Welcome to Estrella Mountain Community College, where “Your Success is Our Success.”

As a learning college, EMCC believes learning occurs anyway, anyplace and anytime. Everything you encounter at the college is by design:

- College buildings are structured to facilitate learning.
- Faculty utilize active learning strategies to foster critical thinking.
- Support services are free to ensure students are successful.
- Events and activities are hosted on campus to cultivate learning connections.

EMCC employees truly want students be successful in both their education and their lives. With opportunities embedded everywhere, students can ensure they are successful by:

1. Identifying a goal. Who do you want to become? What do you eventually want to do? Find your path using the many resources EMCC has to offer, free of charge.
2. Putting your plan into action. Attend college events and engage with campus resources to advance your success: tutoring, Engage Estrella Mentoring Program, academic advising, Honors Program, Career and Transfer Center, student organizations and clubs, the Student Conference, and the Student Success Fair are just a few recommendations.

By becoming an active participant in your learning journey, you are able to pursue positive and enriching opportunities that can change your life.
Table of Contents

Estrella Mountain: Vision, Mission, Goals, Values ........................................ 3
Academic Mountain: Vision, Mission, Goals, Values ........................................ 3
Academic Calendar ...................................................................................... 4
MCCCD Colleges ....................................................................................... 4
Services, Resources and Programs ................................................................. 5
Student Services
Admissions & Registration ........................................................................ 5
Testing Services ......................................................................................... 5
Priority Advisement Workshop (PAW) ...................................................... 5
Advisement ................................................................................................. 5
New Student Orientation (NSO) ................................................................ 6
Career & Transfer Center: Résumé ............................................................ 6
Cashiers ..................................................................................................... 6
Counseling ................................................................................................. 6
Disability Resource and Services (DRS) .................................................... 6
EXCEL program ...................................................................................... 6
Internship Search ..................................................................................... 6
Financial Aid Services .............................................................................. 6
Online Services (My.Maricopa) ................................................................ 7
Scholarship Services ................................................................................ 7
Student Life ............................................................................................... 7
Student Insurance/Accident and Health ................................................... 7
Veterans’ Services .................................................................................... 7
Early Outreach Programs
Summer Programs .................................................................................... 7
Achieving College Education (ACE) ......................................................... 7
High School Dual Enrollment .................................................................. 7
Hoop of Learning ...................................................................................... 8
Athletics & Clubs
Athletics .................................................................................................. 9
Clubs ......................................................................................................... 9
Additional Student Resources
Bookstore ................................................................................................ 12
Food Services .......................................................................................... 12
Public Safety ........................................................................................... 12
Learning Support Services
Academic Success Center/Tutoring .......................................................... 12
Computer Commons ............................................................................... 13
Library .................................................................................................... 13
Academic Enrichment Programs
Honors Program ....................................................................................... 13
Maricopa-ASU Pathways Program ............................................................ 14
Phi Theta Kappa ..................................................................................... 14
Psi Beta .................................................................................................. 14
Service Learning ...................................................................................... 14
Undergraduate Research ......................................................................... 14
Additional Campus Programs
Community Education ................................................................................ 14
Physical Education & Wellness Program .................................................. 14
In-Person, Hybrid, and Online Education ................................................ 15
Internships & Externships ....................................................................... 15
Developmental Education ......................................................................... 16
General Education .................................................................................... 17
EMCC General Education Statement ....................................................... 17
Assessment of Student Abilities ............................................................. 17
General Education Degrees & Certificates ............................................. 17
University Transfer and Pathways Chart ................................................. 18
Academic Certificates ............................................................................ 78
General Graduation Requirements ......................................................... 83
Catalog Under Which a Student Graduates ............................................. 86
Training and Career Programs ................................................................. 88
EMCC Areas of Study Match ................................................................. 89
EMCC Occupational Degrees & Certificates ........................................ 88
SouthWest Skill Center Programs ............................................................ 149
MCCCD Occupational Programs ............................................................ 159
MCCCD Allied Health or Nursing Programs ........................................... 157
Course Descriptions ................................................................................ 173
MCCCD Policies and Procedures ............................................................. 256
MCCCD Governing Board/Administration ............................................. 369
EMCC Administration ............................................................................ 369
Senior Management ............................................................................... 369
Deans/Directors .................................................................................... 369
Division Chairpersons ........................................................................... 370
EMCC Faculty ......................................................................................... 371
Emeritus Faculty .................................................................................... 375
Glossary of College Terms ...................................................................... 376
Map of Estrella Mountain Campus ......................................................... 378
Index ....................................................................................................... 379

Estrella Mountain Community College is accredited by the Higher Learning Commission and a member of the North Central Association.

The Higher Learning Commission
30 North La Salle Street
Suite 2400
Chicago, IL 60602-2504
(800) 621-7440
info@hlcommission.org

For more information, visit
estrellamountain.edu/about/accreditation

[Estrella Mountain Community College | 2016-2017 Catalog]
About Estrella Mountain

Mission

Estrella Mountain is an innovative higher learning organization responding to the diverse needs of West Valley communities. Learners have an opportunity to successfully accomplish their educational and personal goals through the following college purposes:

- Developmental Education
- General Education
- Transfer Education
- Learner Support Services
- Workforce Development
- Community Education
- Civic Responsibility
- Global Engagement

Purposes

Developmental Education
Building the academic foundation and providing learning support to prepare learners for collegiate success.

General Education
Expanding educational experiences for all learners while fostering core academic abilities.

Transfer Education
Offering transfer courses and programs that enable learners to achieve success at their institution of choice.

Learner Support Services
Supporting learners through exceptional educational services, programs and guidance.

Workforce Development
Responding to the community’s dynamic workforce needs by establishing partnerships and creating relevant programs of study, training and services.

Community Education
Providing learning experiences that enhance the knowledge, skills and abilities of life-long learners.

Civic Responsibility
Creating opportunities and partnerships that provide a framework for learners to act responsibly in society.

Global Engagement
Engaging learners in the discovery, contribution and creation of local solutions in response to global issues.

Vision

We provide exceptional and creative learning experiences that prepare all learners to achieve their dreams and transform their lives.

Values

We value learning and engagement through:

Integrity
- Being accountable to fulfill goals, objectives and responsibilities.
- Being truthful, respectful, sincere, and responsible in your interactions with others.

Diversity
- Considering the contributions and worldviews of others.
- Promoting an inclusive campus culture that supports social awareness.
- Committing to comprehensive inter-cultural learning and awareness.

Collaboration
- Growing partnerships and building relationships that enhance the learning environment.
- Practicing communication methods that engage all learners.

Innovation
- Committing to the continued exploration and development of successful learning practices.
- Encouraging creativity and professional exploration within our community of learners.

Sustainability
- Understanding how our actions impact the local and global community.
- Reducing negative effects on the environment through proactive and sustainable practices.
- Applying practices that encourage environmental, economic and social responsibility.

Maricopa Community College District Vision, Mission and Values statements are located under Board Policy 4.1 of the MCCCD Policies and Procedures or online at https://chancellor.maricopa.edu/one-maricopa/vision-mission-and-values
MCCCD General Information

Academic Calendar

FALL 2016
Open Registration Begins.........................................March 21, 2016
Classes Begin.............................................................August 20
Labor Day Observed..................................................September 5
Last Day for Withdrawal w/out Instr. Signature..............+
Graduation Application Deadline.................................November 4
Veteran's Day Observed.............................................November 11
Thanksgiving Break....................................................November 24-27
Last Day Withdrawal Accepted....................................+-
Final Exams...............................................................December 12-15
Mid-Year Recess Begins for Students..........................December 19
Winter Break (Campus Closed).................................December 25-January 1

SPRING 2017
Open Registration Begins.........................................October 10, 2016
Classes Begin.............................................................January 14
M.L. King Birthday Observed......................................January 16
President's Day Observed..........................................February 20
Last Day for Withdrawal w/out Instr. Signature..............+
Graduation Application Deadline.................................April 7,
Spring Break.............................................................March 13-19
Last Day Withdrawal Accepted....................................+-
Final Exams...............................................................May 8-11
Commencement..........................................................May 12
Memorial Day Observed.............................................May 29

SUMMER 2017
Open Registration Begins.........................................March 20, 2017
Summer Graduation Deadline......................................April 7
Memorial Day Observed.............................................May 29
First 5-Week Day & 8-Week Evening Sessions Begin......May 30
First 5-Week Session Ends.........................................June 29
Independence Day Observed......................................July 4
Second 5-Week Day Session Begins.............................June 3
8-Week Evening Sessions End......................................July 20
Second 5-Week Day Session Ends...............................August 3

+ See your student schedule in my.maricopa.edu for the Last Day to Withdraw without an Instructor Signature for each class in which you are enrolled.
++Refer to the Important Deadlines for Students to determine the Last Day Student Initiated Withdrawal will be accepted.
Student Services
Komatke Hall B
estrellamountain.edu/studentservices
Student Services at Estrella Mountain has always focused on a commitment to offer quality and convenience to the students and community. To further this commitment, an innovative way of providing service has been created called One-Stop Enrollment. As the name implies, the One-Stop Model gives students “one-stop” service by providing all services such as placement testing, advisement, financial aid, registration, quick stop services, and payment all in one area.

EMCC’s Enrollment Steps
New college students who are planning to attend EMCC for the first time, are asked to complete the following success steps:
• Take the College Placement Test
• Attend a Priority Advisement Workshop (PAW) Session
  • Register for CPD150 if appropriate
• Attend a New Student Orientation (NSO)

Completing each step improves the student’s ability to continue on a degree path, complete classes and graduate on time. For more information, call 623.935.8824.

Admissions & Registration | 623.935.8888
estrellamountain.edu/students/admissions
Online registration: www.my.maricopa.edu
EMCC’s Admissions and Registration area offers many services to help achieve educational goals. Whether students need help to register for a class, order a transcript or apply for graduation, the friendly staff support student success. Other services provided are listed below:
• Process Student Admission Application
• Determine and process residency for tuition purposes
• Process class registrations and withdrawals
• Maintain official college transcripts
• Evaluate transcripts
• Process transcript requests and enrollment verification
• Evaluate graduation applications for degree and certificate completion

For detailed guidelines covering admissions, registration, tuition and fees please see A.R. 2.2.2 Admission Information, A.R. 2.2.8 Registration, and A.R. 2.2.9 Tuition and Fees Policy in the MCCCD Policies and Procedures.

Estrella Mountain Community College is not authorized to deliver online classes to students who reside outside of the State of Arizona per 34 CFR Part 600.9 – INSTITUTIONAL ELIGIBILITY UNDER THE HIGHER EDUCATION ACT OF 1965.

Testing Services | 623.935.8860
estrellamountain.edu/students/testing-services
New students must take the placement test prior to enrolling in college classes. New students must take all three placement tests: English, Reading, and Math. Examples of test questions are located at estrellamountain.edu/students/testing-services. Go to the Related Resources on the right side of the page and click on ‘Official Accuplacer Sample Questions (see reading and math)’, or ‘English/WritePlacer Sample Essays’. Math instructional videos are also available:
• Administer course placement testing - English, Reading, Mathematics, and English as a Second Language
• Administer HESI-A2 Exam

Testing is a required enrollment step for new students. For more information on testing and placement policies, please see A.R. 2.2.7 Student Course Placement Process in the MCCCD Policies and Procedures.

Priority Advisement Workshop (PAW) | 623.935.8860
All new college students are required to attend a Priority Advisement Workshop (PAW) after completing placement testing. The PAW session provides information on test results and first semester enrollment, introduces new students to my.maricopa.edu, their college email, and how to register/drop classes. PAW sessions serve as the initial advisement session for new students and are offered on a regular basis. Schedules are available in the Testing Center.

Advisement | 623.935.8888
estrellamountain.edu/students/advisement
Students are asked to attend a PAW session prior to meeting with an academic advisor. Advisors can help with the following:
• Interpreting course placement test scores
• Creating an educational plan
• Selecting classes appropriate to program of study
• Unofficial evaluation of college transcripts
• Provide information on college and university transfer process
• Verifying of graduation eligibility

Academic Advisement is a required enrollment step for new students. For more information on advisement policies, please see A.R. 2.2.6 Academic Advising in the MCCCD Policies and Procedures.
New Student Orientation (NSO) | 623.935.8824  
estrellamountain.edu/students/new-student-orientation

New Student Orientation is designed to provide students with the resources needed to maximize their potential and successfully manage their college experience. This is a great opportunity to meet new friends, interact with faculty and take a campus tour. New Student Orientation is a required enrollment step for new students.

Career and Transfer Center | 623.935.8740  
estrellamountain.edu/students/career-services

The Career and Transfer Center offers assistance to both current and prospective students who are interested in career development, exploration, internships, and university transfer. Available assistance includes:

- Career assessments to explore careers related to interests, skills, and values
- Résumés, cover letters, and interviewing
- Job searching and internship opportunities
- University transfer information

Multiple workshops and events are offered throughout the semester. Attendance is free and encouraged. Students can visit the Career and Transfer Center online at estrellamountain.edu/students/career-services to access information related to career development and to view the Center’s upcoming events and workshops. Listings of both part-time and full-time jobs can be accessed online at the Career and Transfer Center through the Maricopa Career Network, an online job search engine for MCCCD students, at maricopa.jobing.com.

Cashiers | 623.935.8888  
estrellamountain.edu/students/student-payment

Payment Plan Option: www.my.maricopa.edu

EMCC Cashiers manage student accounts, tuition and fee payments and student tuition payment plans. Cashiers strive to provide students and employees with accessible and responsive financial and cashier services.

- Process tuition and fee payments
- Process refunds (when appropriate)
- Distribute payroll checks
- Provide information on student tuition payment plans and student accounts

Counseling | 623.935.8909  
estrellamountain.edu/students/counseling

Counseling services are provided to promote student development by helping students to define and achieve their academic, career, and personal goals. At Estrella Mountain, the counselors can help students be successful through counseling services and instruction. The counseling staff encourages students to visit and share how students and counselors can work together to support students’ aspirations both in and out of college.

Disability Resources and Services (DRS) | 623.935.8863  
estrellamountain.edu/students/disability-resources

Disability Resources and Services (DRS) provides information and services to students with documented disabilities who are attending Estrella Mountain Community College. Students who wish to receive services are required to contact the DRS office and follow an intake eligibility process prior to receiving accommodations. Appropriate documentation must be presented to DRS verifying the existence of a disability as defined by Section 504 of the Rehabilitation Act of 1973; the Americans with Disabilities Act, 1990; and the Americans with Disabilities Act Amendments, 2008. The DRS office, along with the campus community, will assist students to discover, develop, and demonstrate their full potential and abilities.

EXCEL Program | 623.935.8969  
maricopa.edu/excelprogram

EXCEL is a student success program developed in collaboration with the Helios Education Foundation at both Estrella Mountain and Glendale Community Colleges. EXCEL provides a unique opportunity for students who would like to have additional support, advice, and guidance obtaining an associate’s degree and/or help to transfer successfully to a four-year university. EXCEL students receive one-on-one attention from a supportive team that will help students accomplish their goals and connect to the right services and resources. Navigating the college experience can be a challenge. With EXCEL, you will not be alone. We will be here to help you every step of the way. For more information, visit us at www.maricopa.edu/excelprogram.

Internship Search | 623.935.8740  
estrellamountain.edu/students/internships

Internships are a great way to gain professional skills and self-confidence, test out a career field, build a résumé, gather insight into a particular industry or organizational culture, establish connections and build a network of contacts. Internships offered by Estrella can be both paid and non-credit and are offered in many different areas of interest. EMCC provides both paid and unpaid internship opportunities. For a list of open internships, please visit jobs.estrellamountain.edu.

Financial Aid Services | 623.935.8888  
estrellamountain.edu/students/financial-aid

- Assist students with obtaining funding for their education including grants, loans, federal work-study and scholarships
- Assist students with completion of financial aid forms

For more information on Financial Aid benefits please see A.R. 2.2.11 Student Financial Assistance in the MCCCD Policies and Procedures.
Online Services
My.maricopa.edu
- Register for classes
- View class schedule
- Drop/Withdraw from classes
- View charges on student account
- View financial aid status
- Make payments
- View grades
- Request transcripts
- Update contact information
- Establish student tuition payment plan

Scholarship Services | 623.935.8940
estrellamountain.edu/students/scholarships
- Assist students with obtaining scholarship funding for their education
- Assist students with completion of scholarship applications

Student Life | 623.935.8807
estrellamountain.edu/students/student-life
Deciding to attend college can be the opportunity of a lifetime. It opens doors to new friendships, offers a different social life and can help build leadership and team skills that will impact students for the rest of their lives. In addition to the academic growth that students experience at Estrella Mountain, there are a myriad of student activities available to help build students' confidence and abilities as they contribute to both the campus community and the community at large.

Information regarding the use of college grounds for public expression or solicitation can be obtained from the Office of Student Life or the MCCCD web site.

Petition Solidification Policy: https://chancellor.maricopa.edu/public-stewardship/governance/administrative-regulations/2-students/2.4-college-environment/2.4.8-petition-signature-solicitation

Use of Grounds by Non-Affiliated Individuals: https://chancellor.maricopa.edu/public-stewardship/governance/administrative-regulations/2-students/2.4-college-environment/2.4.9-use-of-college-grounds-by-non-mcccd

Student Insurance/Accident and Health | 623.935.8910
Enrolled students are automatically provided insurance coverage for college-related accidents. The plan provides secondary coverage when a student has individual insurance and will pay the remaining reasonable charges within the limits of the policy. Forms can be obtained through Student Life.

Veterans Services | 623.935.8937
estrellamountain.edu/students/veterans-services
Estrella Mountain Community College, through the Veterans Administration, offers higher education to Veterans and eligible dependents under U.S. Code Title 38, Chapters 30, 31, 33, 35, 1606, and 1607. The Veterans Services office provides information and application assistance for those eligible for Veterans educational benefits. They also certify and monitor Veterans enrollment. To secure benefits, the student must apply through the Veterans Services office on campus. For more information on Veterans benefits please see A.R. 2.9 Veterans Services in the MCCCD Policies and Procedures.

Early Outreach Programs
Summer Programs | 623.935.8900
Estrella Mountain Community College Early Outreach Programs provide future college students with opportunities to earn college credit during the summer and are a great way for students to get a jump start on their college career. For an updated list of available summer programs and costs, call the Early Outreach Department at 623.935.8900

Achieving College Education (ACE) Program | 623.935.8900
estrellamountain.edu/students/ace
The Maricopa ACE Scholars Program is a nationally recognized scholarship program that targets at-risk high school sophomores by assisting them in making a smooth transition from high school to community college and on to the university system. Students take classes in the summer, fall and spring semesters. The program is dependent upon continued external funding.

High School Dual Enrollment | 623.935.8900
estrellamountain.edu/students/dual-enrollment
Estrella Mountain Community College partners with West Valley high schools to offer dual enrollment credit for academic and occupational classes. The number of courses varies by high school. Dual enrollment courses are held on high school campuses and taught by high school instructors who have met community college hiring qualifications. Registration is coordinated at the high school campus and offers various payment options. Tuition assistance is available on a limited basis. Through Dual Enrollment, EMCC strives to ease the transition from high school to college and to increase the number of college-bound high school students in the community.
Hoop of Learning | 623.935.8900
estrellamountain.edu/students/hoops
The Hoop of Learning Program was implemented in the summer of 1995 in response to concerns voiced by Native American parents in an urban high school district in Phoenix, Arizona. These voices influenced the high school and a local community college to form a partnership committee to provide an educational program for Native American students, now referred to as the Hoop of Learning. Hoop of Learning is a high school to college bridge program designed to foster cultural resilience and career development among Native American students. The program is dependent upon continued external funding. Participants are able to attend college classes in the fall, spring, and summer terms.
**Athletics & Clubs**

**Athletics | 623.935.8910**  
estrellamountain.edu/students/athletics  
Estrella Mountain Community College competes in the Arizona Community College Athletics Conference. The mission is to offer student athletes the opportunity to compete for team and individual championships. Academic achievement is highly emphasized, along with a support system to facilitate the academic and social success of student athletes. Men’s and women’s golf and cross country are available to full-time students.

**Administration of Justice (AJS) Club**  
**Advisor: Jim Cerven | 623.935.8924**  
The purpose of this organization is to stimulate a strong awareness of criminal justice concerns and issues, to provide fellowship among the Administration of Justice students and those interested in the criminal justice system, and to provide an educational and employment opportunity networking system for Administration of Justice students.

**American Sign Language Club**  
**Advisor: Teresa Thiry**  
The purpose of the ASL club is to stimulate a strong interest in American Sign Language; to provide fellowship among signing enthusiasts and those in the deaf community; to promote signing skills and practices among the students of EMCC.

**Art Club**  
**Advisor: Jimmy Fike | 623.935.8570**  
The purpose of this club is to promote the essence of art and creativity within the internal and external campus community by participating in activities, programs and events.

**Asian Pacific Islander Club (APIAC)**  
**Advisor: Carlotta Abrams | 623.935.8462**  
APIAC encompasses students who want to learn and/or join an organization that promotes racial, political and cultural awareness of Asian Pacific Islander minorities.

**Black Student Union (BSU)**  
**Advisors: Tiffany Barner | 623.935.8926 and Tualni Garnett | 623.935.8824**  
The purpose of the Black Student Union is to support EMCC students, while stimulating education by providing an awareness, recognition of, and appreciation toward contributions by the African American culture to the United States of America and to the world.

**Christian Challenge**  
**Advisor: Andy Burch | 623.935.8955**  
The Christian Challenge organization promotes interest in Jesus Christ and provides fellowship among students and faculty. The main objectives are to support the needs of students in regard to the visibility and role of Priority College Ministry and Christianity and to provide a forum to assist self discovery, innovation and contribution to the college community and the broader society.

**Drama Club**  
**Advisors: George Lopercio | 623.935.8807 and Erin Bloomstrand | 623.935.8332**  
The EMCC Drama Club stimulates strong interest in the theatrical arts and promotes thespian activity on campus.

**EMCC Fashion Club**  
**Advisor: Jennifer Complot | 623.935.8832**  
The EMCC Fashion Club offers fellowship among fashion enthusiasts and promotes unity among its members through activities and networking.

**EMCC Student Nurse Association**  
**Advisor: Debra Lemenager | 623.935.8780**  
The purpose of this Association shall be to: promote the awareness of the RN program of nursing among academic and local communities. Serve as a means of communication among students, faculty and administration to: Promote common educational and professional objectives; advocate students’ interests; enhance students’ educational experience; encourage professional and constructive student conduct; foster academic and professional success; represent the Association’s members and their interests to the community at large and to other educational and professional institutions, organizations and associations; inform the Association’s members of activities and opportunities that are organized and provided by other educational institutions, professional organizations and student associations; promote and encourage participation of the Association’s members in appropriate student activities; augment student understanding of post-graduate educational and employment opportunities; promote and encourage relationships with professional associations, including the American Nurses Association and National Student Nurses’ Association; collaborate with other EMCC Student Organizations to achieve mutual goals and be advocates and leaders in the local community.

**Entrepreneur Club**  
**Advisors: Clarissa Davis-Ragland | 623.935.8594 and Jarret Hickman**  
The Entrepreneur Club assists members in their development of leadership skills, providing them with an understanding of career opportunities and the chance to interact with a variety of professionals in any business or related field.
EnviroSTEM Club  
Advisor: Nadine Johnson | 623.935.8319  
The EnviroSTEM Club is a collaborative club that promotes environmental sustainability through the use of science, technology, engineering, math and physics to educate the campus and community and create awareness that fosters environmental stewardship.

Feminist Majority Leadership Alliance (FMLA)  
Advisor: Olga Tsoudis | 623.935.8592  
The purposes of the Feminist Majority Leadership Alliance of Estrella Mountain Community College will be: To establish a broad constituency to work in pursuit of feminist ideals -- social, political, and economic equality for women and men, girls and boys. To study and take action on national, state, local and campus feminist issues and concerns. To provide leadership and career building opportunities for feminist students. To educate the college/university community about feminist issues. To enhance the feminist community on campus.

Future Teachers Club  
Advisors: Rachel Holmes | 623.935.8407 and Peter Turner | 623.935.8705  
The EMCC Future Teachers Club assists in locating a variety of professional development opportunities to assist education students to prepare them for teaching professions. Students develop communication and leadership skills to achieve their goals through participation in a variety of activities, including support networks with fellow students, West Valley teachers, and/or administrators.

Gaming Club  
Advisors: Denise Garland | 623.935.8704  
The EMCC Gaming Club plans, organizes, and executes events related to gaming. Some of the events the club sponsors includes: gaming tournaments, fundraisers, and gaming discussions. Club members come together during meetings to engage in dialogue, and fun activities as they relate to various areas of gaming.

International Student Leadership Organization (ISLO)  
Advisors: Jarrett Hickman | 623.935.8807 and Anastasia Amabisca | 623.935.8489  
The International Student Leadership Organization (ISLO) mission is to promote multicultural awareness and to inspire and encourage a strong interest in volunteerism. ISLO serves as a focal point for the EMCC campus community to engage in global issues and address unique challenges facing international students. In addition, the organization provides opportunities to engage one another and the wider EMCC community with programs and events that celebrate diverse cultural backgrounds. Students work together, as an international community, to explore a variety of different cultural interests while also helping the community, and developing teamwork, creativity, leadership skills, cultural tolerance and understanding through social activities, community service and campus involvement.

Latin Dance  
Advisor: TBA | 623.935.8807  
The purpose of this organization is to stimulate a strong interest in Latin dance, provide fellowship among dance enthusiasts and promote Latin culture among the members.

Living in Full Effect  
Advisor: Alexander Andrews | 623.935.8094  
Life is a social awareness club dedicated to promoting more balanced and open-minded perspectives on controversial issues. Our goal is to create independent and open-minded leaders for the 21st century.

Movimiento Estudiantil Chicano de Aztlan (M.E.Ch.A)  
Advisors: Norma Jimenez Hernandez | 623.985.8464 and Summer Cherland | M.E.Ch.A. supports higher education for Chicano/Hispano students while encouraging student involvement, on and off campus, in cultural and social issues affecting the Chicano/Hispano community.

Male Empowerment Network (M.E.N.)  
Advisors: Tulani Garnett | 623.935.8824 and Daniel Meador | 623.935.8905  
MEN (Male Empowerment Network) provides male students with an opportunity to connect with faculty, staff, and other students to address academic, cultural, social, and professional challenges faced by their peer group. The program also challenges participants to examine what it means to be both male and a person of color in the 21st century. The goal of the program and student organization is for members to collectively strive toward program completion by accessing campus support services and peer accountability.
Native American Club  
Advisor: TBA | 623.935.8807  
The Native American Club encourages awareness of Native American cultures while supporting students in all facets of their college experience. Intrapersonal and interpersonal relationships are strengthened through interaction with others of Native American heritage.

Pre-medical Sciences Society  
Advisor: Open | 623.935.8807  
The purposes of this organization are to provide its members with current information about the Health Sciences, to aide in academic support for its members in relevance to the medical school application, and to be involved and help in the community by volunteering service to local organizations.

P.R.I.D.E.  
Advisor: Michael Bartley | 623.935.8057  
P.R.I.D.E (Practicing Respect, Individuality, Diversity and Equality) is a club for all students that works to create a safe space for gay, lesbian, bisexual, transgendered and questioning (GLBTQ) students. This Gay Straight Alliance fosters strong appreciation of diversity amongst its members.

Social Awareness Club  
Advisor: Sharon Yee | 623.935.8807  
The Social Awareness Club sponsors campus community awareness concerning social issues, such as gun control, the environment, health care, and cultural diversity. The club focuses on activism, responsiveness, and tolerance concerning these issues.

Social Work Club  
Advisor: Alison England  
The purpose of the “club” is to promote unity among all students integrating the Code of Ethics set forth by the National Association of Social Workers, the Department of Social Work, and the Estrella Mountain Community College code of behavior for marticulated students. In doing so, the club will provide avenues to filter information to EMCC students regarding Social Work causes he club see’s fit that coincides with the Code of Ethics set forth by NASW. The “club” will also organize various activities promoting unity and community for students and raising issues tha affect by students and non-students.

Sports Club  
Advisor: Lyle Bartelt | 623.935.8405  
The Sports Club encourages an active lifestyle and promotes health and wellness events on campus. The club is open to all students.

Science, Technology, Engineering, Mathematics (STEM) Club  
See EnviroSTEM Club
Additional Student Resources

Bookstore
Komatke Hall | 623.935.8875
efollet.com
The Estrella Mountain Bookstore is managed by Follett College Stores and provides required textbook and academic supplies for students and staff at Estrella Mountain. Additional gift and Estrella Mountain specialty items are also available. Students may purchase computer software through the Bookstore at a special discount. Textbooks and software are also available online at: www.efollett.com. Call the Bookstore directly for current hours of operation.

Food Services
Komatke Hall | 623.935.8254
The on-site restaurant Courtyard Grill is managed by Chartwells and offers a variety of dining options to meet the needs of a diverse student population. Located in Komatke Hall, the food services management encourages students to use both the indoor and outdoor eating areas whether they are customers of the restaurant or are carrying a lunch from home. For added convenience, vending machines are located throughout campus.

Mariposa Hall | 623.935-8731
Featuring Peets coffee, Coke and Pepsi products, pastries, grab and go sandwiches, and salads. The Eco Café also offers a variety of snacks.

Parking
Parking is offered to EMCC students, faculty and staff free of charge. All students, faculty and staff who park on campus are required to have a valid parking decal and be familiar with the parking regulations as established by MCCCD per ARS 15-1449. Please visit estrellamountain.edu/public-safety/parking for full regulations.

Public Safety
Northwest Public Safety Building
Public Safety is located on the north side of campus adjacent to parking lot H. Many dedicated police officers and staff members work behind the scenes to ensure that the college campus is safe for students to pursue their education. Students, staff, faculty and visitors may contact Public Safety via Estrella Mountain’s web page: estrellamountain.edu/security or by calling:

Emergencies: 480.784.0911 or 623-935-8911
Non-emergency: 623.935.8915

In an emergency, upon contact with the Public Safety central dispatch or EMCC Public Safety office, state the nature of your emergency and stay on the line to provide detailed information. An officer will be sent to your location.

Academic Success Center/Tutoring

Academic Success Center/Tutoring
Estrella Hall-First Floor | 623.935.8221
estrellamountain.edu/students/tutoring
Estrella Mountain Community College is committed to students’ academic success. The Academic Success Center located in Estrella Hall provides FREE tutoring and academic learning resources throughout the semester. Visit the website for the most updated information.

Math Success | 623.935.8221
- Drop-in tutoring for all Math courses offered at EMCC
- Graphing calculator lease program
- Math textbooks available for use in the Center
- Math tutorials, videos and handouts on selected topics
- Group Study Sessions
- Computers/software/printing/study strategies handouts

Science Success | 623.935.8221
- Appointment based tutoring for Biology, Chemistry, and Physics courses offered at EMCC
- Appointment based tutoring for Nursing courses offered at EMCC
- Anatomical models, bones, and microscopes for use in the Center
- Group Study Sessions
- Computers/software/printing/study strategies handouts

Writing Success | 623.935.8221
- Drop-in writing tutoring for all courses offered at EMCC
- Online paper critique through the Online Writing Center
- My WritingLab, MyCompLab Assistance
- Workshops
- Writing handouts
- Computers/software/printing/study strategies handouts

Reading, Languages and Occupational Success | 623.935.8221
- Appointment based tutoring for all Reading courses and English as a Second Language (ESL) courses offered at EMCC
- Appointment based tutoring for Accounting, Economics, Foreign Language, and Psychology Statistics courses offered at EMCC.
- Computers/software/printing/study strategies handouts
Estrella Mountain Community College | 2016-2017 Catalog

Academic Enrichment Programs

Honors Program
Montezuma Hall, Room 122 | 623.935.8222
Coordinator: Alex Andrews
The Honors Program is designed to enhance the intellectual experience of students through enrollment in Honors courses, independent study options and increased contact with Honors students at Estrella Mountain and within the Maricopa County Community College District. Participation in the program presents students with growth opportunities in the area of leadership through attendance at local, regional and national conferences. Cultural enrichment activities are also stressed with frequent attendance at theater, symphony, museum, and lecture events.

Honors Program Graduation Requirements
Honors students who graduate with at least fifteen (15) credits in Honors courses and who maintain a cumulative 3.50 GPA or higher will be designated as Honors Program graduates.

Honors Program Eligibility
Presidents' Scholarships are available for new students who have graduated from an accredited Maricopa County high school within one academic year after graduate. There are two pathways for recent high school graduates to receive the Presidents' Scholarship. The first pathway is for students who have graduated in the top 20% of their class. Top 20% students must score a 5 on the Write placer or be ENG 101 eligible, test into CRE 101, and test into MAT 120 or higher on the Maricopa County Community College District approved placement test. Students not in the top 20% must score a 6 on the Writeplacer, test out of CRE 101, and test into MAT 120 or higher. Students must also have a 3.0 cumulative high school GPA in order to be eligible. Recent high school graduates must begin their college studies in the academic year following high school graduation. To retain the Presidents' Scholarship for 2 academic years, students must demonstrate scholarly activity each semester. For example, a Presidents' Scholars must take one Honors Only Cohort class for both their third and fourth semesters. Presidents' Scholars during their third and fourth semesters may continue to take at least one Honors Only Cohort course or Honors project each semester and maintain a cumulative grade point average of 3.25 or higher. In addition, Presidents' Scholars must also attend one Honors Forum Lecture and one Honors sponsored event each semester.
Services, Resources and Programs

In-Person, Hybrid, and Online Learning

Estrella Mountain Community College offers classes in three different ways:

1) **In-Person Learning** - An in-person, web-enhanced class consists of face-to-face instruction with CANVAS support for assignments, discussion boards, and announcements. Instructors primarily use face-to-face meetings or email to provide student feedback and answer questions. Web-enhanced learning environments are used in many courses at EMCC to provide interactive learning experiences inside and outside the classroom to support student learning. Web-enhanced courses may use CANVAS, and/or web-based learning environments such as MyMathLab, MyCompLab, MyWritingLab, MyITLab, and Connect.

2) **Hybrid Learning** - A hybrid class is a blend of face-to-face instruction with online learning. Hybrid classes reduce the number of face-to-face meetings by requiring a higher number of hours doing virtual work. Hybrid classes provide schedule flexibility and save commute time and money that give students an opportunity to balance work/life responsibilities. This format does not reduce the amount of student work or effort required to succeed in the course. Hybrid classes focus on in-person, experiential learning and clarification of concepts. Students spend the remaining time working online to complete required class assignments and activities via CANVAS.

3) **Online Learning** - Online classes are conducted via the Internet through a learning management system, and use new and emerging technologies. Online courses are designed for motivated, self-disciplined, technology-literate students. In this setting, most instructor/student communication will take place via email, chat, video-conferencing, and/or the virtual classroom. Some online classes may require student participation in a virtual classroom at prescribed times. Please note that all Online classes start on a Monday.

Students may visit http://www.estrellamountain.edu/academics/classes/classes to explore which of the formats might work best for them. The website includes a description of the different types and formats of classes, as well as Tips to Get Started and the Online Class Orientation.

Once enrolled in an Online class, students may access the syllabus, assignments, course content, discussions, and contact information for classmates and instructors by following these steps. To demonstrate readiness for hybrid and online learning, students are encouraged to complete course-level Getting Started and Orientation modules within forty-eight hours of the class start date.

1) Navigate to the EMCC college website (http://www.estrellamountain.edu)
2) Select “Students” from the menu in the gold bar in the upper right hand corner.
3) Click on the red icon in the upper right corner will take students to Canvas (https://learn.maricopa.edu/login)
4) Enter an MEID and password (the same information required to access MCCC email) for access to course materials and student or instructor contact information.
5) Complete course-level Getting Started and Orientation modules.

Internships & Externships

The Maricopa County Community College’s official district course descriptions (available at http://www.maricopa.edu/academic/ccta/) for internships/externships states the amount of hours required in order for a student to receive college credit. The internship/externship descriptions also indicate if a maximum amount of credit is allowable for any given internship. Each internship/externship course that is scheduled is assigned an EMCC 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 an internship/externship site supervisor to ensure that the student is making satisfactory progress and meeting the time requirements. The course syllabus communicates student expectations by covering the specific course details and learning outcomes, how internship hours will be tracked, and what is required for grading and course completion. The EMCC instructor submits the final grade for the experience. EMCC’s internship/externship process is in compliance with CFR 38 21.4265. Internships can also be noncredit. If you would like additional information please contact the Career and Transfer Center.
In-Person, Hybrid, and Online Learning

Estrella Mountain Community College offers E-learning in three different ways:

1) In-Person Learning - An in-person, web-enhanced class consists of face-to-face instruction with CANVAS support for assignments, discussion boards, and announcements. Instructors primarily use face-to-face meetings or email to provide student feedback and answer questions. Web-enhanced learning environments are used in many courses at EMCC to provide interactive learning experiences inside and outside the classroom to support student learning. Web-enhanced courses may use CANVAS, and/or web-based learning environments such as MyMathLab, MyCompLab, MyWritingLab, MyITLab, and Connect.

2) Hybrid Learning - A hybrid class is a blend of face-to-face instruction with online learning. Hybrid classes reduce the number of face-to-face meetings by requiring a higher number of hours doing virtual work. Hybrid classes provide schedule flexibility and save commute time and money that give students an opportunity to balance work/life responsibilities. This format does not reduce the amount of student work or effort required to succeed in the course. Hybrid classes focus on in-person, experiential learning and clarification of concepts. Students spend the remaining time working online to complete required class assignments and activities via CANVAS.

3) Online Learning - Online classes are conducted via the Internet through a learning management system, and use new and emerging technologies. Online courses are designed for motivated, self-disciplined, technology-literate students. In this setting, most instructor/student communication will take place via email, chat, video-conferencing, and/or the virtual classroom. Some online classes may require student participation in a virtual classroom at prescribed times. *Please note that all Online classes start on a Monday.

Students may visit http://www.estrellamountain.edu/academics/classes/classes to explore which of the formats might work best for them. The website includes a description of the different types and formats of classes, as well as Tips to Get Started and the Online Class Orientation.

Once enrolled in an E-learning class, students may access the syllabus, assignments, course content, discussions, and contact information for classmates and instructors by following these steps. To demonstrate readiness for hybrid and online learning, students are encouraged to complete course-level Getting Started and Orientation modules within forty-eight hours of the class start date.

1) Navigate to the EMCC college website (http://www.estrellamountain.edu)
2) Select “Students” from the menu in the gold bar in the upper right hand corner.
3) Click on the red icon in the upper right corner will take students to Canvas (https://learn.maricopa.edu/login)
4) Enter an MEID and password (the same information required to access MCCCD email) for access to course materials and student or instructor contact information.
5) Complete course-level Getting Started and Orientation modules.

Internships & Externships

The Maricopa County Community College’s official district course descriptions (available at http://www.maricopa.edu/academic/ccta/) for internships/externships states the amount of hours required in order for a student to receive college credit. The internship/externship descriptions also indicate if a maximum amount of credit is allowable for any given internship. Each internship/externship course that is scheduled is assigned an EMCC 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 an internship/externship site supervisor to ensure that the student is making satisfactory progress and meeting the time requirements. The course syllabus communicates student expectations by covering the specific course details and learning outcomes, how internship hours will be tracked, and what is required for grading and course completion. The EMCC instructor submits the final grade for the experience. EMCC’s internship/externship process is in compliance with CFR 38 21.4265. Internships can also be noncredit. If you would like additional information please contact the Career and Transfer Center.
All under-100 level courses at EMCC are targeted to enhance student skills in English, English as a Second Language (ESL), Mathematics, and Reading. Strong emphasis is placed on instruction with individual support, small classes, caring faculty, and creative learning experiences. Instruction is enriched through technology, interaction with other learners, and tutoring services provided by the Academic Success Center.

Students are advised for these courses through placement testing. Required courses must be successfully completed before advancing to the next level. Students enrolled in one or more courses at the under-100 level are considered part of a focused student support program initiated by the Maricopa Community College District.

The focus of all courses at the developmental level is to build confidence and competence in students so that they can progress to college-level work. These courses form an educational foundation for successful engagement in the college’s transfer, degree, and training/career programs.

English
+ENG071 Preparatory Academic Writing I 3
+ENG081 Preparatory Academic Writing II 3
+ENG091 Preparatory Academic Writing III 3
+ indicates that a course has prerequisites or corequisites.

English as a Second Language

Level I
+ESL010 English as a Second Language I: Grammar 3
+ESL011 ESL I: Listening and Speaking 3
+ESL012 ESL I: Writing with Oral Practice 3
+ESL016 Reading English as a Second Language I 3

Recommended Courses
+RDG008 Phonics 3

Level II
+ESL020 English as a Second Language II: Grammar 3
+ESL021 ESL II: Listening and Speaking 3
+ESL022 ESL II: Writing with Oral Practice 3
+ESL026 Reading English as a Second Language II 3

Level III
+ESL030 English as a Second Language III: Grammar 3
+ESL031 ESL III: Listening and Speaking 3
+ESL032 ESL III: Writing with Oral Practice 3
+ESL036 Reading English as a Second Language III 3

Level IV
+ESL040 English as a Second Language IV: Grammar 3
+ESL041 ESL IV: Listening and Speaking 3
+ESL042 ESL IV: Writing with Oral Practice 3
+ESL046 Reading English as a Second Language IV 3

Level V
+ESL050 Review Grammar for ESL 3

Recommended Courses
+ESL049 General Vocational ESL 3
+ESL051 Pronunciation Improvement for ESL 3
+ESL061 Informal Conversational and Written English for Non-Native Speakers
+ indicates that a course has prerequisites or corequisites.

Reading
+RDG071 Basic Reading 3
+RDG081 Reading Improvement 3
+RDG091 College Reading Skills I 3
+RDG095 Intensive Foundations of College Reading 6
+RDG100 Successful College Reading 3
+ indicates that a course has prerequisites and/or corequisites.

Mathematics (Fall & Spring)
MAT081 Basic Arithmetic 4
+MAT091 Introductory Algebra 4
+ indicates that a course has prerequisites and/or student placement.

Mathematics (Summer)
MAT082 Basic Arithmetic 3
+MAT092 Introductory Algebra 3
+ indicates that a course has prerequisites and/or student placement.
EMCC General Education Statement

At Estrella Mountain, students experience a collaborative and stimulating environment which stresses a solid foundation of general education. Each facet of the Estrella Mountain experience is designed to provide students with the necessary information, knowledge, abilities, intellectual concepts, and perspectives they need to achieve their academic and personal goals.

Estrella Mountain’s curricular patterns enhance critical thinking and communication skills. They reflect an emphasis on the study of composition, literacy and critical inquiry, numeracy, humanities, fine and performing arts, the social and behavioral sciences, the natural sciences, as well as cultural diversity, global engagement, civic responsibility, and historical awareness.

Recognizing the importance of breadth and depth of knowledge, the ability to apply that knowledge, and a view of learning as a lifetime activity, faculty and staff are committed to providing all students with an engaging learning environment in which everyone experiences growth.

Assessment of Student Abilities
Co-Chairs: Pete Turner 623.935.8705 and Rebecca Baranowski 623.935.8596
estrellamountain.edu/employees/committees/saac

At Estrella Mountain, successful learning is the primary focus. Successful learning means not only learning content but learning abilities and skills that enhance student success in academic, professional, and personal pursuits. The faculty at EMCC have identified the following abilities as being crucial to student success and are therefore important for students to develop across disciplines:

• Communication
• Composition/Writing
• Quantitative Reasoning (math skills)
• Critical Inquiry
• Information Literacy
• Technological Literacy
• Social, Civic, and Global Responsibility

The entire matrix of these abilities and their outcomes is available at: estrellamountain.edu/employees/committees/saac/gen-ed-abilities

General Education Degrees and Certificates

Arizona General Education Curriculum (AGEC)

AGEC-A (liberal arts major), or ......................................................... 19
AGEC-B (business majors), or ........................................................... 19
AGEC-S (majors with more prescriptive mathematics and mathematics-based science requirements) ........................................ 19

Academic Degrees

Associate in Arts (AA) .......................................................................... 27
Associate in Arts in Elementary Education (AAEE) ................... 32
Associate in Arts (AA), Fine Arts-Art ............................................... 39
Associate in Arts (AA), Fine Arts-Dance ........................................ 44
Associate in Arts (AA), Fine Arts-Theater ...................................... 51
Associate in Business (ABUS) - General ........................................ 56
Associate in Business (ABUS) - Special .......................................... 61
Associate in General Studies (AGS) ................................................ 67
Associate in Science (AS) ................................................................... 70
Associate in Applied Science ........................................................... 75

Academic Certificates

Academic Certificates ................................................................. 78
Advanced Interdisciplinary Storytelling ......................................... 79
Chicana and Chicano Studies ....................................................... 80
Creative Writing .................................................................................. 80
Interdisciplinary Storytelling......................................................... 81
Sustainability and Ecological Literacy ........................................ 82

Graduation Requirements

General Graduation Requirements ............................................. 83
Catalog Under Which a Student Graduates ................................ 86

Courses, degrees and certificates offered by the Maricopa Colleges are subject to change. Students should consult a MCCCD Academic Advisor to ensure appropriate course selection for general education purposes and transfer.

General Education Degrees and Academic Certificates Offered by the Estrella Mountain Community College are viewable at http://www.maricopa.edu/academic/ccta/curric/programs/programs_byCol.php?loc=EM
University Transfer and Pathways

Each public university major is matched with one of the following Maricopa Community Colleges Associate Degree Pathways. Some majors at the Arizona public universities are not matched with any of the Transfer Pathway Degrees below, due to sequencing or upper division requirements, and are designed as Transfer Guide-Exceptional Requirements (TG-XR). Students should consult with an advisor to determine the specific degree requirements for the selected major.

### Associate in Arts (AA) 60-64 Credits

<table>
<thead>
<tr>
<th>General Education Core Areas</th>
<th>35 Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCCCD Requirements</td>
<td>(Communication, Reading) 0-6 Credits</td>
</tr>
<tr>
<td>General Electives</td>
<td>(Select courses to complete a minimum of 60 credits but no more than a total of 64 semester credits.)</td>
</tr>
</tbody>
</table>

### Associate in Arts Elementary Education (AAEE) 60-63 Credits

<table>
<thead>
<tr>
<th>General Education Core Areas</th>
<th>35 Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCCCD Requirements</td>
<td>(Communication, Reading) 0-6 Credits</td>
</tr>
<tr>
<td>Elementary Education Requirements</td>
<td>25 Credits</td>
</tr>
<tr>
<td>- Education Foundations</td>
<td>(18-20 Credits)</td>
</tr>
<tr>
<td>- Elective for AZ Professional Teacher Standards</td>
<td>(5-7 Credits)</td>
</tr>
</tbody>
</table>

### Associate in Arts Fine Arts (AAFA) 60-64 Credits

<table>
<thead>
<tr>
<th>General Education Core Areas</th>
<th>35 Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCCCD Requirements</td>
<td>(Communication, Reading) 0-6 Credits</td>
</tr>
<tr>
<td>Fine Arts Requirement- Art</td>
<td>(28 Credits)</td>
</tr>
<tr>
<td>Fine Arts Requirement- Dance</td>
<td>(29 Credits)</td>
</tr>
<tr>
<td>Fine Arts Requirement- Theatre</td>
<td>(25-29 Credits)</td>
</tr>
</tbody>
</table>

### Associate in Business (ABus)

**ABus-GR Pathway 62-63 credits**

<table>
<thead>
<tr>
<th>General Education Core Areas</th>
<th>35 Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common Lower Division Requirements</td>
<td>27 Credits</td>
</tr>
<tr>
<td>General Electives</td>
<td>(Select courses to complete a minimum of 62 credits but no more than a total of 63 semester credits)</td>
</tr>
</tbody>
</table>

**ABus-SR Pathway 62-63 credits CIS Majors**

<table>
<thead>
<tr>
<th>General Education Core Areas</th>
<th>35 Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common Lower Division Requirements</td>
<td>27 Credits</td>
</tr>
<tr>
<td>General Electives</td>
<td>(Select courses to complete a minimum of 62 credits but no more than a total of 63 semester credits)</td>
</tr>
</tbody>
</table>

### Associate in Science (AS) 60-64 Credits

<table>
<thead>
<tr>
<th>General Education Core Areas</th>
<th>36-38 Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCCCD Requirements</td>
<td>(Communication, Reading) 0-6 Credits</td>
</tr>
<tr>
<td>General Electives</td>
<td>(Select courses to complete a minimum of 60 credits but no more than a total of 64 semester credits)</td>
</tr>
</tbody>
</table>

### Additional Programs for University Transfer

**Associate in General Science (AGS) 60 Credits**

| General Education Core Areas | (16 Credits) |
| General Education Distribution Areas | (28-29 Credits) |
| Elective Courses              | (15-16 Credits) |

**Associate in Applied Science (AAS) 60-64 Credits**

| General Education Core Areas | (15 Credits) |
| General Education Distribution Areas | (9-10 Credits) |
| Required Courses              | (Credits Vary) |
| Restricted Electives          | (Credits Vary) |
General Education
Maricopa Community Colleges (MCCCD)
2016-2017 Arizona General Education Curriculum (AGEC) – A, B, S

Description

The Maricopa County Community College District Arizona General Education Curriculum (MCCCD AGEC) is a 35-38 semester-credit general education certificate that fulfills lower-division general education requirements for students planning to transfer to any Arizona public community college or university. Generally, the MCCCD AGEC transfers as a block without loss of credit.

In most cases, all courses used to satisfy the MCCCD AGEC will apply to graduation requirements of the university major for which the AGEC was designed.

For students planning to pursue an associate degree or transfer to an Arizona public community college or university, the AGEC A is a component of the MCCCD Associate in Arts, the AGEC B is a component of the MCCCD Associate in Business, and the AGEC S is a component of the MCCCD Associate in Science.

Purpose of the AGECs

There are three types of MCCCD AGECs. They are the AGEC A, the AGEC B, and the AGEC S. Designed to articulate with different academic majors, their requirements vary accordingly. 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 the Associate in Arts (e.g., social sciences, fine arts, humanities). AGEC A requires a minimum of college mathematics or college algebra to satisfy the Mathematics [MA] requirement. AGEC A Mathematics requirement is less stringent than the AGEC B and AGEC S. AGEC A and AGEC B Natural Sciences requirements are less stringent than AGEC S.

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. AGEC S articulates with the Associate in Science. 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 to satisfy the Natural Sciences [SQ/SG] requirement. In addition, students must select six to eight additional credits of math and/or science appropriate to the major.
Academic Policies that Govern the AGEC A, B, S:

- Requires 35-38 semester credits in courses numbered 100 and above to be completed with a grade of “C” or better. Credit units transferred from outside of the district need to be at a grade of “C” or better. A grade of “C” equals 2.0 on a 4.0 grading scale or equivalent. On an exception basis, P-grades may be allowed in the AGEC for credit transferred if documentation collected by the community college indicates that the P-grade issued was the only option for the student and the P-grade is a “C” or better. The P-grade exception does not apply to credits awarded by AGEC granting/receiving institutions;

- Credit received through prior learning assessment or credit by evaluation is transferable within the Maricopa Community Colleges but is not necessarily transferable to other colleges and universities. No more than 20 semester credit hours may be applied toward AGEC;

- Uses the following policies to help students complete the required Core and Awareness Areas without exceeding the 35-38 semester credits
  1. Courses can satisfy a Core area and one or two Awareness areas simultaneously.
  2. A course cannot be used to satisfy more than one Core area requirement in the AGEC A and B.
  3. A course can be used to satisfy the L and SB or L and HU requirements simultaneously in the Core area for the AGEC S.

- Follows the general education policy below:

  General Education Designations (example: (FYC), [SB], [HU], etc.)
  Effective fall 2000 the course evaluation and/or the 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 course evaluations and/or general education designations.

- Require courses that transfer as equivalent courses, departmental elective credit (XXXXDEC), or general elective credit (Elective) at all Arizona public universities according to the Arizona Course Equivalency Guide (CEG). The course evaluation and/or general education designation as listed in AZ Transfer is valid for the term in which the student is awarded credit on the transcript;

- Require that a minimum of 12 semester credits of course work be taken at any of the MCCCD colleges;

- Include both courses and their modular equivalents, either the course or the modular equivalents will satisfy the AGEC;

- Accept one of the courses that is cross-referenced with other courses;

- Provide for exemption from Arizona university admission requirements for: Students who complete the AGEC A, AGEC B, or AGEC S with a minimum 2.5 on a 4.0=A scale, or students who complete an associate or higher degree from a regionally accredited post-secondary institution with a minimum 2.0 on a 4.0=A scale for Arizona residents and a minimum 2.5 on a 4.0=A scale for non-residents.
General Education

Maricopa Community Colleges (MCCCD
2016-2017 Arizona General Education Curriculum (AGEC) – A, B, S

AGEC Requirements

The 35-38 semester credits required for each of the three AGECs follow. View specific course information via the following website: https://asa.maricopa.edu/departments/center-for-curriculum-transfer-articulation by clicking on the statewide AGEC link.

The AGEC A, B, S, and AGEC Matrix identify the courses in alpha-order by prefix as well as the different Core Areas and Awareness Areas where the course will apply.

