \\
\hline
\end{tabular}

Crudup, Keith B.A., M.A., Ph.D. Csikar, Elizabeth B.A., B.S., M.S., Ph.D. D'Ambrosio, Jon A.A., B.A., M.Ed
Danielson, Robert B.A., M.A.
Daugherty, Seth B.S., M.S.
Dawson, Janice B.S., M.S.D.

De Martini, Francesca B.S., M.S., Ph.D.
Dille, Brian B.A., M.A., Ph.D.

Dipietro, Dori B.S., M.S.W.
Dix, Owen B.S., Ph.D.
Djariri, Suzanne B.A., M.A.
Dressler, Kevin B.A., M.Ed., M.A., M.F.A.
Elson Jr, Timothy B.S.N., M.S.N.
Esposito, Sonia B.S., M.Ed., M.Ed.
Fay, Jennifer B.A.M., M.S.
Files, Jack A.A.S., B.S.
Florschuetz, Timothy B.A., M.A.
Focht, Kimberly B.S., D.V.M.
Fogel, Ephram B.F.A., M.F.A.

Forgione, William A.A.S, B.S.N., M.S.N. Foster, Charles A.A., B.A., M.S.N.

Franklin, Cynthia A.A., B.A., M.S.
Frantz, Chevelle B.S.E.
Fredson, Todd B.A., M.F.A, Ph.D.
Ganesan, Puvana B.A., M.A., Ph.D.
Ganesh, Annapurna B.A., M.Ed., Ph.D.
Garvy, Megan B.A., M.A.Ed.

Garzon-Forero, Jorge B.A., M.A., M.Ed., Ph.D.

Gaye, Amadou B.S., M.S., Ph.D.
Gilcrease, Delaine B.S., M.S.
Gilletti, Paul B.A., M.S., Ph.D
Goodman, Layne B.A., M.A.
Green, Amber B.A., M.A.

Religious Studies Life Sciences Applied Sciences Network Academy Mathematics

VP of Academic Affairs

Life Sciences
Social \& Behavioral Sciences
Cultural Science
Physical Sciences
Mathematics
Speech-Theatre
Nursing
Counseling
Physical Education
Network Academy
English
Applied Sciences
Art and Photog-
raphy
Nursing
Nursing
Mathematics
Applied Sciences
English
Speech-Theatre Education

Center for Teaching and Learning
Languages

Mathematics
Life Sciences
Physical Sciences
Speech-Theatre
Speech-Theatre

\section*{Mesa Community College Residential Faculty (cont.)}

Griffith, Anthony B.S., M.S., Ph.D. Griffith, John B.S., M.S., Ph.D.
Guerin, Aimee B.A., M.A., Ed.D.
Haleem, Dilshad B.C.S., M.S.
Hall, Leanna B.A., M.A., Ph.D.
Hamilton, Andrew B.A., B.S., M.B.A.
Hanneken, Kathleen B.S.N., M.B.A.
Hansen, Jerilyn A.A., A.A.S, B.S.N., M.S.N.
Harasha, Paul B.S.E.E., M.A.
Harrison, Pamela B.A.,Ph.D.
Hauptli, Tawn B.A., M.Ed., Ed.D.
Healy, Kevin B.S., M.S., Ph.D.
Heffner, Keith B.A., M.A.
Held, Christine B.S., M.S.Ed., Ed.D.

Helfers, Christine B.A., M.A.
Henley, Mijolae B.A., M.Ed.
Henney, Debra A.A., B.A., M.A.

Herrera, Jaime B.S., M.A.
Hietter, Paul B.S., M.A., Ph.D.

Hocutt, Gregory B.A., Ph.D. Holm, Melissa B.A., M.A.

Holycross, Andrew B.S., M.A., Ph.D.
Horton, Mary B.S., M.A., Ph.D.