Credits

A. Core Areas:

1. First-Year Composition (FYC) 6

2. Literacy and Critical Inquiry [L] 0-3
   AGEC A & AGE C B: Select a course that satisfies the [L] requirement (3)
   AGEC S: Recommend selecting a course that satisfies (L and SB) or (L and HU), or (L and COM), or (L and CRE101) requirements simultaneously.

3. Mathematical Studies [MA/CS] 4-6
   The Mathematics [MA] requirement differs for AGEC A, AGEC B, and AGEC S.
   To complete the Mathematical Studies requirement for AGEC A and AGEC B, select one course to satisfy Mathematics [MA] and a second course from Computer/Statistics/Quantitative Applications [CS].
   AGEC S does not require the [CS] area.
   AGEC A requires;
   a. Mathematics [MA] (3 credits) AND
      (Requires a course in college mathematics (MAT140, MAT141, MAT142) or college algebra (MAT150, MAT151, MAT152) or pre-calculus (MAT187) or any other mathematics course designated with the MA general education value and for which college algebra is a pre-requisite.)
   b. Computer/Statistics/Quantitative Applications [CS] (3 credits)

   AGEC B requires;
   a. Mathematics [MA] (3 credits) AND
      (Requires a course in brief calculus (MAT212) or a higher level mathematics course (MAT220, or MAT221 or any course for which these courses are prerequisites).
   b. Computer/Statistics/Quantitative Applications [CS] (3 credits)

   AGEC S requires;
   a. Mathematics [MA] (4 credits) AND
      Requires a calculus course (MAT220 or MAT221) OR any mathematics course for which MAT220 or MAT221 are prerequisites

4. Humanities, Arts and Design [HU] 6
   AGEC A and AGEC B: Students are encouraged to choose courses from more than one discipline for a total of six semester credits.
   AGEC S: Recommend selecting a course that satisfies (L and HU) requirements simultaneously.
General Education

Maricopa Community Colleges (MCCCD)
2016-2017 Arizona General Education Curriculum (AGEC) – A, B, S

Core Areas (cont’d)

5. Social-Behavioral Sciences [SB]  6
   AGEC A and AGEC B: Students are encouraged to choose courses from more than one discipline
   for a total of six semester credits.
   AGEC S: Recommend selecting a course that satisfies (L and SB) requirements simultaneously.

6. Natural Sciences [SQ/SG]  8
   To complete the Natural Sciences requirement:

   AGEC A and AGEC B require four (4) semester credits of [SQ] and four (4) semester credits of [SG]
   for a total of eight (8) semester credits, OR eight (8) semester credits of [SQ]. Students cannot take
   eight (8) semester credits of [SQ] to meet the Natural Sciences requirement.

   The Natural Sciences requirement differs for AGEC S. AGEC S requires eight (8) semester credits of either
   university chemistry or eight (8) semester credits of university physics or eight (8) semester credits of
   general biology appropriate to the major.

   The lecture course(s) selected for Natural Sciences must include or be accompanied by the corresponding
   laboratory course. The lecture and corresponding laboratory course(s) may carry separate credit. Students
   should consult with an advisor for appropriate course selection. Students should also access the AZ Course
   Equivalency Guide (CEG) within AZ Transfer for information on equivalencies.

7. Subject Options (Subject based on major) (AGEC S) 6-8
   Students completing AGEC S, through careful selection of courses that meet the other major or pre-requisite
   requirements for Science degrees, will meet this requirement. Using a transfer guide, select Mathematics
   courses above Calculus, and/or Science courses from: Astronomy, Biology, Botany, Chemistry, Environmental
   Science, Geology, Physical Geography, Physics, Zoology.

B. Awareness Areas:
   Students must satisfy two Awareness areas: Cultural Diversity in United States [C] and either Global
   Awareness [G] or Historical Awareness [H]. However, it is not necessary for students to exceed thirty-five
   to thirty-eight semester credits to complete any of the three MCCCD AGECs because 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.

   1. Cultural Diversity in the United States [C]
      AND
   2. Global Awareness [G]
      OR
   3. Historical Awareness [H]
General Education

MCCCD GB Approval: Mar. 22, 2016  revised 4/21/16

AGEC Area Requirements Descriptions/Definitions

CORE AREAS

First-Year Composition (FYC)
Courses must be completed with a grade of “C” or better in the First-Year Composition Core area. Courses must emphasize skills necessary for college-level learning and writing skills.

Literacy and Critical Inquiry [L]
Courses must be completed with a grade of “C” or better in the Literacy and Critical Inquiry Core area. In the [L] course, typically at the sophomore level, students 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. For AGEC S, students will select a course that satisfies both Literacy and Social-Behavioral Sciences or Literacy and Humanities, Arts and Design requirements simultaneously.

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 requirement helps students sustain and extend their ability to reason critically and communicate clearly through language.

Mathematical Studies [MA]
Courses must be completed with a grade of “C” or better in the Mathematical Studies Core Area. One course must be selected from Mathematics [MA]. In AGEC A and AGEC B, a second course must be selected from Computer/Statistics/Quantitative Applications [CS].

The Mathematical Studies requirement is intended to ensure that students have skill in basic mathematics, can use mathematical analysis in their chosen fields, and can understand how computers make mathematical analysis more powerful and efficient.

First, the acquisition of essential skill in basic mathematics requires the student to complete a course in college algebra or to demonstrate a higher level of skill by completing a course for which college algebra is a prerequisite.

Second, the real-world application of mathematical reasoning requires the student to take a course in statistics or the use of quantitative analysis to solve problems of substance.

Third, the use of the computer to assist in serious analytical work is required. Computers are widely used to study the implications of social decisions or to model physical systems.

Mathematics [MA] AGEC A

The AGEC A Mathematics Core area requires a course in college mathematics, college algebra, pre-calculus, or any other mathematics course for which college algebra is a prerequisite.

Mathematics [MA] AGEC B

The AGEC B Mathematics Core area requires a course in Brief Calculus or a higher level mathematics course.

Mathematics [MA] AGEC S

The AGEC S Mathematics Core area requires the first course in the calculus sequence or any mathematics course for which that course is a prerequisite.
General Education

Maricopa Community Colleges (MCCCD
2016-2017 Arizona General Education Curriculum (AGEC) – A, B, S

AGEC Area Requirements Descriptions/Definitions (cont’d)

Computer/Statistics/Quantitative Applications [CS]
AGEC A, B [CS] requires: courses that emphasize the use of statistics or other mathematical methods in the interpretation of data and in describing and understanding quantitative relationships, courses that involve the use of computer programming languages or software in the development of skills in analytical thinking. AGEC B specifies CIS105 as the course that meets the [CS] requirement.

Humanities, Arts and Design [HU]
Courses must be completed with a grade of “C” or better in the Humanities, Arts and Design Core area. Students are encouraged to choose coursework from more than one discipline.

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 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]
Courses must be completed with a grade of “C” or better in the Social-Behavioral Sciences Core area. Students are encouraged to choose course work from more than one discipline.

The Social-Behavioral Sciences Core area provides scientific methods of inquiry and empirical knowledge about human behavior, both within society and within individuals. The forms of study may be cultural, economic, geographic, historical, linguistic, political, psychological, or social. The courses in this area address the challenge of understanding the diverse natures of individuals and cultural groups who live together in a world of diminishing economic, linguistic, military, political, and social distance.

Natural Sciences [SQ/SG]
Courses must be completed with a grade of “C” or better in the Natural Sciences Core area.

Courses in the Natural Sciences Core area help the student to develop an appreciation of the scope and limitations of scientific capability to contribute to the quality of society. This Core area emphasizes knowledge of methods of scientific inquiry and mastery of basic scientific principles and concepts, in particular those that relate to matter and energy in living and non-living systems. Firsthand exposure to scientific phenomena in the laboratory is important in developing and understanding the concepts, principles, and vocabulary of science. At least one of the two laboratory courses required in the Natural Sciences Core area must include an introduction to the fundamental behavior of matter and energy in physical or biological systems.

Natural Sciences [SQ] A & B
The AGEC A and B Natural Sciences Core area requires one laboratory course in natural sciences that includes a substantial introduction to the fundamental behavior of matter and energy in physical or biological systems.

Natural Sciences [SG] A & B
The AGEC A and B Natural Sciences Core area requires a second laboratory course in the natural sciences, for example, from anthropology, astronomy, biology, chemistry, experimental psychology, geology, microbiology, physical anthropology, physical geography, physics, plant biology

Natural Sciences S
The AGEC S Natural Sciences Core area requires eight semester credits of either university chemistry or eight semester credits of university physics or eight semester credits of general biology appropriate to the major.
General Education

Maricopa Community Colleges (MCCCD)
2016-2017 Arizona General Education Curriculum (AGEC) – A, B, S

SQ = Natural Science-Quantitative
SG = Natural Science-General

AGEC Area Requirements Descriptions/Definitions (cont’d)

Subject Options (for AGEC S)
Courses in the Subject Options area help the student to be prepared for specific majors in science. Students completing AGEC S, through careful selection of courses that meet the other major or prerequisite requirements for Science degree, will meet this requirement. Using a transfer guide, courses would be selected from Mathematics courses above Calculus, and/or Science courses from: Astronomy, Biology, Botany, Chemistry, Environmental Science, Geology, Physical Geography, Physics, and Zoology.

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.

AGEC Area Requirements Descriptions/Definitions (cont’d)

**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.
Description
The Maricopa County Community College District Associate in Arts degree requires 60-64 semester credits for the program of study. The degree includes the following components:
I. General Education:
   Arizona General Education Curriculum for Arts (AGEC-A)
   MCCCD Additional Requirements
II. General Electives

Purpose of the Degree
The Associate in Arts 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 will apply to university graduation requirements of the university major for which the Associate in Arts is designed. Information regarding the articulation of the Associate in Arts with majors at the Arizona public universities can be accessed via the following website: www.aztransfer.com

Academic Policies that Govern the Associate in Arts Degree

- Completion of the Associate in Arts and the AGEC-A provides for exemption from Arizona public university admission requirements for Arizona residents who have a minimum Grade Point Average of 2.0 on a 4.0=A scale and a minimum 2.5 on a 4.0=A scale for non-residents.

- The graduation policies within the general catalog must be satisfied for completion of the Associate in Arts degree.

- A minimum of 60 semester credits in courses numbered 100 and above to be completed with a grade of “C” or better. Credit units transferred from outside of the district need to be at a grade of “C” or better. A grade of “C” equals 2.0 on a 4.0 grading scale or equivalent. On an exception basis, P-grades may be allowed in the AGEC for credit transferred if documentation collected by the community college indicates that the P-grade issued was the only option for the student and the P-grade is a “C” or better. The P-grade exception does not apply to credits awarded by AGEC granting/receiving institutions.

- Credit received through prior learning assessment or credit by evaluation is transferable within the Maricopa Community Colleges but is not necessarily transferable to other colleges and universities. No more than 20 semester credit hours may be applied toward AGEC.

- The General Education Requirements for AGEC-A may be completed in 35 semester credits with the following stipulations
  - Courses can satisfy a Core Area and one or two Awareness Areas simultaneously
  - A course cannot be used to satisfy more than one Core Area

- General Education Courses can satisfy multiple areas within the degree simultaneously (AGEC-A Core Area, AGEC Awareness Area, MCCCD Additional Requirements, or lower-division courses applicable to the major).
General Education

Maricopa Community Colleges (MCCCD)
2016-2017 Associate in Arts (AA) Degree

Academic Policies that Govern the Associate in Arts Degree Continued:

- 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. Students do have the option to petition for general education evaluations and/or general education designations upon transfer.

- Courses completed at one of the Maricopa Community Colleges to meet AGEC-A requirements must be listed in the Course Equivalency Guide within AZ Transfer as an equivalent course, departmental elective credit (XXXXDEC), or general elective credit (Elective) at all Arizona public universities. The course’s evaluation and/or general education designation is valid for the term in which the student is awarded credit on the transcript. View specific course information via the following website: https://asa.maricopa.edu/departments/center-for-curriculum-transfer-articulation by clicking on the statewide AGEC link.

- Maricopa courses and external courses evaluated as Maricopa equivalents or departmental electives (for example, HISELC, MATELC), 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 elective requirements with courses that are transferable and applicable to their intended university degree. For appropriate course selection, students should consult with an advisor.

- Courses transferred from another regionally accredited institution to one of the Maricopa Community Colleges will be evaluated by the college for inclusion in the AGEC-A or Associate in Arts Degree.

- Courses and their modular equivalents will satisfy AGEC-A and Associate in Arts requirements.

- If a course is cross-referenced with one or more other courses, then only one of the cross-referenced courses will be accepted to meet requirements.

- Courses completed at one of the Maricopa Community Colleges to satisfy Common Courses must be transferable as elective or better to the universities that have the shared majors listed on a Common Course Matrix. A shared major is a university degree program that has similar academic preparation to one or more degree programs at other Arizona public universities as listed on the Common Course Matrices. For appropriate course selection, students should consult with an advisor.
General Education

Degree Requirements

The 60-64 semester credits required for the Associate in Arts follow. View specific course information via the following website: https://asa.maricopa.edu/departments/center-for-curriculum-transfer-articulation by clicking on the statewide AGEC link. The AGEC A, B, S, and AGEC Matrix identify the courses in alphabetical order by prefix as well as the Core Areas and Awareness Areas where the course will apply.

I. MCCCD General Education

The MCCCD General Education includes two areas: MCCCD AGEC-A and MCCCD Additional Requirements.

MCCCD AGEC-A

1. Core Areas: 35

   a. First-Year Composition (FYC) 6

   b. Literacy and Critical Inquiry [L] 3

   c. Mathematical Studies [MA/CS] 6

      To complete the Mathematical Studies requirement, select one course to satisfy Mathematics [MA] A and a second course from Computer/Statistics/Quantitative Applications [CS].

         1) Mathematics [MA] A (3 credits)
         Note: requires a course in college mathematics (MAT140, MAT141, MAT142) or college algebra (MAT150, MAT151, MAT152) or pre calculus (MAT187) or any other mathematics course designated with the MA general education value and for which college algebra is a pre-requisite.
         AND
         2) Computer/Statistics/Quantitative Applications [CS] (3 credits)

   d. Humanities, Arts and Design [HU] 6

      Students are encouraged to choose course work from more than one discipline for a total of six semester credits.

   e. Social-Behavioral Sciences [SB] 6

      Students are encouraged to choose course work from more than one discipline for a total of six semester credits.

   f. Natural Sciences [SQ/SG] 8

      To complete the Natural Sciences requirement: Select four (4) semester credits of [SQ] and four (4) semester credits of [SG] for a total of eight (8) semester credits, OR eight (8) semester credits of [SQ]. Students can not take eight (8) semester credits of [SG] to meet the Natural Sciences requirement.
General Education

MCCCQ General Education Core Areas Continued:

The lecture course(s) selected for Natural Sciences must include or be accompanied by the corresponding laboratory course. The lecture and corresponding laboratory course(s) may carry separate credit. Students should consult with an advisor for appropriate course selection. Students should also access the AZ Course Equivalency Guide (CEG) within AZ Transfer for information on equivalencies.

2. Awareness Areas:
Students must satisfy two Awareness Areas: Cultural Diversity in the United States [C] and either Global Awareness [G] or Historical Awareness [H]. However, it is not necessary for students to exceed thirty-five semester credits to complete the Awareness Areas because 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]
AND
Global Awareness [G] OR
Historical Awareness [H]

3. MCCCQ Additional Requirements 0-6
Students must satisfy Oral Communication and Critical Reading areas. However, it is not necessary for students to exceed the thirty-five semester credits required in order to complete the MCCCQ Additional Requirements because courses can satisfy a Core Area and MCCCQ Additional Requirements simultaneously. Therefore no additional semester credits are required to satisfy Oral Communication and Critical Reading.

a. Oral Communication
A total of three (3) semester credits are required for Oral Communication. However, if students select a communication course that satisfies both the Oral Communication area and an area within the Core, then the Oral Communication requirement has been satisfied and additional electives may be taken.

Select from the following options:
COM100 [SB] (3 credits) OR
COM100AA & COM100AB & COM100AC [SB] (3 credits) OR
COM110 [SB] (3 credits) OR
COM110AA & COM110AB & COM110AC [SB] (3 credits) OR
COM225 [L] (3 credits) OR
COM230 [SB] (3 credits)

b. Critical Reading
A total of three (3) semester credits are required for the Critical Reading area. However, if students complete CRE 101 and apply it to AGEC-A Core Requirements or if the students demonstrate proficiency through assessment, then the Critical Reading requirement has been satisfied and additional electives may be taken.

CRE101 [L] OR
equivalent as indicated by assessment
II. General Electives

Select courses to complete a minimum of 60 semester credits but no more than a total of 64 semester credits.

For students who have decided on a major that articulates with the AA, but who are undecided on the university to which they will transfer, courses satisfying the General Electives area should be selected from the list of Common Courses, Arizona Transfer Pathway Guides, and/or University Transfer Guides in order for the courses to apply in the major upon transfer.

The list of Common Courses for each major is included in the Arizona Transfer Pathway Guides. University Transfer Guides are also available for the Arizona public universities. These guides, both statewide and institutional, are accessible on the following web site: www.aztransfer.com.

Maricopa courses and external courses evaluated as Maricopa equivalents or departmental electives (for example, HISELC, MATELC), 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 elective requirements with courses that are transferable and applicable to their intended university degree. For appropriate course selection, students should consult with an advisor.

For some majors, students must demonstrate 4th semester proficiency at the 202 course level to satisfy the Non-English Language Requirements. Students should consult the Arizona Transfer Pathway Guides and/or the University Transfer Guides to determine this requirement for the major at the university to which they intend to transfer. If required, it is recommended that students choose Maricopa courses as electives to meet this requirement as part of the Associate in Arts degree.

Students who are undecided on a major or university should consult an advisor. Not all majors have common courses, so it is recommended that students consult with an advisor for a list of common courses or assistance with selecting appropriate electives.

**Associate in Arts Total Credits:** 60-64
Description
The MCCCD Associate in Arts in Elementary Education (AAEE) requires the student to complete a total of 60-63 semester credits in the program of study. The degree has two major components:

I. MCCCD General Education
   Arizona General Education Curriculum for Arts (AGEC-A)
   Additional MCCCD Requirements

II. Elementary Education Requirements
   Education Foundations
   Restricted Electives

Purpose of the Degree
The AAEE is designed for the student who plans to transfer to an Elementary Education, Early Childhood, Multicultural/Multilingual, or Special Education program at an Arizona public higher education institution and/or who plans to become a classroom instructional aide.

Generally, the degree transfers as a block without loss of credit to Arizona's public universities. In most cases, courses applied to the MCCCD Associate in Arts in Elementary Education also apply to graduation requirements of the university major for which the AAEE was designed.

Academic Policies that Govern the Associate in Arts Elementary Education Degree:

- Completion of the Associate in Arts and the AGEC-A provides for exemption from Arizona public university admission requirements for Arizona residents who have a minimum Grade Point Average of 2.0 on a 4.0=A scale and a minimum 2.5 on a 4.0=A scale for non-residents.

- The graduation policies within the general catalog must be satisfied for completion of the Associate in Arts degree.

- A minimum of 60 semester credits in courses numbered 100 and above to be completed with a grade of “C” or better. Credit units transferred from outside of the district need to be at a grade of “C” or better. A grade of “C” equals 2.0 on a 4.0 grading scale or equivalent. A grade of “C” equals 2.0 on a 4.0 grading scale or equivalent. On an exception basis, P-grades may be allowed in the AGEC for credit transferred if documentation collected by the community college indicates that the P-grade issued was the only option for the student and the P-grade is a “C” or better. The P-grade exception does not apply to credits awarded by AGEC granting/receiving institutions.

- Credit received through prior learning assessment or credit by evaluation is transferable within the Maricopa Community Colleges but is not necessarily transferable to other colleges and universities. No more than 20 semester credit hours may be applied toward AGEC.

- The General Education Requirements for AGEC-A may be completed in 35 semester credits with the following stipulations:
  - Courses can satisfy a Core Area and one or two Awareness Areas simultaneously
  - A course cannot be used to satisfy more than one Core Area
  - Courses can satisfy an Elementary Education Requirement and one or more Awareness Areas simultaneously.
  - A course cannot satisfy both the Elementary Education Requirement and a Core Area Requirement simultaneously.
Academic Policies that Govern the Associate in Arts Elementary Education Degree Continued:

- 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. Students do have the option to petition for general education evaluations and/or general education designations upon transfer.

- Courses completed at one of the Maricopa Community Colleges to meet AGEC-A requirements must be listed in the Course Equivalency Guide within AZ Transfer as an equivalent course, departmental elective credit (XXXXDEC), or general elective credit (Elective) at all Arizona public universities. The course’s evaluation and/or general education designation is valid for the term in which the student is awarded credit on the transcript. View specific course information via the following website: https://asa.maricopa.edu/departments/center-for-curriculum-transfer-articulation by clicking on the statewide AGEC link.

- Maricopa courses and external courses evaluated as Maricopa equivalents or departmental electives (for example, HISELC, MATELC), 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 elective requirements with courses that are transferable and applicable to their intended university degree. For appropriate course selection, students should consult with an advisor.

- Courses transferred from another regionally accredited institution to one of the Maricopa Community Colleges will be evaluated by the college for inclusion in the AGEC A or the Associate in Arts Elementary Education degree.

- Courses and their modular equivalents will satisfy AGEC-A and Associate in Arts in Elementary Education requirements.

- If a course is cross-referenced with one or more other courses, then only one of the cross-referenced courses will be accepted to meet requirements.

- Courses completed at one of the Maricopa Community Colleges to satisfy Common Courses must be transferable as elective or better to the universities that have the shared majors listed on a Common Course Matrix. A shared major is a university degree program that has similar academic preparation to one or more degree programs at other Arizona public universities as listed on the Common Course Matrices. For appropriate course selection, students should consult with an advisor.
General Education

Maricopa Community Colleges (MCCCD)
2016-2017 Associate in Arts, Elementary Education Degree (AAEE)

Degree Requirements

I. MCCCD General Education Requirements

A. MCCCD AGEC - A
   1. Core Areas
      a. First-Year Composition (FYC)
         ENG101/102 OR ENG107/108
      b. Mathematics Studies [MA] and Computer/Statistics/Quantitative Applications [CS]
         1) Requires a course in college mathematics (MAT140, MAT141, MAT142) or college algebra (MAT150, MAT151, MAT152) or pre-calculus (MAT187) or any other mathematics course designated with the MA general education value and for which college algebra is a pre-requisite.
            (NOTE: MAT256, MAT257, MAT182, and MAT206 are excluded)
            AND
      c. Literacy and Critical Inquiry [L]
         Select the following: COM225 Public Speaking
      d. Humanities, Arts and Design [HU]
         1) Select (3) semester credits from the following courses:
            ARH100 Introduction to Art
            ARH101 Prehistoric through Gothic Art
            ARH102 Renaissance through Contemporary Art
            DAH100 Introduction to Dance
            DAH201 World Dance Studies
            DAH250 Dance in Popular Culture
            MHL140 Survey of Music History
            MHL145 American Jazz and Popular Music
            MHL146 Survey of Broadway Musicals
            MHL153 Rock Music and Culture
            THE111 Introduction to Theatre
            THE220 Modern Drama
            AND
         2) Select (3) semester credits from the following courses:
            EDU/ENH291 Children’s Literature
            ENH110 Introduction to Literature
            ENH241 American Literature Before 1860
General Education

Maricopa Community Colleges (MCCCD)
2016-2017 Associate in Arts, Elementary Education Degree (AAEE)

ENH242 American Literature After 1860
HUM250 or HUM251 Ideas and Values in the Humanities

e. Social-Behavioral Sciences [SB] 6
   1) Select 3 semester credits from the following courses:
      HIS103 United States History to 1865
      POS110 American National Government
      GCU/POS227 United States and Arizona Social Studies
      AND
   2) Select 3 semester credits from the following courses:
      CFS205 Human Development
      ECH/CFS176 Child Development
      GCU121 World Geography I: Eastern Hemisphere
      GCU122 World Geography II: Western Hemisphere
      ECN211 Macroeconomic Principles
      ECN212 Microeconomic Principles
      HIS104 United States History 1865 to Present
      PSY101 Introduction to Psychology

f. Natural Sciences—Science-Quantitative [SQ] and Science-General [SG] 8

To complete the Natural Sciences requirement, select a total of 8 semester credits from the following categories. At least 4 credits must be SQ courses. You can select 4 semester credits of SG and 4 semester credits of SQ for a total of 8 semester credits. Natural Sciences courses must include or be accompanied by the corresponding laboratory course. When the lecture and corresponding laboratory are awarded separate credit, both will be counted as equivalent to one course in that discipline.

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

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

g. Awareness Areas

The MCCCD AAEE requires coursework in two Awareness Areas:

Cultural Diversity in the U.S. [C]

AND

Historical Awareness [H]

OR

Global Awareness [G]

Courses can satisfy a Core Area Requirement and one or more Awareness Areas, or can satisfy an Elementary Education Requirement and one or more Awareness Areas simultaneously. Therefore, no additional semester credits are required to satisfy the two Awareness Areas.

2. MCCCD Additional Requirements 0-3

a. Oral Communication

Satisfied by COM225 taken for Literacy and Critical Inquiry Requirement

b. Critical Reading

CRE101 or exemption by testing

II. Elementary Education Requirements 25

A total of 25 semester credits are required to satisfy the Elementary Education Requirements.

A. Education Foundations 20

Complete the following courses to satisfy the Education Foundations requirements:

EDU220 Introduction to Serving English Language Learners (ELL)

EDU221 Introduction to Education

EDU222 Introduction to the Exceptional Learner

EDU230 Cultural Diversity in Education

MAT256 Investigating Quantity: Number, Operations and Numeration Systems

MAT257 Investigating Geometry, Probability and Statistics

B. Restricted Electives 5

A total of 5 semester credits are required to satisfy the Restricted Electives

Courses must transfer to all public Arizona universities as Elective Credit, Departmental Elective, or Equivalent to a university course as indicated in the Arizona Course Equivalency Guide in effect when the course is taken. Courses identified as Non-transferable in the Arizona Course Equivalency Guide cannot be used to satisfy this requirement.

Content Area Electives

Select 5 credits from the following:

Any ARH, ART, CIS, ECN, BPC, ENG, ENH, GCU, GPH, HIS, MHL, MTC, POS, THF, THE, THP prefixed course(s)

Any EDU prefixed course(s) (except EDU250)
Any MAT (courses numbered higher than 142 except MAT256 and MAT257)
General Education

Maricopa Community Colleges (MCCCD)
2016-2017 Associate in Arts, Elementary Education Degree (AAEE)

Elementary Education Requirements Continued:

Any Foreign Language course(s)
Any Natural Science course(s)
CFS/ECH176 Child Development
CFS205 Human Development
EED215 Early Learning: Heath, Safety, Nutrition and Fitness
AAA/CPD115 Creating College Success

AAEE Total Credits: 60-63

NOTE: The following courses meet the state teacher certification requirement for United States and Arizona Constitutions:
United States—HIS103, POS110, POS220, POS222, or GCU/POS227
Arizona—POS220, POS221, or GCU/POS227
General Education

Maricopa Community Colleges (MCCCD)
2016-2017 Associate in Arts, Fine Arts (AAFA) – Art

Description
The Maricopa County Community College District Associate in Arts, Fine Arts - Art degree requires a minimum of 63 semester credits for the program of study. The degree includes the following components:

I. General Education:
   Arizona General Education Curriculum for Arts (AGEC-A)
   MCCCD Additional Requirements

II. Fine Arts Requirements – Art

Purpose of the Degree
The Associate in Arts, Fine Arts - Art 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.

The semester credits used to satisfy the MCCCD Associate in Arts, Fine Arts - Art degree may apply to university graduation requirements of the university major for which the degree is designed. Information regarding the articulation of the degree with majors at the Arizona public universities can be accessed via the following website: www.aztransfer.com

Academic Policies that Govern the Associate in Arts, Fine Arts – Art Degree

- Completion of the Associate in Arts, Fine Arts - Art degree and the AGEC-A provides for exemption from Arizona public university admission requirements for Arizona residents who have a minimum Grade Point Average of 2.0 on a 4.0=A scale and a minimum 2.5 on a 4.0=A scale for non-residents.

- The graduation policies within the general catalog must be satisfied for completion of the Associate in Arts, Fine Arts - Art degree.

- A minimum of 63 semester credits in courses numbered 100 and above to be completed with a grade of “C” or better. Credit units transferred from outside of the district need to be at a grade of “C” or better. A grade of “C” equals 2.0 on a 4.0 grading scale or equivalent. On an exception basis, P-grades may be allowed in the AGEC for credit transferred if documentation collected by the community college indicates that the P-grade issued was the only option for the student and the P-grade is a “C” or better. The P-grade exception does not apply to credits awarded by AGEC granting/receiving institutions.

- Credit received through prior learning assessment or credit by evaluation is transferable within the Maricopa Community Colleges but is not necessarily transferable to other colleges and universities. No more than 20 semester credit hours may be applied toward AGEC.

- The General Education Requirements for AGEC-A may be completed in 35 semester credits with the following stipulations
  - Courses can satisfy a Core Area and one or two Awareness Areas simultaneously
  - A course cannot be used to satisfy more than one Core Area

- General Education Courses can satisfy multiple areas within the degree simultaneously (AGEC-A Core Area, AGEC Awareness Area, MCCCD Additional Requirements, or lower-division courses applicable to the major).
General Education

Academic Policies that Govern the Associate in Arts, Fine Arts - Art Degree Continued

- 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. Students do have the option to petition for general education evaluations and/or general education designations upon transfer.

- Courses completed at one of the Maricopa Community Colleges to meet AGEC-A requirements must be listed in the Course Equivalency Guide within AZ Transfer as an equivalent course, departmental elective credit (XXXXDEC), or general elective credit (Elective) at all Arizona public universities. The course’s evaluation and/or general education designation is valid for the term in which the student is awarded credit on the transcript. View specific course information via the following website: https://asa.maricopa.edu/departments/center-for-curriculum-transfer-articulation by clicking on the statewide AGEC link.

- Maricopa courses and external courses evaluated as Maricopa equivalents or departmental electives (for example, HISELC, MATELC), 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 elective requirements with courses that are transferable and applicable to their intended university degree. For appropriate course selection, students should consult with an advisor.

- Courses transferred from another regionally accredited institution to one of the Maricopa Community Colleges will be evaluated by the college for inclusion in the AGEC-A or Associate in Arts, Fine - Arts Degree.

- Courses and their modular equivalents will satisfy AGEC-A and Associate in Arts, Fine Arts – Art requirements.

- If a course is cross-referenced with one or more other courses, then only one of the cross-referenced courses will be accepted to meet requirements.

- Courses completed at one of the Maricopa Community Colleges to satisfy Common Courses must be transferable as elective or better to the universities that have the shared majors listed on a Common Course Matrix. A shared major is a university degree program that has similar academic preparation to one or more degree programs at other Arizona public universities as listed on the Common Course Matrices. For appropriate course selection, students should consult with an advisor.
General Education

Maricopa Community Colleges (MCCCD)
2016-2017 Associate in Arts, Fine Arts (AAFA) – Art

Degree Requirements

The 63 semester credits required for the Associate in Arts, Fine Arts - Art degree follow. View specific course information via the following website: https://asa.maricopa.edu/departments/center-for-curriculum-transfer-articulation by clicking on the statewide AGEC link. The AGEC A, B, S, and AGEC Matrix identify the courses in alpha-order by prefix as well as the Core Areas and Awareness Areas where the course will apply.

I. MCCCD General Education
The MCCCD General Education includes two areas: MCCCD AGEC-A and MCCCD Additional Requirements.

MCCCD AGEC-A
1. Core Areas: Credits: 35

   a. First-Year Composition [FYC]: Credits: 6
   
   b. Literacy and Critical Inquiry [L]: Credits: 3
   
   c. Mathematical Studies [MA/CS]: Credits: 6
      To complete the Mathematical Studies requirement, select one course to satisfy Mathematics [MA] A and a second course from Computer/Statistics/Quantitative Applications [CS].
      
      1) Mathematics [MA] A (3 credits)
         Requires a course in college mathematics (MAT140, MAT141, MAT142) or college algebra (MAT150, MAT151, MAT152) or pre-calculus (MAT187) or any other mathematics course designated with the MA general education value and for which college algebra is a pre-requisite.
         AND
         2) Computer/Statistics/Quantitative Applications [CS] (3 credits)
   
   d. Humanities, Arts and Design [HU]: Credits: 6
      Students are encouraged to choose course work from more than one discipline for a total of six semester credits.
      Select the following:
      
      ARH101 Prehistoric Through Gothic Art 3
   
   e. Social-Behavioral Sciences [SB]: Credits: 6
      Students are encouraged to choose course work from more than one discipline for a total of six semester credits.
   
   f. Natural Sciences [SQ/SG]: Credits: 8
      To complete the Natural Sciences requirement: Select four (4) semester credits of [SQ] and four (4) semester credits of [SG] for a total of eight (8) semester credits, OR eight (8) semester credits of [SQ]. Students cannot take eight (8) semester credits of [SG] to meet the Natural Sciences requirement.
MCCCD AGEC-A Core Areas Continued:

The lecture course(s) selected for Natural Sciences must include or be accompanied by the corresponding laboratory course. The lecture and corresponding laboratory course(s) may carry separate credit. Students should consult with an advisor for appropriate course selection. Students should also access the AZ Course Equivalency Guide (CEG) within AZ Transfer for information on equivalencies.

2. Awareness Areas: Credits: 0
Students must satisfy two Awareness Areas: Cultural Diversity in the United States [C] and either Global Awareness [G] or Historical Awareness [H]. However, it is not necessary for students to exceed thirty-five semester credits to complete the Awareness Areas because 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]
- AND
- Global Awareness [G] OR
- Historical Awareness [H]

MCCCD Additional Requirements: Credits: 0-6

Students must satisfy Oral Communication and Critical Reading areas. However, it is not necessary for students to exceed the thirty-five semester credits required in order to complete the MCCCD Additional Requirements because courses can satisfy a Core Area and MCCCD Additional Requirements simultaneously. Therefore no additional semester credits are required to satisfy Oral Communication and Critical Reading.

a. Oral Communication: Credits: 3
A total of three (3) semester credits are required for Oral Communication. However, if students select a communication course that satisfies both the Oral Communication area and an area within the Core, then the Oral Communication requirement has been satisfied and additional electives may be taken.

Select from the following options:
- COM100 [SB] (3 credits) OR
- COM100AA & COM100AB & COM100AC [SB] (3 credits) OR
- COM110 [SB] (3 credits) OR
- COM110AA & COM110AB & COM110AC [SB] (3 credits) OR
- COM225 [L] (3 credits) OR
- COM230 [SB] (3 credits)
General Education

Maricopa Community Colleges (MCCCD)
2016-2017 Associate in Arts, Fine Arts (AAFA) – Art

MCCCD General Education Requirements Continued:

b. Critical Reading: Credits: 3
A total of three (3) semester credits are required for the Critical Reading area. However, if students complete CRE101 and apply it to AGEC-A Core Requirements or if the students demonstrate proficiency through assessment, then the Critical Reading requirement has been satisfied.

Select from the following options to complete 3 credits:
CRE101 (3 credits) OR equivalent as indicated by assessment

II. Fine Arts Requirements – Art Credits: 28
A minimum of 28 credits are required to satisfy the Fine Arts Requirements – Art.

Foundations: Credits: 16

Select the following:

<table>
<thead>
<tr>
<th>Credits</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>ARH102 Renaissance through Contemporary Art</td>
</tr>
<tr>
<td>3</td>
<td>ART111 Drawing I</td>
</tr>
<tr>
<td>3</td>
<td>ART112 Two-Dimensional Design</td>
</tr>
<tr>
<td>3</td>
<td>ART113 Color</td>
</tr>
<tr>
<td>3</td>
<td>ART115 Three-Dimensional Design</td>
</tr>
<tr>
<td>1</td>
<td>ART255AB The Portfolio</td>
</tr>
</tbody>
</table>

Restricted Electives: Credits: 12

Select from the following options to complete a minimum of twelve semester credits:

<table>
<thead>
<tr>
<th>Credits</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>ART116 Life Drawing I</td>
</tr>
<tr>
<td>3</td>
<td>ART122 Drawing and Composition II</td>
</tr>
<tr>
<td>3</td>
<td>ART131 Photography I</td>
</tr>
<tr>
<td>3</td>
<td>ART151 Sculpture I</td>
</tr>
<tr>
<td>3</td>
<td>ART161 Ceramics I</td>
</tr>
<tr>
<td>3</td>
<td>ART165 Watercolor Painting I</td>
</tr>
<tr>
<td>3</td>
<td>ART167 Painting I</td>
</tr>
<tr>
<td>3</td>
<td>ART250 Introduction to Printmaking</td>
</tr>
</tbody>
</table>

Associate in Arts, Fine Arts – Art Total Credits: 63
General Education

Maricopa Community Colleges (MCCCD)
2016-2017 Associate in Arts, Fine Arts (AAFA) – Dance

Description
The Maricopa County Community College District Associate in Arts, Fine Arts - Dance degree requires a minimum of 65 semester credits for the program of study. The degree includes the following components:

I. General Education:
   Arizona General Education Curriculum for Arts (AGEC-A)
   MCCCD Additional Requirements
II. Fine Arts Requirements – Dance

Purpose of the Degree
The Associate in Arts, Fine Arts - Dance 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.

The semester credits used to satisfy the MCCCD Associate in Arts, Fine Arts - Dance degree may apply to university graduation requirements of the university major for which the degree is designed. Information regarding the articulation of the degree with majors at the Arizona public universities can be accessed via the following website: www.aztransfer.com.

Academic Policies that Govern the Associate in Arts, Fine Arts - Dance Degree

- Completion of the Associate in Arts, Fine Arts -Dance degree and the AGEC-A provides for exemption from Arizona public university admission requirements for Arizona residents who have a minimum Grade Point Average of 2.0 on a 4.0=A scale and a minimum 2.5 on a 4.0=A scale for non-residents.

- The graduation policies within the general catalog must be satisfied for completion of the Associate in Arts, Fine Arts - Dance degree.

- A minimum of 65 semester credits in courses numbered 100 and above to be completed with a grade of “C” or better. Credit units transferred from outside of the district need to be at a grade of “C” or better. A grade of “C” equals 2.0 on a 4.0 grading scale or equivalent. On an exception basis, P-grades may be allowed in the AGEC for credit transferred if documentation collected by the community college indicates that the P-grade issued was the only option for the student and the P-grade is a “C” or better. The P-grade exception does not apply to credits awarded by AGEC granting/receiving institutions;

- Credit received through prior learning assessment or credit by evaluation is transferable within the Maricopa Community Colleges but is not necessarily transferable to other colleges and universities. No more than 20 semester credit hours may be applied toward AGEC.

- The General Education Requirements for AGEC-A may be completed in 35 semester credits with the following stipulations
  - Courses can satisfy a Core Area and one or two Awareness Areas simultaneously
  - A course cannot be used to satisfy more than one Core Area

- General Education Courses can satisfy multiple areas within the degree simultaneously (AGEC-A Core Area, AGEC Awareness Area, MCCCD Additional Requirements, or lower-division courses applicable to the major).
General Education

Maricopa Community Colleges (MCCCD)
2016-2017 Associate in Arts, Fine Arts (AAFA) – Dance

Academic Policies that Govern the Associate in Arts, Fine Arts - Dance Degree Continued

- 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. Students do have the option to petition for general education evaluations and/or general education designations upon transfer.

- Courses completed at one of the Maricopa Community Colleges to meet AGEC-A requirements must be listed in the Course Equivalency Guide within AZ Transfer as an equivalent course, departmental elective credit (XXXXDEC), or general elective credit (Elective) at all Arizona public universities. The course’s evaluation and/or general education designation is valid for the term in which the student is awarded credit on the transcript. View specific course information via the following website: https://asa.maricopa.edu/departments/center-for-curriculum-transfer-articulation by clicking on the statewide AGEC link.

- Maricopa courses and external courses evaluated as Maricopa equivalents or departmental electives (for example, HISELC, MATELC), 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 elective requirements with courses that are transferable and applicable to their intended university degree. For appropriate course selection, students should consult with an advisor.

- Courses transferred from another regionally accredited institution to one of the Maricopa Community Colleges will be evaluated by the college for inclusion in the AGEC-A or Associate in Arts, Fine Arts-Dance Degree.

- Courses and their modular equivalents will satisfy AGEC-A and Associate in Arts, Fine Arts - Dance requirements.

- If a course is cross-referenced with one or more other courses, then only one of the cross-referenced courses will be accepted to meet requirements.

- Courses completed at one of the Maricopa Community Colleges to satisfy Common Courses must be transferable as elective or better to the universities that have the shared majors listed on a Common Course Matrix. A shared major is a university degree program that has similar academic preparation to one or more degree programs at other Arizona public universities as listed on the Common Course Matrices. For appropriate course selection, students should consult with an advisor.
General Education

MCCCD General Education

The 65 semester credits required for the Associate in Arts, Fine Arts - Dance degree follow. View specific course information via the following website: https://asa.maricopa.edu/departments/center-for-curriculum-transfer-articulation by clicking on the statewide AGEC link. The AGEC A, B, S, and AGEC Matrix identify the courses in alpha-order by prefix as well as the Core Areas and Awareness Areas where the course will apply.

I. MCCCD General Education

The MCCCD General Education includes two areas: MCCCD AGEC-A and MCCCD Additional Requirements.

MCCCD AGEC-A

1. Core Areas: Credits: 35

   a. First-Year Composition (FYC): Credits: 6

   b. Literacy and Critical Inquiry [L]: Credits: 3

   c. Mathematical Studies [MA/CS]: Credits: 6
      To complete the Mathematical Studies requirement, select one course to satisfy Mathematics [MA] A and a second course from Computer/Statistics/Quantitative Applications [CS].

      1) Mathematics [MA] A (3 credits)
         Requires a course in college mathematics (MAT140, MAT141, MAT142) or college algebra (MAT150, MAT151, MAT152) or pre-calculus (MAT187) or any other mathematics course designated with the MA general education value and for which college algebra is a pre-requisite.
      AND

      2) Computer/Statistics/Quantitative Applications [CS] (3 credits)

   d. Humanities, Arts and Design [HU]: Credits: 6
      DAH100 Introduction to Dance 3
      AND
                                          Any additional Humanities, Art and Design course [HU] (3) 6

      The following options are recommended:

      Credits
      DAH201 World Dance Studies 3
      DAH250 Dance in Popular Culture 3
      DAH255 Hip Hop: Arts, Aesthetic and Culture 3

   e. Social-Behavioral Sciences [SB]: Credits: 6
      Students are encouraged to choose course work from more than one discipline for a total of six semester credits.

   f. Natural Sciences [SQ/SG]: Credits: 8
      To complete the Natural Sciences requirement: Select four (4) semester credits of [SQ] and four (4) semester credits of [SG] for a total of eight (8) semester credits, OR eight (8) semester credits of [SQ]. Students cannot take eight (8) semester credits of [SG] to meet the Natural Sciences requirement.
General Education

Maricopa Community Colleges (MCCCD)
2016-2017 Associate in Arts, Fine Arts (AAFA) – Dance

MCCCD AGEC-A Continued:

The lecture course(s) selected for Natural Sciences must include or be accompanied by the corresponding laboratory course. The lecture and corresponding laboratory course(s) may carry separate credit. Students should consult with an advisor for appropriate course selection. Students should also access the AZ Course Equivalency Guide (CEG) within AZ Transfer for information on equivalencies.

Select from the following options to complete four credits:

<table>
<thead>
<tr>
<th>Credits</th>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>BIO160 Introduction to Human Anatomy and Physiology</td>
</tr>
<tr>
<td>4</td>
<td>BIO201 Human Anatomy and Physiology I</td>
</tr>
</tbody>
</table>

2. Awareness Areas: Credits: 0

Students must satisfy two Awareness Areas: Cultural Diversity in the United States [C] and either Global Awareness [G] or Historical Awareness [H]. However, it is not necessary for students to exceed thirty-five semester credits to complete the Awareness Areas because courses can satisfy a Core Area and/or Fine Arts-Dance Requirements 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]
AND
Global Awareness [G] OR
Historical Awareness [H]

MCCCD Additional Requirements: Credits: 0-6

Students must satisfy Oral Communication and Critical Reading areas. However, it is not necessary for students to exceed the thirty-five semester credits required in order to complete the MCCCD Additional Requirements because courses can satisfy a Core Area and MCCCD Additional Requirements simultaneously. Therefore no additional semester credits are required to satisfy Oral Communication and Critical Reading.

a. Oral Communication: Credits: 0-3

A total of three (3) semester credits are required for Oral Communication. However, if students select a communication course that satisfies both the Oral Communication area and an area within the Core, then the Oral Communication requirement has been satisfied and additional electives may be taken.

Select from the following options:

- COM100 [SB] (3 credits) OR
- COM100AA & COM100AB & COM100AC [SB] (3 credits) OR
- COM110 [SB] (3 credits) OR
- COM110AA & COM110AB & COM110AC [SB] (3 credits) OR
- COM225 [L] (3 credits) OR
- COM230 [SB] (3 credits)
b. Critical Reading: Credits: 0-3
   A total of three (3) semester credits are required for the Critical Reading area.
   However, if students complete CRE101 and apply it to AGEC-A Core
   Requirements or if the students demonstrate proficiency through assessment,
   then the Critical Reading requirement has been satisfied and additional electives
   may be taken.

MCCCDD Additional Requirements Continued:

   Select from the following options to complete 3 credits:
   CRE101 [L] (3 credits) OR
   equivalent as indicated by assessment

II. Fine Arts Requirements – Dance: Credits: 30
   A minimum of 30 credits are required to satisfy the Fine Arts Requirements – Dance.

Part I: Credits 12

   Select the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DAN150</td>
<td>Dance Performance I</td>
</tr>
<tr>
<td>DAN210</td>
<td>Dance Production I</td>
</tr>
<tr>
<td>DAN221</td>
<td>Rhythmic Awareness I</td>
</tr>
<tr>
<td>DAN264</td>
<td>Choreography I</td>
</tr>
<tr>
<td>DAN280</td>
<td>Dance Practicum</td>
</tr>
</tbody>
</table>

Part II: Credits: 9

   Select from the following options to complete a minimum of nine-semester credits. Students must attain
   Level III competency in ballet and modern dance courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DAN131</td>
<td>Ballet I (1)</td>
</tr>
<tr>
<td>DAN134</td>
<td>Ballet II (1)</td>
</tr>
<tr>
<td>DAN231</td>
<td>Ballet III (1)</td>
</tr>
<tr>
<td>DAN231AA</td>
<td>Ballet III: Intensive (2)</td>
</tr>
<tr>
<td>DAN234</td>
<td>Ballet IV (1)</td>
</tr>
<tr>
<td>DAN234AA</td>
<td>Ballet IV: Intensive (2)</td>
</tr>
<tr>
<td>DAN237</td>
<td>Ballet Pointe I</td>
</tr>
<tr>
<td>DAN132</td>
<td>Modern Dance I (1)</td>
</tr>
<tr>
<td>DAN135</td>
<td>Modern Dance II (1)</td>
</tr>
<tr>
<td>DAN232</td>
<td>Modern Dance III (1)</td>
</tr>
<tr>
<td>DAN232AA</td>
<td>Modern Dance III: Intensive (2)</td>
</tr>
<tr>
<td>DAN235</td>
<td>Modern Dance IV (1)</td>
</tr>
<tr>
<td>DAN235AA</td>
<td>Modern Dance IV: Intensive (2)</td>
</tr>
<tr>
<td>DAN133</td>
<td>Jazz Dance I</td>
</tr>
<tr>
<td>DAN136</td>
<td>Jazz Dance II</td>
</tr>
<tr>
<td>DAN233</td>
<td>Jazz Dance III</td>
</tr>
<tr>
<td>DAN233AA</td>
<td>Jazz Dance III: Intensive</td>
</tr>
<tr>
<td>DAN236</td>
<td>Jazz Dance IV</td>
</tr>
<tr>
<td>DAN236AA</td>
<td>Jazz Dance IV: Intensive</td>
</tr>
<tr>
<td>DAN290++</td>
<td>Dance Conservatory I (any module)</td>
</tr>
<tr>
<td>DAN291++</td>
<td>Dance Conservatory II (any module)</td>
</tr>
</tbody>
</table>
## General Education

Maricopa Community Colleges (MCCCD)

2016-2017 Associate in Arts, Fine Arts (AAFA) – Dance

DAN292++ Dance Conservatory III (any module) 1-3

### Part III: Restricted Electives: Credits: 0-3

Students can choose to complete a combination of up to three credits in Part III and the remaining credits in Part IV; or students can opt to complete all Elective credits in Part IV. No more than three credits may be selected from the following DAN prefixed courses:

#### Fine Arts Requirements – Dance – Part III: Restricted Electives Continued:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DAN102++</td>
<td>Hip Hop (any module)</td>
<td>1</td>
</tr>
<tr>
<td>DAN202++</td>
<td>Hip Hop (any module)</td>
<td>1</td>
</tr>
<tr>
<td>DAN103++</td>
<td>Break Dancing (any module)</td>
<td>1</td>
</tr>
<tr>
<td>DAN203++</td>
<td>Break Dancing (any module)</td>
<td>1</td>
</tr>
<tr>
<td>DAN104++</td>
<td>Ballroom (any module)</td>
<td>1</td>
</tr>
<tr>
<td>DAN204++</td>
<td>Ballroom (any module)</td>
<td>1</td>
</tr>
<tr>
<td>DAN105++</td>
<td>Swing (any module)</td>
<td>1</td>
</tr>
<tr>
<td>DAN205++</td>
<td>Swing (any module)</td>
<td>1</td>
</tr>
<tr>
<td>DAN106++</td>
<td>Latin (any module)</td>
<td>1</td>
</tr>
<tr>
<td>DAN206++</td>
<td>Latin (any module)</td>
<td>1</td>
</tr>
<tr>
<td>DAN107++</td>
<td>Country (any module)</td>
<td>1</td>
</tr>
<tr>
<td>DAN207++</td>
<td>Country (any module)</td>
<td>1</td>
</tr>
<tr>
<td>DAN108++</td>
<td>Tango (any module)</td>
<td>1</td>
</tr>
<tr>
<td>DAN208++</td>
<td>Tango (any module)</td>
<td>1</td>
</tr>
<tr>
<td>DAN115++</td>
<td>Contemporary Dance (any module)</td>
<td>1</td>
</tr>
<tr>
<td>DAN120++</td>
<td>World Dance (any module)</td>
<td>1</td>
</tr>
<tr>
<td>DAN125++</td>
<td>Social Dance (any module)</td>
<td>1</td>
</tr>
<tr>
<td>DAN129</td>
<td>Musical Theatre Dance I</td>
<td>1</td>
</tr>
<tr>
<td>DAN130</td>
<td>Musical Theatre Dance II</td>
<td>1</td>
</tr>
<tr>
<td>DAN229</td>
<td>Musical Theatre Dance III</td>
<td>1</td>
</tr>
<tr>
<td>DAN230</td>
<td>Musical Theatre Dance IV</td>
<td>1</td>
</tr>
<tr>
<td>DAN133</td>
<td>Jazz Dance I</td>
<td>1</td>
</tr>
<tr>
<td>DAN136</td>
<td>Jazz Dance II</td>
<td>1</td>
</tr>
<tr>
<td>DAN233</td>
<td>Jazz Dance III</td>
<td>1</td>
</tr>
<tr>
<td>DAN233AA</td>
<td>Jazz Dance III: Intensive</td>
<td>2</td>
</tr>
<tr>
<td>DAN236</td>
<td>Jazz Dance IV</td>
<td>1</td>
</tr>
<tr>
<td>DAN236AA</td>
<td>Jazz Dance IV: Intensive</td>
<td>2</td>
</tr>
<tr>
<td>DAN140</td>
<td>Tap Dance I</td>
<td>1</td>
</tr>
<tr>
<td>DAN141</td>
<td>Dance Workshop</td>
<td>1</td>
</tr>
<tr>
<td>DAN145</td>
<td>Tap Dance II</td>
<td>1</td>
</tr>
<tr>
<td>DAN146</td>
<td>Tap Dance Ensemble</td>
<td>1</td>
</tr>
<tr>
<td>DAN240</td>
<td>Tap Dance III</td>
<td>1</td>
</tr>
<tr>
<td>DAN245</td>
<td>Tap Dance IV</td>
<td>1</td>
</tr>
<tr>
<td>DAN150</td>
<td>Dance Performance I</td>
<td>1</td>
</tr>
<tr>
<td>DAN155</td>
<td>Dance Performance II</td>
<td>1</td>
</tr>
<tr>
<td>DAN250</td>
<td>Dance Performance III</td>
<td>1</td>
</tr>
<tr>
<td>DAN255</td>
<td>Dance Performance IV</td>
<td>1</td>
</tr>
<tr>
<td>DAN164</td>
<td>Improvisation</td>
<td>1</td>
</tr>
<tr>
<td>DAN131</td>
<td>Ballet I</td>
<td>1</td>
</tr>
<tr>
<td>DAN134</td>
<td>Ballet II</td>
<td>1</td>
</tr>
<tr>
<td>DAN231</td>
<td>Ballet III</td>
<td>1</td>
</tr>
</tbody>
</table>
General Education

Maricopa Community Colleges (MCCCD)
2016-2017 Associate in Arts, Fine Arts (AAFA) – Dance

General Education

DAN231AA Ballet III: Intensive (2) 2-4
DAN234 Ballet IV 1
DAN234AA Ballet IV: Intensive (2) 2-4
DAN237 Ballet Pointe I 1
DAN132 Modern Dance I 1
DAN135 Modern Dance II 1
DAN232 Modern Dance III (1) 1-2
DAN232AA Modern Dance III: Intensive 2
DAN235 Modern Dance IV (1) 1-2
DAN235AA Modern Dance IV: Intensive 2
DAN/MUP285AA Multimedia Performance Ensemble I 3
DAN290++ Dance Conservatory I (any module) 1-3

Fine Arts Requirements – Dance – Part III: Restricted Electives Continued:

DAN291++ Dance Conservatory II (any module) 1-3
DAN292++ Dance Conservatory III (any module) 1-3
*DAN298++ Special Projects (any module) 1-3

Part IV: Restricted Electives: Dance Theory Electives: Credits: 6-9
Part IV Dance Theory courses cannot be shared with an AGEC-A core requirement; they may be shared with one or more designated [G], [H] and/or [C] Awareness area(s).

DAH110 Dance in Film 3
DAH190 Discovering Dance Careers 1
DAH201 World Dance Studies 3
DAH210 History of Ballet and Modern Dance 3
DAH250 Dance in Popular Culture 3
DAH255 Hip Hop Arts, Aesthetic and Culture 3
DAN138 Dance Seminar I 1
DAN170 Dance Kinesiology 3
DAN201++ Special Topics: Dance (any module) 1-3
DAN211 Dance Production II 3
DAN222 Rhythmic Awareness II 3
DAN238 Dance Seminar II 1
DAN241 Dance Notation I 3
DAN265 Choreography II 3
DAN272 Dance Technology 3
DAN275 Choreography for Film and Video 3
DAN282++ Service-Learning Experience in Dance (any module) 1-3
DAN293 Teaching Dance in Elementary Education 3
DAN294 Teaching Dance in Secondary Education 3
DAN295 Teaching and Management of Studio Dance 3
*DAN296++ Cooperative Education (any module) 1-4
*DAN298++ Special Projects (any module) 1-3

* Selection of DAN296 or 298 courses to satisfy degree requirements should be done in consultation with a program advisor or faculty member as Special Projects courses do not currently transfer to any of the three Arizona state public universities.

Associate in Arts, Fine Arts – Dance Total Credits: 65
General Education
Maricopa Community Colleges (MCCCD)
2016-2017 Associate in Arts, Fine Arts (AAFA) – Theatre

Description
The Maricopa County Community College District Associate in Arts, Fine Arts - Theatre degree requires a minimum of 60-64 semester credits for the program of study. The degree includes the following components:
   I. General Education:
      Arizona General Education Curriculum for Arts (AGEC-A)
      MCCCD Additional Requirements
   II. Fine Arts Requirements – Theatre

Purpose of the Degree
The Associate in Arts, Fine Arts - Theatre 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.

The semester credits used to satisfy the MCCCD Associate in Arts, Fine Arts - Theatre may apply to university graduation requirements of the university major for which the degree is designed. Information regarding the articulation of the degree with majors at the Arizona public universities can be accessed via the following website: www.aztransfer.com.

Academic Policies that Govern the Associate in Arts, Fine Arts - Theatre Degree

- Completion of the Associate in Arts, Fine Arts - Theatre and the AGEC-A provides for exemption from Arizona public university admission requirements for Arizona residents who have a minimum Grade Point Average of 2.0 on a 4.0=A scale and a minimum 2.5 on a 4.0=A scale for non-residents.

- The graduation policies within the general catalog must be satisfied for completion of the Associate in Arts, Fine Arts - Theatre degree.

- A minimum of 60 semester credits in courses numbered 100 and above to be completed with a grade of “C” or better. Credit units transferred from outside of the district need to be at a grade of “C” or better. A grade of “C” equals 2.0 on a 4.0 grading scale or equivalent. On an exception basis, P-grades may be allowed in the AGEC for credit transferred if documentation collected by the community college indicates that the P-grade issued was the only option for the student and the P-grade is a “C” or better. The P-grade exception does not apply to credits awarded by AGEC granting/receiving institutions.

- Credit received through prior learning assessment or credit by evaluation is transferable within the Maricopa Community Colleges but is not necessarily transferable to other colleges and universities. No more than 20 semester credit hours may be applied toward AGEC.

- The General Education Requirements for AGEC-A may be completed in 35 semester credits with the following stipulations
  o Courses can satisfy a Core Area and one or two Awareness Areas simultaneously
  o A course cannot be used to satisfy more than one Core Area

- General Education Courses can satisfy multiple areas within the degree simultaneously (AGEC-A Core Area, AGEC Awareness Area, MCCCD Additional Requirements, or lower-division courses applicable to the major)
General Education

Maricopa Community Colleges (MCCCD)
2016-2017 Associate in Arts, Fine Arts (AAFA) – Theatre

Academic Policies that Govern the Associate in Arts, Fine Arts - Theatre Degree Continued:

- 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. Students do have the option to petition for general education evaluations and/or general education designations upon transfer.

- Courses completed at one of the Maricopa Community Colleges to meet AGEC-A requirements must be listed in the Course Equivalency Guide within AZ Transfer as an equivalent course, departmental elective credit (XXXXDEC), or general elective credit (Elective) at all Arizona public universities. The course’s evaluation and/or general education designation is valid for the term in which the student is awarded credit on the transcript. View specific course information via the following website: https://asa.maricopa.edu/departments/center-for-curriculum-transfer-articulation by clicking on the statewide AGEC link.

- Maricopa courses and external courses evaluated as Maricopa equivalents or departmental electives (for example, HISELC, MATELC), 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 elective requirements with courses that are transferable and applicable to their intended university degree. For appropriate course selection, students should consult with an advisor.

- Courses transferred from another regionally accredited institution to one of the Maricopa Community Colleges will be evaluated by the college for inclusion in the AGEC-A or Associate in Arts, Fine Arts - Theatre Degree.

- Courses and their modular equivalents will satisfy AGEC-A and Associate in Arts, Fine Arts - Theatre requirements.

- If a course is cross-referenced with one or more other courses, then only one of the cross-referenced courses will be accepted to meet requirements.

- Courses completed at one of the Maricopa Community Colleges to satisfy Common Courses must be transferable as elective or better to the universities that have the shared majors listed on a Common Course Matrix. A shared major is a university degree program that has similar academic preparation to one or more degree programs at other Arizona public universities as listed on the Common Course Matrices. For appropriate course selection, students should consult with an advisor.
General Education

Maricopa Community Colleges (MCCCD)
2016-2017 Associate in Arts, Fine Arts (AAFA) – Theatre

Degree Requirements
The 60-64 semester credits required for the Associate in Arts, Fine Arts -Theatre follow. View specific course information via the following website: https://asa.maricopa.edu/departments/center-for-curriculum-transfer-articulation by clicking on the statewide AGEC link. AGEC A, B, S, and AGEC Matrix identify the courses in alpha-order by prefix as well as the Core Areas and Awareness Areas where the course will apply.

I. MCCCD General Education
The MCCCD General Education includes two areas: MCCCD AGEC-A and MCCCD Additional Requirements.

MCCCD AGEC-A

1. Core Areas: Credits: 35
   a. First-Year Composition (FYC): Credits: 6
   b. Literacy and Critical Inquiry [L]: Credits
      Select the following:
      Credits
      THE220 Modern Drama 3
   c. Mathematical Studies [MA/CS]: Credits: 6
      To complete the Mathematical Studies requirement, select one course to satisfy Mathematics [MA] A and a second course from Computer/Statistics/Quantitative Applications [CS].
      1) Mathematics [MA] A (3 credits)
         Requires a course in college mathematics (MAT140, MAT141, MAT142) or college algebra (MAT150, MAT151, MAT152) or pre-calculus (MAT187) or any other mathematics course designated with the MA general education value and for which college algebra is a pre-requisite.
         AND
      2) Computer/Statistics/Quantitative Applications [CS] (3 credits)
   d. Humanities, Arts and Design [HU]: Credits: 6
      Students are encouraged to choose course work from more than one discipline for a total of six semester credits.
      Select the following:
      Credits
      HUM/THF205 Introduction to Cinema 3
      THE111 Introduction to Theatre 3
   e. Social-Behavioral Sciences [SB]: Credits: 6
      Students are encouraged to choose course work from more than one discipline for a total of six semester credits.
   f. Natural Sciences [SQ/SG]: Credits: 8
      To complete the Natural Sciences requirement: Select four (4) semester credits of [SQ] and four (4) semester credits of [SG] for a total of eight (8) semester credits, OR eight (8) semester credits of [SQ]. Students cannot take eight (8) semester credits of [SG] to meet the Natural Sciences requirement.
      The lecture course(s) selected for Natural Sciences must include or be accompanied by the corresponding laboratory course. The lecture and corresponding laboratory course(s) may carry separate credit. Students
should consult with an advisor for appropriate course selection. Students should also access the AZ Course Equivalency Guide (CEG) within AZ Transfer for information on equivalencies.

**MCCCD General Education Continued:**

2. Awareness Areas: Credits: 0

   Students must satisfy two Awareness Areas: Cultural Diversity in the United States [C] and either Global Awareness [G] or Historical Awareness [H]. However, it is not necessary for students to exceed thirty-five semester credits to complete the Awareness Areas because 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] AND
   Global Awareness [G] OR
   Historical Awareness [H]

**MCCCD Additional Requirements: Credits: 0-6**

Students must satisfy Oral Communication and Critical Reading areas. However, it is not necessary for students to exceed the thirty-five semester credits required in order to complete the MCCCD Additional Requirements because courses can satisfy a Core Area and MCCCD Additional Requirements simultaneously. Therefore no additional semester credits are required to satisfy Oral Communication and Critical Reading.

   a. Oral Communication: Credits: 3

   A total of three (3) semester credits are required for Oral Communication. However, if students select a communication course that satisfies both the Oral Communication area and an area within the Core, then the Oral Communication requirement has been satisfied and additional electives may be taken.

   Select from the following options:
   
   - COM100 [SB] (3 credits) OR
   - COM100AA & COM100AB & COM100AC [SB] (3 credits) OR
   - COM110 [SB] (3 credits) OR
   - COM110AA & COM110AB & COM110AC [SB] (3 credits) OR
   - COM225 [L] (3 credits) OR
   - COM230 [SB] (3 credits)

   b. Critical Reading: Credits: 3

   A total of three (3) semester credits are required for the Critical Reading area. However, if students complete CRE 101 and apply it to AGEC-A Core Requirements or if the students demonstrate proficiency through assessment, then the Critical Reading requirement has been satisfied.

   Select from the following options to complete 3 credits:
   
   - CRE101 [L] (3 credits) OR
   - equivalent as indicated by assessment

**II. Fine Arts Requirements – Theatre: Credits: 25-29**

A minimum of 25 credits are required to satisfy the Fine Arts Requirements – Theatre.

**Foundations: Credits: 16-17**

Select the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>THF115 Makeup for Stage and Screen</td>
<td>3</td>
</tr>
<tr>
<td>THP112 Acting I</td>
<td>3</td>
</tr>
</tbody>
</table>
General Education

Maricopa Community Colleges (MCCCD)
2016-2017 Associate in Arts, Fine Arts (AAFA) – Theatre

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>THP201AA</td>
<td>Theatre Production I OR</td>
<td>1</td>
</tr>
<tr>
<td>THP201AB</td>
<td>Theatre Production II</td>
<td>2</td>
</tr>
<tr>
<td>THP213</td>
<td>Introduction to Technical Theatre</td>
<td>3</td>
</tr>
<tr>
<td>THP214</td>
<td>Directing Techniques</td>
<td>3</td>
</tr>
<tr>
<td>THP217</td>
<td>Introduction to Design Scenography</td>
<td>3</td>
</tr>
</tbody>
</table>

**Restricted Electives: Credits: 9-12**

Students may take a variety of courses, or they may choose to emphasize a particular aspect of theatre, such as acting, technical theatre, cinema, theatre education, directing, movement, musical theatre, etc. Students should consult with their campus theatre advisor for the restricted electives recommended to attain each area of emphasis.

Select from the following options to complete a minimum of 9 semester credits:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUM/THE206</td>
<td>Introduction to Television Arts</td>
<td>3</td>
</tr>
<tr>
<td>HUM/THF210</td>
<td>Contemporary Cinema</td>
<td>3</td>
</tr>
<tr>
<td>THE118</td>
<td>Playwriting</td>
<td>3</td>
</tr>
<tr>
<td>THF120AA</td>
<td>Audition Techniques for Stage and Screen: Prepared Monologue</td>
<td>1</td>
</tr>
<tr>
<td>THF120AB</td>
<td>Audition Techniques for Stage and Screen: Cold Readings</td>
<td>1</td>
</tr>
<tr>
<td>THF130</td>
<td>Combat for Stage and Screen</td>
<td>3</td>
</tr>
<tr>
<td>THF209</td>
<td>Acting for the Camera</td>
<td>3</td>
</tr>
<tr>
<td>THF219</td>
<td>Advanced Acting for the Camera</td>
<td>3</td>
</tr>
<tr>
<td>THP131</td>
<td>Stage Movement</td>
<td>3</td>
</tr>
<tr>
<td>THP151</td>
<td>Theatre for Youth</td>
<td>3</td>
</tr>
<tr>
<td>THP211</td>
<td>Creative Drama</td>
<td>3</td>
</tr>
<tr>
<td>THP212</td>
<td>Acting II</td>
<td>3</td>
</tr>
<tr>
<td>THP214</td>
<td>Directing Techniques</td>
<td>3</td>
</tr>
<tr>
<td>THP216</td>
<td>Beginning Stage Lighting</td>
<td>3</td>
</tr>
<tr>
<td>THP219</td>
<td>Introduction to Puppetry</td>
<td>3</td>
</tr>
<tr>
<td>THP226</td>
<td>Theatrical Design: Costuming</td>
<td>3</td>
</tr>
<tr>
<td>COM/THP241</td>
<td>Oral Interpretation of Literature</td>
<td>3</td>
</tr>
<tr>
<td>THP262</td>
<td>Entertainment Industry Design Drafting</td>
<td>3</td>
</tr>
<tr>
<td>THP267</td>
<td>Painting Techniques for Film, TV and Theatre</td>
<td>3</td>
</tr>
<tr>
<td>THP268</td>
<td>Opportunities in Production</td>
<td>3</td>
</tr>
<tr>
<td>THP269</td>
<td>Technical Theatre Portfolio Development</td>
<td>1</td>
</tr>
<tr>
<td>MUP/THP270</td>
<td>Musical Theatre Workshop</td>
<td>2</td>
</tr>
<tr>
<td>COM/THP271</td>
<td>Voice and Diction</td>
<td>3</td>
</tr>
<tr>
<td>THP281</td>
<td>Production and Acting I</td>
<td>3</td>
</tr>
<tr>
<td>THP298AA-AC</td>
<td>Special Projects</td>
<td>1-3</td>
</tr>
</tbody>
</table>

**Associate in Arts, Fine Arts - Theatre Total Credits:** 60-64
General Education

Maricopa Community Colleges (MCCCD)
2016-2017 Associate in Business (ABUS) Degree, General Requirements (GR)

Description

The Maricopa County Community College District Associate in Business General Requirements (ABus GR) degree requires a total of 62-63 semester credits for the program of study. The degree has three major components:

I. MCCCD General Education, which includes Arizona General Education Curriculum for Business (AGEC-B),
II. Common Lower Division Program Requirements,
III. General Electives.

Purpose of the Degree

The ABus GR degree is designed for students who plan to transfer to Arizona’s public universities into majors that articulate with the Associate in Business General Requirements pathway and for students who plan to complete lower division course work toward a baccalaureate program at other degree granting institutions. All business majors except Computer Information Systems should follow the ABus GR pathway. Computer Information Systems majors should follow the Associate in Business Special Requirements pathway.

Generally, the degree transfers 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 Business General Requirements will apply to university graduation requirements of the university major for which the ABus GR was designed.

Academic Policies that Govern the Associate in Business General Requirements Degree:

- Requires 62-63 semester credits in courses numbered 100 and above to be completed with a grade of “C” or better. Credit units transferred from outside of the district need to be at a grade of “C” or better. A grade of “C” equals 2.0 on a 4.0 grading scale or equivalent. On an exception basis, P-grades may be allowed in the AGEC for credit transferred if documentation collected by the community college indicates that the P-grade issued was the only option for the student and the P-grade is a “C” or better. The P-grade exception does not apply to credits awarded by AGEC granting/receiving institutions;

- Credit received through prior learning assessment or credit by evaluation is transferable within the Maricopa Community Colleges but is not necessarily transferable to other colleges and universities. No more than 20 semester credit hours may be applied toward AGEC.

- Uses the following policies to help students complete the required Core and Awareness Areas in AGEC B without exceeding the 35 semester credits
  - Courses can satisfy a Core Area and one or two Awareness Areas simultaneously.
  - A course cannot be used to satisfy more than one Core Area requirement.

- Uses the following policies to help students complete the program requirements at a minimum of 62 semester credits but not more than 63 semester credits:

  - Courses can satisfy multiple areas within the degree simultaneously (AGEC B Core Area, AGEC B Awareness Area, and/or Common Lower Division Program Requirements)
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.

- Requires courses that transfer as an equivalent course, departmental elective credit (XXXXDEC), or general elective credit (Elective) at all Arizona public universities according to the Arizona Course Equivalency Guide (CEG) within the AZ Transfer. The course evaluation and/or general education designation as listed in AZ Transfer is valid for the term in which the student is awarded credit on the transcript.

- Follows the graduation policies within the general catalog

- Includes both courses and their modular equivalents, either the course or the modular equivalents will satisfy the Associate in Business General Requirements

- Accepts one of the courses that is cross-referenced with other courses

- Provides for exemption from Arizona university admission requirements for students who complete the ABus GR degree from a regionally accredited post-secondary institution with a minimum 2.0 on a 4.0=A scale for Arizona residents and a minimum 2.5 on a 4.0=A scale for non-residents.
General Education

Maricopa Community Colleges (MCCCD)
2016-2017 Associate in Business (ABUS) Degree, General Requirements (GR)

Degree Requirements
The 62-63 semester credits required for the Associate in Business General Requirements follow. View specific course information via the following website: https://asa.maricopa.edu/departments/center-for-curriculum-transfer-articulation

Click on the AGEC link.
Select Maricopa Community College District or any of the Maricopa Community Colleges
Click on the appropriate AGEC A, B, S, or AGEC Matrix

The lists identify the courses in alpha-order by prefix as well as the different Core Areas and Awareness Areas where the course will apply.

I. MCCCD General Education

A. MCCCD AGEC B
   1. Core Areas: 35
      a. First-Year Composition (FYC) 6
      b. Literacy and Critical Inquiry [L] 3
      c. Mathematical Studies [MA/CS] 6
         To complete the Mathematical Studies requirement select one course to satisfy
         Mathematics [MA] B and a second course from Computer/Statistics/Quantitative Applications [CS].
         1) Mathematics [MA] B (3 credits)
            MAT212, Brief Calculus, or a higher level mathematics course
            AND
         2) Computers/Statistics/Quantitative Applications) [CS] (3 credits).
            CIS105 [CS] Survey of Computer Information Systems
      d. Humanities, Arts and Design [HU] 6
         Students are encouraged to choose course work from more than one discipline
         for a total of six semester credits.
      e. Social-Behavioral Sciences [SB] 6
         Students are encouraged to choose course work from more than one discipline
         for a total of six semester credits.
      f. Natural Sciences [SQ/SG] 8
         To complete the Natural Sciences requirement:
         Select four (4) semester credits of [SQ] and four (4) semester credits of [SG] for
         a total of (8) semester credits, OR eight (8) semester credits of [SQ].
         Students cannot take eight (8) semester credits of [SG] to meet the Natural Sciences requirement.

Note: Students transferring to ASU in Accountancy should take two of the following courses in meeting the general education requirements: a transfer course in Sociology; Psychology; COM230 or COM225. If students do not take these prior to transfer, they may need to take additional hours to meet ASU graduation requirements.

The lecture course(s) selected for Natural Sciences must include or be accompanied by the corresponding laboratory course. The lecture and corresponding laboratory course(s) may carry separate credit. Students should consult with an
advisor for appropriate course selection. Students should also access the AZ Course Equivalency Guide (CEG) within AZ Transfer for information on equivalencies.

**MCCCD General Education AGEC-B Continued:**

2. Awareness Areas

Students must satisfy two Awareness Areas: Cultural Diversity in the United States [C] and either Global Awareness [G] or Historical Awareness [H]. However, it is not necessary for students to exceed thirty-five semester credits to complete the Awareness Areas because 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]
- AND
- Global Awareness [G] OR
- Historical Awareness [H]

**II. Common Lower Division Program Requirements:**

A total of 27-28 credits are required to satisfy the Common Lower Division Program Requirements. However, if students select courses that simultaneously satisfy multiple areas of the degree, then the number of semester credits required for Common Lower Division Program Requirements is reduced. Additional semester credits may be required in General Electives to complete the minimum 62-63 total program semester credits.

Complete the following:

**Accounting:**

ACC111  Accounting Principles I AND
ACC230  Uses of Accounting Information I AND
ACC240  Uses of Accounting Information II
ACC211  Financial Accounting AND
ACC212  Managerial Accounting  6
MCCCD ACC111 and ACC112 together are equivalent to ACC211.

ECN211 [SB]  Macroeconomic Principles  3
ECN212 [SB]  Microeconomic Principles  3
GBS205  Legal, Ethical, and Regulatory Issues in Business  3
GBS221 [CS]  Business Statistics  3

**Quantitative Methods**

GBS220  Quantitative Methods in Business OR
*MAT217  Mathematical Analysis for Business OR
*MAT218  Mathematical Analysis for Business
Students planning to attend ASU W.P. Carey will be required to take MAT217 or MAT218
Common Lower Division Program Requirements Continued:

Business Electives: 6

Select from the following options:

- CIS114DE Excel Spreadsheet
- CIS133DA Internet/Web Development Level I
- CIS162AD C#: Level I
- GBS151 Introduction to Business
- GBS233 [L] Business Communication
- **GBS220 Quantitative Methods in Business
- GBS110 OR Human Relations in Business and Industry
- MGT251 Human Relations in Business
- IBS101 Introduction to International Business
- MGT253 Owning and Operating a Small Business
- REA179 Real Estate Principles I
- REA180 Real Estate Principles II
- MKT271 Principles of Marketing
- PAD100 21st Century Public Policy and Service
- SBU200 Society and Business

**If course used to satisfy Common Lower Division Program Requirements, it can not be used to satisfy Business Electives.

III. General Electives

Select courses to complete a minimum of 62 semester credits but no more than a total of 63 semester credits. General Electives semester credits may be necessary if courses selected for the degree satisfy multiple areas.

Maricopa courses and external courses evaluated as Maricopa equivalents or departmental electives (for example, HISELC, MATELC), 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 elective requirements with courses that are transferable and applicable to their intended university degree. For appropriate course selection, students should consult with an advisor.

**Bus GR Degree Total Credits: 62-63
General Education
Maricopa Community Colleges (MCCCD)
2016-2017 Associate in Business (ABUS) Degree, Special Requirements (SR)

Description
The Maricopa County Community College District Associate in Business, Special Requirements (ABus SR) degree requires a total of 62-63 semester credits for the program of study. The degree has three major components:

I. MCCCD General Education which includes the Arizona General Education Curriculum for Business (AGEC B),
II. Common Lower Division Program Requirements,
III. General Electives.

Purpose of the Degree
The ABus SR degree is designed for Computer Information Systems majors who plan to transfer to Arizona's public universities and for students who plan to complete lower division course work toward a baccalaureate program at other degree granting institutions. The Associate in Business General Requirements (ABus GR) is designed for all other business majors. Additional information on academic majors at the Arizona public universities can be accessed via the following web site: www.aztransfer.com/.

Generally, the degree transfers 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 Business Special Requirements may apply to university graduation requirements of the university major for which the ABus SR was designed.

Academic Policies that Govern the Associate in Business Special Requirements Degree:

- Requires 62-63 semester credits in courses numbered 100 and above to be completed with a grade of “C” or better. Credit units transferred from outside of the district need to be at a grade of “C” or better. A grade of “C” equals 2.0 on a 4.0 grading scale or equivalent. On an exception basis, P-grades may be allowed in the AGEC for credit transferred if documentation collected by the community college indicates that the P-grade issued was the only option for the student and the P-grade is a “C” or better. The P-grade exception does not apply to credits awarded by AGEC granting/receiving institutions;

- Credit received through prior learning assessment or credit by evaluation is transferable within the Maricopa Community Colleges but is not necessarily transferable to other colleges and universities. No more than 20 semester credit hours may be applied toward AGEC.

- Uses the following policies to help students complete the required Core and Awareness Areas in AGEC B without exceeding the 35 semester credits
  - Courses can satisfy a Core Area and one or two Awareness Areas simultaneously.
  - A course cannot be used to satisfy more than one Core Area requirement.

- Uses the following policy to help students complete the program requirements at a minimum of 62 semester credits but not more than 63 semester credits:
  - Courses can satisfy multiple areas within the degree simultaneously (AGEC B Core Area, AGEC B Awareness Area, and/or Common Lower Division Program Requirements)
Academic Policies that Govern the Associate in Business Special Requirements Degree Continued:

- Follows the general education policy below:

  **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 course evaluations and/or general education designations.

- Requires courses that transfer as an equivalent course, departmental elective credit (XXXXDEC), or general elective credit (Elective) at all Arizona public universities according to the Arizona Course Equivalency Guide (CEG). The course evaluation and/or general education designation as listed in AZ Transfer is valid for the term in which the student is awarded credit on the transcript.

- Follows the graduation policies within the general catalog.

- Includes both courses and their modular equivalents, either the course or the modular equivalents will satisfy the Associate in Business Special Requirements.

- Accepts one of the courses that is cross-referenced with other courses.

- Provides for exemption from Arizona university admission requirements for students who complete the ABus SR degree from a regionally accredited post-secondary institution with a minimum 2.0 on a 4.0=A scale for Arizona residents and a minimum 2.5 on a 4.0=A scale for non-residents.
General Education

Maricopa Community Colleges (MCCCD)
2016-2017 Associate in Business (ABUS) Degree, Special Requirements (SR)

Degree Requirements
The 62-63 semester credits required for the Associate in Business Special Requirements follow. View specific course information via the following website: https://asa.maricopa.edu/departments/center-for-curriculum-transfer-articulation

Click on the AGEC link.
Select Maricopa Community College District or any of the Maricopa Community Colleges
Click on the appropriate AGEC A, B, S, or AGEC Matrix

The lists identify the courses in alpha-order by prefix as well as the different Core Areas and Awareness Areas where the course will apply.

I. MCCCD General Education

A. MCCCD AGEC B
   1. Core Areas: 35
      a. First-Year Composition (FYC) 6
      b. Literacy and Critical Inquiry [L] 3
      c. Mathematical Studies [MA/CS] 6
         To complete the Mathematical Studies requirement select one course to satisfy the Mathematics [MA] B and a second course from Computer/Statistics/Quantitative Applications [CS]
            1) Mathematics [MA] B (3 credits)
               MAT212, Brief Calculus, or a higher level mathematics course
               AND
            2) Computer/Statistics/Quantitative Applications [CS]
               CIS105 [CS] Survey of Computer Information Systems
         d. Humanities, Arts and Design [HU] 6
            Students are encouraged to choose course work from more than one discipline for a total of six semester credits.
         e. Social-Behavioral Sciences [SB] 6
            Students are encouraged to choose course work from more than one discipline for a total of six semester credits
         f. Natural Sciences [SQ/SG] 8
            To complete the Natural Sciences requirement:
            Select four (4) semester credits of [SQ] and four (4) semester credits of [SG] for a total of eight (8) semester credits, OR eight (8) semester credits of [SQ].
            Students cannot take eight (8) semester credits of [SG] to meet the Natural Sciences requirement

The lecture course(s) selected for Natural Sciences must include or be accompanied by the corresponding laboratory course. The lecture and corresponding laboratory course(s) may carry separate credit. Students should consult with an advisor for appropriate course selection. Students should also access the AZ Course Equivalency Guide (CEG) within AZ Transfer for information on equivalencies.
Degree Requirements Continued:

2. Awareness Areas:
Students must satisfy two Awareness Areas: Cultural Diversity in the United States [C] and either Global Awareness [G] or Historical Awareness [H]. However, it is not necessary for students to exceed thirty-five semester credits to complete the Awareness Areas because 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]
- AND
- Global Awareness [G]
- OR
- Historical Awareness [H]

II. Common Lower Division Program Requirements: 27
A total of 27-28 credits are required for the Common Lower Division Program Requirements. Common courses meeting general education areas are noted with the general education designations encased in brackets.

Complete the following:

**Accounting:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC111</td>
<td>Accounting Principles I AND</td>
</tr>
<tr>
<td>ACC230</td>
<td>Uses of Accounting Information I AND</td>
</tr>
<tr>
<td>ACC240</td>
<td>Uses of Accounting Information II</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>*ACC211</td>
<td>Financial Accounting AND</td>
</tr>
<tr>
<td>ACC212</td>
<td>Managerial Accounting</td>
</tr>
</tbody>
</table>

*ACC211, ACC111, ACC112 together are equivalent to ACC211.

**Programming I:** 3

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS162AD</td>
<td>C#: Level I</td>
</tr>
</tbody>
</table>

**Programming II:** 3

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS250</td>
<td>Management of Information Systems</td>
</tr>
<tr>
<td>GBS205</td>
<td>Legal, Ethical, and Regulatory Issues in Business</td>
</tr>
<tr>
<td>GBS221 [CS]</td>
<td>Business Statistics</td>
</tr>
<tr>
<td>ECN211 [SB]</td>
<td>Macroeconomic Principles</td>
</tr>
<tr>
<td>ECN212 [SB]</td>
<td>Microeconomic Principles</td>
</tr>
</tbody>
</table>

**Quantitative Methods** 3

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>GBS220</td>
<td>Quantitative Methods in Business OR</td>
</tr>
<tr>
<td>*MAT217</td>
<td>Mathematical Analysis for Business OR</td>
</tr>
<tr>
<td>*MAT218</td>
<td>Mathematical Analysis for Business</td>
</tr>
</tbody>
</table>

*Students planning to attend ASU W.P. Carey will be required to take MAT217 or MAT218

III. General Electives 0-6
Select courses to complete a minimum of 62 semester credits but no more than a total of 63 semester credits for the program. General Electives semester credits may be necessary if courses selected for the degree satisfy multiple areas.
General Education

Maricopa Community Colleges (MCCCD)
2016-2017 Associate in Business (ABUS) Degree, Special Requirements (SR)

Maricopa courses and external courses evaluated as Maricopa equivalents or departmental electives (for example, HISELC, MATELC), 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 elective requirements with courses that are transferable and applicable to their intended university degree. For appropriate course selection, students should consult with an advisor.

ABus SR Total Credits: 62-63
General Education

Maricopa Community Colleges (MCCCD)
2016-2017 Associate in General Studies (AGS) Degree

Description

The Maricopa County Community College District Associate in General Studies (AGS) degree is recommended for students whose educational goals require flexibility. The AGS allows students to choose any elective courses numbered 100 or above to complete the degree. Therefore, this degree may be less appropriate for students who intend to transfer to a baccalaureate-granting institution.

Students who demonstrate skills comparable to those in Critical Reading and/or Mathematics and/or Computer Usage may substitute acceptable elective courses to satisfy the total credits required for the degree.

Academic Policies That Govern the Associate in General Studies Degree:

- Requires a minimum of 60 semester credits in courses numbered 100 and above.

- AGS degree requirements follow with the use of a diagonal character (/) between course numbers to signify options. An asterisk (*) following the course number defines requirements with an effective begin term of spring;

- Requires grades as listed for specific areas such as the General Education Core where a minimum grade of “C” is required. Courses applied to other areas may be completed with a minimum grade of “D”;

- Uses the following policies for course(s) satisfying multiple program areas;
  1. A course can simultaneously satisfy one Core area and one Distribution area. Courses that meet this criterion are bold print and underscored in the Core areas and Distribution areas.
  2. A course cannot satisfy more than one Core area, even if it is approved for more than one Core area.
  3. A course cannot satisfy more than one Distribution area, even if it is approved for more than one Distribution area.

- Follows the graduation policies within the general catalog;

- Includes both courses and their modular equivalents; either the course or the modular equivalents will satisfy the Associate in General Studies;

- Accepts one of the courses that is cross-referenced with other courses;
# General Education

## Maricopa Community Colleges (MCCCD)

### 2016-2017 Associate in General Studies (AGS) Degree

### Degree Requirements

**GENERAL EDUCATION CORE**  
(16 credits - grade of “C” or better)

**First-Year Composition (6 credits)**  
ENG English [101/107] & [102/108]

**Oral Communication (3 credits)**  
COM Communication 100/100AA & 100AB & 100AC/110/110AA & 110AB & 110AC/225/230

**Critical Reading (3 credits)**  
CRE Critical Reading 101/Equivalent as indicated by assessment

**Mathematics (3 credits)**  

**Computer Usage (1 credit)**  
Computer-related course or demonstration of comparable computer skills. Additional courses may be approved by individual colleges. Students should contact their advisor for college-specific courses satisfying the requirement.

<table>
<thead>
<tr>
<th>ACC</th>
<th>Accounting 115</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADA</td>
<td>Advertising Arts 169/175/177/183/283/283AA/289</td>
</tr>
<tr>
<td>AJS</td>
<td>Administration of Justice Studies 205</td>
</tr>
<tr>
<td>AMS</td>
<td>Automated Manufacturing System 150</td>
</tr>
<tr>
<td>ARC</td>
<td>Architecture 243/244/245</td>
</tr>
<tr>
<td>ART</td>
<td>Art 100/169/170/173/175/177/179/any 180 module/183/283/289</td>
</tr>
<tr>
<td>BIO</td>
<td>Biology 283</td>
</tr>
<tr>
<td>BPC</td>
<td>Business-Personal Computers Any BPC Course(s)</td>
</tr>
<tr>
<td>CIS</td>
<td>Computer Information Systems Any CIS Course(s) (except 159, 162, 162AC, 169, 183AA, 217AM, 259, 262)</td>
</tr>
<tr>
<td>CSC</td>
<td>Computer Science Any CSC Course(s) (except 200, 200AA, 200AB, 210, 210AA, 210AB)</td>
</tr>
<tr>
<td>CTR</td>
<td>Court Reporting 101/102</td>
</tr>
<tr>
<td>DFT</td>
<td>Drafting Technology 105AA/251/254AA/256AA</td>
</tr>
<tr>
<td>ECH</td>
<td>Early Childhood Education 238</td>
</tr>
<tr>
<td>EEE</td>
<td>Electrical Engineering 120</td>
</tr>
<tr>
<td>ELE</td>
<td>Electronic 131/181/241/243/245</td>
</tr>
<tr>
<td>ELT</td>
<td>Electronic Technology 131/241/243</td>
</tr>
<tr>
<td>ENG</td>
<td>English 100AE</td>
</tr>
<tr>
<td>FON</td>
<td>Food &amp; Nutrition 100</td>
</tr>
<tr>
<td>GBS</td>
<td>General Business 221</td>
</tr>
<tr>
<td>GIS</td>
<td>Geographic Information Science 205/211</td>
</tr>
<tr>
<td>GPH</td>
<td>Physical Geography 220</td>
</tr>
<tr>
<td>HRM</td>
<td>Hotel Restaurant Management 126</td>
</tr>
<tr>
<td>JRN</td>
<td>Journalism 133</td>
</tr>
<tr>
<td>LAS</td>
<td>Paralegal Studies 229</td>
</tr>
<tr>
<td>MAT</td>
<td>Mathematics 206</td>
</tr>
<tr>
<td>MET</td>
<td>Manufacturing Technology 264</td>
</tr>
<tr>
<td>MTC</td>
<td>Music Theory/Composition 180/191</td>
</tr>
<tr>
<td>NET</td>
<td>Networking Technology 181</td>
</tr>
</tbody>
</table>

**Computer Usage Continued**  
OAS Office Automation Systems 111AA/111AB/219/120/DK  
PSY Psychology 230  
SBS Small Business 211  
SWU Social Work 225  
TVL Travel Agent Technology 203  
VPT Video Production Technology 106

**GENERAL EDUCATION DISTRIBUTION AREAS (28-29 credits)**

### Humanities, Arts and Design (9 credits)

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

| AHU      | Arabic Humanities 245 |
| AIS      | American Indian Studies 213 |
| AJS      | Administration of Justice Studies 123 |
| ARH      | Art Humanities Any ARH Course(s) |
| ASB      | Anthropology 211/214/220/222/223/225 |
| CCS      | Chicana and Chicano Studies 101 |
| CNS      | Construction 101 |
| COM      | Communication 241 |
| DAH      | Dance Humanities 100/201/250/255 |
| EDU      | Education 291/292/294 |
| ENG      | English 200/213/218 |
| ENH      | English Humanities Any ENH Course(s) (except 250) |
| FRE      | French 265 |
| HCR      | Health Care Related 210 |
| HHS      | History 101/102/103/108/110/111/113/114/203/212/251/252/275 |
| HUM      | Humanities Any HUM course(s) (except 120, 225) |
| INT      | Interior Design 115/120/225 |
| LAT      | Latin 201/202 |
| MHL      | Music: History/Literature 140/143/145/146/153/155/194/204/241/242/295 |
| PHI      | Philosophy Any PHI Course(s) |
| REL      | Religious Studies Any REL Course(s) |
| SLC      | Studies in Language & Culture 201 |
| SPA      | Spanish 241/242/265/266 |
| SPH      | Spanish Humanities 241, 245 |
| SSH      | Sustainability/Social Sciences and Humanities 111 |
| STO      | Storytelling 292/294 |
| TCM      | Telecommunications 107 |
| THE      | Theater 111/206/220 |
| THF      | Theatre and Film 205/210 |
| TIP      | Theater/Performance/Production 241 |
| WST      | Women’s Studies 209/284/285/290 |

### Social-Behavioral Sciences (9 credits)

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

| AFR      | African American Studies 202 |
| AIS      | American Indian Studies 101/140/141/160 |
| AJS      | Administration of Justice Studies 101/119/200/225/258/259/270 |

MCCCD GB Approval: 3/22/16

[Estrella Mountain Community College | 2016-2017 Catalog] [68]
General Education

Maricopa Community Colleges (MCCCD)
2016-2017 Associate in General Studies (AGS) Degree

MCCCD GB Approval: 3/22/16

[Estrella Mountain Community College | 2016-2017 Catalog] [69]
Description
The Maricopa County Community College District Associate in Science degree requires 60-64 semester credits for the program of study. The degree includes the following components:

I. General Education:
   - Arizona General Education Curriculum for Science (AGEC-S)
   - MCCCD Additional Requirements

II. General Electives

Purpose of the Degree
The Associate in Science 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 will apply to university graduation requirements of the university major for which the Associate in Science is designed. Information regarding the articulation of the Associate in Science with majors at the Arizona public universities can be accessed via the following website: www.aztransfer.com

Academic Policies that Govern the Associate in Science Degree

- Completion of the Associate in Science and the AGECS provides for exemption from Arizona public university admission requirements for Arizona residents who have a minimum Grade Point Average of 2.0 on a 4.0=A scale and a minimum 2.5 on a 4.0=A scale for non-residents.
- The graduation policies within the general catalog must be satisfied for completion of the Associate in Science degree.
- A minimum of 60 semester credits in courses numbered 100 and above to be completed with a grade of “C” or better. Credit units transferred from outside of the district need to be at a grade of “C” or better. A grade of “C” equals 2.0 on a 4.0 grading scale or equivalent. On an exception basis, P-grades may be allowed in the AGEC for credit transferred if documentation collected by the community college indicates that the P-grade issued was the only option for the student and the P-grade is a “C” or better. The P-grade exception does not apply to credits awarded by AGEC granting/receiving institutions.
- Credit received through prior learning assessment or credit by evaluation is transferable within the Maricopa Community Colleges but is not necessarily transferable to other colleges and universities. No more than 20 semester credit hours may be applied toward AGEC.
- The General Education Requirements for AGEC-S may be completed in 36-38 semester credits with the following stipulations:
  - Courses can satisfy a Core area and one or two Awareness areas simultaneously.
  - A course cannot be used to satisfy more than one Core area requirement in the AGEC A and B.
  - A course can be used to satisfy the L and SB or L and HU requirements simultaneously in the Core area for the AGEC S.
- General Education Courses can satisfy multiple areas within the degree simultaneously (AGEC-S Core Area, AGEC Awareness Area, MCCCD Additional Requirements, or lower-division courses applicable to the major).
General Education

Maricopa Community Colleges (MCCCD)
2016-2017 Associate in Science Degree (AS)

Academic Policies that Govern the Associate in Science Degree Continued:

• 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. Students do have the option to petition for general education evaluations and/or general education designations upon transfer.

• Courses completed at one of the Maricopa Community Colleges to meet AGEC-S requirements must be listed in the Course Equivalency Guide within AZ Transfer as an equivalent course, departmental elective credit (XXXXDEC), or general elective credit (Elective) at all Arizona public universities. The course's evaluation and/or general education designation is valid for the term in which the student is awarded credit on the transcript. View specific course information via the following website: https://asa.maricopa.edu/departments/center-for-curriculum-transfer-articulation by clicking on the statewide AGEC link.

• Maricopa courses and external courses evaluated as Maricopa equivalents or departmental electives (for example, HISELC, MATELC), 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 elective requirements with courses that are transferable and applicable to their intended university degree. For appropriate course selection, students should consult with an advisor.

• Courses transferred from another regionally accredited institution to one of the Maricopa Community Colleges will be evaluated by the college for inclusion in the AGEC-S or Associate in Science Degree.

• Courses and their modular equivalents will satisfy AGEC-S and Associate in Science requirements.

• If a course is cross-referenced with one or more other courses, then only one of the cross-referenced courses will be accepted to meet requirements.

• Courses completed at one of the Maricopa Community Colleges to satisfy Common Courses must be transferable as elective or better to the universities that have the shared majors listed on a Common Course Matrix. A shared major is a university degree program that has similar academic preparation to one or more degree programs at other Arizona public universities as listed on the Common Course Matrices. For appropriate course selection, students should consult with an advisor.
General Education
Maricopa Community Colleges (MCCCD)
2016-2017 Associate in Science Degree (AS)

Degree Requirements

The 60-64 semester credits required for the Associate in Science follow. View specific course information via the following website: https://asa.maricopa.edu/departments/center-for-curriculum-transfer-articulation by clicking on the statewide AGEC link. The AGEC A, B, S, and AGEC Matrix identify the courses in alpha-order by prefix as well as the Core Areas and Awareness Areas where the course will apply.

I. MCCCD General Education
The MCCCD General Education includes two areas: MCCCD AGEC-S and MCCCD Additional Requirements.

MCCCD AGEC-S
1. Core Areas: 36-38
   a. First-Year Composition (FYC) 6
   b. Literacy and Critical Inquiry [L] 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 and Design) or L (Literacy and Critical Inquiry) and COM or L (Literacy and Critical Inquiry) and CRE101 requirements simultaneously.
   c. Mathematical Studies [MA] 4
      To complete the Mathematical Studies requirement, select one course to satisfy Mathematics [MA] S.
         1) Mathematics [MA] S (4 credits)
            Select a calculus course MAT220 or MAT221, OR
            Any mathematics course for which MAT220 or MAT221 is a prerequisite,
   d. Humanities, Arts and Design [HU] 6
      Students are encouraged to choose course work from more than one discipline for a total of six semester credits.
      Select a course that satisfies both L and HU requirements simultaneously.
   e. Social-Behavioral Sciences [SB] 6
      Students are encouraged to choose course work from more than one discipline for a total of six semester credits.
      Select a course that satisfies both L and SB requirements simultaneously.
General Education

MCCCD General Education Core Areas Continued:

f. Natural Sciences 8
   To complete the Natural Sciences requirement:
   Select eight (8) semester credits of either general chemistry
   CHM151 & CHM151LL and CHM152 & CHM152LL
   OR
   Eight (8) semester credits of university physics
   PHY115 & PHY116 or PHY121 & PHY131
   OR
   Eight (8) semester credits of general biology, BIO181 & BIO182
   appropriate to the major.

g. Subject Options (subject based on major) 6-8

   Students completing AGEC S, through careful selection of courses that
   meet the other major or pre-requisite requirements for Science degree,
   will meet this requirement. Using a transfer guide, select courses from
   Mathematics courses above Calculus, and/or Science courses from:
   Astronomy, Biology, Botany, Chemistry, Environmental Science, Geology,
   Physical Geography, Physics, Zoology.

2. Awareness Areas:
   Students must satisfy two Awareness Areas: Cultural Diversity in the United States [C] and either
   Global Awareness [G] or Historical Awareness [H]. However, it is not necessary for students to exceed
   thirty-six to thirty-eight semester credits to complete the Awareness Areas because 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]
   AND
   Global Awareness [G] OR
   Historical Awareness [H]

3. MCCCD Additional Requirements 0-6
   Students must satisfy Oral Communication and Critical Reading areas. However, it is not necessary for
   students to exceed the thirty-six to thirty-eight semester credits required in order to complete the
   MCCCD Additional Requirements.

   a. Oral Communication
   A total of three (3) semester credits are required for Oral Communication. However, if
   students select a communication course that satisfies both the Oral Communication area and
   an area within the Core, then the Oral Communication requirement has been satisfied and
   additional electives may be taken.

   Select from the following options:
   COM100 [SB] (3 credits) OR
   COM100AA & COM100AB & COM100AC [SB] (3 credits) OR
   COM110 [SB] (3 credits) OR
   COM110AA & COM110AB & COM110AC [SB] (3 credits) OR
   COM225 [L] (3 credits) OR
   COM230 [SB] (3 credits)
General Education

Maricopa Community Colleges (MCCCD)
2016-2017 Associate in Science Degree (AS)

MCCCD General Education Core Areas Continued:

b. Critical Reading
   A total of three (3) semester credits are required for the Critical Reading area. If students demonstrate proficiency through assessment, then the Critical Reading requirement has been satisfied and additional electives may be taken.

   CRE101 [L] OR equivalent as indicated by assessment

II. General Electives

Select courses to complete a minimum of 60 semester credits but no more than a total of 64 semester credits.

For students who have decided on a major that articulates with the AS, but who are undecided on the university to which they will transfer, courses satisfying the General Electives area should be selected from the list of Common Courses, Arizona Transfer Pathway Guides, and/or University Transfer Guides in order for the courses to apply in the major upon transfer.

The list of Common Courses for each major is included in the Arizona Transfer Pathway Guides. University Transfer Guides are also available for the Arizona public universities. These guides, both statewide and institutional, are accessible on the following web site: www.aztransfer.com

Maricopa courses and external courses evaluated as Maricopa equivalents or departmental electives (for example, HISELC, MATELC), 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 elective requirements with courses that are transferable and applicable to their intended university degree. For appropriate course selection, students should consult with an advisor.

For some majors, students must demonstrate 4th semester proficiency at the 202 course level to satisfy the Non-English Language Requirements. Students should consult the Arizona Transfer Pathway Guides and/or the University Transfer Guides to determine this requirement for the major at the university to which they intend to transfer. If required, it is recommended that students choose Maricopa courses as electives to meet this requirement as part of the Associate in Science degree.

Students who are undecided on a major or university should consult an advisor. Not all majors have common courses, so it is recommended that students consult with an advisor for a list of common courses or assistance with selecting appropriate electives.

Associate in Science Total Credits: 60-64
Purpose of the Degree
The Maricopa County Community College District Associate in Applied Science (AAS) degree is recommended for students who wish to gain a depth of technical expertise by completing an occupational program presented in the college catalog. Students should consult this catalog to determine specific program requirements.

Academic Policies that Govern the AAS degree:

* Requires 60 or more credits numbered 100 or above and includes credits or the equivalent in the General Education Core areas and credits in the Distribution areas. AAS degree requirements follow with the use of a diagonal character (/) between course numbers to signify options. An asterisk (*) following the course number defines requirements with an effective begin term of spring;

* Requires grades as listed for specific areas such as the General Education Core where a minimum grade of “C” is required. See specific AAS occupational degree for specific program grade requirements;

* Follows the graduation policies within the general catalog;

* Includes both courses and their modular equivalents, either the course or the modular equivalents will satisfy the Associate in Applied Science requirements.

* Requires at least 12 semester credit hours earned at the college awarding the AAS degree. 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.

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. 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 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;

The exception is the Nursing program. Students must apply for graduation from the college where they have successfully completed Block 4 of the Associate in Applied Science in Nursing.

* Requires completion of General Education courses as indicated in the General Education Requirements for the Associate in Applied Science degree from the Maricopa County Community College District, or completion of a curriculum as stated in the catalog;

* Accepts one of the courses that is cross-referenced with other courses;
General Education

Maricopa Community Colleges (MCCCD)
2016-2017 Associate in Applied Science General Education Requirements

General Education Core
(15 credits - grade of "C" or better)
Demonstrate college-level skills in the following areas:

First-Year Composition (6 credits)
ENG English [101/107] & [102/108/111]

Oral Communication (3 credits)
COM Communication 100/100AA & 100AB
& 100AC/110/110AA & 110AB &110AC/225/230

Critical Reading (3 credits)
CRE Critical Reading 101/111/Equivalent as indicated by assessment

Mathematics (3 credits)
MAT Mathematics 103AA&103AB/112/120/121/122/
122AA/122BB/122AC/140/141/142/150/151/
151AA/151BB/151AC/151AD/152/187/188/187/
261/262/276/277/equivalent course/Satisfactory completion of a higher level mathematics course

General Education Distribution Areas
(9-10 credits)

Social-Behavioral Sciences (3 credits)
Students are encouraged to choose courses from more than one discipline.
AFR African American Studies 202
AIS American Indian Studies 101/140/141/160
AJS Administration of Justice Studies 101/200/
225/258/259/270
ASB Anthropology 100/102/202/211/222/223/
226/230/235/252
ASM Anthropology 104/275
CFS Child/Family Studies 112/157/159/176/205/
235/259
COM Communications 100/100AA&100AB&100AC/
110/110AA&110AB & 110AC/ 163/230/250/263
ECH Early Childhood Education 176
ECN Economics Any ECN course(s)
EDU Education 221/222
EED Early Education 200/205/222
EMT Emergency Medical Technology 258
ENG English 213
FOR Forensic Science 275
FSC Fire Science 258
FUS Future Studies 101
GCU Cultural Geography 102/113/121/122/141/221
HES Health Science 100
HIS History Any HIS course(s) (except 111,170,251,252,
253, 254)
HON Honors 201
IBS International Business 109
MCO Mass Communications 120
PAD Public Administration 200
POS Political Science Any POS course(s)
REC Recreation 120
SBU Society and Business 200
SLC Studies in Language & Culture 201
SOC Sociology Any SOC course(s) (except 143, 245, 253, 265,
270)
SSH Sustainability/Social Sciences and Humanities 111
SUS Sustainability/Natural Sciences 110
SWU Social Work 102/171/250/258/292
WED Wellness Education 110
WST Women’s Studies 100/161
YAQ Yaqui Indian History and Culture 100

Humanities, Arts and Design (2-3 credits)
Students are encouraged to choose courses from more than one discipline.
AHU Arabic Humanities 245
AIS American Indian Studies 213
AJS Administration of Justice Studies 123
ARH Art Humanities Any ARH Course(s)
ASM Anthropology 104/275
CCS Chicana and Chicano Studies 101
CNS Construction 101
COM Communication 241
DAH Dance Humanities 100/201/250/255
EDU Education 291/292/294
ENG English 200/213/218
ENH English Humanities Any ENH Course(s) (except 250)
FRE French 265
HCR Health Care Related 210
HIS History 101/102/103/108/110/111/113/114/203/212/251/252/275
HUM Humanities Any HUM course(s) (except 120, 225)
INT Interior Design 115/120/225
LAT Latin 201/202
MHL Music: History/Literature 140/143/146/153/155/194/
204/241/242/295
PHI Philosophy Any PHI Course(s)
REL Religious Studies Any REL Course(s)
SLC Studies in Language & Culture 201
SPA Spanish 241/242/265/266
SPI Spanish Humanities 241, 245
SSH Sustainability/Social Sciences and Humanities 111
STO Storytelling 292/294
TCM Telecommunications 107
THE Theater 111/206/220
THF Theatre and Film 205/210
THP Theater Performance/Production 241
WST Women’s Studies 209/284/285/290
Natural Sciences (4 credits)
The lecture course(s) selected for Natural Sciences must include or be accompanied by the corresponding laboratory course. The lecture and corresponding laboratory course(s) may carry separate credit. Students should consult with an advisor for appropriate course selection.