Hunter, Robert B.M.Ed., B.Ed
M.M., D.M.A

Hussein, Lutfi B.A., M.A., Ph.D.
Jacobsen, Craig B.A., M.A., Ph.D.
Jesse, Jacquelyn B.S., M.Ed., Ed.D.
Johnson, Kimberly B.S., M.Ed.
Jones, Tara B.S.E., M.Ed.
Kalison, Bonnie B.S., M.S.
Kane, Asmita B.S., B.Ed., M.S., Ph.D. Keithley, Walter B.S., B.A., M.A., Ph.D. Khorsandi, Mehrzad, B.A., M.S., Ph.D. Kibbe, Dennis

Reading
Physical Sciences
Languages
Mathematics
English
Business
Nursing
Nursing
Cultural Science
Life Sciences
Education
Physical Sciences
Music
Computer Information Systems
English
Reading
Social \& Behavioral
Sciences
English
Social \& Behavioral Sciences

Life Sciences
Mathematics
Life Sciences
Social \& Behavioral
Sciences
Music

English
English
Mathematics
Mathematics
Mathematics
Life Sciences
Physical Sciences
English
Applied Sciences
Network Academy

Kim, Kai B.F.A., M.F.A.

Klare, Tom B.A.

Klassen, Roxanne B.S., M.A.E.D.
LaVergne, Debra A.A.S., B.A., M.A., Ed.D.

Lehigh, Diana A.A.S.
Leighty, Robert B.S., M.S., Ph.D. Lerman, Amy B.A., M.A., Ph.D
Lerner, Shereen B.A., M.A., Ph.D.
Leta, Marjorie B.A., M.L.I.S.
Levine, Charles A.A., B.A., M.A., Ed.D.

Levine, Theresa A.A., B.A., M.Ed., Ed.D.
Lewis, Denise A.D.N., B.S.N., M.S.N.
Leyendecker, Jennifer B.F.A., M.F.A., Ph.D.

Liang, Lori B.S., M.Ed.
Lovelady, Hugh B.M., M.M.
Lurenz, Steven B.A., M.A.

Luter, Zoe B.S., M.A.
Luther, Todd B.S, M.Ed., M.S.
Lyscas, Margie B.S., M.S.
Mackey, Linda A.A.S., B.A., B.S.N., M.S.N., N.D.

Marino, Alice B.A., M.Ed.
Martell, Maria B.A., M.A., Ph.D.
Martinez, Joseph

Martinez, Sam B.A., M.A., Ph.D.
Matus McDonald, Elena A.A., A.G.S., B.S., M.C.

Mazzucco, Michelle B.Ed., M.Ed.
Mazzucco, Palmerino B.S.E.E., M.S.E.
McGuire, Megan A.A., B.A., M.A.
McLaughlin, Sharon B.S., M.S.A.T.
McMahon, Annah B.S., M.A.

Art and Photography

Art and Photog-
raphy
Mathematics
Computer Information Systems
Applied Sciences
Physical Sciences
English
Cultural Science
Library
Social \& Behavioral
Sciences
Mathematics
Nursing
Art and Photog-
raphy
Business
Music
Social \& Behavioral Sciences

Library
Physical Sciences
Mathematics
Nursing

Languages
Languages
Transportation-In-
dustrial
English
Counseling

Mathematics
Applied Sciences Library
Exercise Science
Reading

\section*{Mesa Community College Residential Faculty (cont.)}
\begin{tabular}{|c|c|}
\hline McWhirter, Anna B.A.E., M.Ed. & Reading \\
\hline Messer, Jeffrey B.A., M.B.A., M.S., Ph.D. & Exercise Science \\
\hline Minger, Timothy B.A., B.A., Ph.D. & Physical Sciences \\
\hline Misterek, LeeAnna B.A., M.N.S. & Mathematics \\
\hline Mohler, Kathryn B.A., M.F.A. & English \\
\hline Morales-Jones, Sonia A.A.S., B.S., M.Ed. & Emergency Medical Technology \\
\hline Morgan, Janet B.A., M. Ed. & Mathematics \\
\hline Morley, Erica B.A., M.S., Ph.D. & Life Sciences \\
\hline Muehlenbeck, Kerry B.S., LL.M., J.D., Ph.D. & Administration of Justice \\
\hline Myers, CeAnn B.S., M.A. & English \\
\hline Nango, Patrice B.A., M.A. & Philosphy and Religious Study \\
\hline Nedelkova, Valentina B.S., M.S. & Physical Sciences \\
\hline Neeley, Mark B.S., M.A. & Mathematics \\
\hline Neglia, Joseph B.S.E.E., M.B.A. & Applied Sciences \\
\hline Newcomer, Kelly A.A.S, B.S.N., M.S.N. & Nursing \\
\hline Newton, Sean B.B.A & Emergency Medical Technology \\
\hline Nielsen, Brenda A.A., B.S., M.Ed. & Computer Information Systems \\
\hline Nolan, Craig B.S., M.A. & Exercise Science \\
\hline Norris, Kimberly B.S., M.Ed. & Mathematics \\
\hline Nunez, Paul B.S., M.S. & Mathematics \\
\hline Oakes, Duane A.A., B.S., M.A. & VP of Academic Affairs \\
\hline Obermiller, Lewis B.S., M.S., Ph.D. & Life Sciences \\
\hline Olson, Susan B.A., M.A., Ph.D. & Speech-Theatre \\
\hline Osteen, Andrea B.A., M.A. & English \\
\hline Ouderkirk, Bert B.S., M.F.S., M.O.M. & Administration of Justice \\
\hline Partin, Bethann B.S., M.A.Ed. & Computer Information Systems \\
\hline Pedersen, Lindsey B.A., M.A. & Art and Photography \\
\hline Perdue, Alexandra B.A., M.F.A. & Music \\
\hline Perkins, Vanessa B.A., M.S.W., Ph.D. & Cultural Science \\
\hline Peters, Linda A.D.N., B.S., M.S.N. & Nursing \\
\hline
\end{tabular}