AGS  Agricultural Science 164, 260
ASB  Anthropology (Soc/Behv. Science) 231
ASM  Anthropology (Science/Math) 104/265/275
AST  Astronomy 101&102/106&107/111/112/113/114
BIO  Biology 100/101/102/105/107/108/109/111/145/
     149AN/156/156XT/160/181/181XT/182/201/202/205/241/
     245
CHM  Chemistry 107&107LL/130&130LL/130AA/
     150AA/150&151LL/151AA/151&151LL/152AA/
     152&152LL/154&154LL/230&230LL
ENV  Environmental Sciences 101
FON  Food and Nutrition 241&241LL
FOR  Forensic Science 105/106/275
GLG  Geology Any GLG course(s)
GPH  Physical Geography 111/112&113/211/212&214/
     213&215
PHS  Physical Science 110/120
PHY  Physics 101/101AA/111/111AA/112/115/116/
     121/131
PSY  Psychology 275/290AB/290AC
Purpose of the Academic Certificate (area of emphasis)

The Maricopa Community College District Academic Certificate (area of emphasis) is a defined and coherent program of study that is recommended for students who wish to gain additional expertise in an academic area. While this program of study can result in proficiency in specified skills and competencies, as well as mastery of knowledge, it is not designed to prepare someone for employment in a specific occupation. The content for an Academic Certificate (area of emphasis) may be derived from a variety of disciplines or it can be discipline specific. The Academic Certificate does not require a general studies component even though requirements of the certificate may include courses that currently meet specific general studies designations such as Humanities, Arts and Design, Social-Behavioral Sciences, etc.

Academic Policies that Govern the Academic Certificate (area of emphasis):

* Generally ranges from 12-39 credit hours in courses numbered 100 or above, although there is no minimum number of credit hours required for an Academic Certificate;

* Requires a cumulative GPA of 2.0 or better for completion;

* Follows the graduation policies within the general catalog;

* Accepts one of the courses that is cross-referenced with other courses;

* Includes both courses and their modular equivalents, either the course or the modular equivalents will satisfy the Academic Certificate requirements:

* Does not presume block transfer value. Consequently, in most cases the Academic Certificate should not be a subset of an existing transfer degree;

* May have admission criteria established by the college if and when appropriate;

* Generally offered at a limited number of colleges.
Advanced Interdisciplinary Storytelling (AC-6218N)

Description: The academic certificate program emphasizes the presentation of interdisciplinary and multi-cultural stories through live performance or through multimedia. This Advanced Interdisciplinary Storytelling Certificate provides students the opportunity to develop deeper understanding of points of view and to advance their artistic skills to achieve their fine arts goals. Opportunities are provided to explore a variety of art forms and cultural perspectives to enhance creative content development. Students can choose to concentrate study within a specific culture and/or to refine artistic ability to create compelling original stories.

Program Notes: Students have the option of selecting Performance or Digital Emphasis for this certificate. Required courses and other course choices depend upon the emphasis the student selects.

Program Prerequisites: Certificate of Completion in Interdisciplinary Storytelling (6217) and ENG102 or equivalent

I. Required Courses (3 Credits)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>STO293</td>
<td>The Art of Storytelling II</td>
<td>3</td>
</tr>
</tbody>
</table>

II. Required Courses (12 Credits) Please choose a Track from below to complete the Required Courses in consultation with an advisor

<table>
<thead>
<tr>
<th>Track</th>
<th>Required Courses (12 Credits)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Required Courses: Students must select one of the following Tracks</td>
</tr>
<tr>
<td></td>
<td>Track 1: Performance Emphasis (12 Credits)</td>
</tr>
<tr>
<td></td>
<td>Track 2: Digital Emphasis (12 Credits)</td>
</tr>
</tbody>
</table>

Students should select a total of 6 credits in consultation with an advisor from the following:

<table>
<thead>
<tr>
<th>Track</th>
<th>Required Courses (12 Credits)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Required Courses: Students must select one of the following Tracks</td>
</tr>
<tr>
<td></td>
<td>Track 2: Digital Emphasis (12 Credits)</td>
</tr>
</tbody>
</table>

Students should select a total of 3 credits in consultation with an advisor from the following:

<table>
<thead>
<tr>
<th>Track</th>
<th>Required Courses (3 Credits)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Required Courses: Students must select one of the following Tracks</td>
</tr>
<tr>
<td></td>
<td>Track 2: Digital Emphasis (12 Credits)</td>
</tr>
</tbody>
</table>
Academic Certificate

Chicana and Chicano Studies (AC-6230N)

Description: The Academic Certificate (AC) in Chicana and Chicano Studies explores the unique experiences of the Chicana and Chicano people living in the Southwest. The Certificate provides a study of Mexican-American life in the society of the United States, including Mexican background, social and cultural differences, and experiences of assimilation.

PROGRAM PREREQUISITES: ENG101 OR ENG107 AND CRE101 OR EQUIVALENT

I. REQUIRED COURSES (9 CREDITS)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCS101 Chicano and Chicana Studies</td>
<td>3</td>
</tr>
<tr>
<td>HIS109 Mexican American History and Culture</td>
<td>3</td>
</tr>
<tr>
<td>SPH245 Hispanic Heritage in the Southwest</td>
<td>3</td>
</tr>
</tbody>
</table>

II. RESTRICTED ELECTIVES (3-4 CREDITS) STUDENTS SHOULD SELECT FROM THE FOLLOWING COURSE IN CONSULTATION WITH AN DEPARTMENT ADVISOR.

<table>
<thead>
<tr>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENH112, HIS145, HUM213, SPA101, SPA102, SPA103, SPA104, SPA201, SPA202, SPA203, SPA204</td>
</tr>
</tbody>
</table>

Creative Writing (AC-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 used to seek admittance to a bachelor’s or master’s level creative writing program or that may include work to 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 serves many students, especially women, minorities, seniors, and working adults, who are under-represented in traditional creative writing programs because of cultural, dialect or language differences, scheduling difficulties, financial need, or lack of academic experience. 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.

I. REQUIRED COURSES (21 CREDITS)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRW150 Introduction to Creative Writing</td>
<td>3</td>
</tr>
<tr>
<td>CRW200 Readings for Writers (must be repeated for a total of 2 credits)</td>
<td>2</td>
</tr>
<tr>
<td>CRW201 Portfolio</td>
<td>1</td>
</tr>
<tr>
<td>Series 1: Students must complete two (2) of the following courses for a total of six (6) credits: CRW120, CRW160, CRW170, CRW172, CRW180, CRW190, THE118</td>
<td></td>
</tr>
<tr>
<td>Series 1 Course #1:</td>
<td>3</td>
</tr>
<tr>
<td>Series 1 Course #2:</td>
<td>3</td>
</tr>
<tr>
<td>Series 1: Students must complete three (3) of the following courses for a total of nine (9) credits: CRW202, CRW203, CRW204, CRW220, CRW251, CRW260, CRW261, CRW270, CRW271, CRW272, CRW273, CRW274, CRW281, CRW290, CRW291</td>
<td></td>
</tr>
<tr>
<td>Series 2 Course #1:</td>
<td>3</td>
</tr>
<tr>
<td>Series 2 Course #2:</td>
<td>3</td>
</tr>
<tr>
<td>Series 2 Course #3:</td>
<td>3</td>
</tr>
</tbody>
</table>

II. RESTRICTED ELECTIVES (3 CREDITS) STUDENTS SHOULD SELECT FROM THE FOLLOWING COURSE IN CONSULTATION WITH AN DEPARTMENT ADVISOR.

<table>
<thead>
<tr>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRW+++++, ENG235, ENG/THE260, ENH+++++, HUM/THF210</td>
</tr>
</tbody>
</table>
## Interdisciplinary Storytelling (AC-6217)

**Description:** This academic certificate emphasizes the presentation of interdisciplinary and multi-cultural stories through live performance or through multimedia. Opportunities are provided to explore a variety of art forms and cultural perspectives to enhance creative content development.

+ **Program Notes:** Students have the option of selecting Performance or Digital Emphasis for this certificate. Required courses and other course choices depend upon the emphasis the student selects.

+ **Program Prerequisites:** ENG101 or ENG107 or Equivalent

### I. Required Courses (7 Credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Grade</th>
<th>Semester</th>
<th>Comments</th>
<th>Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>STO282AA Volunteerism for Education: A Service Learning Experience</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDU/HUM/STO292 The Art of Storytelling</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDU/ENH/STO294 Multicultural Folktales</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### II. Required Courses (9 Credits)

**Please choose a track from below to complete the required courses in consultation with an advisor**

**Track:**

### Required Courses: Students Must Select One of the Following Tracks

#### Track 1: Performance Emphasis (9 Credits)

- **STO297 Creating and Telling Personal Stories** 3 Credits

  *Students should select a total of 6 credits in consultation with an advisor from the following:*

  - COM/THP241 Performance of Literature 3 Credits
  - COM263 Elements of Intercultural Communication 3 Credits
  - DAH201 World Dance Perspectives 3 Credits
  - HUM250 Ideas & Values in the Humanities 3 Credits
  - HUM120 Cultural Viewpoints in the Arts 3 Credits
  - STO286 Using Storytelling in a Variety of Settings 3 Credits
  - STO288 Telling Sacred Stories from Around the World 3 Credits

#### Track 2: Digital Emphasis (9 Credits)

- **ART/ADA173 Computer Art** 3 Credits

  *Students should select a total of 6 credits in consultation with an advisor from the following:*

  - ART131 Photography I 3 Credits
  - ADA/ART177 Computer-Photographic Imaging 3 Credits
  - ART298AC Special Projects 3 Credits
  - HUM120 Cultural Viewpoints in the Arts 3 Credits
  - HUM250 Ideas & Values in the Humanities 3 Credits
  - STO286 Using Storytelling in a Variety of Settings 3 Credits
  - STO288 Telling Sacred Stories from Around the World 3 Credits
  - STO297 Creating and Telling Personal Stories 3 Credits
Sustainability and Ecological Literacy (AC-6232)

Description: The interdisciplinary Academic Certificate (AC) in Sustainability and Ecological Literacy enhances students’ understanding of sustainable living practices associated with economics, equity and the environment. Through a combination of coursework and experiential learning, students engage in critical thinking, inquiry, and discourse, skills necessary for becoming socially responsible citizens who are ecologically and environmentally aware. The certificate is designed for, although not limited to, students seeking an Associate in Arts Degree and planning transfer to four-year colleges and universities.

I. PROGRAM PREREQUISITES

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG101 First Year Composition, or ENG107 First Year Composition for ESL</td>
<td>3</td>
</tr>
</tbody>
</table>

II. REQUIRED COURSES (7 CREDITS)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHI216 Environmental Ethics</td>
<td>3</td>
</tr>
<tr>
<td>BIO105 Environmental Biology, or GLG110 Geological Disasters and the Environment, and GLG111 Geological Disasters and the Environment Lab</td>
<td>4</td>
</tr>
</tbody>
</table>

III. RESTRICTED ELECTIVES (9 CREDITS)

Students will choose 2 different courses from the following list

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECN263 Economics of Nature Resources, Population and the Environment</td>
<td>3</td>
</tr>
<tr>
<td>ENH206 Nature and Environmental Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENH260 Literature of the Southwest</td>
<td>3</td>
</tr>
<tr>
<td>HUM201 Humanities: Universal Themes</td>
<td>3</td>
</tr>
<tr>
<td>REC150AB Outdoor Adventure Skills</td>
<td>3</td>
</tr>
<tr>
<td>SBU200 Society and Business</td>
<td>3</td>
</tr>
</tbody>
</table>

Students will choose 1 course from the following list

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIS110 World History to 1500</td>
<td>3</td>
</tr>
<tr>
<td>HIS111 World History 1500 to Present</td>
<td>3</td>
</tr>
<tr>
<td>HUM250 Ideas and Values in the Humanities</td>
<td>3</td>
</tr>
<tr>
<td>PHI104 World Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>POS120 World Politics</td>
<td>3</td>
</tr>
<tr>
<td>PSY132 Psychology and Culture</td>
<td>3</td>
</tr>
<tr>
<td>SOC101 Introduction to Sociology</td>
<td>3</td>
</tr>
</tbody>
</table>
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.

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. 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 required degree or certificate application fee.

See fee schedule for charges.
General Education

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”

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.

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:
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

**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.
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 '05 (Active)
 Continued at a Public Community College Spring '06, Fall '06 (Active)
 Transferred to a University Spring '07 (2005 or Any Subsequent Catalog)

EXAMPLE B:
Admitted & Earned Course Credit at a Public Community College or University Fall '02 (Active)
 Enrolled But Earned All Ws, Zs, or Fs Spring '03 (Inactive)
 Enrolled in Audit Courses Only Fall '03 (Inactive)
 Nonattendance Spring '04 (Inactive)
 Transferred to a University Fall '04 (2004 or Any Subsequent Catalog)

2. Students who do not meet the minimum enrollment standard stipulated in No. 1 during three consecutive semesters (fall/spring) and the intervening summer term* at any public Arizona community college or university are no longer considered continuously enrolled, and must meet requirements 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 '02 (Active)
 Nonattendance Spring '03, Fall '03, Spring '04 (Inactive)
 Readmitted & Earned Course Credit at a Public Community College Fall 04 (Active)
 Transferred to a University Spring 05 (2004 or Any Subsequent Catalog)

EXAMPLE B:
Admitted & Earned Course Credit at a Public Community College or University Fall '02 (Active)
 Nonattendance Spring '03 (Inactive)
 Readmitted & Earned Course Credit at a Public Community College Summer '03 (Active)
 Nonattendance Fall '03, Spring '04 (Inactive)
 Transferred to a University Fall '04 (2002 or Any Subsequent Catalog)
CATALOG UNDER WHICH A STUDENT GRADUATES (continued)

*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 ’04 (Active)
Continued at a Public Community College: Fall ’04, Spring ’05 (Active)
Nonattendance: Fall ’05 (Inactive)
Readmitted & Earned Course Credit at a Public Community College: Spring ’06 (Active)
Transferred to a University: Summer ’06 (2004 or Any Subsequent Catalog)

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.
## Occupational Programs

**Associate in Applied Science (AAS) Degrees**

<table>
<thead>
<tr>
<th>Program</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting</td>
<td>90</td>
</tr>
<tr>
<td>Administration of Justice</td>
<td>92</td>
</tr>
<tr>
<td>Computer Applications Technology</td>
<td>97</td>
</tr>
<tr>
<td>Culinary Studies</td>
<td>100</td>
</tr>
<tr>
<td>Early Childhood Education</td>
<td>103</td>
</tr>
<tr>
<td>Emergency Response and Operations</td>
<td>105</td>
</tr>
<tr>
<td>Engineering Technology</td>
<td>107</td>
</tr>
<tr>
<td>Industrial Manufacturing &amp; Emerging Technologies</td>
<td>112</td>
</tr>
<tr>
<td>Information Technology: Web and Graphic Design</td>
<td>113</td>
</tr>
<tr>
<td>IT and Power Systems Security</td>
<td>115</td>
</tr>
<tr>
<td>Linux Networking Administration</td>
<td>118</td>
</tr>
<tr>
<td>Microsoft Networking Technology</td>
<td>125</td>
</tr>
<tr>
<td>Mobile Apps Programming</td>
<td>128</td>
</tr>
<tr>
<td>Networking Technology: Cisco</td>
<td>130</td>
</tr>
<tr>
<td>Nursing</td>
<td>134</td>
</tr>
<tr>
<td>Organizational Management</td>
<td>135</td>
</tr>
<tr>
<td>Power Plant Technology</td>
<td>136</td>
</tr>
<tr>
<td>Programming and System Analysis</td>
<td>142</td>
</tr>
<tr>
<td>Speech Language Pathology Assistant</td>
<td>145</td>
</tr>
<tr>
<td>Teacher Assisting</td>
<td>147</td>
</tr>
</tbody>
</table>

## Occupational Certificates

**Certificate of Completion (CCL)**

<table>
<thead>
<tr>
<th>Program</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting</td>
<td>91</td>
</tr>
<tr>
<td>Administration of Justice</td>
<td>93</td>
</tr>
<tr>
<td>Baking and Pastry</td>
<td>94</td>
</tr>
<tr>
<td>Banking and Finance</td>
<td>95</td>
</tr>
<tr>
<td>Basic Culinary Studies</td>
<td>96</td>
</tr>
<tr>
<td>Child Development Associate (CDA) Preparation</td>
<td>96</td>
</tr>
<tr>
<td>Computer Applications Technology</td>
<td>98</td>
</tr>
<tr>
<td>Computer Hardware and Desktop Support</td>
<td>99</td>
</tr>
<tr>
<td>Culinary Studies</td>
<td>101</td>
</tr>
<tr>
<td>Customer Service Management</td>
<td>101</td>
</tr>
<tr>
<td>Desktop Publishing</td>
<td>102</td>
</tr>
<tr>
<td>Driver Operator</td>
<td>102</td>
</tr>
<tr>
<td>Early Childhood Education</td>
<td>104</td>
</tr>
<tr>
<td>Electrical Systems Technology</td>
<td>104</td>
</tr>
<tr>
<td>Evidence Technology</td>
<td>108</td>
</tr>
<tr>
<td>Fire Investigation</td>
<td>109</td>
</tr>
<tr>
<td>Fire Officer Leadership</td>
<td>109</td>
</tr>
<tr>
<td>Fire Science</td>
<td>110</td>
</tr>
<tr>
<td>Firefighter Operations</td>
<td>110</td>
</tr>
<tr>
<td>Gifted Education</td>
<td>111</td>
</tr>
<tr>
<td>Information Technology: Web and Graphic Design</td>
<td>114</td>
</tr>
<tr>
<td>Interior Merchandising</td>
<td>114</td>
</tr>
<tr>
<td>IT Security Associate</td>
<td>116</td>
</tr>
<tr>
<td>Linux Associate</td>
<td>117</td>
</tr>
<tr>
<td>Linux Networking Administration</td>
<td>120</td>
</tr>
<tr>
<td>Linux Professional</td>
<td>122</td>
</tr>
<tr>
<td>Mechanical Systems Technology</td>
<td>123</td>
</tr>
<tr>
<td>Mechatronics Level I</td>
<td>123</td>
</tr>
<tr>
<td>Microsoft Certified Information Technology</td>
<td>123</td>
</tr>
<tr>
<td>Professional (MCITP) Administrator</td>
<td>123</td>
</tr>
<tr>
<td>Microsoft Desktop Support Technology</td>
<td>124</td>
</tr>
<tr>
<td>Microsoft Server Administration</td>
<td>127</td>
</tr>
<tr>
<td>Microsoft Technical Specialist</td>
<td>127</td>
</tr>
<tr>
<td>Mobile Apps Programming</td>
<td>128</td>
</tr>
<tr>
<td>Networking Administration: Cisco</td>
<td>129</td>
</tr>
<tr>
<td>Networking Technology: Cisco</td>
<td>132</td>
</tr>
<tr>
<td>Nurse Assisting</td>
<td>133</td>
</tr>
<tr>
<td>Organizational Leadership</td>
<td>135</td>
</tr>
<tr>
<td>Power Plants Technology</td>
<td>140</td>
</tr>
<tr>
<td>Practical Nursing</td>
<td>141</td>
</tr>
<tr>
<td>Programming</td>
<td>143</td>
</tr>
<tr>
<td>Programming and System Analysis</td>
<td>143</td>
</tr>
<tr>
<td>Retail Management</td>
<td>144</td>
</tr>
<tr>
<td>Small Business Management</td>
<td>144</td>
</tr>
<tr>
<td>Speech Language Pathology Assistant</td>
<td>146</td>
</tr>
<tr>
<td>Web Design</td>
<td>148</td>
</tr>
<tr>
<td>Web Developer</td>
<td>148</td>
</tr>
</tbody>
</table>

## SouthWest Skill Center Certificate Programs

<table>
<thead>
<tr>
<th>Program</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency Medical Technician</td>
<td>150</td>
</tr>
<tr>
<td>Medical Assistant</td>
<td>151</td>
</tr>
<tr>
<td>Medical Billing and Coding</td>
<td>153</td>
</tr>
<tr>
<td>Medical Interpreter - Spanish</td>
<td>155</td>
</tr>
<tr>
<td>Phlebotomy Technician</td>
<td>156</td>
</tr>
</tbody>
</table>

## Program Disclosures

For certificates that are Title IV financial aid eligible, please visit [www.estrellamountain.edu/disclosures/programs](http://www.estrellamountain.edu/disclosures/programs) to learn more about our on time completion rates, the median debt of students who complete the program, and other important information.

Non-financial aid eligible programs are denoted with the letter ‘N’ at the end of the program code (i.e. 8000N)

**Degrees and Certificates Offered by the Estrella Mountain Community College are viewable at** [http://www.maricopa.edu/academic/ccta/curric/programs/programs_byC_col.php?loc=EM](http://www.maricopa.edu/academic/ccta/curric/programs/programs_byC_col.php?loc=EM)
# EMCC Degrees, Programs & Areas of Study

<table>
<thead>
<tr>
<th>Arts, Communication &amp; Languages</th>
<th>Cert.</th>
<th>Degree</th>
<th>Transfer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Chicana/o Studies</td>
<td>•</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Communication Studies</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Creative Writing</td>
<td>•</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Dance</td>
<td>•</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>English</td>
<td>•</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Foreign Languages</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Interdisciplinary Storytelling</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Interior Design &amp; Merchandising*</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Medical Interpreter – Spanish</td>
<td>•</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Multimedia* (See IT)</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Music</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Performing Arts/Theatre</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Photography</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Business, Finance &amp; Marketing</td>
<td>Cert.</td>
<td>Degree</td>
<td>Transfer</td>
</tr>
<tr>
<td>Accounting*</td>
<td>•</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Banking &amp; Finance*</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Business</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Communication Studies</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Customer Service Management</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Economics</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Interior Design &amp; Merchandising*</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Multimedia* (See IT)</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Organizational Management*</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Retail Management*</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Small Business Management</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Education</td>
<td>Cert.</td>
<td>Degree</td>
<td>Transfer</td>
</tr>
<tr>
<td>Child Development Associate*</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Early Childhood Education*</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Elementary Education</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Gifted Education</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Secondary Education</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Special Education</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Speech Language Pathology Assistant*</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Structured English Immersion</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Teaching Assistant</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Food, Hospitality &amp; Tourism</td>
<td>Cert.</td>
<td>Degree</td>
<td>Transfer</td>
</tr>
<tr>
<td>Baking &amp; Pastry*</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Culinary Studies*</td>
<td>•</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Healthcare &amp; Wellness</td>
<td>Cert.</td>
<td>Degree</td>
<td>Transfer</td>
</tr>
<tr>
<td>Emergency Medical Technology</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Medical Assistant*</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Medical Billing &amp; Coding*</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Medical Interpreter – Spanish</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Nursing</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Phlebotomy</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>History &amp; Humanities</td>
<td>Cert.</td>
<td>Degree</td>
<td>Transfer</td>
</tr>
<tr>
<td>Chicana/o Studies</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>History</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Political Science</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Social Work</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Sociology</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Human &amp; Social Services</td>
<td>Cert.</td>
<td>Degree</td>
<td>Transfer</td>
</tr>
<tr>
<td>Administration of Justice*</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Political Science</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Psychology</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Social Work</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Sociology</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Information Technology (IT)</td>
<td>Cert.</td>
<td>Degree</td>
<td>Transfer</td>
</tr>
<tr>
<td>CISCO Networking Administration*</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>CISCO Networking Technology*</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Computer Applications Technology*</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Computer Hardware &amp; Desktop Support*</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Computer Science</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Cybersecurity – IT &amp; Power Systems Security</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Cybersecurity – IT Security Associate*</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Interior Design &amp; Merchandising*</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Linux Associate*</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Linux Networking Administration*</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Linux Professional</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Microsoft Certified Information Technology Professional (MCITP) Administrator*</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Microsoft Desktop Support Technology*</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Microsoft Networking Technology</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Microsoft Server Administration*</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Microsoft Technical Specialist*</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Mobile Apps Programming*</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Multimedia – Desktop Publishing*</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Multimedia – Web &amp; Graphic Design*</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Multimedia – Web Design*</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Multimedia – Web Developer*</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Programming*</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Programming &amp; System Analysis*</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Justice &amp; Public Safety</td>
<td>Cert.</td>
<td>Degree</td>
<td>Transfer</td>
</tr>
<tr>
<td>Administration of Justice*</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Emergency Medical Technology</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Evidence Technology*</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Fire Science*</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Fire Science – Driver Operator</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Fire Science – Emergency Response &amp; Operations</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Fire Science – Fire Investigation</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Fire Science – Fire Officer Leadership</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Fire Science – Firefighter Operations*</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Political Science</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Manufacturing, Distribution &amp; Energy</td>
<td>Cert.</td>
<td>Degree</td>
<td>Transfer</td>
</tr>
<tr>
<td>Cybersecurity – IT &amp; Power Systems Security</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Electric System Technology*</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Industrial Manufacturing &amp; Emerging Technologies</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Mechanical Systems Technology*</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Mechatronics Level I*</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Power Plant Technology</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Power Systems Technology*</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Precision Manufacturing*</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Sustainability &amp; Ecological Literacy</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Science, Technology, Engineering, &amp; Mathematics</td>
<td>Cert.</td>
<td>Degree</td>
<td>Transfer</td>
</tr>
<tr>
<td>Biology</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Chemistry</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Computer Science</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Engineering Technology</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Geology</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Mathematics</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Physics</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
</tbody>
</table>

*Visit www.estrellamountain.edu/disclosures/programs to learn more about on time completion rates, the median debt of students who complete the program, and other important information. Information is current as of August 3, 2016, and is subject to change without notice. EMCC is a Maricopa Community College accredited by the Higher Learning Commission of the North Central Association of Colleges and Schools. Financial aid, veterans and veterans’ dependent benefits available for qualified programs and applicants.
## Accounting - Associate in Applied Science (3149)

**Description:** The Associate in Applied Science (AAS) in Accounting is one of several options for students seeking to gain skills and knowledge in the field of accounting. Possible entry-level jobs for this program include accounting clerk, accounts payable/receivable clerk, claims clerk, credit clerk, full-charge bookkeeper, accounting intern, or comparable positions. A Certificate of Completion (CCL) is also available.

### PROGRAM PREREQUISITES: CRE101 or EQUIVALENT BY ASSESSMENT

**I. GENERAL EDUCATION REQUIREMENTS (22-24 CREDITS)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Grade</th>
<th>Semester</th>
<th>Comments</th>
<th>Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG101 or ENG107</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG102 or ENG108</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral Communication*</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRE101 (Met by program prerequisite)</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAT120, or MAT121, or MAT122, or satisfactory completion of higher level mathematics course</td>
<td>3-5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Natural Science*</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities/Fine Arts*</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECN211, or ECN212, or SBU200</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**II. REQUIRED COURSES (29-32 CREDITS)**

- ACC111 Accounting Principles I, and
- ACC230 Uses of Accounting Information I, and
- ACC240 Uses of Accounting Information II
  - Or
- ACC111 Accounting Principles I, and
- ACC112 Accounting Principles II, and
- ACC212 Managerial Accounting
  - Or
- ACC211 Financial Accounting, and
- ACC212 Managerial Accounting
- ACC105 Payroll, Sales and Property Taxes
- ACC115 Computerized Accounting
- ACC121 Income Tax Preparation, or
- ACC221 Tax Accounting
- CIS114DE Excel Spreadsheet
- CIS105 Survey of Computer Information Systems
- GBS151 Introduction to Business
- GBS205 Legal, Ethical and Regulatory Issues in Business
- GBS233 Business Communication

**III. RESTRICTED ELECTIVES (9 CREDITS)**

Students should select from the following courses in consultation with a department advisor:

(Cannot be shared with Required Courses): Any ACC course, CIS117DM, GBS110 or MGT251, GBS131, GBS207, GBS220

All program and course requirements are subject to change. It is strongly recommended that students select courses in consultation with an academic or occupational advisor to ensure proper course selection. A current list of all EMCC programs is available at estrellamountain.edu/academics/programs.

*Courses must meet AAS General Education Requirements (refer to the AAS Requirements under the General Education section)*
Accounting - Certificate of Completion (5665)

Description: The Certificate of Completion (CCL) in Accounting is for students seeking to gain skills and knowledge in the field of accounting. Possible entry-level jobs for this program include accounting clerk, accounts payable/receivable clerk, claims clerk, credit clerk, full-charge bookkeeper, accounting intern, or comparable positions. An Associate in Applied Science (AAS) is also available.

<table>
<thead>
<tr>
<th>I. REQUIRED COURSES (23-26 CREDITS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Must earn &quot;C&quot; or higher in all courses within the program</td>
</tr>
<tr>
<td>Credits</td>
</tr>
<tr>
<td>ACC111 Accounting Principles I, and ACC230 Uses of Accounting Information I, and ACC240 Uses of Accounting Information II Or ACC111 Accounting Principles I, and ACC112 Accounting Principles II, and ACC212 Managerial Accounting Or ACC211 Financial Accounting, and ACC212 Managerial Accounting</td>
</tr>
<tr>
<td>6-9</td>
</tr>
<tr>
<td>ACC105 Payroll, Sales and Property Taxes</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>ACC115 Computerized Accounting</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>CIS114DE Excel Spreadsheet</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>CIS105 Survey of Computer Information Systems</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>GBS151 Introduction to Business</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>GBS205 Legal, Ethical and Regulatory Issues in Business</td>
</tr>
<tr>
<td>3</td>
</tr>
</tbody>
</table>

All program and course requirements are subject to change. It is strongly recommended that students select courses in consultation with an academic or occupational advisor to ensure proper course selection. A current list of all EMCC programs is available at estrellamountain.edu/academics/programs.

*Courses must meet AAS General Education Requirements (refer to the AAS Requirements under the General Education section)
Certificate & Degree Programs

Administration of Justice - Associate in Applied Science (3137)

Description: The Administration of Justice Program is designed to prepare men and women for careers within the criminal justice system, including, but not limited to: law enforcement, the courts, probation and parole, corrections, and the various social service agencies that support the criminal justice system. It is interdisciplinary in nature and provides the student with a broad knowledge of the conceptual occupational issues and concerns existent within the criminal justice system. The program also provides criminal justice practitioners with the opportunity for continued education and academic growth and development.

+ PROGRAM NOTE: Students who have completed an Arizona POST certified academy may be waived from the following courses: AJS101, AJS109, AJS260, AJS270, and AJS275 through the credit by evaluation process. Students without prior experiences in the field of law enforcement should consult with the program director.

I. GENERAL EDUCATION REQUIREMENTS (25 CREDITS)

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credits</th>
<th>Grade</th>
<th>Semester</th>
<th>Comments</th>
<th>Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>First-Year Composition*</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First-Year Composition*</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral Communication*</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Critical Reading*</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics*</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Natural Science*</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AJS123 Ethics and the Administration of Justice (HU)</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AJS200 Current Issues in Criminal Justice (SB)</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

II. REQUIRED COURSES (30 CREDITS)

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credits</th>
<th>Semester</th>
<th>Comments</th>
<th>Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>AJS101 Introduction to Criminal Justice</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AJS109 Substantive Criminal Law</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AJS113 Criminal Justice Crime Control Policies and Practices</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AJS212 Juvenile Justice Procedures</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AJS225 Criminology</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AJS230 The Police Function</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AJS240 The Correction Function</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AJS260 Procedural Criminal Law</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AJS270 Community Relations</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AJS275 Criminal Investigations I</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

III. RESTRICTED ELECTIVES (6 CREDITS) STUDENTS SHOULD SELECT FROM THE FOLLOWING COURSES WITH PERMISSION OF PROGRAM DIRECTOR

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credits</th>
<th>Semester</th>
<th>Comments</th>
<th>Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>AJS201, AJS/EMT/FSC/SWU258, AJS213, AJS215, AJS216, AJS241, AJS242, AJS269AC, AJS290BN, or Any AJS prefixed course with permission of Program Director</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

All program and course requirements are subject to change. It is strongly recommended that students select courses in consultation with an academic or occupational advisor to ensure proper course selection. A current list of all EMCC programs is available at estrellamountain.edu/academics/programs.

*Courses must meet AAS General Education Requirements (refer to the AAS Requirements under the General Education section)
Certificate & Degree Programs

Administration of Justice - Certificate of Completion (5137)

Description: The Certificate of Completion (CCL) in Administration of Justice program is designed to prepare men and women for careers within the criminal justice system, including, but not limited to: law enforcement, the courts, probation and parole, corrections, and the various social service agencies that support the criminal justice system. It is interdisciplinary in nature and provides the student with a broad knowledge of the conceptual occupational issues and concerns existent within the criminal justice system. The program also provides criminal justice practitioners with the opportunity for continued education and academic growth and development.

+ PROGRAM NOTE: Students who have completed an Arizona POST certified academy may be waived from the following courses: AJS101, AJS109, AJS260, AJS270, and AJS275 through the credit by evaluation process. Students without prior experiences in the field of law enforcement should consult with the program director.

I. REQUIRED COURSES (30 CREDITS)

<table>
<thead>
<tr>
<th>Must earn “C” or higher in all courses within the program</th>
<th>CREDITS</th>
<th>GRADE</th>
<th>SEMESTER</th>
<th>COMMENTS</th>
<th>ADVISOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>AJS101 Introduction to Criminal Justice</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AJS109 Substantive Criminal Law</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AJS113 Criminal Justice Crime Control Policies and Practices</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AJS212 Juvenile Justice Procedures</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AJS225 Criminology</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AJS230 The Police Function</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AJS240 The Correction Function</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AJS260 Procedural Criminal Law</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AJS270 Community Relations</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AJS275 Criminal Investigations I</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

All program and course requirements are subject to change. It is strongly recommended that students select courses in consultation with an academic or occupational advisor to ensure proper course selection. A current list of all EMCC programs is available at estrellamountain.edu/academics/programs.

*Courses must meet AAS General Education Requirements (refer to the AAS Requirements under the General Education section)
Certificate & Degree Programs

Baking and Pastry - Certificate of Completion (5649)

Description: The Certificate of Completion (CCL) in Baking and Pastry is designed to train students who wish to become professional pastry chefs. A formal restaurant and kitchen lab operated by the culinary program will provide practical work experience in the areas of dessert preparation. Instruction will be given in the areas of baking, advanced pastry, wedding cakes, baking theory, food sanitation, and business applications related to commercial baking.

**Program Prerequisites:** ENG091, RDG091, MAT090, MAT091, MAT092, MAT093; or appropriate placement test scores or satisfactory completion of a higher level course.

I. REQUIRED COURSES (21 CREDITS)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Grade</th>
<th>Semester</th>
<th>Comments</th>
<th>Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>CUL109/HRM102 Menu Planning and Development</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CUL113 Commercial Baking Techniques</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CUL119 Baking Theory and Retail Operations, or CUL223 Food Service Management</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CUL127 Commercial Baking: Classical Desserts</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CUL137 Specialty Breads and Breakfast Pastry</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CUL217 Commercial Wedding Cake Production</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CUL219 Professional Pastry Techniques</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FON104 Certification in Food Service Safety and Sanitation</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Banking and Finance - Certificate of Completion (5627)

Description: To meet the changing image and many challenges of the world of finance, the role of the modern banker today demands specialized knowledge and flexible job performances. The Certificate in Banking and Finance career program has been developed to prepare qualified men and women for entry or advancement in the banking profession. An Associate in Applied Science (AAS) degree is also available.

<table>
<thead>
<tr>
<th>I. Required Courses (33-36 Credits)</th>
<th>Credits</th>
<th>Grade</th>
<th>Semester</th>
<th>Comments</th>
<th>Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Must earn &quot;C&quot; or higher in all courses within the program</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACC111 Accounting Principles I, and ACC112 Accounting Principles II, and ACC212 Managerial Accounting</td>
<td>6-9</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Or ACC111 Accounting Principles I, and ACC230 Uses of Accounting Information I, and ACC240 Uses of Accounting Information II</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Or ACC211 Financial Accounting, and ACC212 Managerial Accounting</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS105 Survey of Computer Information Systems</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GBS103 Principles of Banking</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GBS131 Business Calculations</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GBS151 Introduction to Business</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GBS205 Legal, Ethical, and Regulatory Issues in Business</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GBS206 Business Law (UCC)</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GBS233 Business Communication</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GBS261 Investments I</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GBS294 Consumer Credit</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Program Prerequisites: ENG101 or Equivalent Course

All program and course requirements are subject to change. It is strongly recommended that students select courses in consultation with an academic or occupational advisor to ensure proper course selection. A current list of all EMCC programs is available at estrellamountain.edu/academics/programs.

*Courses must meet AAS General Education Requirements (refer to the AAS Requirements under the General Education section)
Certificate & Degree Programs

Basic Culinary Studies - Certificate of Completion (5155)

Description: The Certificate of Completion (CCL) in Basic Culinary Studies program is designed to introduce students who wish to become professional chefs and cooks to the fundamentals of culinary studies. A formal dining room is operated by the program and provides practical work experience for students. Instruction includes commercial food production concepts including catering, baking and sanitation.

Admission Criteria: Students must obtain Maricopa County Food Handlers Card before start of required courses, and must maintain card throughout the program. Students with transfer credits should contact the Culinary Studies department. Student must meet with one stop student specialist for culinary studies.

+ Program Prerequisites: ENG091, and RDG091, and MAT090, or MAT091, or MAT092 or MAT093; or appropriate placement test scores or satisfactory completion of a higher level course

<table>
<thead>
<tr>
<th>I. Required Courses (16 Credits)</th>
<th>Credits</th>
<th>Grade</th>
<th>Semester</th>
<th>Comments</th>
<th>Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>CUL105 Principles and Skills for Professional Cooking</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CUL107 Principles and Techniques of Garde Manager</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CUL111 Purchasing for Food Service Systems</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CUL113 Commercial Baking Techniques</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CUL205 American Regional Cuisine</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FON104 Certification in Food Service Safety and Sanitation</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Child Development Associate (CDA) Preparation - Certificate of Completion (5710)

Description: The Certificate of Completion (CCL) in Child Development Associate (CDA) Preparation program is designed to provide documented training in preparation for application to become a Child Development Associate. This program is intended for individuals interested in early childhood education who intend to pursue the national credential of CDA from the Council for Professional Recognition. Students completing the described CCL coursework must apply independently to the Council for final evaluation and validation.

I. Required Courses (16 Credits)

<table>
<thead>
<tr>
<th>Must earn “C” or higher in all courses within the program</th>
<th>Credits</th>
<th>Grade</th>
<th>Semester</th>
<th>Comments</th>
<th>Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>CFS/ECH176 Child Development, or CFS235 Developing Child: Theory into Practice, Prenatal-Age 8</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EED200 Foundations of Early Childhood Education</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EED212 Guidance, Management and the Environment</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EED215 Early Learning: Health, Safety, Nutrition and Fitness</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EED220 Child, Family, Community and Culture, or CFS157 Marriage and Family Life</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EED260 Early Childhood Infant/Toddler Internship, or EED261 Early Childhood Preschool Internship</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

All program and course requirements are subject to change. It is strongly recommended that students select courses in consultation with an academic or occupational advisor to ensure proper course selection. A current list of all EMCC programs is available at estrellamountain.edu/academics/programs.

*Courses must meet AAS General Education Requirements (refer to the AAS Requirements under the General Education section)
Certificate & Degree Programs

Computer Applications Technology - Associate in Applied Science (3547)

Description: The Associate in Applied Science (AAS) Computer Applications Technology Program includes courses in the following microcomputer areas: general usage and applications, operating systems, word processing, database, spreadsheets, and desktop publishing. Other skills which are integrated with the microcomputer training are accounting, English, and math. Many of the courses are offered in a self-paced format to enable students to enter and complete the program in a timely and flexible manner. Students take the courses for personal development of microcomputer skills and to prepare for or enhance employment. This degree program is designed to prepare students for entry-level occupations in the rapidly expanding field of computer information systems. Upon completion of the program students should be able to operate a microcomputer and use a variety of software in a professional manner.

<table>
<thead>
<tr>
<th>I. General Education Requirements (25 Credits)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Must earn “C” or higher in all courses within the program</td>
<td>Credits</td>
</tr>
<tr>
<td>ENG101</td>
<td>3</td>
</tr>
<tr>
<td>ENG111 (ENG102 acceptable if ENG111 is not available)</td>
<td>3</td>
</tr>
<tr>
<td>COM100 or COM110 or COM225 or COM230</td>
<td>3</td>
</tr>
<tr>
<td>Critical Reading*</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics*</td>
<td>3</td>
</tr>
<tr>
<td>Natural Science*</td>
<td>4</td>
</tr>
<tr>
<td>Humanities/Fine Arts*</td>
<td>3</td>
</tr>
<tr>
<td>ECN212 Microeconomic Principles</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>II. Required Courses (30 Credits)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS120++ Courses cannot be used to satisfy both “Required Courses” and Restricted Electives” areas.</td>
<td></td>
</tr>
<tr>
<td>CIS114++ Excel (any module)</td>
<td>3</td>
</tr>
<tr>
<td>BPC117++ Database Management: Oracle (any module), or CIS117++ Database Management: Microsoft Access (any module)</td>
<td>3</td>
</tr>
<tr>
<td>CIS118++ Desktop Presentation: PowerPoint (any module)</td>
<td>3</td>
</tr>
<tr>
<td>CIS120++ Computer Graphics (any module)</td>
<td>3</td>
</tr>
<tr>
<td>CIS121AE Windows Operating System: Level I</td>
<td>1</td>
</tr>
<tr>
<td>CIS133AA Internet/Web Development Level I-A, and CIS133BA Internet/Web Development Level I-B, and CIS133CA Internet/Web Development Level I-C, or CIS133DA Internet/Web Development Level I</td>
<td>3</td>
</tr>
<tr>
<td>BPC/OAS135++ Word Processing Software (any module)</td>
<td>2</td>
</tr>
<tr>
<td>BPC138++ Desktop Publishing (any module)</td>
<td>3</td>
</tr>
<tr>
<td>CIS105 Survey of Computer Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>CIS190 Introduction to Local Area Networks</td>
<td>3</td>
</tr>
<tr>
<td>OAS120 Financial Record Keeping</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>III. Restricted Electives (9 Credits)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Students should select from the following courses in consultation with a department advisor.</td>
<td></td>
</tr>
<tr>
<td>CIS120DB, CIS120DC, CIS120DF, BPC170, CIS/MMT140, CIS150, CIS159, CIS233DA, OAS101AA or OAS102, TQM/CSM101, CIS250</td>
<td></td>
</tr>
</tbody>
</table>

All program and course requirements are subject to change. It is strongly recommended that students select courses in consultation with an academic or occupational advisor to ensure proper course selection. A current list of all EMCC programs is available at estrellamountain.edu/academics/programs.

*Courses must meet AAS General Education Requirements (refer to the AAS Requirements under the General Education section)
Certificate & Degree Programs

Computer Applications Technology - Certificate of Completion (5214)

Description: This certificate program consists of 26 credits including courses in the following microcomputer areas: general usage and applications, operating systems, word processing, database, spreadsheets, and desktop publishing. With proper choices, a student who completes the certificate may apply all those courses toward the Associate in Applied Science (AAS) Degree program. Many of the courses are offered in a self-paced format to enable students to enter and complete the program in a timely and flexible manner. Students take the courses for personal development of microcomputer skills and to prepare for or enhance employment. Upon completion of the program, students should be able to operate a microcomputer and operate a variety of software in a professional manner.

<table>
<thead>
<tr>
<th>I. REQUIRED COURSES (20 CREDITS)</th>
<th>CREDITS</th>
<th>GRADE</th>
<th>SEMESTER</th>
<th>COMMENTS</th>
<th>ADVISOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Must earn “C” or higher in all courses within the program</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS114++ Excel (any module)</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BPC117++ Database Management: Oracle (any module), or CIS117++ Database Management: Microsoft Access (any module)</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS133AA Internet/Web Development Level I-A, and CIS133BA Internet/Web Development Level I-B, and CIS133CA Internet/Web Development Level I-C, or CIS133DA Internet/Web Development Level I</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BPC/OAS135++ Word Processing Software (any module)</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BPC138++ Desktop Publishing (any module)</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS105 Survey of Computer Information Systems</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OAS120 Financial Record Keeping</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

II. RESTRICTED ELECTIVES (6 CREDITS) Students should select from the following courses in consultation with a department advisor.

| CIS118++ (any Module), CIS120DB, CIS120DC, CIS120DF, BPC170, CIS/MMT140, CIS150, CIS190, CIS233DA, OAS101AA or OAS102, TQM101 | | | | | |

All program and course requirements are subject to change. It is strongly recommended that students select courses in consultation with an academic or occupational advisor to ensure proper course selection. A current list of all EMCC programs is available at estrellamountain.edu/academics/programs.

*Courses must meet AAS General Education Requirements (refer to the AAS Requirements under the General Education section)
## Computer Hardware and Desktop Support - Certificate of Completion (5026)

**Description:** The Certificate of Completion (CCL) in Computer Hardware and Desktop Support program is designed to provide training to work in an entry-level computer maintenance and help-desk position. Students will be provided the opportunity to apply technical concepts, fundamentals, and interpersonal skills in a help-desk environment.

### Program Prerequisites: None

#### I. Required Courses (19-22 Credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Grade</th>
<th>Semester</th>
<th>Comments</th>
<th>Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>BPC110 Computer Usage and Applications, or CIS105 Survey of Computer Information Systems</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS121AH Microsoft PowerShell/Command Line Operations, or CIS126DL Linux Operating System</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BPC170 Computer Maintenance: A+ Exam Prep Level I</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BPC270 Computer Maintenance: A+ Exam Prep Level II</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS102DA Customer User Support, or CIS102 Interpersonal and Customer Service Skills for IT Professionals</td>
<td>1-3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS190 Introduction to Local Area Networks, or CNT140AA Introduction to Networks, or MST140 Microsoft Networking Essentials</td>
<td>3-4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MST150++ Microsoft Windows (any suffixed course)</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### II. Restricted Electives (1-3 Credits)

Students should select from the following courses in consultation with a department advisor.

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Grade</th>
<th>Semester</th>
<th>Comments</th>
<th>Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>BPC171 Recycling Used Computer Technology</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS290AA Computer Information Systems Internship</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS290AB Computer Information Systems Internship</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS290AC Computer Information Systems Internship</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MST141 Enterprise Desktop Support Technician</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Culinary Studies - Associate in Applied Science (3151)

**Description:** The Associate in Applied Science (AAS) in Culinary Studies degree is designed to train students who wish to become professional chefs and cooks. A formal dining room is operated by the program and provides practical work experience for students. Instruction includes principles of professional cooking and baking, volume food production, food sanitation and safety, purchasing, customer service, and menu planning.

**Note:** Courses must meet AAS General Education Requirements (refer to the AAS Requirements under the General Education section)

**Certificate & Degree Programs**

**Culinary Studies - Associate in Applied Science (3151)**

**Description:** The Associate in Applied Science (AAS) in Culinary Studies degree is designed to train students who wish to become professional chefs and cooks. A formal dining room is operated by the program and provides practical work experience for students. Instruction includes principles of professional cooking and baking, volume food production, food sanitation and safety, purchasing, customer service, and menu planning.

**+ Program Note:** Students must obtain a Maricopa County Food Handlers Card before the start of required courses, and must maintain the card throughout the program.

**+ Admission Criteria:** Student must meet with One Stop Student Specialist for Culinary Studies

**+ Program Prerequisites:** Program Prerequisites: ENG091, and RDG091, and MAT090, or MAT091, or MAT092 or MAT093; or appropriate placement test scores or satisfactory completion of a higher level course

---

**I. General Education Requirements (21-25 Credits)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Grade</th>
<th>Semester</th>
<th>Comments</th>
<th>Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG101 or ENG107</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG102 or ENG108</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral Communication*</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRE101 or equivalent by assessment</td>
<td>0-3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics*</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Natural Science*</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities/Fine Arts*</td>
<td>2-3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECN211 or PSY101 or SOC101</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**II. Required Courses (35 Credits)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CUL105 Principles and Skills for Professional Cooking</td>
<td>3</td>
</tr>
<tr>
<td>CUL107 Principles and Techniques of Garde Manager</td>
<td>3</td>
</tr>
<tr>
<td>CUL109/HRM102 Menu Planning and Development</td>
<td>2</td>
</tr>
<tr>
<td>CUL111 Purchasing for Food Service Systems</td>
<td>3</td>
</tr>
<tr>
<td>CUL113 Commercial Baking Techniques</td>
<td>3</td>
</tr>
<tr>
<td>CUL123AB Customer Service Practicum</td>
<td>2</td>
</tr>
<tr>
<td>CUL127 Commercial Baking: Classical Desserts</td>
<td>3</td>
</tr>
<tr>
<td>CUL201 International Cuisines</td>
<td>3</td>
</tr>
<tr>
<td>CUL203 American Regional Cuisine</td>
<td>3</td>
</tr>
<tr>
<td>CUL205 French Cuisine</td>
<td>3</td>
</tr>
<tr>
<td>CUL213 Buffet Catering</td>
<td>3</td>
</tr>
<tr>
<td>CUL223 Food Service Management</td>
<td>3</td>
</tr>
<tr>
<td>FON104 Certification in Food Service Safety and Sanitation</td>
<td>1</td>
</tr>
</tbody>
</table>

**III. Restricted Electives (6 Credits)**

Students should select from the following courses in consultation with a department advisor:

CUL101, CUL102, CUL103, CUL104, CUL119, CUL137, CUL217, CUL219, CUL231AA-AC, FON+++++, SPA+++++, FRE++++++
Certificate & Degree Programs

Culinary Studies - Certificate of Completion (5151)

Description: The Certificate of Completion (CCL) in Culinary Studies program is designed to train students who wish to become professional chefs and cooks. A formal dining room is operated by the program and provides practical work experience for students. Instruction includes principles of professional cooking and baking, volume food production, food sanitation and safety, purchasing, customer service, and menu planning.

+ Program Note: Students must obtain a Maricopa County Food Handlers Card before the start of required courses, and must maintain the card throughout the program. Students with transfer credit should contact the culinary studies department.

+ Program Prerequisites: ENG091, and RDG091, and MAT090, or MAT091, or MAT092 or MAT093; or appropriate placement test scores or satisfactory completion of a higher level course.

I. Required Courses (35 Credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Grade</th>
<th>Semester</th>
<th>Comments</th>
<th>Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>CUL105 Principles and Skills for Professional Cooking</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CUL107 Principles and Techniques of Garde Manager</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CUL109/HRM102 Menu Planning and Development</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CUL111 Purchasing for Food Service Systems</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CUL113 Commercial Baking Techniques</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CUL123AB Customer Service Practicum</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CUL127 Commercial Baking: Classical Desserts</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CUL201 International Cuisines</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CUL203 American Regional Cuisine</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CUL205 French Cuisine</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CUL213 Buffet Catering</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CUL223 Food Service Management</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FON104 Certification in Food Service Safety and Sanitation</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

II. Restricted Electives (6 Credits)

Students should select from the following courses in consultation with a department advisor:

<table>
<thead>
<tr>
<th>Course Codes</th>
<th>Code</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CUL101, CUL102, CUL103, CUL104, CUL119, CUL137, CUL217, CUL219, CUL231AA-AC, FON+++++, SPA+++++, FRE+++++</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Customer Service Management - Certificate of Completion (5849N)

Description: This program prepares students to be competitive in today’s domestic and global economies. It provides the student quality management theories and skills to better serve both internal and external customers. Emphasis is on practical application of skills and knowledge.

I. Required Courses (9 Credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Grade</th>
<th>Semester</th>
<th>Comments</th>
<th>Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSM101/TQM101 Quality Customer Service</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSM202 Principles of Process Improvement</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSM203 Teamwork Dynamics</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

All program and course requirements are subject to change. It is strongly recommended that students select courses in consultation with an academic or occupational advisor to ensure proper course selection. A current list of all EMCC programs is available at estrellamountain.edu/academics/programs.

*Courses must meet AAS General Education Requirements (refer to the AAS Requirements under the General Education section)
Certificate & Degree Programs

Desktop Publishing - Certificate of Completion (5066)

**Description:** The Certificate of Completion (CCL) in Desktop Publishing program is designed to prepare students to work with and design professional publications. The courses focus on training the student in desktop design, and graphics design.

<table>
<thead>
<tr>
<th>I. REQUIRED COURSES (17 CREDITS)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Must earn “C” or higher in all courses within the program</strong></td>
</tr>
<tr>
<td>CIS105 Survey of Computer Information Systems</td>
</tr>
<tr>
<td>CIS120DB Computer Graphics: Adobe Illustrator</td>
</tr>
<tr>
<td>CIS120DF Adobe Photoshop Level I: Digital Imaging</td>
</tr>
<tr>
<td>BPC138DA Desktop Design and Publishing Using Adobe InDesign</td>
</tr>
<tr>
<td>CIS108 Electronic Portfolio Development</td>
</tr>
<tr>
<td>SBS217 Starting/Managing a Home Business</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>II. RESTRICTED ELECTIVES (3 CREDITS) STUDENTS SHOULD SELECT FROM THE FOLLOWING COURSES IN CONSULTATION WITH A DEPARTMENT ADVISOR.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG111 Technical and Professional Writing, or BPC118DB Desktop Presentation: PowerPoint</td>
</tr>
</tbody>
</table>

Driver Operator - Certificate of Completion (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.

**ADMISSION CRITERIA:** ACCEPTANCE INTO THE PROGRAM AND PERMISSION OF PROGRAM DIRECTOR IS REQUIRED.

<table>
<thead>
<tr>
<th>I. REQUIRED COURSES (8 CREDITS)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Must earn “C” or higher in all courses within the program</strong></td>
</tr>
<tr>
<td>FSC111 Emergency Vehicle Operator</td>
</tr>
<tr>
<td>FSC117 Fire Apparatus</td>
</tr>
<tr>
<td>FSC118 Fire Hydraulics</td>
</tr>
</tbody>
</table>

All program and course requirements are subject to change. It is strongly recommended that students select courses in consultation with an academic or occupational advisor to ensure proper course selection. A current list of all EMCC programs is available at estrellamountain.edu/academics/programs.

*Courses must meet AAS General Education Requirements (refer to the AAS Requirements under the General Education section)*

[102]  
[Estrella Mountain Community College | 2016-2017 Catalog]
Certificate & Degree Programs

Early Childhood Education - Associate in Applied Science (3007)

Description: The Associate in Applied Science (AAS) in Early Childhood Education program is designed to prepare individuals to work within the field of early childhood education (ECE), focusing on programs serving children birth through 8 years of age. The courses are based on current ECE theory and practice, are offered in a variety of formats, and are scheduled to accommodate those who are already working in the ECE field.

I. General Education Requirements (22-27 Credits)

<table>
<thead>
<tr>
<th>Must earn “C” or higher in all courses within the program</th>
<th>Credits</th>
<th>Grade</th>
<th>Semester</th>
<th>Comments</th>
<th>Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG102 or ENG107</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG102 or ENG108</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral Communication*</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRE101 or equivalent by assessment</td>
<td>0-3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAT112 Mathematical Concepts and Applications, or</td>
<td>3-5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfactory completion of a higher level mathematics course</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Natural Sciences* (FON241 and FON241LL are recommended)</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities/Fine Arts*</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CFS157 Marriage and Family Life</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

II. Required Courses (41 Credits)

| CFS/ECH176 Child Development, or                         | 3       |       |          |          |         |
| CFS235 Developing Child: Theory into Practice, Prenatal-Age 8 |          |       |          |          |         |
| EED111 Multimedia and the Early Childhood Education      | 3       |       |          |          |         |
| EED200 Foundations of Early Childhood Education          | 3       |       |          |          |         |
| EED210 Creative and Cognitive Play                       | 3       |       |          |          |         |
| EED211 Language Acquisition in the Young Child          | 3       |       |          |          |         |
| EED212 Guidance, Management and the Environment         | 3       |       |          |          |         |
| EED215 Early Learning: Health, Safety, Nutrition and Fitness | 3     |       |          |          |         |
| EED220 Child, Family, Community and Culture             | 3       |       |          |          |         |
| EED222 Introduction to the Exceptional Young Child: Birth to Age Eight | 3 |       |          |          |         |
| EED250 Early Literacy Development                        | 3       |       |          |          |         |
| EED255 Portfolio Development and Writing for the Profession | 3    |       |          |          |         |
| EED260 Early Childhood Infant/Toddler Internship, or     | 2       |       |          |          |         |
| EED261 Early Childhood Preschool Internship             |          |       |          |          |         |
| (2 semesters of internship are required)                |          |       |          |          |         |
| EED278 Early Learning: Curriculum and Instruction-       | 3       |       |          |          |         |
| Birth/Preschool                                         |          |       |          |          |         |
| EED280 Standards, Observation and Assessment of          | 3       |       |          |          |         |
| Typical/Atypical Behaviors of Young Children Birth to Age Eight |          |       |          |          |         |

All program and course requirements are subject to change. It is strongly recommended that students select courses in consultation with an academic or occupational advisor to ensure proper course selection. A current list of all EMCC programs is available at estrellamountain.edu/academics/programs.

*Courses must meet AAS General Education Requirements (refer to the AAS Requirements under the General Education section)
I. Required Courses (41 Credits)

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credits</th>
<th>Grade</th>
<th>Semester</th>
<th>Comments</th>
<th>Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Must earn “C” or higher in all courses within the program</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CFS/ECH176 Child Development, or CFS235 Developing Child: Theory into Practice, Prenatal-Age 8</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EED111 Multimedia and the Early Childhood Education</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EED200 Foundations of Early Childhood Education</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EED210 Creative and Cognitive Play</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EED211 Language Acquisition in the Young Child</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EED212 Guidance, Management and the Environment</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EED215 Early Learning: Health, Safety, Nutrition and Fitness</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EED220 Child, Family, Community and Culture</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EED222 Introduction to the Exceptional Young Child: Birth to Age Eight</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EED250 Early Literacy Development</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EED255 Portfolio Development and Writing for the Profession</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EED260 Early Childhood Infant/Toddler Internship, or EED261 Early Childhood Preschool Internship</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2 semesters of internship are required)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EED278 Early Learning: Curriculum and Instruction-Birth/Preschool</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EED280 Standards, Observation and Assessment of Typical/Atypical Behaviors of Young Children Birth to Age Eight</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Certificate & Degree Programs

Emergency Response and Operations - Associate in Applied Science (3112)

Description: The Associate in Applied Science (AAS) in Emergency Response and Operations program provides students with a curriculum specific to the student’s individual needs in addition to the knowledge and skills needed in today’s changing public safety workplace. The program develops education, skills, and techniques for planning, responding, and mitigating various emergency situations within the student’s specific discipline with emphasis on effective response and operations. The curriculum combines coursework in public safety emergency services with a general education component. Additional Certificates of Completion (CCL) are available.

I. General Education Requirements (22-25 Credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Grade</th>
<th>Semester</th>
<th>Comments</th>
<th>Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>First-Year Composition*</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First-Year Composition*</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral Communication* (COM230 recommend for Track II students)</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRE101 or CRE111 or equivalent by assessment</td>
<td>0-3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics*</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Natural Science* (Track II must take BIO160)</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities/Fine Arts*</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social/Behavior Science* (AJS/EMT/FSC/SWU258 recommended for Track II students)</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

II. Required Courses (18-58.5 Credits)

Please choose a track from below to complete the required courses.

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Grade</th>
<th>Semester</th>
<th>Comments</th>
<th>Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMT101 Cardiopulmonary Resuscitation/Basic Cardiac Life Support, or Current validation in Basic Life Support (BLS) Health Care Provider/Professional Rescuer, or Permission of Program Director</td>
<td>0-.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

III. Restricted Electives (0-20 Credits)

Students must select from the following courses in consultation with a department advisor.

- Any AJS+++++, DPR+++++, EMT+++++, FSC+++++, LET+++++ courses.

All program and course requirements are subject to change. It is strongly recommended that students select courses in consultation with an academic or occupational advisor to ensure proper course selection. A current list of all EMCC programs is available at estrellamountain.edu/academics/programs.

*Courses must meet AAS General Education Requirements (refer to the AAS Requirements under the General Education section)
### Certificate & Degree Programs

#### Emergency Response and Operations - Associate in Applied Science (3112) continued

<table>
<thead>
<tr>
<th>Required Courses: Students Must Select One of the Following Four Tracks</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Track I: Fire Operations (18-27.5 Credits Required)</strong></td>
</tr>
</tbody>
</table>
| EMT/FSC104 Emergency Medical Technology, and  
EMT/FSC104AB Applied Practical Studies for Emergency Medical Technology, or  
Arizona State EMT Certification, or  
Arizona State Paramedic Certification, or  
Permission of Program Director | 0-9.5 |
| FSC102 Fire Department Operations | 11 |
| FSC105 Hazardous Materials/First Responder | 3 |
| FSC130 Fitness for Firefighters/CPAT, or  
Verification of CPAT completion, or  
Permission of Program Director | 1 |
| FSC134 Fitness and Conditioning for Firefighters | 3 |

**Track II: Paramedicine (43.5-58 Credits Required)**

| EMT/FSC104 Emergency Medical Technology, and  
EMT/FSC104AB Applied Practical Studies for Emergency Medical Technology, or  
Arizona State EMT Certification, or  
Arizona State Paramedic Certification, or  
Permission of Program Director | 0-9.5 |
| EMT235 Basic ECG Rhythm Analysis and Interpretation in the Emergency Setting | 3 |
| EMT236 Pharmacology in an Emergency Setting | 3 |
| EMT240 Advanced Cardiac Life Support (ACLS) | 2 |
| EMT242 Pediatric Advanced Life Support (PALS), or  
EMT265 Pediatric Education for Prehospital Providers: Advanced | 1 |
| EMT245 Trauma Management I, or  
EMT246 Trauma Management II | 2-4 |
| EMT272AA Advanced Emergency Medical Technology, and  
EMT272AB Advanced Emergency Medical Technology | 25 |
| EMT272LL Advanced Emergency Medical Technology Practicum, or  
EMT272LA Advanced Emergency Medical Technology Practicum Part I, and  
EMT272LB Advanced Emergency Medical Technology Practicum Part II | 7.5 |
| EMT296WC Cooperative Education, or  
HCC145 Medical Terminology for Health Care Workers, or  
HCC145AA Medical Terminology for Health Care Workers I,  
HCC145AB Medical Terminology for Health Care Workers II, and  
HCC145AC Medical Terminology for Health Care Workers III, or  
Permission of Program Director | 0-3 |

**Track III: Emergency Management (18 Credits Required)**

| AJS/DPR/FSC139 Emergency Response to Terrorism | 3 |
| AJS/DPR/FSC146 Disaster Recovery Operations | 3 |
| AJS/DPR/FSC147 Emergency Preparedness | 3 |
| AJS/DPR/FSC148 Fundamentals of Emergency Management | 3 |
| AJS/DPR/FSC149 Hazard Mitigation | 3 |
| FSC224 Incident Command Systems | 3 |

All program and course requirements are subject to change. It is strongly recommended that students select courses in consultation with an academic or occupational advisor to ensure proper course selection. A current list of all EMCC programs is available at estrellamountain.edu/academics/programs.

*Courses must meet AAS General Education Requirements (refer to the AAS Requirements under the General Education section)*
Emergency Response and Operations - Associate in Applied Science (3112) continued

**TRACK IV: FIRE SCIENCE (24 CREDITS REQUIRED)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AJS/DPR/FSC147 Emergency Preparedness, or AJS/DPR/FSC148 Fundamentals of Emergency Management</td>
<td>3</td>
</tr>
<tr>
<td>FSC105 Hazardous Materials/First Responder</td>
<td>3</td>
</tr>
<tr>
<td>FSC108 Fundamentals of Fire Prevention</td>
<td>3</td>
</tr>
<tr>
<td>FSC113 Introduction to Fire Suppression</td>
<td>3</td>
</tr>
<tr>
<td>FSC117 Fire Apparatus</td>
<td>3</td>
</tr>
<tr>
<td>FSC119 Introduction Fire Service Ethics</td>
<td>3</td>
</tr>
<tr>
<td>FSC208 Firefighter Safety and Building Construction</td>
<td>3</td>
</tr>
<tr>
<td>FSC215 Customer Service in the Public Sector</td>
<td>3</td>
</tr>
</tbody>
</table>

**TRACK V: FIRE INVESTIGATION (24-27 CREDITS REQUIRED)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSC113 Introduction to Fire Suppression, or Permission of Program Director</td>
<td>0-3</td>
</tr>
<tr>
<td>FSC105 Hazardous Materials/First Responder</td>
<td>3</td>
</tr>
<tr>
<td>FSC108 Fundamentals of Fire Prevention</td>
<td>3</td>
</tr>
<tr>
<td>FSC119 Introduction Fire Service Ethics</td>
<td>3</td>
</tr>
<tr>
<td>FSC208 Firefighter Safety and Building Construction</td>
<td>3</td>
</tr>
<tr>
<td>FSC209 Fire Investigation I</td>
<td>3</td>
</tr>
<tr>
<td>FSC210 Fire Investigation II</td>
<td>3</td>
</tr>
<tr>
<td>FSC211 Fire Investigation III</td>
<td>3</td>
</tr>
<tr>
<td>FSC212 Fire Investigation IV</td>
<td>3</td>
</tr>
</tbody>
</table>

Engineering Technology - Associate in Applied Science (3228)

**Description:** The Associate in Applied Science (AAS) in Engineering Technology program is designed to provide skills required of entry-level engineering technicians. Students are provided with the fundamentals of physics, engineering, computer hardware, programming, engineering design fundamentals, and computer software program usage. A solid foundation in mathematics, science, communication skills, humanities, and social sciences provides a well-rounded curriculum.

**PROGRAM PREREQUISITES:** MAT120, or MAT121, or MAT122, or EQUIVALENT, and MAT187, or MAT150, or MAT151, or MAT152 AND MAT182, or EQUIVALENT, and CHM130 AND CHM130LL, or CHM130AA, or ONE YEAR OF HIGH SCHOOL CHEMISTRY WITH A GRADE OF C OR BETTER

**I. GENERAL EDUCATION REQUIREMENTS (15-18 CREDITS)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Grade</th>
<th>Semester</th>
<th>Comments</th>
<th>Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG101 or ENG107</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG102 or ENG108</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral Communication*</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRE101 or CRE111 or equivalent</td>
<td>0-3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics met by any course in Required Courses</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Natural Sciences met by PHY115 or PHY121 in Required Courses</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities/Fine Arts*</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social and Behavioral Sciences*</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**II. REQUIRED COURSES (32-38 CREDITS)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE102 Engineering Analysis Tools and Techniques, or ECE102AA Engineering Analysis Tools and Techniques</td>
<td>2</td>
</tr>
<tr>
<td>ECE103 Engineering Problem Solving and Design, or ECE103AB Engineering Problem Solving and Design</td>
<td>2</td>
</tr>
</tbody>
</table>

All program and course requirements are subject to change. It is strongly recommended that students select courses in consultation with an academic or occupational advisor to ensure proper course selection. A current list of all EMCC programs is available at estrellamountain.edu/academics/programs.

*Courses must meet AAS General Education Requirements (refer to the AAS Requirements under the General Education section)*
Certificate & Degree Programs

Engineering Technology - Associate in Applied Science (3228)

continued

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAT220</td>
<td>Calculus with Analytic Geometry I, or MAT221 Calculus with Analytic Geometry I,</td>
<td>4-5</td>
</tr>
<tr>
<td>MAT230</td>
<td>Calculus with Analytic Geometry II, or MAT231 Calculus with Analytic Geometry II</td>
<td>4-5</td>
</tr>
<tr>
<td>MAT240</td>
<td>Calculus with Analytic Geometry III, or MAT241 Calculus with Analytic Geometry III</td>
<td>4-5</td>
</tr>
<tr>
<td>MAT276</td>
<td>Modern Differential Equations, or MAT277 Modern Differential Equations</td>
<td>3-4</td>
</tr>
<tr>
<td>EEE202</td>
<td>Circuits and Devices</td>
<td>5</td>
</tr>
<tr>
<td>PHY115</td>
<td>University Physics I, or PHY121 University Physics I: Mechanics</td>
<td>4-5</td>
</tr>
<tr>
<td>PHY116</td>
<td>University Physics II, or PHY131 University Physics II: Electricity and Magnetism</td>
<td>4-5</td>
</tr>
</tbody>
</table>

III. Restricted Electives (16-20 Credits) Students should select from the following courses in consultation with a department advisor

- BIO181, BIO182: CHM150 OR CHM151 AND CHM151LL; CHM150AA OR CHM151AA; CHM152 AND CHM152LL, OR CHM152AA; CHM230 AND CHM230LL, OR CHM235 AND CHM235LL; CHM236 OR CHM238; CSC100, OR CSC100AA, OR CSC100AB, OR CSC110, OR CSC110AB; CSC205 OR CSC205AB; CSC/EEE120, OR ECE216 AND ECE216LL; ECE105; ECE111; ECE211; ECE212; ECE214; ECE215; CSC/EEE220; CSC/EEE220; GLG101; MAT225; MAT227; PHY241

Evidence Technology - Certificate of Completion (5655)

**Description:** The Certificate of Completion (CCL) in Evidence Technology prepares students for careers as police or civilian crime scene technicians. The program provides comprehensive instruction in crime scene photography, fingerprint classification and processing, crime scene investigation and search techniques, collection, packaging, and processing of evidence, chemical processing of evidence, and related skills such as, proper courtroom demeanor.

I. Required Courses (19 Credits)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AJS201</td>
<td>Rules of Evidence</td>
<td>3</td>
</tr>
<tr>
<td>AJS275</td>
<td>Criminal Investigation I</td>
<td>3</td>
</tr>
<tr>
<td>AJS213</td>
<td>Evidence Technology/Fingerprints</td>
<td>3</td>
</tr>
<tr>
<td>AJS215</td>
<td>Criminalistics: Physical Evidence</td>
<td>3</td>
</tr>
<tr>
<td>AJS216</td>
<td>Criminalistics: Biological Evidence</td>
<td>3</td>
</tr>
<tr>
<td>AJS214</td>
<td>Evidence Technology/Photography, or AJS216 Police Photography</td>
<td>3</td>
</tr>
<tr>
<td>AJS290BN</td>
<td>Courtroom Testimony Seminar</td>
<td>1</td>
</tr>
</tbody>
</table>

All program and course requirements are subject to change. It is strongly recommended that students select courses in consultation with an academic or occupational advisor to ensure proper course selection. A current list of all EMCC programs is available at estrellamountain.edu/academics/programs.

*Courses must meet AAS General Education Requirements (refer to the AAS Requirements under the General Education section)*
Fire Investigation - Certificate of Completion (5744N)

Description: The Certificate of Completion (CCL) in Fire Investigation program is designed to provide educational credentials to industry certification for Fire Investigators. Fire Investigation series I-IV is the regional standard in Arizona for professional Fire Investigators in the private and public sectors. The degree option integrates this Certificate of Completion’s comprehensive approach to knowledge, skills, and theory related to the practice of Fire Investigation.

<table>
<thead>
<tr>
<th>REQUIRED COURSES (12 CREDITS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Must earn “C” or higher in all courses within the program</td>
</tr>
<tr>
<td>CREDITS</td>
</tr>
<tr>
<td>FSC209 Fire Investigation I</td>
</tr>
<tr>
<td>FSC210 Fire Investigation II</td>
</tr>
<tr>
<td>FSC211 Fire Investigation III</td>
</tr>
<tr>
<td>FSC212 Fire Investigation IV</td>
</tr>
</tbody>
</table>

Fire Officer Leadership - Certificate of Completion (5420N)

Description: The Certificate of Completion (CCL) in Fire Officer Leadership program can be used by professional firefighters for promotions and salary advancement within the Fire Services. The program will provide courses for experienced professional firefighters who desire to learn advanced fireground tactics and strategy, building construction, practical incident command, supervisory training of personnel, and human resource management.

<table>
<thead>
<tr>
<th>PROGRAM PREREQUISITES: FORMAL APPLICATION AND ACCEPTANCE INTO THE FIRE OFFICER LEADERSHIP PROGRAM OR PERMISSION OF PROGRAM DIRECTOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. REQUIRED COURSES (15 CREDITS)</td>
</tr>
<tr>
<td>Must earn “C” or higher in all courses within the program</td>
</tr>
<tr>
<td>CREDITS</td>
</tr>
<tr>
<td>FSC202 Supervisory Training for Firefighters</td>
</tr>
<tr>
<td>FSC204 Firefighting Tactics and Strategy</td>
</tr>
<tr>
<td>FSC205 Command Strategies for Major Emergencies</td>
</tr>
<tr>
<td>FSC208 Firefighter Safety and Building Construction</td>
</tr>
<tr>
<td>FSC214 Human Resources Management in Fire Science</td>
</tr>
</tbody>
</table>

All program and course requirements are subject to change. It is strongly recommended that students select courses in consultation with an academic or occupational advisor to ensure proper course selection. A current list of all EMCC programs is available at estrellamountain.edu/academics/programs.

*Courses must meet AAS General Education Requirements (refer to the AAS Requirements under the General Education section)
**Fire Science - Certificate of Completion (5486)**

**Description:** The Certificate of Completion (CCL) in Fire Science program is designed for students who need (1) advanced training as professional firefighters, (2) basic preparation courses for a career in fire services and/or (3) more comprehensive information about the fire hazard and prevention. Certificate can be used by professional firefighters for promotions and salary advancement within the Fire Services. The program will provide courses for plant safety for fire protection personnel and basic emergency services for laypersons who need intensive first aid training. The unique feature of the program is that the instructors are professional firefighters and/or licensed Emergency Medical Training Personnel.

<table>
<thead>
<tr>
<th>+ PROGRAM PREREQUISITES: EMT/FSC104 EMERGENCY MEDICAL TECHNOLOGY</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. REQUIRED COURSES (24 CREDITS)</td>
</tr>
<tr>
<td>Must earn “C” or higher in all courses within the program</td>
</tr>
<tr>
<td>FSC105 Hazardous Materials First Responder</td>
</tr>
<tr>
<td>FSC108 Fundamentals of Fire Prevention</td>
</tr>
<tr>
<td>FSC113 Introduction to Fire Suppression</td>
</tr>
<tr>
<td>FSC117 Fire Apparatus</td>
</tr>
<tr>
<td>FSC119 Introduction Fire Service Ethics</td>
</tr>
<tr>
<td>AJS/DPR/FSC147 Emergency Preparedness, or</td>
</tr>
<tr>
<td>AJS/DPR/FSC148 Fundamentals of Emergency Management</td>
</tr>
<tr>
<td>FSC208 Firefighter Safety and Building Construction</td>
</tr>
<tr>
<td>FSC215 Customer Service in the Public Sector</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>+ ADMISSION CRITERIA: COMPLETION OF PROGRAM PREREQUISITES. FORMAL APPLICATION AND ADMISSION TO THE PROGRAM IS REQUIRED.</th>
</tr>
</thead>
<tbody>
<tr>
<td>+PROGRAM PREREQUISITES (14 CREDITS)</td>
</tr>
<tr>
<td>Must earn “C” or higher in all courses within the program</td>
</tr>
<tr>
<td>EMT101 Cardiopulmonary Resuscitation/Basic Life Support, or Current validation in Basic Life Support Health Care Provider/Professional rescuer, or Permission of Program Director</td>
</tr>
<tr>
<td>EMT/FSC104 Emergency Medical Technology, and EMT/FSC104AB Applied Practical Studies for Emergency Medical Technology, or EMT/FSC104 Emergency Medical Technology, or Arizona State EMT Certification, or Arizona State Paramedic Certification, or Permission of Program Director</td>
</tr>
<tr>
<td>FSC105 Hazardous Materials/First Responder</td>
</tr>
<tr>
<td>FSC130 Fitness for Firefighters/CPAT, or Verification of CPAT completion, or Permission of Program Director</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>I. REQUIRED COURSES (14 CREDITS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSC102 Fire Department Operations</td>
</tr>
<tr>
<td>FSC134 Fitness and Conditioning for Firefighters</td>
</tr>
</tbody>
</table>

All program and course requirements are subject to change. It is strongly recommended that students select courses in consultation with an academic or occupational advisor to ensure proper course selection. A current list of all EMCC programs is available at estrellamountain.edu/academics/programs.

*Courses must meet AAS General Education Requirements (refer to the AAS Requirements under the General Education section)*
Gifted Education - Certificate of Completion (5711N)

**Description:** The Certificate of Completion (CCL) in Gifted Education provides professional development for certified teachers and leads to provisional and full endorsement in gifted education from the Arizona Department of Education.

### I. Required Courses (18 Credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Grade</th>
<th>Semester</th>
<th>Comments</th>
<th>Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPD225 Foundations of Gifted Education and Identification of Gifted Learner</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EPD226 Social and Emotional Needs of Gifted and Talented Students</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EPD227 Methods and Models for Differentiating Curriculum for Gifted Students</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EPD228 Creativity and Critical Thinking Skills in Gifted Education</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EPD229 Gifted Education Practicum I</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EPD230 Gifted Education Practicum II</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

All program and course requirements are subject to change. It is strongly recommended that students select courses in consultation with an academic or occupational advisor to ensure proper course selection. A current list of all EMCC programs is available at estrellamountain.edu/academics/programs.

*Courses must meet AAS General Education Requirements (refer to the AAS Requirements under the General Education section)*
Certificate & Degree Programs

Industrial Manufacturing and Emerging Technologies-Associate in Applied Science (3169)

**Description:** The Associate in Applied Sciences (AAS) in Industrial Manufacturing and Emerging Technologies degree is designed to provide the training necessary for entry-level positions in the Industrial and Manufacturing Technology fields. This degree is intended to provide students and employers with flexibility in designing a program of study that is relevant to the rapidly changing needs of business and industry while allowing the student to match their own talents, interests, and goals. The program provides existing technicians with the broad educational background and technical skills desired by industry to help prepare for supervisory and managerial positions and is also intended for students who desire to transfer to university Bachelor of Applied Science degree programs which accept Associate of Applied Science degree block-transfer. Potential job titles this degree will help prepare students for include Manufacturing Production Technician, Manufacturing Technician, Production Staff Worker, Process Technician, Industrial Engineering Technician.

I. **GENERAL EDUCATION REQUIREMENTS (19-22 CREDITS)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Grade</th>
<th>Semester</th>
<th>Comments</th>
<th>Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG101 or ENG107</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG102 or ENG108 or ENG111</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral Communication*</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRE101 or CRE111 or equivalent by assessment</td>
<td>0-3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics (Met by GTC108 or equivalent course or satisfactory completion of a higher level math course in required area)</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Natural Science*</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities/Fine Arts*</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social/Behavior Science*</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

II. **REQUIRED COURSES (17 CREDITS)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Grade</th>
<th>Semester</th>
<th>Comments</th>
<th>Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATP101 Introduction to Automated Systems and Robotics</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS105 Survey of Computer Information Systems</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CPD104 Career and Personal Development</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GTC108 Technical Mathematics II or equivalent</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MET131 Lean Manufacturing</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MIT120 Industrial Technology Fundamentals</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

III. **RESTRICTED ELECTIVES (24 CREDITS)**

STUDENTS MUST SELECT FROM THE FOLLOWING COURSES IN CONSULTATION WITH A DEPARTMENT ADVISOR.

Cannot be shared with Required Courses. Students may choose to complete a Technology Program Certificate(s) from a Maricopa Community College to complete credits toward their restricted and free electives.

ATP+++++, CAD+++++, CIS+++++, DFT+++++, ECE+++++, EEE+++++, ELC+++++, ELE+++++,ELT+++++, GTC+++++, HVA+++++
IRW+++++, MAT+++++, MET+++++, MIT+++++, PPT+++++, RPT+++++, WLD+++++

All program and course requirements are subject to change. It is strongly recommended that students select courses in consultation with an academic or occupational advisor to ensure proper course selection. A current list of all EMCC programs is available at estrellamountain.edu/academics/programs.

*Courses must meet AAS General Education Requirements (refer to the AAS Requirements under the General Education section)
Certificate & Degree Programs

Information Technology: Web and Graphic Design - Associate in Applied Science (3100)

Description: The Associate in Applied Sciences (AAS) in Information Technology: Web and Graphic Design program is designed to enhance the information technology skills gained, focusing on the analysis, design, and programming skills necessary for entry-level web development support positions. A Certificate of Completion (CCL) is also available.

I. General Education Requirements (22-27 Credits)

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credits</th>
<th>Grade</th>
<th>Semester</th>
<th>Comments</th>
<th>Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>First-Year Composition*</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First-Year Composition*</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral Communication*</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Critical Reading* or equivalent by assessment</td>
<td>0-3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAT120, or, MAT121 or, MAT122 or, MAT151</td>
<td>3-5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Natural Science*</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities/Fine Arts*</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social/Behavior Science*</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

II. Required Courses (27 Credits)

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credits</th>
<th>Grade</th>
<th>Semester</th>
<th>Comments</th>
<th>Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS105 Survey of Computer Information Systems</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS120DB Computer Graphics: Adobe Illustrator</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS120DC Flash: Digital Animation</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS120DF Computer Graphics: Adobe Photoshop</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS133DA Internet/Web Development Level I</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS220DC Flash: Advanced Animation and ActionScript</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS220DF Advanced Photoshop</td>
<td>3-4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS233DA Internet/Web Development Level II, or CIS233DC Internet Web Development: Dreamweaver</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS235 e-Commerce</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

III. Restricted Electives (9-11 Credits) Please choose from the list of Restricted Electives below.

<table>
<thead>
<tr>
<th>Course Description</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ART100, ART111, ART112, ART122, ART131 or ART142, CIS120AK, CIS120D+ (any module except DB, DC, and DF), CIS126AL or CIS126DL, CIS159, CIS162AD, CIS163AA, CIS166++, CIS190 or CNT140AA or MST150++ (any module), CIS243D+, CIS259 or CIS262AD or CIS263AA, GBS151</td>
<td></td>
</tr>
</tbody>
</table>
Certificate & Degree Programs

Information Technology: Web and Graphic Design - Certificate of Completion (5168)

Description: The Certificate of Completion (CCL) in Information Technology: Web and Graphic Design program is designed to enhance the information technology skills gained and focuses on the analysis, design, and programming skills necessary for entry-level web development support positions. An Associate in Applied Science (AAS) is also available.

I. REQUIRED COURSES (27 CREDITS)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Grade</th>
<th>Semester</th>
<th>Comments</th>
<th>Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS105</td>
<td>Survey of Computer Information Systems</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS120DB</td>
<td>Computer Graphics: Adobe Illustrator</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS120DC</td>
<td>Flash: Digital Animation</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS120DF</td>
<td>Computer Graphics: Adobe Photoshop</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS133DA</td>
<td>Internet/Web Development Level I</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS220DC</td>
<td>Flash: Advanced Animation and ActionScript</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS220DF</td>
<td>Advanced Photoshop</td>
<td>3-4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS233DA</td>
<td>Internet/Web Development Level II, or</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS233DC</td>
<td>Internet Web Development: Dreamweaver</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS235</td>
<td>e-Commerce</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

II. RESTRICTED ELECTIVES (9-11 CREDITS) PLEASE CHOOSE FROM THE LIST OF RESTRICTED ELECTIVES BELOW.

ART100, ART111, ART112, ART122, ART131 or ART142, CIS120AK, CIS120D+ (any module except DB, DC, and DF), CIS126AL or CIS126DL, CIS159, CIS162AD, CIS163AA, CIS166++, CIS190 or CNT140AA or MST150++, CIS234D+, CIS259 or CIS262AD or CIS263AA, GBS151

Interior Merchandising - Certificate of Completion (5429)

Description: The Certificate of Completion (CCL) in Interior Merchandising program is intended to provide the student with the knowledge and creative skills important to the home furnishings, colorizing, visual merchandising, and home-staging industries. Students will study design principles and elements, color theory, drafting, furniture layout, historical and modern architecture and furniture, fabrics, and other factors utilized in interior merchandising. Elective coursework allows the student to take specific courses that will help prepare them for the particular segment of the industry they are most interested in pursuing.

I. REQUIRED COURSES (21 CREDITS)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Grade</th>
<th>Semester</th>
<th>Comments</th>
<th>Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>INT100</td>
<td>Interior Design Drafting</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INT105</td>
<td>Introduction to Interior Design</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INT115</td>
<td>Historical Architecture and Furniture</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INT120</td>
<td>Modern Architecture and Furniture</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INT150</td>
<td>Color and Design</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INT160</td>
<td>Fabrics for Interiors</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INT170</td>
<td>Interior Fabrics</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

II. RESTRICTED ELECTIVES (9 CREDITS) STUDENTS SHOULD SELECT FROM THE FOLLOWING COURSES IN CONSULTATION WITH A DEPARTMENT ADVISOR.

AGB140, AGS187, ARH100, ART111, ART112, ART131, GTC130, GTC131, GTC144, GTC145, MGT251, MKT/TEC151, MKT263, MKT268, MKT271, SCT100, TEC126, TEC128, Any INT/ART/MKT+++++ prefixed course approved by department director.

All program and course requirements are subject to change. It is strongly recommended that students select courses in consultation with an academic or occupational advisor to ensure proper course selection. A current list of all EMCC programs is available at estrellamountain.edu/academics/programs.

*Courses must meet AAS General Education Requirements (refer to the AAS Requirements under the General Education section)
**IT and Power Systems Security - Associate in Applied Science (3160)**

**Description:** The Associate in Applied Science (AAS) in IT and Power Systems Security program is designed to help prepare students for a variety of industry-recognized information technology (IT) security certification exams as well as to provide practical hands-on skills for the work place. The program also includes fundamental knowledge and skills in system administration, network administration, IT management and compliance necessary to inform the practices of IT security.

<p>| PROGRAM PREREQUISITES: CIS105, AND CRE101, OR EQUIVALENT AS INDICATED BY ASSESSMENT |</p>
<table>
<thead>
<tr>
<th>Must earn “C” or higher in all courses within the program</th>
<th>CREDITS</th>
<th>GRADE</th>
<th>SEMESTER</th>
<th>COMMENTS</th>
<th>ADVISOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG101 or ENG107</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG102 or ENG108</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral Communication*</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRE101 Met by Program Prerequisites</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAT112, or equivalent course, or satisfactory completion of a higher level mathematics course</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**I. GENERAL EDUCATION REQUIREMENTS (22 CREDITS)**

**II. REQUIRED COURSES (22 CREDITS)**

<table>
<thead>
<tr>
<th>REQUIRED COURSES (22 CREDITS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNT140AA Cisco - Introduction to Networks 4</td>
</tr>
<tr>
<td>MST150++ Microsoft Windows Professional (any suffixed course) 3</td>
</tr>
<tr>
<td>CIS111Ethics in Information Technology 3</td>
</tr>
<tr>
<td>CIS126DL Linux Operating System 3</td>
</tr>
<tr>
<td>CIS250 Management of Information Systems 3</td>
</tr>
<tr>
<td>CIS271DB Information Security Essentials 3</td>
</tr>
<tr>
<td>CIS272DB Information Security Principles 3</td>
</tr>
</tbody>
</table>

**III. RESTRICTED ELECTIVES (18-20 CREDITS)** Students must select one of the following four tracks below:

**RESTRICTED ELECTIVES: STUDENTS MUST SELECT ONE OF THE FOLLOWING FOUR TRACKS:**

**Track I: Power Systems IT Security (18 Credits Required)**

<table>
<thead>
<tr>
<th>RESTRICTED ELECTIVES: STUDENTS MUST SELECT ONE OF THE FOLLOWING FOUR TRACKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPD104 Career and Personal Development 3</td>
</tr>
<tr>
<td>PPT120 Energy Industry Fundamentals 3</td>
</tr>
<tr>
<td>CIS274DA Introduction to Power Systems Security 3</td>
</tr>
<tr>
<td>CIS275DA Generation and Transmission Systems Security 3</td>
</tr>
<tr>
<td>CIS275DB Smart Grid and Distribution System Security 3</td>
</tr>
<tr>
<td>CIS275DC Embedded Systems Security 3</td>
</tr>
</tbody>
</table>

**Track II: Network Security (20 Credits Required)**

<table>
<thead>
<tr>
<th>Track II: Network Security (20 Credits Required)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNT150AA Cisco - Routing and Switching Essentials 4</td>
</tr>
<tr>
<td>CNT160AA Scaling Networks 4</td>
</tr>
<tr>
<td>CNT170AA Cisco - Connecting Networks 4</td>
</tr>
<tr>
<td>CNT205 Cisco Certified Network Associate Security 4</td>
</tr>
<tr>
<td>CNT206 Cisco Certified Network Associate Wireless 4</td>
</tr>
</tbody>
</table>

All program and course requirements are subject to change. It is strongly recommended that students select courses in consultation with an academic or occupational advisor to ensure proper course selection. A current list of all EMCC programs is available at estrellamountain.edu/academics/programs.

*Courses must meet AAS General Education Requirements (refer to the AAS Requirements under the General Education section)*
Certificate & Degree Programs

IT and Power Systems Security - Associate in Applied Science (3160) ...continued

<table>
<thead>
<tr>
<th>TRACK III: SYSTEMS SECURITY-LINUX (18 CREDITS REQUIRED)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS238DL Linux System Administration                      3</td>
</tr>
<tr>
<td>CIS239DL Linux Shell Scripting                            3</td>
</tr>
<tr>
<td>CIS240DL Linux Network Administration                     3</td>
</tr>
<tr>
<td>CIS271DL Linux Security                                   3</td>
</tr>
<tr>
<td>CIS275DL Linux Capstone                                   3</td>
</tr>
<tr>
<td>ITS240 Ethical Hacking and Network Defense                3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TRACK IV: SYSTEMS SECURITY-MICROSOFT (18 CREDITS REQUIRED)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS121AH Microsoft PowerShell/Command Line Operations       3</td>
</tr>
<tr>
<td>MST155++ Windows Server Network Infrastructure Configuration (any suffixed course) 4</td>
</tr>
<tr>
<td>MST157++ Active Directory Windows Server Configuration (any suffixed course) 4</td>
</tr>
<tr>
<td>MST158++ Windows Server Administration (any suffixed course) 4</td>
</tr>
<tr>
<td>ITS240 Ethical Hacking and Network Defense                 3</td>
</tr>
</tbody>
</table>

IT Security Associate - Certificate of Completion (5826)

**Description:** The Certificate of Completion (CCL) in IT Security Associate program is designed to help to prepare students for a variety of industry-recognized information technology (IT) security certification exams as well as to provide practical hands-on skills for the work place. The program also includes fundamental knowledge and skills in system administration, network administration, IT management and compliance necessary to inform the practices of IT security.

<table>
<thead>
<tr>
<th>PROGRAM PREREQUISITES: CIS 10S</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. REQUIRED COURSES (25 CREDITS)</td>
</tr>
<tr>
<td>CNT140AA Cisco - Introduction to Networks  4</td>
</tr>
<tr>
<td>MST150++ Microsoft Windows Professional (any suffixed course) 3</td>
</tr>
<tr>
<td>CIS111 Ethics in Information Technology 3</td>
</tr>
<tr>
<td>CIS126DL Linux Operating System 3</td>
</tr>
<tr>
<td>CIS250 Management of Information Systems 3</td>
</tr>
<tr>
<td>CIS217DB Information Security Essentials 3</td>
</tr>
<tr>
<td>CIS272DB Information Security Principles 3</td>
</tr>
</tbody>
</table>

All program and course requirements are subject to change. It is strongly recommended that students select courses in consultation with an academic or occupational advisor to ensure proper course selection. A current list of all EMCC programs is available at estrellamountain.edu/academics/programs.

*Courses must meet AAS General Education Requirements (refer to the AAS Requirements under the General Education section)*
Linux Associate - Certificate of Completion (5219)

Description: The Certificate of Completion (CCL) in Linux Associate 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 work place. The program includes a core of Linux classes including Linux Operating System Basics, System Administration, Network Administration and Network Security. These classes will help develop a student’s knowledge and skill level in preparation for employment or to improve current professional skills. Objectives for a variety of industry certifications are encompassed within course and program objectives.

I. Required Courses (12 Credits)

<table>
<thead>
<tr>
<th>Must earn “C” or higher in all courses within the program</th>
<th>Credits</th>
<th>Grade</th>
<th>Semester</th>
<th>Comments</th>
<th>Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS126DL Linux Operating System</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS238DL Linux System Administration</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS240DL Linux Network Administration</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS271DL Linux Security</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

II. Restricted Electives (12 Credits) Please choose from the list of restricted electives below.

RESTRICTED ELECTIVES (12 CREDITS REQUIRED) Students should select from the following courses in consultation with a department advisor.

| BPC170 Computer Maintenance I: A+ Exam Prep Level I | 3 |
| BPC270 Computer Maintenance II: A+ Exam Prep Level II | 3 |
| CIS105 Survey of Computer Information Systems       | 3 |
| CIS121AH Microsoft PowerShell/Command Line Operations | 3 |
| CIS197 VMware ESXI Server Enterprise                | 4 |
| CIS226AL Internet/Intranet Server Administration-Linux | 3 |
| CIS239DL Linux Shell Scripting                       | 3 |
| CIS241DL Apache Web Server Administration (Linux/Unix) | 3 |
| CIS270 Essentials of Network and Information Security | 3 |
| CIS274DL Linux Enterprise Network Security           | 3 |
| CIS275DL Linux Capstone                              | 3 |
| CIS280 Current Topics in Computing                   | 3 |
| CIS290++ Computer Information Systems Internship (any suffixed course) | 1-3 |
| CIS190 Introduction to Local Area Networks, or       |       |
| CNT140AA Introduction to Networks, or                | 3-4   |
| MST140 Microsoft Networking Essentials                |       |
| CNT150AA Cisco-Routing Protocols and Concepts        | 4     |
| MST150++ Microsoft Windows (any suffixed course)     | 3     |
| MST155 Implementing Windows Network Infrastructure, or|       |
| MST155DA Windows Server Network Infrastructure Configuration | 3-4  |
Linux Networking Administration - Associate in Applied Science (3013)

**Description:** The Associate in Applied Science (AAS) in Linux Networking 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. These classes will help develop a student’s knowledge and skill level in preparation for employment or to improve current professional skills.

<table>
<thead>
<tr>
<th>I. GENERAL EDUCATION REQUIREMENTS (22-25 CREDITS)</th>
<th>CREDITS</th>
<th>GRADE</th>
<th>SEMESTER</th>
<th>COMMENTS</th>
<th>ADVISOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Must earn “C” or higher in all courses within the program</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG101 or ENG107</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG102 or ENG108</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COM225 or Communication*</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRE101 or equivalent by assessment</td>
<td>0-3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics*</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Natural Science*</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities/Fine Arts*</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social/Behavior Science*</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>II. REQUIRED COURSES (24-25 CREDITS)</th>
<th>CREDITS</th>
<th>GRADE</th>
<th>SEMESTER</th>
<th>COMMENTS</th>
<th>ADVISOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>BPC170 Computer Maintenance I: A+ Essentials Prep</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS126DL Linux Operating System</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS238DL Linux System Administration</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS239DL Linux Shell Scripting</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS240DL Linux Network Administration</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS271DL Linux Security</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS190 Introduction to Local Area Networks, or CNT140AA Introduction to Networks, or MST140 Microsoft Networking Essentials</td>
<td>3-4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MST150++ Microsoft Windows (any suffixed course)</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| III. RESTRICTED ELECTIVES (14 CREDITS) | PLEASE CHOOSE FROM THE LIST OF RESTRICTED ELECTIVES BELOW. |
## Linux Networking Administration - Associate in Applied Science (3013) continued

<table>
<thead>
<tr>
<th>RESTRICTED ELECTIVES (12 CREDITS REQUIRED)</th>
<th>STUDENTS SHOULD SELECT FROM THE FOLLOWING COURSES IN CONSULTATION WITH A DEPARTMENT ADVISOR.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BPC110 Computer Usage and Applications, or</td>
<td>3</td>
</tr>
<tr>
<td>CIS105 Survey of Computer Information Systems</td>
<td></td>
</tr>
<tr>
<td>BPC270 Microcomputer Maintenance II: A+ Technician Prep</td>
<td>3</td>
</tr>
<tr>
<td>BPC273 Advanced Server Computer Maintenance: Server+Prep</td>
<td>3</td>
</tr>
<tr>
<td>CIS121AH Microsoft PowerShell/Command Line Operations</td>
<td>3</td>
</tr>
<tr>
<td>CIS197 VMware ESXi Server Enterprise</td>
<td>4</td>
</tr>
<tr>
<td>CIS226AL Internet/Intranet Server Administration-Linux</td>
<td>3</td>
</tr>
<tr>
<td>CIS241DL Apache Web Server Administration (Linux/Unix)</td>
<td>3</td>
</tr>
<tr>
<td>CIS250 Management of Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>CIS270 Essentials of Network and Information Security</td>
<td>3</td>
</tr>
<tr>
<td>CIS274DL Linux Enterprise Network Security</td>
<td>3</td>
</tr>
<tr>
<td>CIS275DL Linux Capstone</td>
<td>3</td>
</tr>
<tr>
<td>CIS296WC Cooperative Education</td>
<td>3</td>
</tr>
<tr>
<td>CIS290++ Computer Information Systems Internship</td>
<td>1-3</td>
</tr>
<tr>
<td>CIS298AC Special Projects</td>
<td>3</td>
</tr>
<tr>
<td>CIS190 Introduction to Local Area Networks, or</td>
<td>3-4</td>
</tr>
<tr>
<td>CNT140AA Introduction to Networks, or</td>
<td></td>
</tr>
<tr>
<td>MST140 Microsoft Networking Essentials</td>
<td></td>
</tr>
<tr>
<td>CNT150AA Cisco-Routing and Switching Essentials</td>
<td>4</td>
</tr>
<tr>
<td>CNT160AA Scaling Networks</td>
<td>4</td>
</tr>
<tr>
<td>CNT170AA Cisco-Connecting Networks</td>
<td>4</td>
</tr>
<tr>
<td>MST150++ Microsoft Windows (any suffixed course)</td>
<td>3</td>
</tr>
<tr>
<td>MST155 Implementing Windows Network Infrastructure, or MST155DA Windows Server Network Infrastructure Configuration</td>
<td>3-4</td>
</tr>
<tr>
<td>MST157 Implementing Windows Directory Services, or MST157DA Active Directory Windows Server Configuration</td>
<td>3-4</td>
</tr>
<tr>
<td>MST158DA Windows Server Administration</td>
<td>4</td>
</tr>
</tbody>
</table>

All program and course requirements are subject to change. It is strongly recommended that students select courses in consultation with an academic or occupational advisor to ensure proper course selection. A current list of all EMCC programs is available at [estrellamountain.edu/academics/programs](http://estrellamountain.edu/academics/programs).

*Courses must meet AAS General Education Requirements (refer to the AAS Requirements under the General Education section)
**Linux Networking Administration - Certificate of Completion (5225)**

**Description:** The Certificate of Completion (CCL) in Linux Networking Administration program is designed to help prepare students for a variety of industry recognized Linux certification exams as well as provides 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. These classes will help develop a student’s knowledge and skill level in preparation for employment or to improve current professional skills. Objectives for a variety of industry certifications are encompassed within course and program objectives.

### I. Required Courses (24-25 Credits)

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credits</th>
<th>Grade</th>
<th>Semester</th>
<th>Comments</th>
<th>Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>BPC170 Computer Maintenance I: A+ Exam Prep Level I</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS126DL Linux Operating System</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS238DL Linux System Administration</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS239DL Linux Shell Scripting</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS240DL Linux Network Administration</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS271DL Linux Security</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS190 Introduction to Local Area Networks, or MST140 Microsoft Networking Essentials</td>
<td>3-4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MST150++ Microsoft Windows (any suffixed course)</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### III. Restricted Electives (12 Credits)

Please choose from the list of restricted electives below.
Certificate & Degree Programs

Linux Networking Administration - Certificate of Completion (5225) continued

<table>
<thead>
<tr>
<th>RESTRICTED ELECTIVES (12 CREDITS REQUIRED)</th>
<th>STUDENTS SHOULD SELECT FROM THE FOLLOWING COURSES IN CONSULTATION WITH A DEPARTMENT ADVISOR.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BPC110 Computer Usage and Applications, or</td>
<td>-------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>CIS105 Survey of Computer Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>BPC270 Computer Maintenance: A+ Exam Prep Level II</td>
<td>3</td>
</tr>
<tr>
<td>BPC273 Advanced Server Computer Maintenance: Server+Prep</td>
<td>3</td>
</tr>
<tr>
<td>CIS197 VMware ESXI Server Enterprise</td>
<td>4</td>
</tr>
<tr>
<td>CIS121AH Microsoft PowerShell/Command Line Operations</td>
<td>3</td>
</tr>
<tr>
<td>CIS226AL Internet/Intranet Server Administration-Linux</td>
<td>3</td>
</tr>
<tr>
<td>CIS241DL Apache Web Server Administration (Linux/Unix)</td>
<td>3</td>
</tr>
<tr>
<td>CIS250 Management of Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>CIS270 Essentials of Network and Information Security</td>
<td>3</td>
</tr>
<tr>
<td>CIS274DL Linux Enterprise Network Security</td>
<td>3</td>
</tr>
<tr>
<td>CIS275DL Linux Capstone</td>
<td>3</td>
</tr>
<tr>
<td>CIS280 Current Topics in Computing</td>
<td>3</td>
</tr>
<tr>
<td>CIS296WC Cooperative Education</td>
<td>3</td>
</tr>
<tr>
<td>CIS290++ Computer Information Systems Internship (any suffixed course)</td>
<td>1-3</td>
</tr>
<tr>
<td>CIS298AC Special Projects</td>
<td>3</td>
</tr>
<tr>
<td>CIS190 Introduction to Local Area Networks, or</td>
<td>-------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>CNT140AA Introduction to Networks, or</td>
<td>-------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>MST140 Microsoft Networking Essentials</td>
<td>3-4</td>
</tr>
<tr>
<td>CNT150AA Cisco-Routing and Switching Essentials</td>
<td>4</td>
</tr>
<tr>
<td>CNT160AA Scaling Networks</td>
<td>4</td>
</tr>
<tr>
<td>CNT170AA Cisco-Connecting Networks</td>
<td>4</td>
</tr>
<tr>
<td>MST150++ Microsoft Windows (any module)</td>
<td>3</td>
</tr>
<tr>
<td>MST155 Implementing Windows Network Infrastructure, or</td>
<td>-------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>MST155DA Windows Server Network Infrastructure Configuration</td>
<td>3-4</td>
</tr>
<tr>
<td>MST157 Implementing Windows Directory Services, or</td>
<td>-------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>MST157DA Active Directory Windows Server Configuration</td>
<td>3-4</td>
</tr>
<tr>
<td>MST158DA Windows Server Administration</td>
<td>4</td>
</tr>
</tbody>
</table>

All program and course requirements are subject to change. It is strongly recommended that students select courses in consultation with an academic or occupational advisor to ensure proper course selection. A current list of all EMCC programs is available at estrellamountain.edu/academics/programs.

*Courses must meet AAS General Education Requirements (refer to the AAS Requirements under the General Education section)
## Linux Professional - Certificate of Completion (5204N)

**Description:** The Certificate of Completion (CCL) in Linux Professional program is designed to help to prepare students for a variety of industry-recognized Linux certification exams as well as provide practical hands-on skills for the work place. The program includes a core of Linux classes including Linux operating system basics, System Administration, Network Administration and Network Security. These classes will help develop a student’s knowledge and skill level in preparation for employment or to improve current professional skills. Objectives for a variety of industry certifications are encompassed within course and program objectives.

### I. Required Courses (6 Credits)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS126DL</td>
<td>Linux Operating System</td>
<td>3</td>
</tr>
<tr>
<td>CIS238DL</td>
<td>Linux System Administration</td>
<td>3</td>
</tr>
</tbody>
</table>

**I. Required Courses (6 Credits)**

Must earn “C” or higher in all courses within the program.[1]

### II. Restricted Electives (6 Credits)

**PLEASE CHOOSE FROM THE LIST OF RESTRICTED ELECTIVES BELOW.**

**Restricted Electives (6 Credits Required)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BPC170</td>
<td>Computer Maintenance: A+ Exam Prep Level I</td>
<td>3</td>
</tr>
<tr>
<td>BPC230</td>
<td>Computer Maintenance: A+ Exam Prep Level II</td>
<td>3</td>
</tr>
<tr>
<td>CIS105</td>
<td>Survey of Computer Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>CIS197</td>
<td>VMware ESXi Server Enterprise</td>
<td>4</td>
</tr>
<tr>
<td>CIS121AH</td>
<td>Microsoft PowerShell/Command Line Operations</td>
<td>3</td>
</tr>
<tr>
<td>CIS226AL</td>
<td>Internet/Intranet Server Administration-Linux</td>
<td>3</td>
</tr>
<tr>
<td>CIS239DL</td>
<td>Linux Shell Scripting</td>
<td>3</td>
</tr>
<tr>
<td>CIS240DL</td>
<td>Linux Network Administration</td>
<td>3</td>
</tr>
<tr>
<td>CIS241DL</td>
<td>Apache Web Server Administration (Linux/Unix)</td>
<td>3</td>
</tr>
<tr>
<td>CIS270</td>
<td>Essentials of Network and Information Security</td>
<td>3</td>
</tr>
<tr>
<td>CIS271DL</td>
<td>Linux Security</td>
<td>3</td>
</tr>
<tr>
<td>CIS190</td>
<td>Introduction to Local Area Networks, or</td>
<td>3-4</td>
</tr>
<tr>
<td>CNT140AA</td>
<td>Introduction to Networks (4), or</td>
<td></td>
</tr>
<tr>
<td>MST140</td>
<td>Microsoft Networking Essentials (3)</td>
<td></td>
</tr>
<tr>
<td>CNT150AA</td>
<td>Cisco - Routing and Switching Essentials</td>
<td>4</td>
</tr>
<tr>
<td>MST150++</td>
<td>Microsoft Windows (any suffixed course)</td>
<td>3</td>
</tr>
<tr>
<td>CIS280</td>
<td>Current Topics in Computing</td>
<td>3</td>
</tr>
<tr>
<td>CIS290++</td>
<td>Computer Information Systems Internship (any suffixed course)</td>
<td>1-3</td>
</tr>
</tbody>
</table>

---

*Courses must meet AAS General Education Requirements (refer to the AAS Requirements under the General Education section)
Certificate & Degree Programs

Mechanical Systems Technology - Certificate of Completion (5846)

Description: The Certificate of Completion (CCL) in Mechanical Systems Technology is designed to help prepare students in the installation and maintenance of mechanical systems found in commercial and industrial facilities. Training, most of which is hands on, will include: tool parts and components; machinery and associated equipment maintenance; assembling components using various fasteners; and workplace health and safety. The completion of this program will help prepare students for a variety of careers in mechanical fields as an on-the-job trainee and apprentice.