Peterson, Bruce B.A., M.A., M.A. Peterson, Craig B.M., M.M., D.M.A.

Peterson, Jacqueline B.S., M.N.S. Pike, Scott B.S., M.Ed.

Plowes, Nicola B.S., Ph.D.
Priewe, Melina B.A., M.A., Ph.D.
Rathkamp, Joshua B.A., M.F.A., M.F.A.
Rawson, Erin B.A., M.A.
Raymond, Jill B.S., Ph.D.
Richardson, Danene A.A, B.A., M.M.
Richardson-Delgado, Jodi B.M. M.Ed., Ph.D.

Robb, Cherise B.A., M.S.D.
Roberts, Patricia B.A., M.B.A.

Rodriguez, Amelia B.A., M.S. Rodriguez, Nadine B.A., M.Ed. Rogers, Diane B.S., M.Ed.
Rossiter, Daphne B.A., M.A. Rozsa, Katalin M.S., M.N.S.

Rushing, Derek B.S., M.A.

Saffell, Erinanne B.S., M.A., Ph.D.
Samson, Robert A.A., B.S.
Sanders, Sara M.S., Ph.D.
Sands, Teryl M.A., Ph.D.
Schineller IV, Frederick B.S., M.S.
Schultz, David B.A., M.Ed., M.S.
Scott, Mona B.A., M.A.
Scott, Michael B.S., M.A.
Seagle, Andy A.A., A.A.
Seela, Jeff B.S., Ph.D
Seims, John A.A., B.S., M.A.
Serpone, Enrico B.A., M.A.
Shoemaker, Thomas B.A., M.Div.

Silberschlag, Hans A.A.S., B.S., M.Ed., D.Ed.

Communication
Music
Mathematics
Mathematics
Life Sciences
Mathematics
English
Speech-Theatre
Life Sciences
Music
Social \& Behavioral Sciences

Applied Sciences
Computer Informa-
tion Systems
Reading
English
Reading
Mathematics
Mathematics
Computer Information Systems
Cultural Science
Network Academy
Life Sciences
English
Mathematics
Mathematics
Cultural Science
Physical Sciences
Music
Physical Sciences
Mathematics
Mathematics
Philosphy and
Religious Study
Fire Science

\section*{Mesa Community College Residential Faculty (cont.)}

Simms, Robert B.S., M.S.
Simpson, Elizabeth B.A., M.Ed.
Sizemore, Jim B.S., M.S., Ph.D.
Skroch, Stephen
Smith, Courtney B.A., M.A., M.Ed.

Smith, Trevor B.S., M.A., M.S.
Somers, Mark B.S., B.S., M.S., Ph.D.
Soza, Robert B.A., M.A., Ph.D.
Sparks, Deborah A.S., B.S., M.Ed.
Spasovski, Lupco B.A., M.A., Ph.D.
St. Amand, Litsa B.S., M.A.T
St. Peter, Carolyn B.A., M.A., Ph.D.

Stevenson, Paulette B.A., M.A., Ph.D. Stich, Ashley B.A., M.A.T., Ed.D.
Strickland, Jennifer A.A., B.A., M.Ed., Ph.D.

Surber, Angeline A.A.S., B.S., M.A., D.B.A.

Thomson, Kara A.A., B.F.A., M.F.A.
Todd, Christopher B.F.A., M.F.A.