I. REQUIRED COURSES (13 CREDITS)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Grade</th>
<th>Semester</th>
<th>Comments</th>
<th>Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPT101 Hand and Power Tools</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PPT103 Print Reading and Plant Drawings</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PPT107 Lubrication</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PPT114 Drive and Gear Components</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PPT118 Conduct of Maintenance</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PPT115 Hydraulics and Pneumatics</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PPT121 Power Plant Components</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PPT206 Bearings</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PPT205 Rigging</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

II. RESTRICTED ELECTIVES (5 CREDITS)

Students should select from the following courses in consultation with a department advisor.

- HVA+++++, PPT+++++, WLD+++++

Mechatronics Level I - Certificate of Completion (5848)

Description: The Certificate of Completion (CCL) in Mechatronics Level I is designed to help prepare students to apply basic engineering principles and technical skills in support of engineers and other professionals engaged in developing, installing, calibrating, modifying and maintaining automated systems. Includes instruction in computer systems; electronics and instrumentation; programmable logic controllers (PLCs); electric, hydraulic, and pneumatic control systems; actuator and sensor systems; process control; applications to specific industrial tasks; and report preparation.

The completion of this certificate will help prepare students for employment in industries that utilize control systems, computer hardware and software, electrical, mechanical and electromechanical devices in their automation systems. Graduates should have sufficient knowledge required to pass select nationally and internationally recognized mechatronics certification examinations.

I. REQUIRED COURSES (16 CREDITS)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Grade</th>
<th>Semester</th>
<th>Comments</th>
<th>Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELC119 Concepts of Electricity and Electronics, or ELE100 Concepts of Electricity and Electronics</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ELC217 Motor Controls</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ELC219 Programmable Controllers</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PPT101 Hand and Power Tools</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PPT107 Lubrication</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PPT114 Drive and Gear Components</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PPT115 Hydraulics and Pneumatics</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PPT206 Bearings</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Microsoft Certified Information Technology Professional (MCITP) Administrator - Certificate of Completion (5843)

Description: The Certificate of Completion (CCL) in Microsoft Certified Information Technology Professional (MCITP) Administrator program is designed to help prepare students towards an intermediate- to supervisory-level position working with Windows networks. It is designed to develop the skills needed to install, configure, customize, optimize, and troubleshoot Windows servers, Windows client workstations and Microsoft Office products. The courses in the program also help to prepare for Microsoft Certified Product Specialist (MCP), and Microsoft Certified Information Technology Professional (MCITP) examinations.

Typical tasks of a Microsoft Certified Information Technology Professional (MCITP) are developing a local area network, installing and configuring software, creating and managing user and group accounts, analyzing and optimizing system performance, troubleshooting system and printing problems, training end users, and working as a system administrator.

+ PROGRAM PREREQUISITES: CIS105 or PERMISSION OF DEPARTMENT/DIVISION

I. REQUIRED COURSES (29-32 CREDITS)

<table>
<thead>
<tr>
<th>CREDITS</th>
<th>GRADE</th>
<th>SEMESTER</th>
<th>COMMENTS</th>
<th>ADVISOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3-4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3-4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Microsoft Desktop Support Technology - Certificate of Completion (5473)

Description: The Certificate of Completion (CCL) in Microsoft Desktop Support Technology program is designed to provide training for entry-level computer maintenance and help-desk positions. Students will develop the skills to troubleshoot desktop environments running on the Microsoft Windows operating system. Courses in the program also help to prepare for the Microsoft Certified IT Professional: Enterprise Desktop Support Technician 7 (MCITP) examinations, 70-680 and 70-685.

+ PROGRAM PREREQUISITES: CIS121AB, or CIS121AH, or STUDENTS WITH EXPERIENCE IN THE INFORMATION TECHNOLOGY FIELD MAY MEET THESE PROGRAM PREREQUISITES WITH THE PERMISSION OF THE INSTRUCTOR OR PROGRAM DIRECTOR.

I. REQUIRED COURSES (16-17 CREDITS)

<table>
<thead>
<tr>
<th>CREDITS</th>
<th>GRADE</th>
<th>SEMESTER</th>
<th>COMMENTS</th>
<th>ADVISOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3-4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3-4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

All program and course requirements are subject to change. It is strongly recommended that students select courses in consultation with an academic or occupational advisor to ensure proper course selection. A current list of all EMCC programs is available at estrellamountain.edu/academics/programs.

*Courses must meet AAS General Education Requirements (refer to the AAS Requirements under the General Education section)*
Microsoft Networking Technology - Associate in Applied Science (3778)

Description: The Associate in Applied Science (AAS) in Microsoft Networking Technology program is designed to develop skills needed to implement a network infrastructure and install, configure, monitor, optimize, and troubleshoot Windows server and Windows client workstations. Courses in the program are also designed to help prepare for Microsoft Certified Product Specialist (MCP), and Microsoft Certified Information Technology Professional (MCITP) examinations. The curriculum is ideally taught by Microsoft Certified Professionals. Typical tasks of a Microsoft Networking Administrator include developing a local area network, installing and configuring software, creating and managing user and group accounts, analyzing and optimizing system performance, troubleshooting system and printing problems, inter-operating with various operating systems, and working as a system administrator.

+ PROGRAM PREREQUISITES: CIS105 or PERMISSION OF DEPARTMENT OR DIVISION

I. GENERAL EDUCATION REQUIREMENTS (22-25 CREDITS)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Grade</th>
<th>Semester</th>
<th>Comments</th>
<th>Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG101 or ENG107</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG102 or ENG108</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral Communication*</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRE101 or equivalent by assessment</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics*</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Natural Science*</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities/Fine Arts*</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social/Behavior Science*</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

II. REQUIRED COURSES (24-27 CREDITS)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Grade</th>
<th>Semester</th>
<th>Comments</th>
<th>Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS121AB Microsoft Command Line Operations, or</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSC221AB Microsoft Power Shell</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BPC170 Computer Maintenance I: A+ Essentials Prep</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS102 Interpersonal and Customer Service Skills for IT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professionals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS126DA UNIX Operating System, or</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS126AA UNIX Operating System: Level I, and</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS126BA UNIX Operating System: Level II, and</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS126CA UNIX Operating System: Level III, or</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS126DL Linux Operating System, or</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS126AL Linux Operating System I, and</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS126BL Linux Operating System II, and</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS126CL Linux Operating System III</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS190 Introduction to Local Area Networks, or</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CNT140AA Introduction to Networks, or</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MST140 Microsoft Networking Essentials</td>
<td>3-4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MST150 Microsoft Windows Professional, or</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MST150++ Any Microsoft Windows (any module)</td>
<td>3-4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MST155 Implementing Windows Network Infrastructure, or</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MST155++ Any Windows Network Infrastructure (any module)</td>
<td>3-4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MST157 Implementing Windows Directory Services, or</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MST157++ Any Active Directory Windows Server Configuration</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(any module)</td>
<td>3-4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MST158++ Any Windows Server Administration (any module)</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

III. RESTRICTED ELECTIVES (14-15 CREDITS) STUDENTS SHOULD SELECT FROM THE FOLLOWING COURSES IN CONSULTATION WITH A DEPARTMENT ADVISOR.

All program and course requirements are subject to change. It is strongly recommended that students select courses in consultation with an academic or occupational advisor to ensure proper course selection. A current list of all EMCC programs is available at estrellamountain.edu/academics/programs.

*Courses must meet AAS General Education Requirements (refer to the AAS Requirements under the General Education section)
Microsoft Networking Technology - Associate in Applied Science (3778) continued

<table>
<thead>
<tr>
<th>Restricted Electives (14-15 Credits Required)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students should select from the following courses in consultation with a department advisor. Courses cannot be shared with required courses.</td>
</tr>
<tr>
<td><strong>BPC171 Recycling Used Computer Technology (may be repeated)</strong> 3</td>
</tr>
<tr>
<td><strong>BPC270 Computer Maintenance II: A+ Technician Prep</strong> 3</td>
</tr>
<tr>
<td><strong>CIS238 Advanced UNIX System Administration, or</strong></td>
</tr>
<tr>
<td><strong>CIS238++ Any UNIX/Linux System Administration (any module)</strong> 3</td>
</tr>
<tr>
<td><strong>CIS239++ Any Linux course (any module) except CIS239DC</strong> 3</td>
</tr>
<tr>
<td><strong>CIS240 Local Area Network Planning and Design, or</strong></td>
</tr>
<tr>
<td><strong>CIS240++ Any Linux course (any module)</strong> 3</td>
</tr>
<tr>
<td><strong>CIS270 Essentials of Network and Information Security</strong> 3</td>
</tr>
<tr>
<td><strong>CIS15+ Any CIS programming language Level I, or</strong></td>
</tr>
<tr>
<td><strong>CIS15+++ Any CIS programming language Level I (any module), or</strong> 3</td>
</tr>
<tr>
<td><strong>CIS16+ Any CIS programming language Level II, or</strong></td>
</tr>
<tr>
<td><strong>CIS16+++ Any CIS programming language Level II (any module)</strong></td>
</tr>
<tr>
<td><strong>CIS280 Current Topics in Computing, or</strong></td>
</tr>
<tr>
<td><strong>CIS280++ Current Topics in Computing (any module)</strong> 1-3</td>
</tr>
</tbody>
</table>

**NOTE:** Students may select no more than four (4) credits combined from CIS282AA-AC, CIS290AA-AC and CIS296WA-WD courses.

| **CIS282++ Volunteerism for Computer Information Systems: A Service Learning Experience (any suffixed course), or** |
| **CIS282++ Computer Information Systems Internship (any suffixed course), or** |
| **CIS296++ Cooperative Education (any suffixed course)** 1-4 |
| **CNT++++++ Any CNT Cisco Network Technology course** 4 |
| **ITS++++++ Any ITS Information Technology Security course** 3-4 |
| **MST141 Enterprise Desktop Support Technician** 3 |
| **MST150 Microsoft Windows Professiona, or** |
| **MST150++ Any Microsoft Windows (any module) not selected in Required Courses area** 3 |
| **MST152 Any Microsoft Windows (any module), or** |
| **MST152++ Any Microsoft Windows (any module)** 4 |
| **MST157 Implementing Windows Directory Services, or** |
| **MST157++ Any Microsoft Windows (any module) not selected in Required Courses area** 3-4 |
| **MST244 Microsoft SQL Server Administration** 3 |
| **MST259 Designing Windows Network Security** 3 |
| **MST298A+ Special Projects (any suffixed course)** 1-3 |
| **CWE198++ Career Work Experience (any suffixed course)** 1-3 |

All program and course requirements are subject to change. It is strongly recommended that students select courses in consultation with an academic or occupational advisor to ensure proper course selection. A current list of all EMCC programs is available at estrellamountain.edu/academics/programs.

*Courses must meet AAS General Education Requirements (refer to the AAS Requirements under the General Education section)*
Certificate & Degree Programs

Microsoft Server Administration - Certificate of Completion (5852)

Description: The Certificate of Completion (CCL) in Microsoft Server Administration program is designed to provide training for professionals who implement, manage, and troubleshoot existing network and system environments based on current Microsoft Server operating systems. The courses in the program are also designed to help prepare for Microsoft Certified Product Specialist (MCP), and Microsoft Certified Information Technology Professional (MCITP) examinations. Typical tasks of a Microsoft Certified Systems Administrator (MCSA) are implementing, managing, and troubleshooting networks containing messaging services, file and print servers, and firewalls. In addition a MCSA may be responsible for configuring Internet access, to enabling remote access for users, and to managing client computers.

+ Program Prerequisites: CIS105 or Permission of Department/Division

I. Required Courses (20-23 Credits)

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credits</th>
<th>Grade</th>
<th>Semester</th>
<th>Comments</th>
<th>Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS121AB Microsoft Command Line Operations, or CIS221AB Microsoft Power Shell</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BPC170 Computer Maintenance: A+ Exam Prep Level I</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS190 Introduction to Local Area Networks, or CNT140AA Introduction to Networks, or MST140 Microsoft Networking Essentials</td>
<td>3-4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MST150 Microsoft Windows Professional, or MST150++ Any Microsoft Windows (any module)</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MST155 Implementing Windows Network Infrastructure, or MST155++ Any Windows Network Infrastructure (any module)</td>
<td>3-4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MST157 Implementing Windows Directory Services, or MST157++ Any Active Directory Windows Server Configuration (any module)</td>
<td>3-4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MST158++ Any Windows Server Administration (any module)</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Microsoft Technical Specialist - Certificate of Completion (5841)

Description: The Certificate of Completion (CCL) in Microsoft Technical Specialist program provides training for an entry-level position working with Windows networks. Knowledge and skills are developed to install, configure, customize, optimize, and troubleshoot Windows servers and Windows client workstations. The courses in the program also help to prepare for Microsoft Certified Product Specialist (MCP) and Microsoft Certified Information Technology Professional (MCITP) examinations. The curriculum ideally is taught by Microsoft Certified Professionals.

+ Program Prerequisites: CIS105 or Permission of Department/Division

I. Required Courses (16-17 Credits)

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credits</th>
<th>Grade</th>
<th>Semester</th>
<th>Comments</th>
<th>Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS121AB Microsoft Command Line Operations, or CIS221AB Microsoft Power Shell</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BPC170 Computer Maintenance: A+ Exam Prep Level I</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BPC270 Computer Maintenance: A+ Exam Prep Level II</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS190 Introduction to Local Area Networks, or CNT140 Cisco Networking Basics, or MST140 Microsoft Networking Essentials</td>
<td>3-4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MST150 Microsoft Windows Professional, or MST150++ Any MST150 Microsoft Windows course</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS270 Essentials of Network and Information Security</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

All program and course requirements are subject to change. It is strongly recommended that students select courses in consultation with an academic or occupational advisor to ensure proper course selection. A current list of all EMCC programs is available at estrellamountain.edu/academics/programs.

*Courses must meet AAS General Education Requirements (refer to the AAS Requirements under the General Education section)
Certificate & Degree Programs

Mobile Apps Programming - Associate in Applied Science (3139)

Description: The Associate in Applied Science (AAS) in Mobile Apps Programming is designed to provide information and training on the programming aspect of technology. Individuals will be provided with the opportunity to develop skills necessary to work in the programming field including mobile applications programming. The program also includes a Certificate of Completion (CCL) in Programming, a Certificate of Completion (CCL) in Programming and System Analysis, and a Certificate of Completion (CCL) in Mobile Apps Programming.

Program Notes: Student will need to consult with a program advisor on availability of Certificate of Completion programs. Program requirements for CCL/5047 or CCL/5048 may be taken in the CCL/5793 Mobile Apps Programming.

<table>
<thead>
<tr>
<th>I. General Education Requirements (19-27 Credits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Must earn “C” or higher in all courses within the program</td>
</tr>
<tr>
<td>ENG101 or ENG107</td>
</tr>
<tr>
<td>ENG102 or ENG108</td>
</tr>
<tr>
<td>Oral Communication*</td>
</tr>
<tr>
<td>CRE101, or CRE111, or equivalent by assessment</td>
</tr>
<tr>
<td>MAT120 Intermediate Algebra, or MAT121 Intermediate Algebra, or MAT122 Intermediate Algebra (may be met by required courses)</td>
</tr>
<tr>
<td>Natural Science*</td>
</tr>
<tr>
<td>Humanities/Fine Arts*</td>
</tr>
<tr>
<td>Social/Behavior Science*</td>
</tr>
</tbody>
</table>

II. Required Courses (37-45 Credits)

Mobile Apps Programming - Certificate of Completion (5793)

Description: The Certificate of Completion (CCL) in Mobile Apps Programming is designed to prepare individuals with the skills necessary to develop and distribute applications for mobile devices. Courses will include Mac Operating System, Adobe Photoshop, and Hypertext Markup Language (HTML)/Cascading Styles Sheets (CSS) for the development of iPhone, Android, and Windows 8 App development.

Program Notes: The Computer Information System (CIS) courses required by this program are not applicable if taken more than eight (8) years prior to the completion of the certificate program. Consult with an Academic Advisor for complete information.

I. Program Prerequisites (0-29 Credits)

<table>
<thead>
<tr>
<th>Must earn “C” or higher in all courses within the program</th>
<th>Credits</th>
<th>Grade</th>
<th>Semester</th>
<th>Comments</th>
<th>Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS150 Programming Fundamentals</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Certificate of Completion in Programming (5047), or Certificate of Completion in Programming and System Analysis (5048), or Permission of Department of Division Chair</td>
<td>0-29</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

II. Required Courses (16 Credits)

| CIS120DF Computer Graphics: Adobe Photoshop | 3 |
| CIS121AI Mac Operating System | 1 |
| CIS132 HTML/CSS | 3 |
| CIS165 Introduction to IOS Application Programming | 3 |
| CIS165DA Android Mobile Device Programming | 3 |
| CIS165DB C#/VB.NET: Windows 8 Mobile App Development | 3 |

All program and course requirements are subject to change. It is strongly recommended that students select courses in consultation with an academic or occupational advisor to ensure proper course selection. A current list of all EMCC programs is available at estrellamountain.edu/academics/programs.

*Courses must meet AAS General Education Requirements (refer to the AAS Requirements under the General Education section)
Networking Administration: Cisco - Certificate of Completion (5969N)

Description: The Certificate of Completion (CCL) in Networking Administration: Cisco program is a Cisco Systems recognized Regional or Local Academy that prepares students for industry-recognized certification. The curriculum is taught by Cisco Systems Certified Professionals. The Certificate of Completion (CCL) in Networking Administration: Cisco provides training for a position working with Cisco Systems networking and Internet hardware. Knowledge and skills are developed to install, configure, maintain, and troubleshoot Cisco routers and components, advanced routing protocols, Local Area Networks (LANs), and Wide Area Networks (WANs). The courses in the program also prepare students for the Cisco Certified Networking Associate examination.

I. REQUIRED COURSES (14-18 CREDITS) ONE OF THE FOLLOWING TWO TRACKS FROM BELOW MUST BE FULFILLED.

<table>
<thead>
<tr>
<th>Must earn “C” or higher in all courses within the program</th>
<th>CREDITS</th>
<th>GRADE</th>
<th>SEMESTER</th>
<th>COMMENTS</th>
<th>ADVISOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Track 1: Exploration or Track 2: Discovery -</td>
<td>14-18</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**REQUIRED COURSES TRACK 1 & TRACK 2 COURSE REQUIREMENTS**

**TRACK 1: EXPLORATION (14-18 CREDITS REQUIRED)**

| CNT140 Cisco Networking Basics, or                        | 4-6     |
| CNT140AA Introduction to Networks, or                     |         |
| CNT138 CCNA Discovery-Networking for Home and Small Businesses, and |         |
| CNT148 CCNA Discovery-Working at a Small-to-Medium Business or Internet Service Provider |         |
| CNT150 Cisco Networking Router Technologies, or           | 4       |
| CNT150AA Cisco-Routing and Switching Essentials           |         |
| CNT160 Cisco Switching Basics and Intermediate Routing, or | 3-4     |
| CNT160AA Scaling Networks                                 |         |
| CNT170 Cisco Wide Area Networks (WAN) Technologies, or    | 3-4     |
| CNT170AA Cisco-Connecting Networks                        |         |

**TRACK 2: DISCOVERY (14 CREDITS REQUIRED)**

| CNT138 CCNA Discovery –Networking for Home and Small Businesses | 3     |
| CNT148 CCNA Discovery-Working at a Small-to-Medium Business or Internet Service Provider | 3     |
| CNT158 CCNA Discovery-Introduction to Routing and Switching in the Enterprise | 4     |
| CNT168 CCNA Discovery-Designing and Supporting Computer Networks | 4     |
Networking Technology: Cisco - Associate in Applied Science (3816)

Description: A Cisco Systems recognized Regional or Local Academy, prepares students for industry-recognized certification. The curriculum is taught by Cisco Systems Certified Professionals. The Associate in Applied Science (AAS) in Networking Technology: Cisco provides training for a supervisory position working with Cisco Systems networking and Internet hardware. Knowledge and skills are developed to install, configure, maintain, and troubleshoot Cisco routers and components, advanced routing protocols, Local Area Networks (LANs), and Wide Area Networks (WANs); troubleshoot problems with various common hardwar and software configurations; perform administrative tasks in a network; develop methods for customer service. Courses in the program also prepare students for the Cisco Certified Networking Associate examination.

+ Program Notes: A course cannot be used to satisfy both the Required Course and Restricted Elective Area

<table>
<thead>
<tr>
<th>I. General Education Requirements (25 Credits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Must earn &quot;C&quot; or higher in all courses within the program</td>
</tr>
<tr>
<td>ENG101 or ENG107</td>
</tr>
<tr>
<td>ENG102 or ENG108 or ENG111</td>
</tr>
<tr>
<td>Oral Communication*</td>
</tr>
<tr>
<td>CRE101 or Equivalent by assessment</td>
</tr>
<tr>
<td>Mathematics*</td>
</tr>
<tr>
<td>Natural Science*</td>
</tr>
<tr>
<td>Humanities/Fine Arts*</td>
</tr>
<tr>
<td>Social/Behavior Science*</td>
</tr>
</tbody>
</table>

II. Required Courses (20-24 Credits)

BPC170 Computer Maintenance I: A+ Prep 3
CIS126++ UNIX/Linux Operating System (any module), or
MST150 Microsoft Windows Professional, or
MST150VI Microsoft Windows Vista Administration, or
MST150XP Microsoft Windows XP Professional 3

III. Required Courses From Track 1 or Track 2 (14-18 Credits) Please choose a track from below to complete the required courses

<table>
<thead>
<tr>
<th>TRACK 1: EXPLORATION OR TRACK 2: DISCOVERY</th>
</tr>
</thead>
<tbody>
<tr>
<td>14-18</td>
</tr>
</tbody>
</table>

III. Restricted Electives (15 Credits) Please choose from the list of restricted electives below. Courses cannot be shared with any required courses.

Required Courses Track 1 & Track 2 Course Requirements

<table>
<thead>
<tr>
<th>TRACK 1: EXPLORATION (14-18 Credits Required)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNT140 Cisco Networking Basics, or</td>
</tr>
<tr>
<td>CNT140AA Introduction to Networks, or</td>
</tr>
<tr>
<td>CNT138 CCNA Discovery-Networking for Home and Small Businesses, and</td>
</tr>
<tr>
<td>CNT148 CCNA Discovery-Working at a Small-to-Medium Business or Internet Service Provider</td>
</tr>
<tr>
<td>CNT150 Cisco Networking Router Technologies, or</td>
</tr>
<tr>
<td>CNT150AA Cisco-Routing and Switching Essentials</td>
</tr>
<tr>
<td>CNT160 Cisco Switching Basics and Intermediate Routing, or</td>
</tr>
<tr>
<td>CNT160AA Scaling Networks</td>
</tr>
<tr>
<td>CNT170 Cisco Wide Area Networks (WAN) Technologies, or</td>
</tr>
<tr>
<td>CNT170AA Cisco-Connecting Networks</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TRACK 2: DISCOVERY (14 Credits Required)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNT138 CCNA Discovery-Networking for Home and Small Businesses</td>
</tr>
<tr>
<td>CNT148 CCNA Discovery-Working at a Small-to-Medium Business or Internet Service Provider</td>
</tr>
</tbody>
</table>

All program and course requirements are subject to change. It is strongly recommended that students select courses in consultation with an academic or occupational advisor to ensure proper course selection. A current list of all EMCC programs is available at estrellamountain.edu/academics/programs.

*Courses must meet AAS General Education Requirements (refer to the AAS Requirements under the General Education section)
## Networking Technology: Cisco - Associate in Applied Science (3816) continued

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNT158</td>
<td>CCNA Discovery-Introduction to Routing and Switching in the Enterprise</td>
<td>4</td>
</tr>
<tr>
<td>CNT168</td>
<td>CCNA Discovery-Designing and Supporting Computer Networks</td>
<td>4</td>
</tr>
</tbody>
</table>

**RESTRICTED ELECTIVES (15 CREDITS REQUIRED)**  
COURSES CANNOT BE SHARED WITH ANY REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BPC110</td>
<td>Computer Usage and Applications, or CIS105 Survey of Computer Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>CIS126++</td>
<td>UNIX/Linux Operating System (any module), or</td>
<td>3</td>
</tr>
<tr>
<td>MST150</td>
<td>Microsoft Windows Professional, or</td>
<td></td>
</tr>
<tr>
<td>MST150VI</td>
<td>Microsoft Windows Vista Administration, or</td>
<td></td>
</tr>
<tr>
<td>MST150XP</td>
<td>Microsoft Windows XP Professional</td>
<td></td>
</tr>
<tr>
<td>CNT190</td>
<td>Introduction to Local Area Networks, or</td>
<td>3</td>
</tr>
<tr>
<td>MST140</td>
<td>Microsoft Networking Essentials</td>
<td></td>
</tr>
<tr>
<td>CNT270</td>
<td>Essentials of Network and Information Security</td>
<td>3</td>
</tr>
<tr>
<td>CNT296WA</td>
<td>Cooperative Education, or</td>
<td>3</td>
</tr>
<tr>
<td>CNT296WB</td>
<td>Cooperative Education, or</td>
<td>1-4</td>
</tr>
<tr>
<td>CNT296WC</td>
<td>Cooperative Education, or</td>
<td></td>
</tr>
<tr>
<td>CNT296WD</td>
<td>Cooperative Education, or</td>
<td></td>
</tr>
<tr>
<td>CNT298AA</td>
<td>Special Projects, or</td>
<td>1-3</td>
</tr>
<tr>
<td>CNT298AB</td>
<td>Special Projects, or</td>
<td></td>
</tr>
<tr>
<td>CNT298AC</td>
<td>Special Projects, or</td>
<td></td>
</tr>
<tr>
<td>CIS121AB</td>
<td>Microsoft Command Line Operations</td>
<td>1</td>
</tr>
<tr>
<td>CIS110</td>
<td>Interpersonal and Customer Service Skills for IT Professionals</td>
<td>1</td>
</tr>
<tr>
<td>CIS110H</td>
<td>Home Entertainment and Computer Networking</td>
<td>3</td>
</tr>
<tr>
<td>ELT100</td>
<td>Survey of Electronics</td>
<td>3</td>
</tr>
<tr>
<td>CIS224</td>
<td>Project Management Microsoft Project for Windows</td>
<td>3</td>
</tr>
<tr>
<td>CNT205</td>
<td>Cisco Certified Network Associate Security</td>
<td>4</td>
</tr>
<tr>
<td>CNT181</td>
<td>Cisco Securing IOS Networks</td>
<td>4</td>
</tr>
<tr>
<td>CNT202</td>
<td>Cisco Secure Firewall Appliance Configuration</td>
<td>4</td>
</tr>
<tr>
<td>CNT185</td>
<td>Cisco Network Security</td>
<td>4</td>
</tr>
<tr>
<td>CNT206</td>
<td>Cisco Certified Network Associate Wireless</td>
<td>4</td>
</tr>
<tr>
<td>CNT2++++</td>
<td>Any 200 level course with a CNT Prefix</td>
<td>1-4</td>
</tr>
<tr>
<td>BPC270</td>
<td>Computer Maintenance II: A+ Technician Prep</td>
<td>3</td>
</tr>
<tr>
<td>BPC273</td>
<td>Advanced Server Computer Maintenance: Server+ Prep</td>
<td>3</td>
</tr>
<tr>
<td>CIS127DL</td>
<td>Linux Utilities</td>
<td>3</td>
</tr>
<tr>
<td>CIS238DL</td>
<td>Linux System Administration</td>
<td>3</td>
</tr>
<tr>
<td>CIS239DL</td>
<td>Linux Shell Scripting</td>
<td>3</td>
</tr>
<tr>
<td>CIS240DL</td>
<td>Linux Network Administration</td>
<td>3</td>
</tr>
<tr>
<td>CIS241DL</td>
<td>Apache Web Server Administration (Linux/Unix)</td>
<td>3</td>
</tr>
<tr>
<td>CIS271DL</td>
<td>Linux Security</td>
<td>3</td>
</tr>
<tr>
<td>CIS274DL</td>
<td>Linux Enterprise Network Security</td>
<td>3</td>
</tr>
<tr>
<td>MST152</td>
<td>Microsoft Windows Server, or</td>
<td></td>
</tr>
<tr>
<td>MST152DA</td>
<td>Microsoft Windows 2000 Server, or</td>
<td></td>
</tr>
<tr>
<td>MST152DB</td>
<td>Microsoft Windows 2003 Server, or</td>
<td>4</td>
</tr>
<tr>
<td>MST155</td>
<td>Implementing Windows Network Infrastructure</td>
<td>3</td>
</tr>
<tr>
<td>MST157</td>
<td>Implementing Windows Directory Services</td>
<td>3</td>
</tr>
<tr>
<td>MST232</td>
<td>Managing a Windows Network Environment</td>
<td>3</td>
</tr>
<tr>
<td>CIS250</td>
<td>Management of Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>CIS280</td>
<td>Current Topics in Computing</td>
<td>3</td>
</tr>
<tr>
<td>CIS290AA</td>
<td>Computer Information Systems Internship, or</td>
<td>1-3</td>
</tr>
<tr>
<td>CIS290AB</td>
<td>Computer Information Systems Internship, or</td>
<td></td>
</tr>
<tr>
<td>CIS290AC</td>
<td>Computer Information Systems Internship, or</td>
<td></td>
</tr>
</tbody>
</table>

All program and course requirements are subject to change. It is strongly recommended that students select courses in consultation with an academic or occupational advisor to ensure proper course selection. A current list of all EMCC programs is available at estrellamountain.edu/academics/programs.

*Courses must meet AAS General Education Requirements (refer to the AAS Requirements under the General Education section)*
Networking Technology: Cisco - Certificate of Completion (5967)

Description: A Cisco Systems recognized Regional or Local Academy prepares students for industry-recognized certification. The curriculum is taught by Cisco Systems Certified Professionals. The Certificate of Completion (CCL) in Networking Technology: Cisco provides training for a supervisory position working with Cisco Systems networking and Internet hardware. Knowledge and skills are developed to install, configure, maintain, and troubleshoot Cisco routers and components, advanced routing protocols, Local Area Networks (LANs), and Wide Area Networks (WANs). The courses in the program also prepare students for the Cisco Certified Networking Associate examination.

I. Required Courses (20-24 Credits)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Grade</th>
<th>Semester</th>
<th>Comments</th>
<th>Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>BPC170</td>
<td>Computer Maintenance I: A+ Prep</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS126++</td>
<td>UNIX/Linux Operating System (any module), or</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MST150++</td>
<td>Microsoft Windows Professional (any module)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

III. Required Courses from Track 1 or Track 2 (14-18 Credits)

Please choose a track from below to complete the required courses.

| Track 1: Exploration or Track 2: Discovery - | 14-18 |

**Required Courses Track 1 & Track 2 Course Requirements**

**Track 1: Exploration (14-18 Credits Required)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CNT140</td>
<td>Cisco Networking Basics, or</td>
<td>4-6</td>
<td></td>
</tr>
<tr>
<td>CNT140AA</td>
<td>Introduction to Networks, or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CNT138</td>
<td>CCNA Discovery-Networking for Home and Small Businesses, and</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CNT148</td>
<td>CCNA Discovery-Working at a Small-to-Medium Business or Internet Service Provider</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CNT150</td>
<td>Cisco Networking Router Technologies, or</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>CNT150AA</td>
<td>Cisco-Routing and Switching Essentials</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CNT160</td>
<td>Cisco Switching Basics and Intermediate Routing, or</td>
<td>3-4</td>
<td></td>
</tr>
<tr>
<td>CNT160AA</td>
<td>Scaling Networks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CNT170</td>
<td>Cisco Wide Area Networks (WAN) Technologies, or</td>
<td>3-4</td>
<td></td>
</tr>
<tr>
<td>CNT170AA</td>
<td>Cisco-Connecting Networks</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Track 2: Discovery (14 Credits Required)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CNT138</td>
<td>CCNA Discovery-Networking for Small Businesses</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CNT148</td>
<td>CCNA Discovery-Working at a Small-to-Medium Business or Internet Service Provider</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CNT158</td>
<td>CCNA-Introduction to Routing and Switching in the Enterprise</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>CNT168</td>
<td>CCNA Discovery-Designing and Supporting Computer Networks</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>
Certificate & Degree Programs

Nurse Assisting - Certificate of Completion (5963N)

Description: The Certificate of Completion (CCL) in Nurse Assisting prepares students for entry level employment in various health care settings as a nursing assistant. The program combines classroom instruction with clinical laboratory, skilled care and acute care experiences. Students who complete the program are eligible to take a written and practical certification examination and work as a Certified Nursing Assistant. Licensing requirements are the exclusive responsibility of the Arizona State Board of Nursing. The MCCD Nurse Assisting Program is approved by the Arizona State Board of Nursing.

Admission Criteria: Application and acceptance into the program, High School graduate or GED, current Health Care Provider CPR Card required before beginning courses. All students must submit a copy of a fingerprint clearance card with their application for the Maricopa Community College District Nursing Program.

<table>
<thead>
<tr>
<th>I. REQUIRED COURSES (6 CREDITS)</th>
<th>CREDITS</th>
<th>GRADE</th>
<th>SEMESTER</th>
<th>COMMENTS</th>
<th>ADVISOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Must earn &quot;C&quot; or higher in all courses within the program</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NUR158 Nurse Assisting</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

All program and course requirements are subject to change. It is strongly recommended that students select courses in consultation with an academic or occupational advisor to ensure proper course selection. A current list of all EMCC programs is available at estrellamountain.edu/academics/programs.

*Courses must meet AAS General Education Requirements (refer to the AAS Requirements under the General Education section)
Nursing - Associate in Applied Science (3812)

Description: The Associate in Applied Science (AAS) in Nursing Program is available at eight of the Maricopa Community Colleges. Clinical experiences are provided in a variety of healthcare settings. Nursing Program graduates are eligible to apply for the national exam for the registered nurse license. Licensing requirements are the exclusive responsibility of the State Board of Nursing. The Associate in Applied Science (AAS) Nursing Program is approved by the Arizona State Board of Nursing and accredited by the Accreditation Commission for Education in Nursing (ACEN), 3343 Peachtree Road NE, Suite 850, Atlanta, GA 30326; (404.975.5000); email: info@acen nursing.org.

PROGRAM NOTES: 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.

ADMISSION CRITERIA: HIGH SCHOOL DIPLOMA OR GED. 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.

PROGRAM PREREQUISITES (10-20 CREDITS) The credit hour range is subject to change depending on the student’s education experience. 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.

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Grade</th>
<th>Semester</th>
<th>Comments</th>
<th>Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO156 Introductory Biology for Allied Health, or BIO181 General Biology</td>
<td>0-4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIO201 Human Anatomy and Physiology I</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHM130 Fundamental Chemistry, and CHM130LL Fundamental Chemistry Laboratory, or One year of high school chemistry</td>
<td>0-4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAT140 College Mathematics, or MAT141 College Mathematics, or MAT142 College Mathematics, or Satisfactory completion of higher level math course</td>
<td>3-5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG101 First-Year Composition, or ENG107 First-Year Composition for ESL</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

I. GENERAL EDUCATION REQUIREMENTS (16-19 CREDITS)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG102 or ENG108</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Oral Communication – Waived</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>CRE101 or equivalent by assessment</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Mathematics met by MAT140/141/142, or Satisfactory completion of higher level math course in Program prerequisites area</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>BIO202 Human Anatomy and Physiology II, and BIO205 Microbiology</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Humanities/Fine Arts*</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>PSY101 Introduction to Psychology</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

II. REQUIRED COURSES (36 CREDITS)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUR152 Nursing Theory and Science I</td>
<td>9</td>
</tr>
<tr>
<td>NUR172 Nursing Theory and Science II</td>
<td>9</td>
</tr>
<tr>
<td>NUR252 Nursing Theory and Science III</td>
<td>9</td>
</tr>
<tr>
<td>NUR283 Nursing Theory and Science IV</td>
<td>9</td>
</tr>
</tbody>
</table>

All program and course requirements are subject to change. It is strongly recommended that students select courses in consultation with an academic or occupational advisor to ensure proper course selection. A current list of all EMCC programs is available at estrellamountain.edu/academics/programs.

*Courses must meet AAS General Education Requirements (refer to the AAS Requirements under the General Education section)
Organizational Leadership - Certificate of Completion (5731)

Description: The Certificate of Completion (CCL) in Organizational Leadership is designed to prepare students with knowledge and skills needed in today's changing workplace. The program provides leadership and communication skills and techniques for planning, directing, and evaluating business situations. This program also emphasizes procedures for effective allocation of time, money, materials, space, and personnel. An Associate in Applied Science (AAS) in Organizational Management is also available.

Certificate & Degree Programs

Organizational Leadership - Certificate of Completion (5731)

Description: The Certificate of Completion (CCL) in Organizational Leadership is designed to prepare students with knowledge and skills needed in today's changing workplace. The program provides leadership and communication skills and techniques for planning, directing, and evaluating business situations. This program also emphasizes procedures for effective allocation of time, money, materials, space, and personnel. An Associate in Applied Science (AAS) in Organizational Management is also available.

Program Prerequisites: (0-3 Credits) ENG101, or ENG107, or Permission of Department or Division

<table>
<thead>
<tr>
<th>I. General Education Requirements (18 Credits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Must earn &quot;C&quot; or higher in all courses within the program</td>
</tr>
<tr>
<td>BPC110 Computer Usage and Application, or CIS105 Survey of Computer Information Systems</td>
</tr>
<tr>
<td>GBS110 Human Relations in Business and Industry, or MGT251 Human Relations in Business</td>
</tr>
<tr>
<td>GBS151 Introduction to Business</td>
</tr>
<tr>
<td>GBS233 Business Communication</td>
</tr>
<tr>
<td>MGT175 Business Organization and Management, or TQM240 Project Management in Quality Organizations</td>
</tr>
<tr>
<td>MGT101 Techniques of Supervision, or MGT229 Management and Leadership</td>
</tr>
</tbody>
</table>

Organizational Management - Associate in Applied Science (3727)

Description: The Associate in Applied Science (AAS) in Organizational Management program provides students 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 develops leadership and communication skills and techniques for planning, directing, and evaluating business situations, with an emphasis on effective allocation of time, money, materials, space, and personnel. The curriculum combines coursework in leadership with a general education component.

I. General Education Requirements (22-27 Credits)

<table>
<thead>
<tr>
<th>Must earn &quot;C&quot; or higher in all courses within the program</th>
<th>Credits</th>
<th>Grade</th>
<th>Semester</th>
<th>Comments</th>
<th>Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG101 or ENG107</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG102 or ENG108</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral Communication*</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRE101 or Equivalent by assessment</td>
<td>0-3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics*</td>
<td>3-5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Natural Science*</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities/Fine Arts*</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social/Behavior Science*</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

II. Required Courses (18 Credits) Completion of Certificate of Completion in Organizational Leadership (5731)

<table>
<thead>
<tr>
<th>I. General Education Requirements (18 Credits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BPC110 Computer Usage and Application, or CIS105 Survey of Computer Information Systems</td>
</tr>
<tr>
<td>GBS110 Human Relations in Business and Industry, or MGT251 Human Relations in Business</td>
</tr>
<tr>
<td>GBS151 Introduction to Business</td>
</tr>
<tr>
<td>GBS233 Business Communication</td>
</tr>
<tr>
<td>MGT175 Business Organization and Management, or TQM240 Project Management in Quality Organizations</td>
</tr>
<tr>
<td>MGT101 Techniques of Supervision, or MGT229 Management and Leadership</td>
</tr>
</tbody>
</table>

All program and course requirements are subject to change. It is strongly recommended that students select courses in consultation with an academic or occupational advisor to ensure proper course selection. A current list of all EMCC programs is available at estrellamountain.edu/academics/programs.

Courses must meet AAS General Education Requirements (refer to the AAS Requirements under the General Education section)
Certificate & Degree Programs

Organizational Management - Associate in Applied Science (3727)
continued

III. Restricted Electives (19-25 Credits)  Students must choose 19-25 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.


Power Plant Technology-Associate in Applied Science (3003)

Description: The Associate in Applied Science (AAS) in Power Plant Technology Program is designed to provide trade-related classroom training as required by the US department of Labor, Bureau of Apprenticeship and Training, the State of Arizona, Apprenticeship Division, and the National Academy of Nuclear Training. The program consists of a core curriculum that is common to all power plant disciplines. The student selects a track of study-mechanical electrical, instrumentation, heating ventilation and air conditioning, welding, machining, radiation protection technician, or non-licensed operator-to complete specialized craft-related training.

+ Program Notes: Students who wish to obtain the Nuclear Uniform Curriculum Program (NUCP) industry certificate, may be required to meet additional standards. Please contact the Division or Program Director for more information.

II. General Education Requirement (19-22 Credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Grade</th>
<th>Semester</th>
<th>Comments</th>
<th>Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG101 or ENG107</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG102 or ENG108 or ENG111</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral Communication*</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRE101 or CRE111 or Equivalent as indicated by assessment Mathematics (Met by GTC108 Required Courses area)</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities and Fine Arts*</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social and Behavioral Sciences*</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHS110 or PHY101</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

II. Required Courses (29 Credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPD104 Career and Personal Development (CPD104 must be completed prior to enrollment in the program, or during the first semester of the program)</td>
<td>3</td>
</tr>
<tr>
<td>BPC110 Computer Usage and Applications, or CIS105 Survey of Computer Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>PPT120 Energy Industry Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>GTC107 Technical Mathematics I</td>
<td>3</td>
</tr>
<tr>
<td>GTC108 Technical Mathematics II</td>
<td>3</td>
</tr>
<tr>
<td>PPT121 Plant Components</td>
<td>3</td>
</tr>
<tr>
<td>PPT202 Power Plant Systems I</td>
<td>3</td>
</tr>
<tr>
<td>PPT203 Power Plant Systems II</td>
<td>3</td>
</tr>
<tr>
<td>PPT221 Reactor Theory</td>
<td>3</td>
</tr>
<tr>
<td>PPT222 Reactor Plant Chemistry and Materials</td>
<td>2</td>
</tr>
</tbody>
</table>

All program and course requirements are subject to change. It is strongly recommended that students select courses in consultation with an academic or occupational advisor to ensure proper course selection. A current list of all EMCC programs is available at estrellamountain.edu/academics/programs.

*Courses must meet AAS General Education Requirements (refer to the AAS Requirements under the General Education section)

[136]
Power Plant Technology-Associate in Applied Science (3003) Continued

### III. Restricted Electives: Students must select one (1) of the following eight (8) tracks. Please choose a track from below to complete the Restricted Electives

<table>
<thead>
<tr>
<th>Track One (1) to Track Eight (8)</th>
<th>17-23</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Restricted Electives Track One (1) through Eight (8) Requirements

#### Track 1: Power Plant Technology- Mechanical (17-20 Credits)

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPT101 Hand and Power Tools</td>
<td>1</td>
</tr>
<tr>
<td>PPT103 Print Reading and Plant Drawings</td>
<td>1</td>
</tr>
<tr>
<td>PPT108 Turbines</td>
<td>1</td>
</tr>
<tr>
<td>PPT115 Hydraulics and Pneumatics</td>
<td>2</td>
</tr>
<tr>
<td>PPT118 Conduct of Maintenance</td>
<td>1</td>
</tr>
<tr>
<td>PPT205 Rigging</td>
<td>2</td>
</tr>
<tr>
<td>PPT207 Heat Exchangers</td>
<td>1</td>
</tr>
<tr>
<td>PPT210 Valve Maintenance II</td>
<td>3</td>
</tr>
<tr>
<td>PPT212 Control Valves and Actuators</td>
<td>1</td>
</tr>
<tr>
<td>PPT213 Pumps II</td>
<td>3</td>
</tr>
<tr>
<td>PPT224MM Mechanical Components for Maintenance Technicians</td>
<td>1</td>
</tr>
</tbody>
</table>

Choose 0-3 additional Credits from the following courses:

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPT107 Lubrication</td>
<td>1</td>
</tr>
<tr>
<td>PPT112 Principles of Machining</td>
<td>3</td>
</tr>
<tr>
<td>PPT114 Drive and Gear Components</td>
<td>1</td>
</tr>
<tr>
<td>PPT119 Instrument Air Compressor Maintenance</td>
<td>2</td>
</tr>
<tr>
<td>PPT206 Bearings</td>
<td>1</td>
</tr>
<tr>
<td>PPT209 Pipefitting Auxiliaries II</td>
<td>2</td>
</tr>
<tr>
<td>PPT214 Machine Alignment</td>
<td>3</td>
</tr>
<tr>
<td>PPT215 Relief and Safety Valves</td>
<td>1</td>
</tr>
<tr>
<td>PPT218 Lathe Operations</td>
<td>2</td>
</tr>
<tr>
<td>PPT219 Milling Machine Operations</td>
<td>2</td>
</tr>
</tbody>
</table>

#### Track 2: Power Plant Technology- Electrical (17-20 Credits)

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPT101 Hand and Power Tools</td>
<td>1</td>
</tr>
<tr>
<td>PPT103 Print Reading and Plant Drawings</td>
<td>1</td>
</tr>
<tr>
<td>PPT118 Conduct of Maintenance</td>
<td>1</td>
</tr>
<tr>
<td>PPT224EM Electrical Components for Maintenance Technicians</td>
<td>1</td>
</tr>
<tr>
<td>PPT224EI Components for Maintenance Technicians</td>
<td>1</td>
</tr>
<tr>
<td>ELC119 Concepts of Electricity and Electronics</td>
<td>3</td>
</tr>
<tr>
<td>ELC120 Solid State Fundamentals</td>
<td>3</td>
</tr>
</tbody>
</table>

Choose 6-9 additional Credits from the following courses:

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELC210 AC Machinery and DC Machinery</td>
<td>3</td>
</tr>
<tr>
<td>ELC217 Motor Controls</td>
<td>3</td>
</tr>
<tr>
<td>ELC218 Variable Frequency Drives</td>
<td>3</td>
</tr>
<tr>
<td>ELT101 Mathematics for Electronics I</td>
<td>3</td>
</tr>
<tr>
<td>ELT102 Mathematics for Electronics II</td>
<td>3</td>
</tr>
<tr>
<td>ELT113 Basic Electronics</td>
<td>4</td>
</tr>
</tbody>
</table>

All program and course requirements are subject to change. It is strongly recommended that students select courses in consultation with an academic or occupational advisor to ensure proper course selection. A current list of all EMCC programs is available at estrellamountain.edu/academics/programs.

*Courses must meet AAS General Education Requirements (refer to the AAS Requirements under the General Education section)
# Certificate & Degree Programs

## Power Plant Technology-Associate in Applied Science (3003) Continued

<table>
<thead>
<tr>
<th>Track 3: Power Plant Technology- Instrumentation (17-20 Credits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPT101 Hand and Power Tools</td>
</tr>
<tr>
<td>PPT103 Print Reading and Plant Drawings</td>
</tr>
<tr>
<td>PPT115 Hydraulics and Pneumatics</td>
</tr>
<tr>
<td>PPT118 Conduct of Maintenance</td>
</tr>
<tr>
<td>PPT224EI Components for Maintenance Technicians</td>
</tr>
<tr>
<td>PPT224IC Instrumentation and Control for Maintenance Technicians</td>
</tr>
<tr>
<td>ELT113 Basic Electronic</td>
</tr>
<tr>
<td>ELT195 Solid State Electronics</td>
</tr>
</tbody>
</table>

*Choose 2-5 additional credits from the following courses*

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELT101 Mathematics for Electronics I</td>
<td>3</td>
</tr>
<tr>
<td>ELT102 Mathematics for Electronics II</td>
<td>3</td>
</tr>
<tr>
<td>ELT131 Digital and Logic Circuits</td>
<td>4</td>
</tr>
<tr>
<td>ELT251 Electronic Instrumentation</td>
<td>3</td>
</tr>
<tr>
<td>NET183AA Operating Systems/PC</td>
<td>2</td>
</tr>
<tr>
<td>PPT102 Introduction to Electricity</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Track 4: Power Plant Technology- Heating, Ventilation and Air Conditioning (17-20 Credits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPT101 Hand and Power Tools</td>
</tr>
<tr>
<td>PPT103 Print Reading and Plant Drawings</td>
</tr>
<tr>
<td>PPT118 Conduct of Maintenance</td>
</tr>
</tbody>
</table>

*Choose 14-17 additional credits from the following courses*

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FAC/HVA101 Refrigeration Applications and Components I</td>
<td>2</td>
</tr>
<tr>
<td>FAC/HVA101LL Refrigeration Applications and Components I Lab</td>
<td>1</td>
</tr>
<tr>
<td>ELC/FAC/HVA105 Electricity for Industry</td>
<td>3</td>
</tr>
<tr>
<td>ELC/FAC/HVA105LL Electricity for Industry Lab</td>
<td>1</td>
</tr>
<tr>
<td>ELC/FAC/HVA115 Motors, Controls and Wiring Diagrams</td>
<td>3</td>
</tr>
<tr>
<td>ELC/FAC/HVA115LL Motors, Controls and Wiring Diagrams Lab</td>
<td>1</td>
</tr>
<tr>
<td>FAC/HVA210 Facilities Air Conditioning Systems</td>
<td>3</td>
</tr>
<tr>
<td>FAC/HVA210 Facilities Air Conditioning Systems Lab</td>
<td>1</td>
</tr>
<tr>
<td>HVA112 Heating and Air Conditioning</td>
<td>3</td>
</tr>
<tr>
<td>HVA112LL Heating and Air Conditioning Lab</td>
<td>1</td>
</tr>
<tr>
<td>HVA143 Load Calculation and Duct Design</td>
<td>3</td>
</tr>
<tr>
<td>HVA234 HVAC and Refrigeration Installation</td>
<td>3</td>
</tr>
<tr>
<td>HVA234LL HVAC and Refrigeration Installation Lab</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Track 5: Power Plant Technology- Welding (17-20 Credits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPT101 Hand and Power Tools</td>
</tr>
<tr>
<td>PPT103 Print Reading and Plant Drawings</td>
</tr>
<tr>
<td>PPT118 Conduct of Maintenance</td>
</tr>
</tbody>
</table>

*Choose 14-17 additional credits from the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>WLD101 Welding I</td>
<td>3</td>
</tr>
<tr>
<td>WLD106 Arc Welding</td>
<td>5</td>
</tr>
<tr>
<td>WLD201 Welding II</td>
<td>3</td>
</tr>
<tr>
<td>WLD206 Advanced Welding-Heliarc and Wire Feed</td>
<td>5</td>
</tr>
<tr>
<td>WLD208 Advanced Arc Welding-Certification</td>
<td>5</td>
</tr>
</tbody>
</table>

All program and course requirements are subject to change. It is strongly recommended that students select courses in consultation with an academic or occupational advisor to ensure proper course selection. A current list of all EMCC programs is available at [estrellamountain.edu/academics/programs](http://estrellamountain.edu/academics/programs).

*Courses must meet AAS General Education Requirements (refer to the AAS Requirements under the General Education section)*
## Certificate & Degree Programs

### Power Plant Technology-Associate in Applied Science (3003)

#### TRACK 6: POWER PLANT TECHNOLOGY- MACHINING (17-20 CREDITS)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPT101 Hand and Power Tools</td>
<td>1</td>
</tr>
<tr>
<td>PPT103 Print Reading and Plant Drawings</td>
<td>1</td>
</tr>
<tr>
<td>PPT118 Conduct of Maintenance</td>
<td>1</td>
</tr>
<tr>
<td><em>Choose 14-17 additional credits from the following courses:</em></td>
<td></td>
</tr>
<tr>
<td>MET109 Machine Trades Print Reading</td>
<td>3</td>
</tr>
<tr>
<td>MET110 Survey of Manufacturing Materials</td>
<td>1</td>
</tr>
<tr>
<td>MET112 Inspection Techniques</td>
<td>3</td>
</tr>
<tr>
<td>MET113 Applied Geometric Dimensioning and Tolerance</td>
<td>3</td>
</tr>
<tr>
<td>MET114 Quality Systems</td>
<td>1</td>
</tr>
<tr>
<td>MET231 Manufacturing Processes and Materials</td>
<td>3</td>
</tr>
<tr>
<td>GTC/MET206 CNC Programming</td>
<td>3</td>
</tr>
<tr>
<td>GTC236 CAD/CAM Computer Numerical Control (CNC) Programming</td>
<td>3</td>
</tr>
<tr>
<td>MET260 Tooling and Fixturing</td>
<td>3</td>
</tr>
<tr>
<td>MET264 Manufacturing Process Planning</td>
<td>3</td>
</tr>
</tbody>
</table>

#### TRACK 7: POWER PLANT TECHNOLOGY- RADIATION PROTECTION TECHNOLOGY (18-23 CREDITS)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>RPT103 Radiation Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>RPT113 Radiation Monitoring</td>
<td>3</td>
</tr>
<tr>
<td>RPT223 Radiation Dosimetry</td>
<td>3</td>
</tr>
<tr>
<td>RPT233 Radioactive Materials Handling</td>
<td>3</td>
</tr>
<tr>
<td>RPT243 Radiological Safety and Response</td>
<td>3</td>
</tr>
<tr>
<td>RPT253 Radiation Protection</td>
<td>3</td>
</tr>
<tr>
<td><em>Choose 0-5 additional credits from the following course:</em></td>
<td></td>
</tr>
<tr>
<td>RPT290 Radiation Protection Internship</td>
<td>5</td>
</tr>
</tbody>
</table>

#### TRACK 8: POWER PLANT TECHNOLOGY- NON-LICENSED OPERATOR (22 CREDITS)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPT103 Print Reading and Drawing</td>
<td>1</td>
</tr>
<tr>
<td>PPT107 Lubrication</td>
<td>1</td>
</tr>
<tr>
<td>PPT122 Conduct of Operations</td>
<td>1</td>
</tr>
<tr>
<td>PPT228 Electric Plant Systems for Operators</td>
<td>1</td>
</tr>
<tr>
<td>PPT229 Auxiliary Plant Systems for Operators</td>
<td>3</td>
</tr>
<tr>
<td>PPT230 Primary Plant Systems or Operators</td>
<td>3</td>
</tr>
<tr>
<td>PPT231 Secondary Plant Systems for Operators</td>
<td>3</td>
</tr>
<tr>
<td>PPT232 Reactor Plant Operations</td>
<td>3</td>
</tr>
<tr>
<td>RPT243 Radiological Safety and Response</td>
<td>3</td>
</tr>
<tr>
<td>PPT240 Non-Licensed Operator Practicum</td>
<td>3</td>
</tr>
</tbody>
</table>

All program and course requirements are subject to change. It is strongly recommended that students select courses in consultation with an academic or occupational advisor to ensure proper course selection. A current list of all EMCC programs is available at estrellamountain.edu/academics/programs.

*Courses must meet AAS General Education Requirements (refer to the AAS Requirements under the General Education section)*
Power Systems Technology-Certificate of Completion (5850)

Description: The Certificate of Completion (CCL) in Power Systems Technology is designed to help prepare students for careers in the power generation and distribution industries. Training, most of which is hands-on, will include such topics as AC/DC theory, solid state devices, industrial motors and generators, power plant systems and their operation, power plant chemistry, and other subjects as local needs require. The completion of this program will help prepare students for a variety of careers in power generation and distribution fields as an on-the job trainee or apprentice.

+ Program Notes: Student must obtain First Aid/Cardiopulmonary Resuscitation (CPR) certification by the completion of the program.

II. Required Courses (19 Credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Grade</th>
<th>Semester</th>
<th>Comments</th>
<th>Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELC119 Concepts of Electricity and Electronics, or ELE100 Concepts of Electricity and Electronics</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GTC107 Technical Mathematics I, or GTC108 Technical Mathematics II</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PPT101 Hand and Power Tools</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PPT103 Print Reading and Plant Drawings</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PPT120 Energy Industry Fundamentals</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PPT121 Power Plant Components</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PPT202 Power Plant Systems I</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PPT222 Reactor Plant Chemistry and Materials</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

All program and course requirements are subject to change. It is strongly recommended that students select courses in consultation with an academic or occupational advisor to ensure proper course selection. A current list of all EMCC programs is available at estrellamountain.edu/academics/programs.

*Courses must meet AAS General Education Requirements (refer to the AAS Requirements under the General Education section)
Certificate & Degree Programs

Practical Nursing - Certificate of Completion (5957)

Description: The Certificate of Completion (CCL) in Practical Nursing Program is available at eight 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.

+ Admission Criteria: High School diploma or GED. 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 Assisting 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.

I. Program Prerequisites (10-20 Credits)

Must earn “C” or higher in all courses within the program

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Grade</th>
<th>Semester</th>
<th>Comments</th>
<th>Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO156 Introductory Biology for Allied Health, or BIO181 General Biology (Majors) I, or One year high school biology</td>
<td>0-4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIO201 Human Anatomy and Physiology I</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHM130 Fundamental Chemistry, and CHM130LL Fundamental Chemistry Laboratory, or One year high school chemistry</td>
<td>0-4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG101 First-Year Composition, or ENG107 First-Year Composition for ESL</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAT140 College Mathematics, or MAT141 College Mathematics, or MAT142 College Mathematics, or Satisfactory completion of higher level mathematics course</td>
<td>3-5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

II. Required Courses (25 Credits)

Must earn “C” or higher in all courses within the program

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Grade</th>
<th>Semester</th>
<th>Comments</th>
<th>Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO202 Human Anatomy and Physiology II</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NUR152 Nursing Theory and Science I</td>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NUR172 Nursing Theory and Science II</td>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NUR192 Practical Nursing Transition</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

All program and course requirements are subject to change. It is strongly recommended that students select courses in consultation with an academic or occupational advisor to ensure proper course selection. A current list of all EMCC programs is available at estrellamountain.edu/academics/programs.

*Courses must meet AAS General Education Requirements (refer to the AAS Requirements under the General Education section)
Programming and System Analysis - Associate in Applied Science (3844)

Description: The Associate in Applied Science (AAS) program provides an in-depth exploration of different computer language and technical skills. The program includes, but is not limited to the following: operating systems, local area networks, business communication, team roles, and dynamics. A Certificate of Completion (CCL) is also available.

<table>
<thead>
<tr>
<th>+ Program Prerequisites: CRE101 or equivalent by assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. General Education Requirements (22-24 Credits)</td>
</tr>
<tr>
<td>Must earn “C” or higher in all courses within the program</td>
</tr>
<tr>
<td>CREDITS</td>
</tr>
<tr>
<td>ENG101 or ENG107</td>
</tr>
<tr>
<td>ENG102 or ENG108</td>
</tr>
<tr>
<td>Oral Communication*</td>
</tr>
<tr>
<td>CRE101 met by program prerequisite</td>
</tr>
<tr>
<td>MAT150 College Algebra/Functions, or MAT151 College Algebra/Functions, or MAT152 College Algebra/Functions</td>
</tr>
<tr>
<td>Natural Science*</td>
</tr>
<tr>
<td>Humanities/Fine Arts*</td>
</tr>
<tr>
<td>ECN211 or ECN212 or SBU200</td>
</tr>
</tbody>
</table>

II. Required Courses (36-37 Credits) Students should select courses in consultation with a department advisor.

| CIS233 Business Communication | 3 |  |
| ACC111 Accounting Principles I | 3 |  |
| CIS105 Survey of Computer Information Systems | 3 |  |
| CIS224 Project Management Microsoft Project for Windows | 3 |  |
| CIS126DA UNIX Operations System, or CIS126DL Linux Operating System, or MST150 Microsoft Windows Professional, or MST150VI Microsoft Windows Vista Administration, or MST150XP Microsoft Windows XP Professional | 3 |  |
| CIS150 Programming Fundamentals, or CIS150AB Object-Oriented Programming Fundamentals | 3 |  |
| CIS166 Web Scripting/Programming, or CIS166AA Introduction to Java Scripting, or CIS166AB Web Scripting with Perl/CGI, or CIS166AC Web Scripting with Active Server Pages (ASP).NET, or CIS166AD Web Scripting with Java Server Pages (JSP), or CIS166AE Web Scripting with PHP: Hypertext Preprocessor (PHP), or CIS166AF Web Scripting with Python | 3 |  |
| CIS190 Introduction to Local Area Networks, or CNT140 Cisco Networking Basics, or MST140 Microsoft Networking Essentials | 3-4 |  |
| CIS225 Business Systems Analysis and Design, or CIS225AB Object-Oriented Analysis and Design, or CIS250 Management of Information Systems | 3 |  |
| CIS217AM Advanced Microsoft Access: Database Management, or CIS119DO Introduction to Oracle: SQL, or CIS276DA My SQL Database | 3 |  |
| Select two courses from the following for a total of 6 credits: CIS151, CIS159, CIS162, CIS162AB, CIS162AC, CIS162AD, CIS163AA | 3 |  |

III. Restricted Electives (6 Credits) Students should select from the following courses in consultation with a department advisor:

| CIS251, CIS259, CIS262, CIS262AB, CIS262AC, CIS262AD, CIS263AA |  |  |

All program and course requirements are subject to change. It is strongly recommended that students select courses in consultation with an academic or occupational advisor to ensure proper course selection. A current list of all EMCC programs is available at estrellamountain.edu/academics/programs.

*Courses must meet AAS General Education Requirements (refer to the AAS Requirements under the General Education section)
Certificate & Degree Programs

Programming and System Analysis - Certificate of Completion (5048)

Description: The Certificate of Completion (CCL) program provides an in-depth exploration of different computer language and technical skills. Includes, but is not limited to the following: operating systems, local area networks, team roles, and dynamics. An Associate in Applied Science (AAS) is also available.

I. Required Courses (21 Credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Grade</th>
<th>Semester</th>
<th>Comments</th>
<th>Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS105 Survey of Computer Information Systems</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS224 Project Management Microsoft Project for Windows</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS12DA UNIX Operations System, or CIS12DL Linux Operating System, or</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MST150 Microsoft Windows Professional, or MST150VI Microsoft Windows Vista Administration, or MST150XP Microsoft Windows XP Professional</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS150 Programming Fundamentals, or CIS150AB Object-Oriented Programming Fundamentals</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS151 Computer Game Development: Level I, or CIS159 Visual Basic Programming I, or CIS162++ Any C Programming: Level I course, or CIS163AA Java Programming: Level I</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS225 Business Systems Analysis and Design, or CIS225AB Object-Oriented Analysis and Design, or CIS250 Management of Information Systems</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS217AM Advanced Microsoft Access: Database Management, or CIS119DO Introduction to Oracle: SQL, or CIS276DA MySQL Database</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

II. Restricted Electives (3 Credits) Students should select from the following courses in consultation with a department advisor.

- CIS251, CIS259, CIS262++, CIS263AA

Programming - Certificate of Completion (5047)

Description: The Certificate of Completion (CCL) in Programming is designed to prepare the student to work in the programming field. Courses focus on programming theory, Java programming, Visual Basic programming, and web programming.

+ Program Notes: The Computer Information System (CIS) or the Computer Science (CSC) courses required by this program are not applicable if taken more than eight (8) years prior to the completion of the certificate program. Consult with an Academic Advisor for complete information.

+ Program Prerequisites: Students selecting CSC110 in the Required Areas, must complete MAT120, or MAT121, or MAT122, or Permission of Instructor.

I. Required Courses (21 Credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Grade</th>
<th>Semester</th>
<th>Comments</th>
<th>Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS105 Survey of Computer Information Systems</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS119DO Introduction to Oracle: SQL, or CIS276DA MySQL Database, or</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS276DB SQL Server Database</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS159 Visual Basic Programming I</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS162AD C#: Level I</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS163AA Java Programming: Level I, or CSC110 Introduction to Computer Science (Java)</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS225AB Object-Oriented Analysis and Design, or CSC205 Object Oriented Programming &amp; Data Structures</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS259 Visual Basic Programming II, or CIS262AD C# Level II, or CIS263AA Java Programming: Level II</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

All program and course requirements are subject to change. It is strongly recommended that students select courses in consultation with an academic or occupational advisor to ensure proper course selection. A current list of all EMCC programs is available at estrellamountain.edu/academics/programs.

*Courses must meet AAS General Education Requirements (refer to the AAS Requirements under the General Education section)
Certificate & Degree Programs

Retail Management - Certificate of Completion (5286)

Description: The Retail Management Certificate of Completion (CCL) 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.

I. Required Courses (24 Credits)

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credits</th>
<th>Grade</th>
<th>Semester</th>
<th>Comments</th>
<th>Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC111 Accounting Principles, or</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACC211 Financial Accounting</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BPC110 Computer Usage and Applications, or</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS105 Survey of Computer Information Systems</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COM100 Introduction to Human Communication</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GBS110 Human Relations in Business and Industry, or</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MGT180 Retail Management, or</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GBS270AC Business Internship, or</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GBS296WC Cooperative Education, or</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GBS298AC Special Projects</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MGT101 Techniques of Supervision, or</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MGT229 Management and Leadership</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MGT179 Utilizing the Human Resources Department, or</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MGT276 Personnel/Human Resources Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MKT271 Principles of Marketing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Small Business Management - Certificate of Completion (5153N)

Description: The Certificate of Completion (CCL) in Small Business Management program is designed to meet the needs of individuals who wish to own and/or manage a small business.

I. Required Courses (9 Credits)

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credits</th>
<th>Grade</th>
<th>Semester</th>
<th>Comments</th>
<th>Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBS200 Small Business Operations</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SBS202 Small Business Bookkeeping and Tax Preparation</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SBS203 Financing and Cash Management for a Small Business</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SBS204 Small Business Marketing and Advertising</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SBS214 Small Business Customer Relations</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SBS220 Internet Marketing for Small Business</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

All program and course requirements are subject to change. It is strongly recommended that students select courses in consultation with an academic or occupational advisor to ensure proper course selection. A current list of all EMCC programs is available at estrellamountain.edu/academics/programs.

*Courses must meet AAS General Education Requirements (refer to the AAS Requirements under the General Education section)
Speech Language Pathology Assistant - Associate in Applied Science (3776)

**Description:** The Associate in Applied Science (AAS) in Speech-Language Pathology Assistant is designed to provide comprehensive academic and practical education and training for Speech-Language Pathology Assistants. The program provides training in working with speech and language disordered adults and children, including bilingual populations. The program content is based upon the recommendations of the American Speech-Language-Hearing Association (ASHA) and the Arizona State Licensure Statue for Speech Language Pathology Assistants. In addition to work in the classroom, the program provides students with the opportunity to gain practical experience in working with clients/patients in a variety of settings under the direction and supervision of an ASHA certified speech-language pathologist. A CCL in Speech-Language Pathology Assistant is also available.

<table>
<thead>
<tr>
<th>I. GENERAL EDUCATION REQUIREMENTS (23-26 CREDITS)</th>
<th>CREDITS</th>
<th>GRADE</th>
<th>SEMESTER</th>
<th>COMMENTS</th>
<th>ADVISOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Must earn “C” or higher in all courses within the program</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG101 First-Year Composition</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG102 First-Year Composition</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COM110 Interpersonal Communication</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRE101 or equivalent by assessment</td>
<td>0-3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAT121 Intermediate Algebra, or MAT151 College Algebra/Functions</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIO160 Introduction to Human Anatomy and Physiology, or PHY101 Introduction to Physics</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities/Fine Arts*</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSY101 Introduction to Psychology</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>II. REQUIRED COURSES (32 CREDITS)</th>
<th>CREDITS</th>
<th>GRADE</th>
<th>SEMESTER</th>
<th>COMMENTS</th>
<th>ADVISOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLP104 Speech, Language, Hearing Development</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SLP205 Introduction to Communication Disorders</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SLP210 Speech and Hearing Anatomy and Physiology</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SLP212 Language Disorders and Rehabilitation</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SLP214 Speech Sound Disorders and Phonetics</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SLP215 Speech, Language, Hearing Disorders and Rehabilitation</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SLP217 Clinical Ethics and Documentation</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SLP218 Behavior Management</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SLP235AA Speech-Language Pathology Practicum (1) May be repeated , or SLP235AB Speech-Language Pathology Practicum (2)</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SLP240 Assistive Technology and Augmentative Communication</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SLP242 Low Incidence Disabilities</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>III. RESTRICTED ELECTIVES (6-8 CREDITS)</th>
<th>CREDITS</th>
<th>GRADE</th>
<th>SEMESTER</th>
<th>COMMENTS</th>
<th>ADVISOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM263, ENG213, PSY230, PSY240, SOC101, SOC210, and Choose 6-8 credits from any Foreign language sequence (i.e. SPA101 and SPA102) ARB, CHI, FRE, GER, GRK, HEB, ITA, JPN, POR, LAT, NAV, PIM, RUS, SLG, SPA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Speech Language Pathology Assistant - Certificate of Completion (5994)

Description: The Certificate of Completion (CCL) in Speech-Language Pathology Assistant is designed to provide comprehensive academic and practical education and training for Speech-Language Pathology Assistants. The program provides training in working with speech and language disordered adults and children, including bilingual populations. The program content is based upon the recommendations of the American Speech-Language-Hearing Association (ASHA) and the Arizona State Licensure Statue for Speech Language Pathology Assistants. In addition to work in the classroom, the program provides students with the opportunity to gain practical experience in working with clients/patients in a variety of settings under the direction and supervision of an ASHA certified speech-language pathologist. An AAS in Speech-Language Pathology Assistant is also available.

I. REQUIRED COURSES (34-35 CREDITS)

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credits</th>
<th>Grade</th>
<th>Semester</th>
<th>Comments</th>
<th>Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG101 First-Year Composition</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SLP104 Speech, Language, Hearing Development</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SLP205 Introduction to Communication Disorders</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SLP210 Speech and Hearing Anatomy and Physiology</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SLP212 Language Disorders and Rehabilitation</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SLP214 Speech Sound Disorders and Phonetics</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SLP215 Speech, Language, Hearing Disorders and Rehabilitation</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SLP217 Clinical Ethics and Documentation</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SLP218 Behavior Management</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SLP235AA Speech-Language Pathology Practicum (May be repeated), or SLP235AB Speech-Language Pathology Practicum</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SLP240 Assistive Technology and Augmentative Communication</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SLP242 Low Incidence Disabilities</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

All program and course requirements are subject to change. It is strongly recommended that students select courses in consultation with an academic or occupational advisor to ensure proper course selection. A current list of all EMCC programs is available at estrellamountain.edu/academics/programs.

*Courses must meet AAS General Education Requirements (refer to the AAS Requirements under the General Education section)
**Teacher Assisting - Associate in Applied Science (3008)**

**Description:** This program is designed to prepare students for employment as an assistant to the classroom teacher in grades k-12. The curriculum includes experiences as a teacher assistant in an educational setting under the leadership and supervision of a professional teacher. The program provides foundation work, which will allow the aide to pursue a higher degree in the field of education.

### I. General Education Requirements (24-27 Credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Grade</th>
<th>Semester</th>
<th>Comments</th>
<th>Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG101 or ENG107</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG102 or ENG108</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COM100 Introduction to Human Communication, or COM110 Interpersonal Communication, or COM225 Public Speaking, or COM230 Small Group Communication</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRE101 Critical and Evaluative Reading I</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAT112 Mathematical Concepts and Applications, or MAT120 Intermediate Algebra, or MAT122 Intermediate Algebra, or Equivalent as indicated by assessment, or Approved Mathematics courses which are required in AAS program, or Satisfactory completion of higher level mathematics course</td>
<td>3-5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Natural Science*</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities/Fine Arts*</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social/Behavior Science*</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### II. Required Courses (6 Credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Grade</th>
<th>Semester</th>
<th>Comments</th>
<th>Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDU236 Classroom Relationships</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDU221 Introduction to Education</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### III. Restricted Electives (9 Credits) Students should select from the following courses in consultation with a department advisor.

<table>
<thead>
<tr>
<th>Course</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>EDU222, EDU230, EDU291 or ENH291, EDU282AA or EDU282AB or EDU282AC or EDU296WA or EDU296WB or EDU296WC, ENG213, POS220</td>
<td></td>
</tr>
</tbody>
</table>

### IV. Free Electives (25 Credits) Any 100/200 numbered courses to complete 25 credits
Web Design - Certificate of Completion (5159)

Description: The Certificate of Completion (CCL) in Web Design is intended for those interested in designing and maintaining web pages for personal or small business use.

I. Required Courses (18 Credits)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
<th>Grade</th>
<th>Semester</th>
<th>Comments</th>
<th>Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS120DC</td>
<td>Adobe Flash Level I: Digital Animation</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS120DF</td>
<td>Adobe Photoshop Level I: Digital Imaging</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS120AF</td>
<td>Computer Graphics: Adobe Photoshop: Level I</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS120BF</td>
<td>Computer Graphics: Adobe Photoshop: Level II</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS120CF</td>
<td>Computer Graphics: Adobe Photoshop: Level III</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS133DA</td>
<td>Internet/Web Development Level I</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS166++</td>
<td>Web Scripting (any module)</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS233DA</td>
<td>Internet/Web Development Level II</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS235</td>
<td>e-Commerce</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Web Developer - Certificate of Completion (5051)

Description: The Certificate of Completion (CCL) prepares a software developer to properly create and maintain web applications. In addition to web page development, this certificate prepares software developers to fully manage and develop corporate web systems using interactive applications. Developers will be able to write programs to manage corporate database via the web.

I. Required Courses (30 Credits)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
<th>Grade</th>
<th>Semester</th>
<th>Comments</th>
<th>Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS105</td>
<td>Survey of Computer Information Systems</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS117DM</td>
<td>Microsoft Access: Database Management</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS120DC</td>
<td>Adobe Flash Level I: Digital Animation</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS120DF</td>
<td>Adobe Photoshop Level I: Digital Imaging</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS120AF</td>
<td>Computer Graphics: Adobe Photoshop: Level I</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS120BF</td>
<td>Computer Graphics: Adobe Photoshop: Level II</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS120CF</td>
<td>Computer Graphics: Adobe Photoshop: Level III</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS126AA</td>
<td>UNIX Operating System: Level I</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS133DA</td>
<td>Internet/Web Development Level I</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS166++</td>
<td>Web Scripting (any module)</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS233DA</td>
<td>Internet/Web Development Level II</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS234</td>
<td>XML Application Development</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS235</td>
<td>e-Commerce</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS298AB</td>
<td>Special Projects, or</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS290AB</td>
<td>Computer Information Systems Internship, or</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS296WB</td>
<td>Cooperative Education</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

All program and course requirements are subject to change. It is strongly recommended that students select courses in consultation with an academic or occupational advisor to ensure proper course selection. A current list of all EMCC programs is available at estrellamountain.edu/academics/programs.

*Courses must meet AAS General Education Requirements (refer to the AAS Requirements under the General Education section)
The SouthWest Skill Center opened summer of 1999 at Estrella Mountain Community College. It serves the fast growing community in the West Valley with training that prepares students for career opportunities.

Tuition is $5.00 per clock hour. Lab fees are applied accordingly per program. There is a $15.00 commencement fee, and a $15.00 registration fee. Tuition and fees apply from July 1, 2016 through June 30, 2017, and are subject to change per Governing Board approval.

**SouthWest Skill Center Certificate Programs**

- Emergency Medical Technology .................................................................150
- Medical Assistant ..............................................................................................151
- Medical Billing and Coding ...........................................................................153
- Medical Interpreter - Spanish .......................................................................155
- Phlebotomy Technician ...............................................................................156

**Get Started Today!**
Advisor 623.935.8964
estrellamountain.edu/swsc
Emergency Medical Technology (EMT) Program

The Emergency Medical Technology (EMT) Program includes techniques of emergency care, stabilization, and immobilization of a victim’s illness and injuries. Recognition and documentation of signs and symptoms of illness and injury, intervention, and evaluation of the intervention are integrated into the program. Techniques for assessment, administration of oxygen use of specific immobilization devices, and preparation for transportation are other areas of the program.

As an Emergency Medical Technology (EMT) student at the SWSC, you will be challenged daily in class as you learn the crucial skills needed to perform in emergency medicine. The EMT program will take students with minimal to zero medical knowledge and in 16 weeks have them trained and prepared to assist people in their most critical time of need. EMT’s are trained to handle events such as heart attacks, strokes, internal bleeding, diabetic problems, and trauma patients.

The Emergency Medical Technology (EMT) Program is the first step toward a career in Emergency Medical Services. The techniques taught in the program are in accordance with the state and national curriculum. Successful completion of this program will make students eligible to sit for the National Registry of EMT’s certification examination in order to gain state certification.

Length of Program
17 weeks at 12 hours per week / 208 clock hours

Program requirements include:
- Reading Assessment
- Completed admission packet
- 17 1/2 years of age to enroll

Emergency Medical Technology Curriculum

SKEMT101 - CPR/Basic Cardiac Life Support
Designed to train students in the skills of cardiopulmonary resuscitation to include mouth-to-mouth, mouth-to-mask, and cardiac compressioin, stabilization of adult, infant, and child victims with airway obstruction, respiratory, and cardian arrest. Prerequisites: None.

SKEMT102AB - Emergency Medical Responder
A comprehensive course to train a lay person to provide care for patients suffering sudden illness or injury. For members of law enforcement agencies, industry, and the private sector. Prerequisites: None.

SKEMT104 - Basic Emergency Medical Technology
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, Sudden Infant Death Syndrome (SIDS), patient-assisted medication administration, automated external defibrillator, and blood-glucose monitoring. Includes participation in simulated clinical events. Prerequisites: Reading assessment and completing admission packet.
Medical Assistant Program

A medical assistant is an integral member of the health care delivery team, qualified by education and experience to work in the administrative office, examining room, and physician office laboratory. The Medical Assistant, also a liaison between the doctor and patient, is of vital importance to the success of the medical practice.

Employment is found in physician offices, clinics, and other healthcare settings.

Upon completion of the program, students are eligible to register and sit for a national certification test.

Length of Program
26 weeks at 32 hours per week / 830 clock hours, or
52 weeks at 16 hours per week / 830 clock hours

Program requirements include:
• 17 1/2 years of age to enroll
• High School Diploma or GED
• Reading and Math Assessment
• Completed admission packet
• Level 1 Fingerprint Clearance Card
• “Pass” on Supplemental Background Check

Medical Assistant Curriculum

SKHCC130 - Fundamentals in Health Care Delivery
Overview of current health care professions including career and labor market information. Health care delivery systems, third party payers, and facility ownership. Health organization structure, patient rights and quality care. Health care and life values. Definition and importance of values, ethics, and essential behaviors in the workplace. Worker rights and responsibilities. Healthful living practices to include nutrition, stress management and exercise. Occupational Safety and Health Administration (OSHA) standard precautions and facility safety. Use of principles of body mechanics in daily living activities. Basic communication skills which facilitate teamwork in the health care setting. Focus on development of personal communication skills and an understanding of how effective communication skills promote teamwork. Focus on intercultural communication strategies.

SKMAS126 - Administrative Procedures
Principles and procedures for front office administrative skills. Methods of telephone management, correspondence and mail processing, appointment scheduling, medical records management and data collection. Includes medical assistant as office manager. Prerequisites: Acceptance into the Medical Assisting or Medical Front Office program and permission of Program Director. Corequisites: HCC130, MAS128, and MAS129 and permission of Program Director.

SKMAS127 - Insurance Billing & Coding
Application of insurance, coding and billing. Includes legal and ethical issues, federal, state and private insurance claims, procedural and diagnostic coding, and banking and accounting principles. Prerequisites: Acceptance into the Medical Assisting or Medical Front Office program, and permission of Program Director. Corequisites: HCC130 and MAS126, and permission of Program Director.

SKMAS128 – Electronic Health Records for Medical Assisting
Introduction to the electronic health record in the physician's office, including health record content and structure, origin of clinical information and merging clinical information into the record, implementation of the electronic health record system, HIPAA regulations, and security measures for electronic health records. Prerequisites: Acceptance into the Medical Assisting or Medical Front Office program, and permission of the Program Director. Corequisites: HCC130, MAS126, and permission of Program Director.

SKMAS129 - Automated Computer System for Medical Office Management
Principles and procedures in using an office automated computerized system for entering patient information and tracking patient billing, including basic computer navigation skills and use of accounting cycle from originating data to closing ledger entries. Prerequisites: Acceptance into the Medical Assisting or Medical Front Office program and permission of Program Director. Corequisites: HCC130, MAS126, MAS128, and permission of Program Director.

SKMAS130 - Orientation to the Physiology and Psychology of Body Systems
Application of basic pathophysiology and psychology of body systems as they relate to an entry-level health care professional's role. Prerequisites: Grade of C or better in MAS126, MAS127, MAS128, MAS129, acceptance into the Medical Assisting program, and permission of Program Director. Corequisites: HCC130 and permission of Program Director.
SKMAS210 - Aseptic Techniques
Fundamentals of microbial control. Includes procedures for sanitation, disinfection, and sterilization. Specimen collection and handling. Compliance with Occupational Health and Safety Administration (OSHA), the United States Center for Communicable Disease Control (CDC), and Clinical Laboratory Improvement Amendments (CLIA). Prerequisites: Grade of C or better in MAS127, MAS128, MAS129, acceptance into the Medical Assisting program, and permission of Program Director. Corequisites: HCC130 and MAS126 and permission of Program Director.

SKMAS220 - Laboratory Testing in Patient Care Service Centers
Basic Point of Care testing in a clinical setting. Includes procedures for urinalysis, whole blood hematology, glucose monitoring, cholesterol and coagulation testing. Specimen collection and handling. Compliance with Occupational Health and Safety Administration (OSHA) and the Clinical Laboratory Improvement Amendments (CLIA) regulations. Prerequisites: Grade of C or better in MAS126, MAS127, MAS128, MAS129, acceptance into the Medical Assisting program, and permission of Program Director. Corequisites: HCC130, MAS210 and permission of Program Director.

SKMAS260 - Clinical Procedures
Principles and procedures for the medical assistant. Methods of assisting clinicians with physical examinations, procedures, treatments, and minor surgical procedures in the medical office. Includes vital signs, height, and weight, collection of patient data and documentation. Prerequisites: Acceptance into the Medical Assisting program, Grade of C or better in MAS126, MAS127, MAS128, MAS129, and MAS210, and permission of Program Director. Corequisites: HCC130 and permission of Program Director.

SKMAS265 - Administration of Medication
Principles and procedures for administering medications. Includes classifications, uses, effects, legal regulations, calculating dosages, and correct terminology. Emphasis on oral and parenteral drug administration. Prerequisites: Grade of C or better in HCC130, HCC145, MAS126, MAS127, MAS128, MAS129, MAS130, MAS210, MAS220, MAS230, MAS240, MAS260, acceptance into the Medical Assisting program, and permission of Program Director. Corequisites: HCE109 and permission of Program Director.

SKMAS274 – Administrative Medical Assisting Externship
Practicum in administrative medical assisting. Application of administrative duties, procedures, and knowledge derived from medical assisting courses. Prerequisites: Acceptance into the Medical Assisting or Medical Front Office program, negative results on drug screening, and permission of Program Director. Corequisites: HCE110, MAS274, MAS280, and permission of Program Director. Corequisite: CPR and Fingerprint Clearance cards must remain current throughout the MAS274 externship/practicum.

SKMAS275 - Clinical Medical Assisting Externship
Practicum in clinical medical assisting. Application of clinical skills, procedures, and knowledge derived from medical assisting courses. Prerequisites: Acceptance into the Medical Assisting program, negative results on drug screening, and permission of Program Director. Corequisites: HCE110, MAS274, MAS280, and permission of Program Director. Course Note: CPR and Fingerprint Clearance cards must remain current throughout the MAS275 externship/practicum.

SKPLB109 - Phlebotomy: Basic Skills
Theory and practice of basic phlebotomy including laboratory test codes, equipment, and procedures. Prerequisites: Acceptance into the Medical Assisting or Phlebotomy program, or permission of Program Director. Corequisites: HCC130 and HCC145AA, or permission of Program Director.

SKPLB110 - Practicum: Fundamental Phlebotomy Skills
Application of fundamental phlebotomy techniques in a clinical laboratory setting or health care environment. Prerequisites: PLB109, submit to a drug screening and demonstrate negative results, and acceptance into the Medical Assisting or Phlebotomy program, or permission of Program Director. Course Notes: PLB110 may be repeated for credit.
Medical Billing and Coding Program

This program trains students to process medical claims and payment for services in healthcare settings. A medical biller and coder is someone who can work independently, is detail oriented, can interpret reimbursement guidelines and regulations, and has good computer skills.

These professionals assign specific codes for diagnosis and procedures performed on a patient and documented in the patient’s health record. They code symptoms, diseases, operations, and treatments according to national classification systems.

Upon completion of the coding classes, students are eligible to register and sit for the national Certified Professional Coder (CPC) exam through the AAPC.

Length of Program
40 weeks at 20 hours per week/ 805 clock hours

Program requirements include:
- 17 1/2 years of age to enroll
- High School Diploma or GED
- Reading and Math Assessment
- Completed admission packet
- Level I Finger Print Clearance Card

Medical Billing and Coding Curriculum

SKHCC130 - Fundamentals in Health Care Delivery
Overview of current health care professions including career and labor market information. Health care delivery systems, third party payers, and facility ownership. Health organization structure, patient rights and quality care. Health care and life values. Definition and importance of values, ethics, and essential behaviors in the workplace. Worker rights and responsibilities. Healthful living practices to include nutrition, stress management and exercise. Occupational Safety and Health Administration (OSHA) standard precautions and facility safety. Use of principles of body mechanics in daily living activities. Basic communication skills which facilitate teamwork in the health care setting. Focus on development of personal communication skills and an understanding of how effective communication skills promote teamwork. Focus on intercultural communication strategies.

SKHCC145 - Medical Terminology for Health Care Workers
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.

SKHCC164 - Pharmacology for Allied Health
Chemical, generic, and trade names for drugs. Use of drug references. Pharmacological principles of drugs. Routes of drug administration. Federal and Arizona regulations. Classification of drugs. Abbreviations and symbols for drug measurement, administration, and prescription. Prerequisites: HCC130 or (HCC130AA, HCC130AB, HCC130AC, HCC130AD, HCC130AE and HCC130AF), or equivalent.

SKHCC204 - Clinical Pathophysiology
Causes of disease and their impact on the human body. Common physiologic effects of disease on body systems. Roles of the multidisciplinary health care team in the diagnosis and treatment of disease. Cultural implications in prevention and treatment of disease. Prerequisites: HCC130 or (HCC130AA, HCC130AB, HCC130AC, HCC130AD, HCC130AE and HCC130AF), or equivalent and (BIO160 or BIO162AB, or BIO201).

SKHIM105 - Health Record Documentation for Allied Health Professionals
Introduction to computer applications in health care settings including electronic health records, health record content, structure, and origin of clinical information for various healthcare settings. A basic review of federal, state, and organizational documentation guidelines. Legal and ethical issues applicable to health information documentation and coding practices. Prerequisites: HCC130 or permission of Program Director.

SKHIM180 - Introduction to Medical Billing and Reimbursement
An overview of the medical billing profession, the claims process, and federal billing guidelines. Study of major medical third-party payers including coverage offered, client eligibility, and reimbursement methodologies. Prerequisites: HCC130 or permission of Program Director.

SKHIM181 - Medical Claims Processing
Application of third-party payer billing information to claims processing in the non-hospital setting. Use of the computer for claims submission. Management of claims to ensure confidentiality, data retention, and successful payment for services. Prerequisites: [(BPC101AA or BPC/CIS121AE) and HIM180], or permission of Program Director. Prerequisites or Corequisites: (HIM185 and HIM212), or permission of Program Director.
SKHIM208 - ICD-10-CM Diagnostic Coding
International Classification of Diseases, 10th Revision, Clinical Modification (ICD-10-CM) diagnostic code assignment. Use of appropriate guidelines and federal, state, and local compliance standards for coding diagnoses. Application of diagnostic codes for inpatient, outpatient, and ambulatory coding assignment. Introduction of references to assist in code assignment. Prerequisites: HCC145, HCC164, and (BIO160 or BIO201) or permission of Program Director. Prerequisites or Corequisites: HCC204 or permission of Program Director.

SKHIM212 - CPT Coding I
Introduction to Current Procedural Terminology (CPT) from both facility and physician perspectives. General content, coding guidelines, and the role in healthcare reimbursement. Coding of basic medical and surgical services including use of modifiers. Ethical coding and compliance issues. Prerequisites: HCC145 and (BIO160 or BIO202) and HIM185, or permission of Program Director.

SKHIM214 - CPT Coding II

BCR100 - Examination Review
This course is a review class with extensive hands-on coding that prepares the student to register and sit for the national CPC exams (ICD-9 and ICD-10 proficiency) through the AAPC to obtain certification for a medical coding career in an outpatient facility. This course reviews fundamental coding skills for an outpatient physician setting and assures a broad encompassing knowledge and expertise in reviewing and assigning the correct procedure and diagnosis codes for physician services. The course will provide a review of anatomy and terminology, ICD-9-CM, ICD-10-CM, HCPCS Level II, and CPT® coding for each body system and includes information on the business of medicine. Test taking techniques are included to optimize exam preparation. Practice exams are included in this course and are the ideal simulation of the real exam, as well as a realistic indicator of student readiness for the certification exam(s).
Medical Interpreter Program - Spanish

The Medical Interpreter Program - Spanish is a 170-hour introduction to medical interpreting including a forty-hour externship. Bilingual persons who would like to interpret or pursue a bilingual career in a health care setting can gain skills necessary to interpret in a manner consistent with national standards of practice for interpreters.

Interpreting is a value-added skill for bilingual health care workers. Interpreter training is required to apply to the Certification Commission for Healthcare Interpreters for national certification.

Learn about medical vocabulary in English and Spanish, body systems, legal issues, ethics, standards of practice, cultural awareness, and more. Emphasis is placed on practicing interpretation in consecutive and sight translation modes.


Students who successfully complete the Spanish Medical Interpreter Program at SWSC/EMCC will be able to:

- Interpret or pursue a bilingual job in a health care setting.
- Gain skills to interpret in a manner consistent with national standards of practice for interpreters in health care.
- Receive 12 articulated credits within the Maricopa Community College District.
- Qualify for national certification. The SWSC is now a testing center for the CCHI oral exam.

This program exceeds the minimum training necessary to apply nationally for Spanish Certified Healthcare Interpreter (www.healthcareinterpretercertification.org/). Successful students are encouraged to apply upon concluding the Spanish Medical Interpreter Program.

Length of Program
28 weeks at 6 hours per week / 170 clock hours

Program requirements include:

- 17 1/2 years of age to enroll
- Reading Assessment
- Completed admission packet
- Spanish/English Assessment (Written and Oral)
- Level 1 Fingerprint Clearance Card
- “Pass” on Supplemental Background Check Medical

Medical Interpreter Curriculum

SIM 117 - Fundamentals of Healthcare Interpreting
This course introduces the field of interpreting, interpretation models, cognitive processes associated with interpretation, professional ethical standards, employment opportunities, bilingual customer service, and working conditions. Topics include pronunciation, medical vocabulary, resources, legal issues, code of ethics, standards of practice, certification, interpreter assessments/qualifications, and protocol associated with various settings. Upon completion, students should be able to interpret English/Spanish and Spanish/English simulated health care encounters, explain how to prepare for and manage an interpreted encounter, and apply ethical standards to a variety of working situations.

SIM 119 - Medical and Clinical Development
Basic anatomy and physiology, medical terminology in Spanish & English for health care settings. Emphasis on pronunciation of commonly used medical abbreviations for medical specialists and branches of medicine. Students will analyze, define and correctly spell medical terms and abbreviations. Systems to be covered are: cardiovascular, respiratory, digestive, musculoskeletal, genitourinary, endocrine, immune, and nervous. Common test procedures for each system, cancer and first response interpretation roles will also be covered. Students also participate in activities to prepare for externship, including a review of professional conduct, dress code, bilingual customer service, and downtime activities.

SIM 120 - Professional Externship
Practical training and application of healthcare interpreting under direct supervision of clinical or hospital preceptor. Students may train with staff interpreters or dual-role interpreters. Documentation of daily interpreter logs and a satisfactory evaluation is required to successfully complete the externship. Students must meet the clinical facilities requirements prior to beginning. Externship hours will vary and students are expected to travel and have reliable transportation.

Phlebotomy Technician Program
This program is designed to prepare a person to obtain blood specimens by skin puncture and venipuncture. The phlebotomist may find employment in hospitals, patient service centers, life insurance companies, doctor’s offices, outreach services, and donor centers. This program can be customized to accommodate the phlebotomy needs of any health care professional currently employed in the health care setting. Students in the Phlebotomy program will be in contact with potentially infectious blood, tissues, and body fluids. Upon completion of the program, the students are eligible to take a national certification examination.
Phlebotomy Technician Program

This program is designed to prepare a person to obtain blood specimens by skin puncture and venipuncture. The phlebotomist may find employment in hospitals, patient service centers, life insurance companies, doctor’s offices, outreach services, and donor centers. This program can be customized to accommodate the phlebotomy needs of any health care professional currently employed in the health care setting. Students in the Phlebotomy program will be in contact with potentially infectious blood, tissues, and body fluids. Upon completion of the program, the students are eligible to take a national certification examination.

Length of Program
21 weeks at 20 hours per week / 410 clock hours

Program requirements include:

- Reading and Math Assessment
- Completed Admission Packet
- Level 1 Fingerprint Clearance Card
- “Pass” on Supplemental Background Check

Phlebotomy Curriculum

SKHCC130 - Fundamentals in Health Care Delivery
Overview of current health care professions including career and labor market information. Health care delivery systems, third party payers, and facility ownership. Health organization structure, patient rights and quality care. Health care and life values. Definition and importance of values, ethics, and essential behaviors in the workplace. Worker rights and responsibilities. Healthful living practices to include nutrition, stress management and exercise. Occupational Safety and Health Administration (OSHA) standard precautions and facility safety. Use of principles of body mechanics in daily living activities. Basic communication skills which facilitate teamwork in the health care setting. Focus on development of personal communication skills and an understanding of how effective communication skills promote teamwork. Focus on intercultural communication strategies.

SKHCC146 - Common Medical Terminology for Health Care Workers
Common medical terms used in health care. Body systems approach to terms related to structures, functions, diseases, procedures, and diagnostic tests. Building and analyzing terms sing word parts. Medical abbreviations and symbols and term spelling.

SKPLB109 - Phlebotomy: Basic Skills
Theory and practice of basic phlebotomy including laboratory test codes, equipment, and procedures. Prerequisites: Acceptance into the Medical Assisting or Phlebotomy program, or permission of Program Director. Corequisites: HCC130 and HCC145AA, or permission of Program Director.

SKPLB111 – Specimen Processing and Advanced Techniques in Phlebotomy Procedures
Theory and practice of advanced techniques in phlebotomy and specimen processing including laboratory test codes, equipment, and procedures. Prerequisites: PLB109 or permission of Program Director.

SKPLB122 – Practicum: Phlebotomy & Specimen Processing
Application of phlebotomy and specimen processing techniques in a clinical laboratory setting or health care environment. Prerequisites: PLB109 or permission of Program Director. Prerequisites or Corequisites: PLB111 or permission of Program Director.
THE MARICOPA COMMUNITY COLLEGES ALLIED HEALTH OR NURSING PROGRAM

In collaboration and partnership with the health care community and its response to the dynamic changes occurring in the health care arena and health care practice, the Maricopa Community Colleges integrated the curriculum of all allied health and nursing programs. All allied health or nursing program pathways and educational offerings emphasize the achievement of relevant competencies and provide value to the individual, the employer, and the community. As a result, graduates of the various allied health or nursing program pathways will meet the community’s demand for a flexible, multi-skilled health care workforce that meets employer and consumer needs. Refer to individual college catalogs for specific health care program pathways.

For further information, https://asa.maricopa.edu/departments/healthcare-education-at-the-maricopa-community/ is a comprehensive information source.

Allied Health or Nursing Assumption of Risk/Release of Liability
Most of the allied health or nursing program pathways include a program of study in a clinical training environment that may contain exposures to risks inherent in patient-oriented educational experiences (such as but not limited to bodily injury or communicable and infectious diseases). Students enrolling in clinical educational courses will be asked to sign a statement assuming all risks inherent in their coursework.

Use of Confidential Information
Students enrolled in allied health or nursing program pathways will have learning experiences in a health care setting where they will have access to confidential information. Prior to beginning any clinical studies, the students will be asked to sign an agreement to adhere to the requirements of those clinical sites and applicable law, including the Health Insurance Portability and Accountability Act of 1996 (HIPAA).

Allied Health or Nursing Program College Attendance
As the allied health or nursing programs are integrated across the Maricopa Community Colleges, college of attendance requirements for the completion of the healthcare program pathways can be met through the completion of coursework taken at all Maricopa Community Colleges and Skills Centers.

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 on or after September 1, 2011. 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 (http://www.azleg.gov/FormatDocument.asp?inDoc=/ars/41/01758-07.htm&Title=41&DocType=ARS). 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 Number Verification
3. Residency History
4. Arizona Statewide Criminal offense Databases
5. Nationwide Criminal offense Databases
7. Homeland Security Watch Lists

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 regardless of how long ago the conviction was
5. Any arrest warrant issued by any state
6. Any misdemeanor conviction for the following regardless of

[157]
how long ago the conviction was:
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
8. Any misdemeanor relating to a controlled substance conviction in last 7 years
9. Any other misdemeanor conviction within last 3 years with the exception-any misdemeanor traffic misdemeanor [NOTE that a DUI is NOT considered a traffic misdemeanor.]

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.

Students Accepted in a Program before September 1, 2011
Students who are accepted in a program before September 1, 2011 will generally need to meet the requirements of each program that existed before that date. It is not MCCCD’s intent to apply the standards effective on September 1, 2011 to students accepted in a program before that date. However, note that MCCCD always reserves the right to change the requirements for these programs, even after a student is accepted. Students should be aware of this right.

Duty to Report Changes; Removal
Students have an obligation to immediately report to the director of their program any change in the information that they supplied on forms submitted to initiate background checks relating to the allied health or nursing program. That includes information provided to the Arizona Department of Public Safety and MCCCD’s supplemental background check vendor, as well as that related to the background check required by a clinical agency. Failure to do so will result in removal from the program. Additionally, any change in background check status that would affect the student’s clearance under either MCCCD’s or a clinical agency’s standards will result in removal from a program.

Additional Clinical Agency Background Check
Some clinical agencies require that students assigned to their sites submit to a criminal background check covering other offenses, as well as to a drug screening. Students are required to pay for the additional agency clinical background check. A clinical agency that requires this additional background check may refuse to place a student due to information the clinical agency obtains in its background check even though that student possess a valid Level I Fingerprint Clearance Card and has obtained a “pass” status on the MCCCD supplemental background check.

Some conditions that have resulted in students being denied placement at clinical agencies include pending criminal charges, outstanding warrants, unfinished terms of a sentence (such as unpaid fines), pattern of repeated types of arrests/convictions, and failure to disclose all past arrests/convictions when asked to do so on any background check application.

Inability to Place
MCCCD has no obligation to make repeated attempts to place a student when the reason for MCCCD’s inability to place the student is due to background check issues. Since clinical agency assignments are mandatory requirements for completion of a program, a student’s inability to complete required clinical experience due to his or her background check issues will result in removal from the program.

Changes to Admission or Background Check Requirements
MCCCD may change its program admission requirements or background check requirements without notice at any time.

No Guarantee of Receipt of Licensure/Certificate
Many of the nursing and allied health programs prepare graduates for application for State or National certificates or licenses. In some professions, such licensure and certification is required prior to employment or practice in the profession. Graduation from a nursing and allied health program does not guarantee the receipt of a license or certificate to practice in the field of study.
DESCRIPTION

The Maricopa County Community College Occupational Program Matrix identifies all programs currently available for offering within the 10 community colleges and two skill centers of the district. The programs are grouped under broad occupational areas as requested by the colleges. For specific information regarding individual programs, contact the college(s) listed as participating institutions.