Toler Jr., Richard B.S., M.B.A., Ph.D.
Tolzman, Ann B.A., M.L.I.S.
Townsley, Jennifer B.A., M.A., Ed.D.
Tran-Nguyen, Ly B.S., M.A., Ph.D.

Ung, Sophie B.S., M.B.A., Ph.D.
Ursic, Elizabeth B.S., M.A., M.B.A., M.Div., Ph.D.

Mathematics
English
Physical Sciences
Applied Sciences
Social \& Behavioral
Sciences
Library
Physical Sciences
English
Dental Programs
English
Mathematics
Social \& Behavioral Sciences

English
Reading
Center for Teaching and Learning
Computer Information Systems
Speech-Theatre
Art and Photography

Business
Library
Speech-Theatre
Social \& Behavioral
Sciences
Physical Sciences
Philosphy and
Religious Study

Van Tassell, Heidi B.A., B.S., M.S.
Vassett, Christine B.A., B.S., M.A., Ph.D.
Vaughan, Barry B.A., M.A., M.A., Ph.D.

Venema, Jeremy B.A., M.A., Ph.D
Verch, Todd B.S.D., M.S.D
Waclawski, Phillip B.S., M.S.

Wakefield, Kelli B.S., M.S.
Webb, Eddie B.A., M.F.A., Ed.D.
Weiss, Belinda A.A.S., B.S., M.S.N.
Whitcomb, Sean B.A., M.S.
Willman, Justine B.S.N., M.S.N., M.Ed.
Wilson, Dennis B.S., Ph.D
Wilson, Stacy B.A.Ed., M.Ed.
Windman, Todd B.S., M.S., Ph.D.
Wintz, Michael B.A., M.Div.

Wolf, Blake B.S., M.Ed., M.S
Wood, Shawn B.S., M.Ed.
Wood, Jennifer B.S., M.Ed.
Yoshimura, Mark A.A., B.A., M.A.

Young, Marjorie A.S., B.A., M.A.
Yount, David B.A., M.A., Ph.D.

Zerangue, Karl B.A. M.S., Ph.D.
Zienkewicz, Lori B.S., M.S., Ed.D.
Zimmerman, Maureen B.S., M.P.H., Ed.D.

Physical Sciences
English
Philosphy and Religious Study
English
Applied Sciences
Computer Information Systems

Physical Sciences
English
Nursing
Life Sciences
Nursing
Life Sciences
English
Physical Sciences
Philosphy and Religious Study
Speech-Theatre
Mathematics
Mathematics
Administration of Justice
Reading
Philosphy and
Religious Study
Mathematics
Exercise Science
Exercise Science



\title{
Locations
}
\& Maps

(:)
COMMUNITY COLLEGE
A MARICOPA COMMUNITY COLLEGE

\section*{Locations \& Maps}

\section*{Locations}

Students pursue coursework at two comprehensive campuses, MCC at Southern and Dobson and MCC at Red Mountain. Additional learning sites in the East Valley as well as Online classes offer easy accessibility to meet our community's diverse needs.

\section*{Southern and Dobson Campus}

MCC has provided outstanding transfer, career, and service programs to the East Valley of the Phoenix Metro area for over 40 years. Built in 1965, our Southern \& Dobson location is a focus for education and community involvement. MCC is the largest of the 10 Maricopa Community Colleges with over 29,000 students.

\section*{Location}

1833 West South Avenue
Mesa, AZ 85202
480-461-7000

\section*{Red Mountain Campus}

MCC Red Mountain campus occupies 100 acres of beautiful Sonoran Desert in northeast Mesa. Opened in 2001, this comprehensive campus offers an intimate college environment with advanced classrooms, wireless technology, and outdoor teaching spaces. Course offerings at Red Mountain focus on university transfer programs.

\section*{Location}

7110 East McKellips Road
Mesa, AZ 85207
480-654-7200


\section*{Downtown Center}

The Downtown Center is home to Fire Science/EMT program, Virtual Incident Command Center (VICC), and MCC/NAU Connection.

\section*{Primary Location}

145 North Centennial Way
Mesa, AZ 85201
Phone:
Main: 480-461-6300
Public Safety: 480-461-6116

\section*{MCC Online}

The MCC Online represents the college's dedication to serving students through distance learning programs and online learning.