Agriculture, Food, and Natural Resources

- Equine Science SC
- Environmental and Natural Resource Conservation PC
- Environmental and Natural Resource Sustainability PC
- Equine Science SC
- Landscape Aide MC
- Landscape Specialist MC
- Sustainable Agriculture MC
- Urban Horticulture MC
- Veterinary Technology/Animal Health MC

Architecture and Construction

- Air Conditioning/Refrigeration/Facilities GW
- Architecture MC
- Architectural CADD Level III MC
- Architectural Detailing CADD Level III MC
- Architectural Technology SC
- Building Inspection MC
- Construction Trades: Carpentry GW
- Construction Trades: Construction Management GW
- Construction Trades: Millwrighting GW
- Construction Trades: Painting and Drywalling GW
- Construction Trades: Pre-Apprenticeship GW
- Construction Trades: Electricity GW
- Construction Trades: Heat and Frost Insulation GW
- Construction Trades: Ironworking GW
- Construction Trades – Mechanical Trades: Plumbing GW
- Construction Trades – Mechanical Trades: Pipefitting GW
- Construction Trades – Mechanical Trades: Sheet Metal GW
- Construction Trades: General Construction Worker GW
- Computer Aided Drafting MC
- Computer Aided Design and Drafting CADD Level I MC
# MCCCD Occupational Programs

**Maricopa Community Colleges**

**2016-2017 Occupational Program Matrix**

<table>
<thead>
<tr>
<th>AREAS / PROGRAMS</th>
<th>INSTITUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial Drafting CADD Level II</td>
<td>MC</td>
</tr>
<tr>
<td>Construction</td>
<td>MC</td>
</tr>
<tr>
<td>Construction Drafting CADD Level III</td>
<td>MC</td>
</tr>
<tr>
<td>Construction Trades: Heavy Equipment Operations</td>
<td>GW</td>
</tr>
<tr>
<td>Home Inspection</td>
<td>MC</td>
</tr>
<tr>
<td>Mechanical Drafting</td>
<td>MC</td>
</tr>
<tr>
<td>Power Plant Technology</td>
<td>EM</td>
</tr>
<tr>
<td>Pre-Contractor Licensing</td>
<td>MC</td>
</tr>
<tr>
<td>Residential and Light Commercial Air Conditioning</td>
<td>GW</td>
</tr>
<tr>
<td>Residential Drafting CADD Level II</td>
<td>MC</td>
</tr>
<tr>
<td>Survey and Civil Drafting - CADD Level II</td>
<td>MC</td>
</tr>
<tr>
<td>Workforce Development: Carpentry Level I</td>
<td>RS</td>
</tr>
<tr>
<td>Workforce Development: Carpentry Level II</td>
<td>RS</td>
</tr>
<tr>
<td>Workforce Development: Furniture Construction/Refinishing Level I</td>
<td>RS</td>
</tr>
<tr>
<td>Workforce Development: Furniture Construction/Refinishing Level II</td>
<td>RS</td>
</tr>
</tbody>
</table>

**Art, A/V Technology, and Communication**

<table>
<thead>
<tr>
<th>Program</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adolescent Development</td>
<td>GC, RS</td>
</tr>
<tr>
<td>Adult Development and Aging</td>
<td>GC, RS</td>
</tr>
<tr>
<td>Alteration Specialist</td>
<td>MC</td>
</tr>
<tr>
<td>Apparel Construction</td>
<td>PC</td>
</tr>
<tr>
<td>Audio Production Technologies</td>
<td>GC, MC, PC, PV, SC</td>
</tr>
<tr>
<td>Beginning Piano Pedagogy</td>
<td>MC</td>
</tr>
<tr>
<td>Intermediate Piano Pedagogy</td>
<td>MC</td>
</tr>
<tr>
<td>Costume Design and Production</td>
<td>MC</td>
</tr>
<tr>
<td>Costuming</td>
<td>PC</td>
</tr>
<tr>
<td>Computer Graphic Design</td>
<td>PC</td>
</tr>
<tr>
<td>Dance Technology</td>
<td>SC</td>
</tr>
<tr>
<td>Disc Jockey Techniques</td>
<td>MC, SC</td>
</tr>
<tr>
<td>Digital Media Arts</td>
<td>GC</td>
</tr>
<tr>
<td>Family Life Education</td>
<td>GC, RS</td>
</tr>
<tr>
<td>Fashion Design</td>
<td>PC</td>
</tr>
<tr>
<td>Fashion Design Level I</td>
<td>PC</td>
</tr>
<tr>
<td>Fashion Design Level II</td>
<td>PC</td>
</tr>
<tr>
<td>Fashion Illustration</td>
<td>PC</td>
</tr>
<tr>
<td>Fashion Merchandising</td>
<td>PC</td>
</tr>
<tr>
<td>Fashion Merchandising &amp; Design</td>
<td>MC</td>
</tr>
<tr>
<td>Fashion Design Entrepreneurship</td>
<td>PC</td>
</tr>
<tr>
<td>Graphic Design: Visual Communication</td>
<td>SC</td>
</tr>
<tr>
<td>Interior Merchandising</td>
<td>MC, PC, EM</td>
</tr>
<tr>
<td>Interior Design</td>
<td>MC, PC, SC</td>
</tr>
<tr>
<td>Interior Design: Advanced</td>
<td>MC</td>
</tr>
<tr>
<td>Image Consultant</td>
<td>MC</td>
</tr>
<tr>
<td>AREAS / PROGRAMS</td>
<td>INSTITUTION</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>Journalism and New Media Studies</td>
<td>GC, PV, MC, SC</td>
</tr>
<tr>
<td>Music Business</td>
<td>CG, GC, MC, PC, PV, SC, SM</td>
</tr>
<tr>
<td>Photography</td>
<td>GC, PC</td>
</tr>
<tr>
<td>Parent Education</td>
<td>GC, RS</td>
</tr>
<tr>
<td>Pattern Design Level I</td>
<td>PC</td>
</tr>
<tr>
<td>Pattern Design Level II</td>
<td>PC</td>
</tr>
<tr>
<td>Textile and Apparel: Fashion Computer-Assisted Design (CAD) Technician</td>
<td>MC</td>
</tr>
<tr>
<td>Textile and Apparel: Fashion Illustration Specialist</td>
<td>MC</td>
</tr>
<tr>
<td>Textile and Apparel: Industrial Sewing Technician</td>
<td>MC</td>
</tr>
<tr>
<td>Textile and Apparel: Product Development</td>
<td>MC</td>
</tr>
<tr>
<td>Workforce Development: Graphic Arts Level I</td>
<td>RS</td>
</tr>
<tr>
<td>Workforce Development: Graphic Arts Level II</td>
<td>RS</td>
</tr>
</tbody>
</table>

**Business, Management, and Administration**

<table>
<thead>
<tr>
<th>Accounting</th>
<th>GC, PC, GW, RS, SM, CG, EM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting – Specialized Para-Professional</td>
<td>PV</td>
</tr>
<tr>
<td>Accounting Paraprofessional</td>
<td>GC</td>
</tr>
<tr>
<td>Administrative Professional</td>
<td>PV</td>
</tr>
<tr>
<td>Administrative Technology</td>
<td>GW</td>
</tr>
<tr>
<td>Administrative Professional</td>
<td>PC, MC</td>
</tr>
<tr>
<td>Automobile Insurance: Customer Service</td>
<td>RS</td>
</tr>
<tr>
<td>Automobile Insurance Claims: Customer Service</td>
<td>RS</td>
</tr>
<tr>
<td>Broadband Telecommunications: Account Services</td>
<td>RS</td>
</tr>
<tr>
<td>Broadband Telecommunications</td>
<td>RS</td>
</tr>
<tr>
<td>Broadband Telecommunications: Field Operation</td>
<td>RS</td>
</tr>
<tr>
<td>Broadband Telecommunications: Technical Support Services</td>
<td>RS</td>
</tr>
<tr>
<td>Bookkeeping</td>
<td>SC</td>
</tr>
<tr>
<td>Business</td>
<td>MC, SC</td>
</tr>
<tr>
<td>Business (Fastrack)</td>
<td>SC</td>
</tr>
<tr>
<td>Business Management</td>
<td>SM</td>
</tr>
<tr>
<td>Business Technology Specialist</td>
<td>GW</td>
</tr>
<tr>
<td>Business Office Assistant</td>
<td>GC</td>
</tr>
<tr>
<td>Computer Applications</td>
<td>PC</td>
</tr>
<tr>
<td>Court Reporting: Judicial</td>
<td>GW</td>
</tr>
<tr>
<td>Credit Counseling: Customer Service</td>
<td>RS</td>
</tr>
</tbody>
</table>
## MCCCD Occupational Programs

### AREAS / PROGRAMS

<table>
<thead>
<tr>
<th>Customer Service Management</th>
<th>EM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrepreneurial Studies Level I</td>
<td>GW, MC, PV, RS, SM</td>
</tr>
<tr>
<td>Entrepreneurial Studies Level II</td>
<td>GW, MC, PV, RS, SM</td>
</tr>
<tr>
<td>General Business</td>
<td>CG, GC, MC, PC, RS, SCC, SMC</td>
</tr>
<tr>
<td>General Business Specialized</td>
<td>PVC</td>
</tr>
<tr>
<td>Human Resources Management</td>
<td>PC</td>
</tr>
<tr>
<td>Human Services-Assistance: Public Assistance Eligibility</td>
<td>RS</td>
</tr>
<tr>
<td>Human Services-Specialist: Customer Service</td>
<td>RS</td>
</tr>
<tr>
<td>Human Services - Unemployment Insurance: Customer Service</td>
<td>RS</td>
</tr>
<tr>
<td>Insurance Studies</td>
<td>GC, RS</td>
</tr>
<tr>
<td>International Business</td>
<td>PV</td>
</tr>
<tr>
<td>International Trade</td>
<td>MC</td>
</tr>
<tr>
<td>Management</td>
<td>PC, MC, PV</td>
</tr>
<tr>
<td>Middle Management</td>
<td>GC, PV</td>
</tr>
<tr>
<td>Military Leadership</td>
<td>RS</td>
</tr>
<tr>
<td>Microcomputer Accounting</td>
<td>PV</td>
</tr>
<tr>
<td>Motor Vehicle: Customer Service</td>
<td>RS</td>
</tr>
<tr>
<td>Office Technology</td>
<td>GW</td>
</tr>
<tr>
<td>Organizational Leadership</td>
<td>CG, GC, EM, GW, MC, PV, RS</td>
</tr>
<tr>
<td>Organizational Management</td>
<td>CG, GC, EM, GW, MC, RS</td>
</tr>
<tr>
<td>Pharmacy: Customer Service</td>
<td>SM</td>
</tr>
<tr>
<td>Paralegal Studies</td>
<td>PC</td>
</tr>
<tr>
<td>Project Management</td>
<td>MC</td>
</tr>
<tr>
<td>Quality Customer Service</td>
<td>RS</td>
</tr>
<tr>
<td>Realtime Reporting Scoping</td>
<td>GW</td>
</tr>
<tr>
<td>Public Relations</td>
<td>MC, GC</td>
</tr>
<tr>
<td>Retail Management</td>
<td>CG, GC, GW, MC, PC</td>
</tr>
<tr>
<td>Retail Sales Manager</td>
<td>MC</td>
</tr>
<tr>
<td>Retail Pharmacy: Customer Service</td>
<td>RS</td>
</tr>
<tr>
<td>Small Business</td>
<td>MC</td>
</tr>
<tr>
<td>Small Business Entrepreneurship</td>
<td>GC, SM, GW</td>
</tr>
<tr>
<td>Small Business Management</td>
<td>EM, GW</td>
</tr>
<tr>
<td>Small Business Start-Up</td>
<td>CG, MC, PC, PV, RS, SM</td>
</tr>
<tr>
<td>Sports Management</td>
<td>PV, SC</td>
</tr>
<tr>
<td>Social Media Marketing</td>
<td>CG, GW, MC, SC, SM</td>
</tr>
</tbody>
</table>
### AREAS / PROGRAMS

| Supervision and Management I | SM |
| Supervision and Management II | SM |
| Supervision | GC |
| Technology Support Analyst | MC |
| Utilities Customer Service | RS |
| Water Services: Customer Service | RS |

### Education and Training

- Adult Learning and Development | RS
- Adult Learning and Coaching Development | RS
- Bilingual Education/Dual Language Immersion (BE/DLI) | MC
- Child and Family Organizations Management and Administration | GC, RS
- Child Development Associate (CDA) Preparation | GC, PVC, SM, EM
- Curriculum for Young Children | PC
- Early Care Specialist | MC
- Early Childhood Development | SM
- Early Childhood Education and Administration: Birth through Age Five | PC
- Early Childhood Classroom Management | PC
- Early Childhood Education | PV, GC, EM
- Early Childhood Administration and Management | GC, RSC
- Early Learning and Development | CG, MC, RS, SM
- Family Child Care Management | RS, SM
- Foundations of Student Services | EM
- Gifted Education | EM
- Instructional Assistance | MC, SM
- Infant and Toddler Development | RS, SM
- Reading Specialist | MC
- Teacher Assisting | EM, GW
- Workforce Development and Community Re-Entry | RS

### Environmental Technology

- Environmental Science Technology | GW
- Energy Systems Technology | RS
- Geospatial Technologies | MC
- Occupational Safety and Health Technology | GW
- Safety, Health and Environmental Studies | PV
- Wastewater Treatment | GW
- Water Resources Technologies | GW
- Water Treatment | GW

Revised as of: GBA Date June 28, 2016
<table>
<thead>
<tr>
<th>AREAS / PROGRAMS</th>
<th>INSTITUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Finance</strong></td>
<td></td>
</tr>
<tr>
<td>Banking and Finance</td>
<td>PC</td>
</tr>
<tr>
<td>Bank Account Management: Customer Service</td>
<td>RS</td>
</tr>
<tr>
<td>Certified Residential Appraiser</td>
<td>MC</td>
</tr>
<tr>
<td>Licensed Real Estate Appraiser</td>
<td>MC</td>
</tr>
<tr>
<td>Real Estate</td>
<td>PC</td>
</tr>
<tr>
<td>Real Estate: Prelicense</td>
<td>MC, SM</td>
</tr>
<tr>
<td>Residential Appraisal Trainee</td>
<td>MC</td>
</tr>
<tr>
<td><strong>Government and Public Administration</strong></td>
<td></td>
</tr>
<tr>
<td>Public Administration</td>
<td>RS</td>
</tr>
<tr>
<td>Public Administration: Legal Services</td>
<td>RS</td>
</tr>
<tr>
<td>Tribal Development</td>
<td>SC</td>
</tr>
<tr>
<td><strong>Health Science</strong></td>
<td></td>
</tr>
<tr>
<td>Advanced Behavioral Health Sciences</td>
<td>GC, SM</td>
</tr>
<tr>
<td>Advanced Emergency Medical Technology (Paramedic)</td>
<td>PC, PV</td>
</tr>
<tr>
<td>Basic Behavioral Health</td>
<td>GC, SM</td>
</tr>
<tr>
<td>Clinical Research Associate</td>
<td>GW</td>
</tr>
<tr>
<td>Computed Tomography</td>
<td>GW</td>
</tr>
<tr>
<td>Community Emergency Response Team (CERT): Level I</td>
<td>PC</td>
</tr>
<tr>
<td>Clinical Dental Assisting</td>
<td>RS</td>
</tr>
<tr>
<td>Community Dental Health Coordination</td>
<td>RS</td>
</tr>
<tr>
<td>Developmental Disabilities Specialist</td>
<td>GC</td>
</tr>
<tr>
<td>Diagnostic Medical Sonography</td>
<td>GW</td>
</tr>
<tr>
<td>Dental Assisting</td>
<td>PC</td>
</tr>
<tr>
<td>Dental Hygiene</td>
<td>PC, RS, MC</td>
</tr>
<tr>
<td>Dental Assisting Technology</td>
<td>RS</td>
</tr>
<tr>
<td>Diagnostic Medical Sonography: Vascular Technology</td>
<td>GW</td>
</tr>
<tr>
<td>Electroneurodiagnostic (END) Technology</td>
<td>GW</td>
</tr>
<tr>
<td>Emergency Communications and Deployment</td>
<td>PC</td>
</tr>
<tr>
<td>Fast Track Practical Nursing</td>
<td>GW</td>
</tr>
<tr>
<td>Healthcare Regulatory Compliance</td>
<td>GW</td>
</tr>
<tr>
<td>Health Information: Long Term Care Settings</td>
<td>PC</td>
</tr>
<tr>
<td>Health Information Technology</td>
<td>PC</td>
</tr>
<tr>
<td>Health Services Management</td>
<td>GW</td>
</tr>
<tr>
<td>Health Unit Coordinating/Patient Care Associate</td>
<td>GW</td>
</tr>
<tr>
<td>Histologic Technology</td>
<td>PC</td>
</tr>
</tbody>
</table>

Revised as of: GBA Date June 28, 2016
### MCCCD Occupational Programs

**AREAS / PROGRAMS**

<table>
<thead>
<tr>
<th>Program</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital Central Service Technology</td>
<td>GW</td>
</tr>
<tr>
<td>Laboratory Assisting</td>
<td>PC</td>
</tr>
<tr>
<td>Magnetic Resonance Imaging</td>
<td>GW</td>
</tr>
<tr>
<td>Medical Laboratory Sciences</td>
<td>PC</td>
</tr>
<tr>
<td>Medical Assisting</td>
<td>PC</td>
</tr>
<tr>
<td>Medical Coding: Hospital-Based</td>
<td>PC</td>
</tr>
<tr>
<td>Medical Billing and Coding: Physician-Based</td>
<td>PC</td>
</tr>
<tr>
<td>Medical Radiography</td>
<td>GW</td>
</tr>
<tr>
<td>Nursing</td>
<td>CG, EM, GC, GW, MC, PC, PV, SC</td>
</tr>
<tr>
<td>Nurse Assisting</td>
<td>GW, MC, PC, PV, EM</td>
</tr>
<tr>
<td>Nursing Refresher</td>
<td>GW, MC</td>
</tr>
<tr>
<td>Phlebotomy</td>
<td>PC, SM</td>
</tr>
<tr>
<td>Physical Therapist Assisting</td>
<td>GW</td>
</tr>
<tr>
<td>Polysomnographic Technology</td>
<td>GW</td>
</tr>
<tr>
<td>Practical Nursing</td>
<td>CG, GC, GW, MC, PV, SC, EM</td>
</tr>
<tr>
<td>Radiation Therapy</td>
<td>GW</td>
</tr>
<tr>
<td>Recovery Support</td>
<td>SM</td>
</tr>
<tr>
<td>Respiratory Care</td>
<td>GW</td>
</tr>
<tr>
<td>Speech Language Pathology Assistant</td>
<td>EM</td>
</tr>
<tr>
<td>Surgical Technology</td>
<td>GW</td>
</tr>
<tr>
<td>Surgical Technology for the Operating Room Nurse</td>
<td>GW</td>
</tr>
</tbody>
</table>

**Hospitality and Tourism**

<table>
<thead>
<tr>
<th>Program</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airline Operations</td>
<td>RS</td>
</tr>
<tr>
<td>Airline Operations: Ground Operations</td>
<td>RS</td>
</tr>
<tr>
<td>Airline Operations: Passenger Services</td>
<td>RS</td>
</tr>
<tr>
<td>Airline Operations: Reservations</td>
<td>RS</td>
</tr>
<tr>
<td>Airline Operations: Reservations and Ticketing Services</td>
<td>RS</td>
</tr>
<tr>
<td>Baking and Pastry</td>
<td>EM, PC</td>
</tr>
<tr>
<td>Basic Culinary Studies</td>
<td>EM</td>
</tr>
<tr>
<td>Commercial Food Preparation</td>
<td>PC</td>
</tr>
<tr>
<td>Commercial Bakery and Pastry Arts</td>
<td>SC</td>
</tr>
<tr>
<td>Culinary Arts</td>
<td>SC</td>
</tr>
<tr>
<td>Culinary Studies</td>
<td>EM, PC</td>
</tr>
<tr>
<td>Culinary Arts Foundations</td>
<td>SC</td>
</tr>
<tr>
<td>Culinary Fundamentals</td>
<td>SC, SM</td>
</tr>
<tr>
<td>Dietetic Technology</td>
<td>CG, PV</td>
</tr>
<tr>
<td>Food Service Administration</td>
<td>PC</td>
</tr>
<tr>
<td>Hospitality and Tourism/Golf Management</td>
<td>SC</td>
</tr>
<tr>
<td>AREAS / PROGRAMS</td>
<td>INSTITUTION</td>
</tr>
<tr>
<td>---------------------------------------------------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Hospitality and Tourism/Hotel Management</td>
<td>SC</td>
</tr>
<tr>
<td>Hospitality and Tourism/Restaurant Management</td>
<td>SC</td>
</tr>
<tr>
<td>Hospitality and Tourism/Spa and Wellness Center Management</td>
<td>SC</td>
</tr>
<tr>
<td>Hospitality/Hotel Management</td>
<td>EM</td>
</tr>
<tr>
<td>Hospitality and Tourism/Tourism Development and Management</td>
<td>SC</td>
</tr>
<tr>
<td>Sustainable Food Systems</td>
<td>MC, RS</td>
</tr>
</tbody>
</table>

**Human Services**

- Addictions and Substance Use Disorders Level I                 | RS          |
- Addictions and Substance Use Disorders Level II                | RS          |
- Addictions and Substance Use Disorders                        | RS          |
- Adolescent Studies                                            | PC          |
- Deaf Studies                                                  | PC          |
- Exercise Science and Personal Training                        | CG, GC, MC, PV, SC |
- Family Development                                             | PC          |
- Family Support                                                | PC          |
- Group Fitness Instructor                                       | MC          |
- Interpreter Preparation                                        | PC          |
- Nutrition for Fitness and Wellness                           | GC, MC, SC  |
- Personal Trainer                                              | GC, MC      |
- Professional Addictions Counseling                            | RS          |
- Personal Training Specialist                                  | CG, GC, MC, PV, SC |
- Recreation Management                                          | MC, SC      |
- Teaching, Healing, Meditation for Stress Management            | PV          |
- Therapeutic Massage                                           | CG, PC      |
- Yoga Instruction                                              | SC          |
- Yoga Therapy                                                  | SC          |

**Information Technology**

- Advanced Computer Usage and Applications                      | RS          |
- Advanced Web Designer                                          | MC          |
- Applications in Geospatial Technologies                       | MC          |
- Adobe Foundations                                             | GC, MC, SM, PV |
- Adobe Creative Suite in Business: Master Suite Applications Specialist | MC, SM      |
- Adobe Creative Suite in Business: Print and Web Applications Specialist | GC, MC, PV, SM |
- Adobe Creative Suite in Business: Production Applications Specialist | GC, MC, SM  |
- Business Office Computer Applications                          | GC          |
- Production Television                                          | SC          |
- Comic and Sequential Art                                       | PC          |
- Computer Applications Technology                               | EM          |
- Computer Applications: Microsoft Office Specialist/Advanced    | MC          |

Revised as of: GBA Date June 28, 2016
<table>
<thead>
<tr>
<th>AREAS / PROGRAMS</th>
<th>INSTITUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Applications: Microsoft Office Specialist/Basic</td>
<td>MC</td>
</tr>
<tr>
<td>Computer Hardware and Desktop Support</td>
<td>CG, EM</td>
</tr>
<tr>
<td>Computer Hardware and Network Support</td>
<td>SC</td>
</tr>
<tr>
<td>Computer Information Systems</td>
<td>GC, GW, PC, PV</td>
</tr>
<tr>
<td>Computer Information Systems Technologies</td>
<td>SC</td>
</tr>
<tr>
<td>Computer Information Technology</td>
<td>PV</td>
</tr>
<tr>
<td>Computer Networking Technology</td>
<td>PV</td>
</tr>
<tr>
<td>Computer Programming</td>
<td>MC</td>
</tr>
<tr>
<td>Computer Systems Maintenance</td>
<td>PV</td>
</tr>
<tr>
<td>Computer Technology</td>
<td>RS</td>
</tr>
<tr>
<td>Computer Usage and Applications</td>
<td>RS</td>
</tr>
<tr>
<td>Computer and Information Technologies</td>
<td>SM</td>
</tr>
<tr>
<td>Computer Applications: Office Specialist/Core Level</td>
<td>CG</td>
</tr>
<tr>
<td>Computer Applications: Office Specialist/Expert Level</td>
<td>CG</td>
</tr>
<tr>
<td>Computer Business Applications</td>
<td>CG</td>
</tr>
<tr>
<td>Digital Arts</td>
<td>MC</td>
</tr>
<tr>
<td>Digital Design</td>
<td>RSC</td>
</tr>
<tr>
<td>Digital Photography</td>
<td>PC</td>
</tr>
<tr>
<td>Digital Arts: Digital Illustration</td>
<td>MCC</td>
</tr>
<tr>
<td>Digital Arts: Digital Photography</td>
<td>MCC</td>
</tr>
<tr>
<td>Digital Arts: Graphic Design</td>
<td>MCC</td>
</tr>
<tr>
<td>Database Development</td>
<td>SC</td>
</tr>
<tr>
<td>Desktop Publishing</td>
<td>EM</td>
</tr>
<tr>
<td>Digital Cinema Arts</td>
<td>GC</td>
</tr>
<tr>
<td>Editing</td>
<td>SC</td>
</tr>
<tr>
<td>eLearning Design Specialist</td>
<td>RS</td>
</tr>
<tr>
<td>Production Film</td>
<td>SC</td>
</tr>
<tr>
<td>Game Technology</td>
<td>MC, GC</td>
</tr>
<tr>
<td>Healthcare Technology Systems</td>
<td>GC, PV</td>
</tr>
<tr>
<td>Information Security</td>
<td>GC</td>
</tr>
<tr>
<td>Information Security Technology</td>
<td>GC</td>
</tr>
<tr>
<td>Information Technology</td>
<td>CG</td>
</tr>
<tr>
<td>Information Technology: Android/iOS Programming</td>
<td>SM</td>
</tr>
<tr>
<td>Information Technology: Programming and Mobile Development</td>
<td>SM</td>
</tr>
<tr>
<td>Information Technology: Web and Graphic Design</td>
<td>SM, EM</td>
</tr>
<tr>
<td>Information Technology: Cisco Networking</td>
<td>SM, MC</td>
</tr>
<tr>
<td>Information Technology: Computer Applications Specialist</td>
<td>SM</td>
</tr>
<tr>
<td>Information Technology: Microsoft Programming</td>
<td>SM</td>
</tr>
<tr>
<td>Information Technology: Network Server</td>
<td>SM</td>
</tr>
<tr>
<td>Information Technology: Network Security</td>
<td>SM</td>
</tr>
<tr>
<td>Information Technology Support</td>
<td>SM</td>
</tr>
<tr>
<td>IT and Power Systems Security</td>
<td>SM</td>
</tr>
<tr>
<td>Linux Associate</td>
<td>CG, EM, MC</td>
</tr>
<tr>
<td>Linux Networking Administration</td>
<td>EM</td>
</tr>
<tr>
<td>Linux Networking Administration</td>
<td>EM, GC, MC</td>
</tr>
<tr>
<td>AREAS / PROGRAMS</td>
<td>INSTITUTION</td>
</tr>
<tr>
<td>------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Linux Professional</td>
<td>CG, EM, GC, GW, PC, SC, SM, MC, PV</td>
</tr>
<tr>
<td>Microsoft Desktop Support Technology</td>
<td>EM, GC, PV</td>
</tr>
<tr>
<td>Microsoft Networking Technology</td>
<td>EM, GC, GW, PV</td>
</tr>
<tr>
<td>Microsoft Technical Specialist</td>
<td>EM, GW, PV</td>
</tr>
<tr>
<td>Microsoft Server Administration</td>
<td>EM, GC</td>
</tr>
<tr>
<td>Microsoft Certified Information Technology Professional (MCITP) Administrator</td>
<td>EM, GW</td>
</tr>
<tr>
<td>Mobile Apps Programming</td>
<td>EM, PVC, RSC, SMC</td>
</tr>
<tr>
<td>Multimedia and Business Technology</td>
<td>MC</td>
</tr>
<tr>
<td>Media Arts: Computer Art/Illustration</td>
<td>CG, PC</td>
</tr>
<tr>
<td>Media Arts: Digital Animation</td>
<td>PC</td>
</tr>
<tr>
<td>Media Arts: Digital Imaging</td>
<td>CG, PC</td>
</tr>
<tr>
<td>Media Arts: Web Design</td>
<td>PC</td>
</tr>
<tr>
<td>Motion Picture/Television Production</td>
<td>SC</td>
</tr>
<tr>
<td>Multimedia Technology</td>
<td>MC</td>
</tr>
<tr>
<td>Network Administration</td>
<td>SC</td>
</tr>
<tr>
<td>Network Administration: CISCO Network Professional</td>
<td>MC, SM</td>
</tr>
<tr>
<td>Network Administration: Microsoft Windows Server</td>
<td>CG, GW, MC, SM</td>
</tr>
<tr>
<td>Networking: Design and System Support</td>
<td>RS</td>
</tr>
<tr>
<td>Networking Administration: Cisco</td>
<td>CG, EM, GC, GW, SM, MC</td>
</tr>
<tr>
<td>Networking System Administration</td>
<td>MC</td>
</tr>
<tr>
<td>Networking Technology: Cisco</td>
<td>CG, EM, GC, GW</td>
</tr>
<tr>
<td>Oracle Database Operations Programming</td>
<td>CG</td>
</tr>
<tr>
<td>Programming and System Analysis</td>
<td>RS, EM, SM</td>
</tr>
<tr>
<td>Software Development</td>
<td>SC</td>
</tr>
<tr>
<td>Screenwriting</td>
<td>SC</td>
</tr>
<tr>
<td>Technical Theatre</td>
<td>PC, SCC</td>
</tr>
<tr>
<td>Web Application Development</td>
<td>SM</td>
</tr>
<tr>
<td>Web Design</td>
<td>GC, PV, EM, PC, CG, SM</td>
</tr>
<tr>
<td>Web Design Technologies</td>
<td>SC</td>
</tr>
<tr>
<td>Web Design: User Interface</td>
<td>RS</td>
</tr>
<tr>
<td>Web Designer</td>
<td>MC</td>
</tr>
</tbody>
</table>
### MCCCD Occupational Programs

#### 2016-2017 Occupational Program Matrix

<table>
<thead>
<tr>
<th>AREAS / PROGRAMS</th>
<th>INSTITUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Web Developer</td>
<td>GC, MC, PC, PV, EM</td>
</tr>
<tr>
<td>Web Development</td>
<td>SC</td>
</tr>
<tr>
<td>Web Server Administrator</td>
<td>MC</td>
</tr>
</tbody>
</table>

### Manufacturing

- Automation Technology
- Automation Technology Level I
- Automation Technology Level II
- Automation Technology Level III
- Applied Electrical Technologies
- Lineman Technology Level I
- Lineman Technology Level II
- Lineman Technology Level III
- Lineman Technology Level IV
- CAD Technology
- CAD Fundamental
- CAD/CAM/CNC I
- CAD/CAM/CNC II
- CAD/CAM/CNC III
- CAD Application
- Computer and Networking Technology
- Electro/Mechanical Drafting
- Electromechanical Manufacturing Technology
- Electric Utility Technology
- Electric Utility Design Technology
- Electrical Technology
- Electromechanical Automation Technology
- Electronics Engineering Technology
- Electronics Technology
- Industrial Design Technology
- Industrial Design Technology: Design Specialist: SolidWorks
- Machining I
- Machining II
- Manufacturing Engineering Technology
- Manufacturing Management
- Manufacturing Welding
- Micro Circuit Mask Design
- Meter Technology
- Network Maintenance
- Production Technology
- Production Technology: CNC Technology
- Production Technology: Quality Assurance
- Workforce Development: Electrical Level I

Revised as of: GBA Date June 28, 2016
<table>
<thead>
<tr>
<th>AREAS / PROGRAMS</th>
<th>INSTITUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workforce Development: Electrical Level II</td>
<td>RS</td>
</tr>
<tr>
<td>Welding</td>
<td>MC</td>
</tr>
<tr>
<td><strong>Marketing, Sales, and Service</strong></td>
<td></td>
</tr>
<tr>
<td>Marketing</td>
<td>PC, PV, SC</td>
</tr>
<tr>
<td>Salesmanship</td>
<td>MC</td>
</tr>
<tr>
<td><strong>Law, Public Safety, Corrections, and Security</strong></td>
<td></td>
</tr>
<tr>
<td>Administration of Justice</td>
<td>EM, GC, PC, PV, RS</td>
</tr>
<tr>
<td>Administration of Justice-Comprehensive</td>
<td>PC</td>
</tr>
<tr>
<td>Administration of Justice-Fundamentals</td>
<td>PC</td>
</tr>
<tr>
<td>Administration of Justice Studies</td>
<td>CG, MC, SC, GW</td>
</tr>
<tr>
<td>Advanced Corrections</td>
<td>RS</td>
</tr>
<tr>
<td>Basic Corrections</td>
<td>RS</td>
</tr>
<tr>
<td>Corrections</td>
<td>RS</td>
</tr>
<tr>
<td>Correctional Studies</td>
<td>CG</td>
</tr>
<tr>
<td>Crime and Accident Scene Photography</td>
<td>PC, SC</td>
</tr>
<tr>
<td>Crime Scene Investigation</td>
<td>SC, PC</td>
</tr>
<tr>
<td>Crime Scene Technology</td>
<td>SC, PC</td>
</tr>
<tr>
<td>Detention Services</td>
<td>RS</td>
</tr>
<tr>
<td>Domestic Preparedness and Homeland Security</td>
<td>PC</td>
</tr>
<tr>
<td>Driver Operator</td>
<td>GC, EM, MC, PC, PV</td>
</tr>
<tr>
<td>Evidence Technology</td>
<td>PC</td>
</tr>
<tr>
<td>Evidence Technology</td>
<td>EM</td>
</tr>
<tr>
<td>Emergency Medical Technology</td>
<td>CG, GC, MC, PC, PV, SC</td>
</tr>
<tr>
<td>Emergency Management</td>
<td>MC, PV</td>
</tr>
<tr>
<td>Emergency Response and Operations</td>
<td>EM, GC, MC, PC, PV, SC</td>
</tr>
<tr>
<td><strong>Fire Academy</strong></td>
<td>GC, SC</td>
</tr>
<tr>
<td>Fire Officer Leadership</td>
<td>MC, EM, GC, PC, PV</td>
</tr>
<tr>
<td>Fire Science</td>
<td>PV, EM, MC</td>
</tr>
<tr>
<td>Firefighter Operations</td>
<td>GC, MC, PC, PV, EM</td>
</tr>
<tr>
<td>Fingerprint Classification and Identification</td>
<td>PC, SC</td>
</tr>
<tr>
<td>Forensic Investigation</td>
<td>MC</td>
</tr>
<tr>
<td>Forensic Technology</td>
<td>PC</td>
</tr>
<tr>
<td>Forensic Science: Crime Lab</td>
<td>SC</td>
</tr>
<tr>
<td>Fire Investigation</td>
<td>EM, GC, MC, PC, PV</td>
</tr>
<tr>
<td>AREAS / PROGRAMS</td>
<td>INSTITUTION</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>--------------</td>
</tr>
<tr>
<td>Global Citizenship</td>
<td>MC</td>
</tr>
<tr>
<td>Homeland Security</td>
<td>CG, GW</td>
</tr>
<tr>
<td>Hazardous Materials Response</td>
<td>PC</td>
</tr>
<tr>
<td>Judicial Studies</td>
<td>MC</td>
</tr>
<tr>
<td>Justice Studies</td>
<td>CG, SC, EM</td>
</tr>
<tr>
<td>Juvenile Corrections</td>
<td>RSC</td>
</tr>
<tr>
<td>Law Enforcement Investigator</td>
<td>GC</td>
</tr>
<tr>
<td>Law Enforcement Technology Academy</td>
<td>RS</td>
</tr>
<tr>
<td>Law Enforcement</td>
<td>SC</td>
</tr>
<tr>
<td>Law Enforcement Training Academy</td>
<td>GC, CG</td>
</tr>
<tr>
<td>Legal Studies</td>
<td>MC</td>
</tr>
<tr>
<td>Paralegal</td>
<td>RS</td>
</tr>
<tr>
<td>Paramedicine</td>
<td>GC, PC, PV, MC</td>
</tr>
<tr>
<td>Police Academy Preparation Level I</td>
<td>SC</td>
</tr>
<tr>
<td>Police Science</td>
<td>MC, SC</td>
</tr>
<tr>
<td>Public Safety Technology</td>
<td>RS</td>
</tr>
<tr>
<td>Tribal Court Advocacy</td>
<td>SC</td>
</tr>
<tr>
<td>Victimology</td>
<td>MC</td>
</tr>
</tbody>
</table>

**Science, Technology, Engineering and Mathematics**

- Aircraft Maintenance Technology               CG
- Aircraft Maintenance Technology (Part 147)    CG
- Airframe Maintenance (Part 147)               CG
- Airway Science Technology, Flight Emphasis   CG
- Biotechnology                                 MC
- Biotechnology and Molecular Biosciences      GC

- Certified Flight Instructor Instrument Airplane Rating CG
- Engineering Technology                        GC, CGC, EM, SM
- Flight Technology                             CG
- Powerplant Maintenance (Part 147)             CG
- Nanotechnology                               RS

**Transportation, Distribution, and Logistics**

- Air Conditioning and Electrical Accessories  GW
- Air Conditioning                              MC
- Automotive Chassis                            GC
- Automotive Drive Trains                       GW
- Automotive Electrical Systems                 MC
- Automotive Engines and Drive Trains           GC
### AREAS / PROGRAMS

<table>
<thead>
<tr>
<th>ares / programs</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automotive Engine Performance Diagnosis &amp; Air Conditioning</td>
<td>GC</td>
</tr>
<tr>
<td>Automotive Performance Technology</td>
<td>MC</td>
</tr>
<tr>
<td>Automotive Suspension, Steering and Brakes</td>
<td>GW</td>
</tr>
<tr>
<td>Automotive Technology</td>
<td>GC, GW</td>
</tr>
<tr>
<td>Automotive Maintenance and Light Repair</td>
<td>GC</td>
</tr>
<tr>
<td>Automotive Engine Performance</td>
<td>GC</td>
</tr>
<tr>
<td>Automotive Heating, Ventilation and Air Conditioning (HVAC)</td>
<td>GC</td>
</tr>
<tr>
<td>Automotive Technology</td>
<td>GC</td>
</tr>
<tr>
<td>Brakes, Alignment, Suspension and Steering</td>
<td>MC</td>
</tr>
<tr>
<td>Engine Performance and Diagnosis</td>
<td>GW, MC</td>
</tr>
<tr>
<td>Transmissions and Power Trains</td>
<td>MC</td>
</tr>
<tr>
<td>Workforce Development: Automotive Technology Level I</td>
<td>RS</td>
</tr>
<tr>
<td>Workforce Development: Automotive Technology Level II</td>
<td>RS</td>
</tr>
</tbody>
</table>

---

**College Acronyms/Name:**

CG: Chandler Gilbert Community College  
EM: Estrella Mountain Community College  
GC: Glendale Community College  
GW: GateWay Community College  
MC: Mesa Community College  
PC: Phoenix College  
PV: Paradise Valley Community College  
RS: Rio Salado College  
SC: Scottsdale Community College  
SM: South Mountain Community College
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAA</td>
<td>Advancing Academic Achievement</td>
<td>175</td>
</tr>
<tr>
<td>ACC</td>
<td>Accounting</td>
<td>175</td>
</tr>
<tr>
<td>ADA</td>
<td>Advertising Arts</td>
<td>175</td>
</tr>
<tr>
<td>AES</td>
<td>Aerospace Studies</td>
<td>175</td>
</tr>
<tr>
<td>AFR</td>
<td>African-American Studies</td>
<td>178</td>
</tr>
<tr>
<td>AIS</td>
<td>American Indian Studies</td>
<td>179</td>
</tr>
<tr>
<td>AJS</td>
<td>Administration of Justice</td>
<td>176</td>
</tr>
<tr>
<td>ARH</td>
<td>Art Humanities</td>
<td>182</td>
</tr>
<tr>
<td>ART</td>
<td>Art</td>
<td>180</td>
</tr>
<tr>
<td>ASB</td>
<td>Anthropology</td>
<td>179</td>
</tr>
<tr>
<td>AST</td>
<td>Astronomy</td>
<td>182</td>
</tr>
<tr>
<td>ATP</td>
<td>Automation Technology</td>
<td>182</td>
</tr>
<tr>
<td>BIO</td>
<td>Biology</td>
<td>182</td>
</tr>
<tr>
<td>BPC</td>
<td>Business/Personal Computers</td>
<td>183</td>
</tr>
<tr>
<td>CAD</td>
<td>Computer Aided Drafting</td>
<td>189</td>
</tr>
<tr>
<td>CCS</td>
<td>Chicana and Chicano Studies</td>
<td>186</td>
</tr>
<tr>
<td>CFS</td>
<td>Child/Family Studies</td>
<td>186</td>
</tr>
<tr>
<td>CHM</td>
<td>Chemistry</td>
<td>184</td>
</tr>
<tr>
<td>CIS</td>
<td>Computer Information Systems</td>
<td>189</td>
</tr>
<tr>
<td>CNS</td>
<td>Construction</td>
<td>198</td>
</tr>
<tr>
<td>CNT</td>
<td>Cisco Networking Technology</td>
<td>186</td>
</tr>
<tr>
<td>COM</td>
<td>Communication</td>
<td>188</td>
</tr>
<tr>
<td>CPD</td>
<td>Counseling and Personal Development</td>
<td>198</td>
</tr>
<tr>
<td>CRE</td>
<td>Critical Reading</td>
<td>200</td>
</tr>
<tr>
<td>CRW</td>
<td>Creative Writing</td>
<td>199</td>
</tr>
<tr>
<td>CSC</td>
<td>Computer Science</td>
<td>197</td>
</tr>
<tr>
<td>CSM</td>
<td>Customer Service Management</td>
<td>202</td>
</tr>
<tr>
<td>CUL</td>
<td>Culinary Arts</td>
<td>200</td>
</tr>
<tr>
<td>DAH</td>
<td>Dance Humanities</td>
<td>205</td>
</tr>
<tr>
<td>DAN</td>
<td>Dance</td>
<td>203</td>
</tr>
<tr>
<td>DPR</td>
<td>Disaster Preparedness and Emergency Response</td>
<td>205</td>
</tr>
<tr>
<td>ECE</td>
<td>Engineering Science</td>
<td>212</td>
</tr>
<tr>
<td>ECH</td>
<td>Early Childhood Education</td>
<td>205</td>
</tr>
<tr>
<td>ECN</td>
<td>Economics</td>
<td>206</td>
</tr>
<tr>
<td>EED</td>
<td>Early Education</td>
<td>205</td>
</tr>
<tr>
<td>EEE</td>
<td>Electrical Engineering</td>
<td>209</td>
</tr>
<tr>
<td>EDU</td>
<td>Education</td>
<td>206</td>
</tr>
<tr>
<td>ELC</td>
<td>Electricity</td>
<td>209</td>
</tr>
<tr>
<td>ELE</td>
<td>Electricity and Electronics</td>
<td>210</td>
</tr>
<tr>
<td>ELT</td>
<td>Electronics Technology</td>
<td>210</td>
</tr>
<tr>
<td>EMT</td>
<td>Emergency Medical Technology</td>
<td>210</td>
</tr>
<tr>
<td>ENG</td>
<td>English</td>
<td>213</td>
</tr>
<tr>
<td>ENH</td>
<td>English Humanities</td>
<td>215</td>
</tr>
<tr>
<td>EPD</td>
<td>Education Professional Development</td>
<td>208</td>
</tr>
<tr>
<td>EPS</td>
<td>Entrepreneurial Studies</td>
<td>217</td>
</tr>
<tr>
<td>EXS</td>
<td>Exercise Science</td>
<td>217</td>
</tr>
<tr>
<td>ESL</td>
<td>English as a Second Language</td>
<td>214</td>
</tr>
<tr>
<td>FAC</td>
<td>Facilities Management</td>
<td>218</td>
</tr>
<tr>
<td>FON</td>
<td>Food and Nutrition</td>
<td>221</td>
</tr>
<tr>
<td>FSC</td>
<td>Fire Science Technology</td>
<td>219</td>
</tr>
<tr>
<td>GBS</td>
<td>General Business</td>
<td>221</td>
</tr>
<tr>
<td>GER</td>
<td>German</td>
<td>223</td>
</tr>
<tr>
<td>GCU</td>
<td>Geography, Cultural</td>
<td>223</td>
</tr>
<tr>
<td>GLG</td>
<td>Geology</td>
<td>223</td>
</tr>
<tr>
<td>GTC</td>
<td>General Technology</td>
<td>222</td>
</tr>
<tr>
<td>HCC</td>
<td>Health Core Curriculum</td>
<td>224</td>
</tr>
<tr>
<td>HCR</td>
<td>Health Care Related</td>
<td>223</td>
</tr>
<tr>
<td>HEO</td>
<td>Heavy Equipment Operation</td>
<td>225</td>
</tr>
<tr>
<td>HES</td>
<td>Health Science</td>
<td>224</td>
</tr>
<tr>
<td>HIS</td>
<td>History</td>
<td>225</td>
</tr>
<tr>
<td>HLR</td>
<td>Health Related</td>
<td>225</td>
</tr>
<tr>
<td>HVA</td>
<td>Heating, Ventilating &amp; Air Conditioning</td>
<td>224</td>
</tr>
<tr>
<td>HRM</td>
<td>Hotel Restaurant Management</td>
<td>226</td>
</tr>
<tr>
<td>HUM</td>
<td>Humanities</td>
<td>227</td>
</tr>
<tr>
<td>IBS</td>
<td>International Business</td>
<td>228</td>
</tr>
<tr>
<td>IND</td>
<td>Industry</td>
<td>227</td>
</tr>
<tr>
<td>INT</td>
<td>Interior Design</td>
<td>228</td>
</tr>
<tr>
<td>JRN</td>
<td>Journalism</td>
<td>228</td>
</tr>
<tr>
<td>LDR</td>
<td>Leadership</td>
<td>228</td>
</tr>
<tr>
<td>MAT</td>
<td>Mathematics</td>
<td>231</td>
</tr>
<tr>
<td>MCO</td>
<td>Mass Communications</td>
<td>231</td>
</tr>
<tr>
<td>MET</td>
<td>Manufacturing Technology</td>
<td>229</td>
</tr>
<tr>
<td>MGT</td>
<td>Management</td>
<td>228</td>
</tr>
<tr>
<td>MHL</td>
<td>Music: History/Literature</td>
<td>235</td>
</tr>
<tr>
<td>MIT</td>
<td>Manufacturing Industrial Technology</td>
<td>229</td>
</tr>
<tr>
<td>MKT</td>
<td>Marketing</td>
<td>230</td>
</tr>
<tr>
<td>MMT</td>
<td>Multimedia Technology</td>
<td>235</td>
</tr>
<tr>
<td>MST</td>
<td>Microsoft Technology</td>
<td>233</td>
</tr>
<tr>
<td>MTC</td>
<td>Music: Theory/Composition</td>
<td>236</td>
</tr>
<tr>
<td>MUP</td>
<td>Music: Performance</td>
<td>235</td>
</tr>
<tr>
<td>NET</td>
<td>Networking Technology</td>
<td>236</td>
</tr>
<tr>
<td>NUR</td>
<td>Nursing</td>
<td>236</td>
</tr>
<tr>
<td>OAS</td>
<td>Office Automation Systems</td>
<td>238</td>
</tr>
<tr>
<td>OCS</td>
<td>Office Career Success</td>
<td>238</td>
</tr>
<tr>
<td>OSH</td>
<td>Occupational Safety &amp; Health</td>
<td>238</td>
</tr>
<tr>
<td>PAD</td>
<td>Public Administration</td>
<td>246</td>
</tr>
<tr>
<td>PED</td>
<td>Physical Education</td>
<td>239</td>
</tr>
<tr>
<td>PHI</td>
<td>Philosophy</td>
<td>239</td>
</tr>
<tr>
<td>PHS</td>
<td>Physical Science</td>
<td>241</td>
</tr>
<tr>
<td>PHY</td>
<td>Physics</td>
<td>241</td>
</tr>
<tr>
<td>POS</td>
<td>Political Science</td>
<td>242</td>
</tr>
</tbody>
</table>
All courses listed in this catalog are not necessarily offered every semester. Check the EMCC Class Schedule for current course offerings or Search For Classes using the online schedule at http://schedule.estrellamountain.edu/

Courses are subject to change. Current course information can be found in the EMCC Course Catalog at http://schedule.estrellamountain.edu/courses or through the Center for Curriculum and Transfer Articulation at http://www.maricopa.edu/academic/ccta/curric/search_course.php
Course Descriptions

Accounting

**ACC105**
Payroll, Sales and Property Taxes
3 Credits. 3 Periods.
Tax reporting for payroll, sales, and personal property. Prerequisites: None.

**ACC111**
Accounting Principles I
3 Credits. 3 Periods.
Fundamental theory of accounting principles and procedures. Prerequisites: None.

**ACC112**
Accounting Principles II
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/division.

**ACC115**
Computerized Accounting
2 Credits. 3 Periods.
Mastery of a microcomputer accounting system including the general ledger, accounts receivable, accounts payable and payroll. Prerequisites: ACC107, or higher level accounting course, or permission of instructor.

**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.

**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).

**ACC221**
Tax Accounting
3 Credits. 3 Periods.
Preparation of and accounting procedures for individuals; introduction to partnerships and corporate tax structures. Prerequisites: ACC111 or ACC211 or permission of department/division.

**ACC230**
Uses of Accounting Information I
3 Credits. 3 Periods.
Introduction to the uses of accounting information for internal and external purposes with emphasis on financial statement analysis. Prerequisites: Grade of "C" or better in ACC111 or ACC211, or a grade of "C" or better in (ENG101 and MAT151 and CRE101), or equivalent, or satisfactory score on District placement exam.

**ACC240**
Uses of Accounting Information II
3 Credits. 3 Periods.
Introduction to the uses of accounting information for internal and external purposes with emphasis on analysis for use by management. Prerequisites: ACC230.

**ACC270AA**
Accounting Internship
1 Credits. 1 Period.
Accounting work experience in a business or industry. Eighty hours of designated work per credit per semester. Prerequisites: Permission of Department or Division.

**ACC270AB**
Accounting Internship
2 Credits. 2 Periods.
Accounting work experience in a business or industry. Eighty hours of designated work per credit totaling 160 hours per semester. Prerequisites: Permission of Department or Division.

Advancing Academic Achievement

**AAA115**
Creating College Success
1 Credits. 1 Periods.
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. Cross-Reference: CPD115

**AAA150**
Strategies for College Success
See description under cross-reference course CPD150

Advertising Arts

**ADA112**
Two-Dimensional Design
See description under cross-reference course ART112

**ADA169**
Two-Dimensional Computer Design
See description under cross-reference course ART169

**ADA173**
Computer Art
See description under cross-reference course ART173

**ADA177**
Computer-Photographic Imaging
See description under cross-reference course ART177

Aerospace Studies

**AES101**
The Air Force Today I
LEC 2 Credits. 1 Period.
LAB 0 Credits. 1 Period.
Introduction to U.S. Air Force and AFROTC. Topics include: the Air Force mission and organization, customs and courtesies, officer opportunities, officership and professionalism. Prerequisites: None.
Course Descriptions

AES103
The Air Force Today II
LEC 2 Credits. 1 Period.
LAB 0 Credits. 1 Period.
Introduction to U.S. Air Force and AFROTC. Topics include: the Air Force mission and organization, customs and courtesies, officer opportunities, officerhood, and professionalism. Prerequisites: None.

AES201
Evolution of USAF Air and Space Power I
LEC 2 Credits. 1 Period.
LAB 0 Credits. 1 Period.
Further preparation of AFROTC candidate. Topics include: Air Force heritage and leaders, communication skills, ethics, leadership, quality Air Force, and values. Prerequisites: None.

AES203
Evolution of USAF Air and Space Power II
LEC 2 Credits. 1 Period.
LAB 0 Credits. 1 Period.
Topics include: the air Force mission and organization, customs and courtesies, officer opportunities, officerhood, and professionalism. Prerequisites: None.

AES294
Air Force Physical Fitness
1 Credits. 3 Periods.
Beginning instruction in adapted physical activities and a variety of sports and sports activities to include calisthenics, sit-ups, push-ups, running, basketball, volleyball, and other physical events. Prerequisites: None

AJS106
The Air Force Today I
LEC 2 Credits. 1 Period.
LAB 0 Credits. 1 Period.
Introduction to U.S. Air Force and AFROTC. Topics include: the Air Force mission and organization, customs and courtesies, officer opportunities, officerhood, and professionalism. Prerequisites: None.

AJS101
Introduction to Criminal Justice
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.

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.

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.

AJS110
Law and Legal Review I
3 Credits. 3 Periods.
In-depth study of the Arizona laws governing arrest by peace officers, as well as, an intensive study of the Arizona substantive criminal law code (ARS Title 13). Focuses on specific sections of ARS Title 4 and ARS Title 8, as they apply to peace officers in Arizona. Partially fulfills the Arizona POST (Peace Officer Standard and Training) Board requirements for Proficiency Skills Academy attendance. Prerequisites: None.

AJS113
Criminal Justice Crime Control Policies and Practices
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.

AJS123
Ethics and the Administration of Justice
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. Encourages critical thinking and value decision making in criminal justice system situations. Prerequisites: None.

AJS124
Correctional Institutions
3 Credits. 3 Periods.
An examination of correctional institutions with an emphasis on personnel and security measures, care and treatment programs and institutional planning. The criminal justice system and matters of custody and treatment. Inmate subcultures, and organized crime in correctional institutions and jails. Prerequisites: None.

AJS131
Police Management Techniques I
3 Credits. 3 Periods.
Police supervisory techniques for planning, organization, coordination, reporting, budgeting and handling related personnel problems. Prerequisites: None.

AJS132
Police Management Techniques II
3 Credits. 3 Periods.
Management of police personnel including selection processes, disciplinary practices, public relations, elements of supervision, service ratings, recruiting and probation, and related personnel problems. Prerequisites: AJS131 or instructor’s approval.

AJS133
Correctional Supervision I
3 Credits. 3 Periods.
Basic supervision of correctional employees. Personnel practices, employee discipline and motivation, trust/team building, and one-minute manager principles. Prerequisites: None.
Course Descriptions

AJ5139
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.

AJ5146
Disaster Recovery Operations
3 Credits. 3 Periods.
Specialized knowledge and skills for the disaster manager in developing programs and activities associated with disaster recovery assistance and mitigation actions that reduce losses from future disasters. Prerequisites: None.

AJ5147
Emergency Preparedness
3 Credits. 3 Periods.
Emergency preparedness related to natural and manmade disasters. Planning concepts and the planning process; awareness and education programs and strategies for the general community as well as business and industries. Prerequisites: None.

AJ5148
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.

AJ5149
Hazard Mitigation
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 manmade hazards. Prerequisites: None.

AJ5200
Current Issues in Criminal Justice
3 Credits. 3 Periods.
Examines current issues, techniques and trends in the Criminal Justice System. Prerequisites: None.

AJ5201
Rules of Evidence
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, and recordings; corpus delicti; opinion evidence, circumstantial evidence, evidential privileges. Required in AJ5 curriculum. Prerequisites: None.

AJ5205
Criminal Justice Report Writing
3 Credits. 3 Periods.
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.

AJ5210
Constitutional Law
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 AJ5 curriculum. Prerequisites: None.

AJ5220
Organized Crime
3 Credits. 3 Periods.
Examines the history, structure and activities of organized crime groups. Reviews theories explaining the existence of organized crime and enforcement strategies used to combat it. Prerequisites: None.

AJ5225
Criminology
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 crimes and categories of offenders. Required in the AJ5 curriculum. Prerequisites: None.
**Course Descriptions**

**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.

**AJS131**  
**Police Management Techniques I**  
3 Credits. 3 Periods.  
Police supervisory techniques for planning, organization, coordination, reporting, budgeting and handling related personnel problems. Prerequisites: None.

**AJS132**  
**Police Management Techniques II**  
3 Credits. 3 Periods.  
Management of police personnel including selection procedures, disciplinary practices, public relations, elements of supervision, service ratings, recruiting and probation, and related personnel problems. Prerequisites: AJS131 or permission of Instructor.

**AJS240**  
**The Correction Function**  
3 Credits. 3 Periods.  
Examines the history and development of correctional theories and institutions. Prerequisites: None.

**AJS241**  
**Police Photography**  
3 Credits. 3 Periods.  
Emphasis on proper procedure for photographing crime scenes, accident scenes, and laboratory specimens. Discussion of photographic techniques, equipment, lighting techniques, aerial photography, video and motion pictures, macro and micro photography, filters, and preparation for court presentation using selected simulations. Prerequisites: None.

**AJS242**  
**Crime Scene Processing**  
3 Credits. 3 Periods.  
Procedures and technology required to process crime scenes including how to protect a crime scene, collect information, search for, collect, and preserve physical and biological evidence, and conduct field tests. Practical experience in evidence collection and crime scene sketching and processing. Prerequisites: AJS213 and (AJS214 or AJS241) or permission of instructor.

**AJS249**  
**Community Policing**  
3 Credits. 3 Periods.  
Examines the history, philosophy, implementation, administration, application, benefits and future of community policing. Prerequisites: None.

**AJS258**  
**Victimology and Crisis Management**  
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. Cross-References: EMT/FSC/SWU258

**AJS260**  
**Procedural Criminal Law**  
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.

**AJS269AC**  
**Internship**  
3 Credits. 15 Periods.  
Supervised field training for preservice administration of justice students. Maximum of three (3) credit hours allowed in program. Prerequisites: Student sponsored by governmental enforcement agency, and departmental approval.

**AJS270**  
**Community Relations**  
3 Credits. 3 Periods.  
Examination, recognition and understanding of community problems; community action programs; methods of coping with human behavior, victimology, conflict and communication; ethnic and minority cultures and environments; the community and relationships with the criminal justice system. Prerequisites: None.

**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.

**AJS290BN**  
**Courtroom Testimony Seminar**  
1 Credit. 1 Period.  
Courtroom demeanor and protocol. Role and primary functions of witness and legal counsels. Prerequisites: None.

**African-American Studies**

**AFR110**  
**Introduction to African-American Studies**  
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.

**AFR202**  
**Ethnic Relations in the United States**  
3 Credits. 3 Periods.  
Basic concepts and processes, including historic overview, of interethnic relations in the United States: culture, race, ethnicity, ethnocentrism, prejudice, discrimination, racism, assimilation, acculturation, and individual and group responses to interethnic contact. Cultural knowledge and intercultural communication skills and perspectives as fundamental tools for successful management of social relations in a multicultural world. Prerequisites: None.
American Indian Studies

AIS101
Survey of American Indian Issues
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.

AIS105
Introduction to American Indian Studies
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.

AIS110
Navajo Government
3 Credits. 3 Periods.
Addresses and examines major historical developments of the Navajo People with a focus on government, law, society, livelihood, tradition, and culture. Includes the major components and operation of Navajo government and related tribal laws, such as Title II and Title VII of the Navajo Nation Code, as well as the significance of the Treaty of 1868. Federal Indian policies and their impact on Navajo society and government, the importance of federal and tribal citizenship and related federal and tribal laws, and the role of the Navajo clanship system and other relevant cultural concepts addressed. Prerequisites: None.

AIS140
American Indian History
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.

AIS298AA
Special Projects
1 Credits. 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.

Anthropology

ASB102
Introduction to Cultural and Social Anthropology
3 Credits. 3 Periods.
Basic concepts and processes, including historic overview, of interethic relations in the United States: culture, race, ethnicity, ethnocentrism, prejudice, discrimination, racism, assimilation, acculturation, and individual and group responses to interethic contact. Cultural knowledge and intercultural communication skills and perspectives as fundamental tools for successful management of social relations in a multicultural world. Prerequisites: None.

ASB202
Ethnic Relations in the United States
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.

ASB211
Women in Other Cultures
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.

ASB214
Magic, Witchcraft, and