\section*{Location}
mesacc.edu/online
1833 W. Southern Avenue
Mesa, AZ 85202
480-461-7217

1833 W. Southern Avenue
Mesa, Arizona 85202 480-461-7000 www.mesacc.edu

Performing Arts Center
\begin{tabular}{|c|c|}
\hline & - Automatic External Defibrillator (AED) \\
\hline \multicolumn{2}{|l|}{LEGEND} \\
\hline 1 & English Faculty Offices \\
\hline EF 2 & English, Journalism, College Newspaper \\
\hline LA 3 & English Faculty Offices, Classrooms \\
\hline AS 4 & Copy Center, HelpCenter, World Language Lab \\
\hline MC 5 & Computer Science, Math \\
\hline NU & Life Science Faculty Offices \\
\hline MS 7 & Math Foundation Center \& Tutor Center \\
\hline HW 8 & Health-Wellness, Exercise Science \\
\hline SC 14 & Education Studies, Exercise Science Faculty Offices, Social Science, Cultural Science, College Police, First Aid \\
\hline LB 11 & Library, Learning Enhancement Center, Academic Skills Center, Writing Center \\
\hline LS 12 & Life Science \\
\hline PS 15 & Physical Science, Planetarium \\
\hline 26 & Children's Center \\
\hline ST 28 & Sound Lab, Music Studios \\
\hline TH 29 & MCC Theatre, MCC Theatre Design Lab \\
\hline AC 30 & Art, Communication \\
\hline
\end{tabular}
\begin{tabular}{|c|c|}
\hline \(\star\) Col & ge Police Download the campus map at \\
\hline AG 31 & Art Gallery \\
\hline 34 & Receiving Dock \\
\hline KSC35N & Center for Community \& Civic Engagement, Deans Offices Veteran Services \\
\hline KSC35S & ASMCC/Student Life \& Leadership, Cafeteria, Navajo Room \\
\hline 36 N & American Indian Institute, Career Services, International Education, Multicultural/ESL, Student Success Programs \\
\hline 365 & Student Lounge \\
\hline 37 N & Counseling Center, Disability Services \\
\hline 375 & Bookstore \\
\hline 38 & Testing Center \\
\hline 39 & Enrollment Center: Admissions \& Records, Registration, Advisement, Cashier, Financial Aid, Scholarships \\
\hline \[
\begin{array}{r}
\text { BA } 40 \\
41
\end{array}
\] & Multi-Use Computer Lab, Network Academy World Language Faculty Offices \\
\hline AD 42 & Psychology Instructional Resource Center (PIRC), Reading \\
\hline
\end{tabular}
\begin{tabular}{|c|c|}
\hline MU 43 & Music \\
\hline BP43A & Business, Philosophy, Psychological Sciences, Religious Studies \\
\hline 44 & Athletics Administration, Sports Offices \\
\hline 46 & Athletics Administration, Sports Offices, Fitness Center, Gym \\
\hline HIC 47 & Health Improvement Center \\
\hline 48 & Maintenance \& Operations \\
\hline 49 & Athletics Sports Offices \\
\hline TC 50 & Applied Sciences \& Technology Classrooms and Labs \\
\hline 51 & Greenhouse, Land Lab \\
\hline 52 & Welding Technology \\
\hline GC54A & Recruitment, Outreach Center, University Transfer Center \\
\hline GC54B & Outreach Center, Early College, GED/HSE \\
\hline PC 56 & Athletic Student Learning Center \\
\hline PAC 57 & Performing Arts Center \\
\hline
\end{tabular}


LEGEND
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 PIRC Lab (2nd Floor)

College Police
Maintenance \& Operations
Receiving

RDM M
Mesquite
Administration Office (M222) Bookstore
Community Room (2nd Floor) Enrollment Services:

Academic Advising • Admissions Career Services • Cashier Services Disability Resources \& 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)

\section*{Disclaimer}

At Maricopa, we strive to provide you with accurate and current information about our degree and certificate offerings. Due to the dynamic nature of the curriculum process, course and program information is subject to change. As a result, the course list in this catalog does not represent a contract, nor does it guarantee course availability. If you are interested in pursuing this degree or certificate, we encourage you to meet with an advisor to discuss the requirements at your college for the appropriate catalog year.



\section*{2020-2021 Catalog}

\section*{mesacc.edu}```


[^0]:    * 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.

[^1]:    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

[^2]:    - Architecture \& Construction

[^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.

[^4]:    * 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.

[^5]:    * 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 pathways.

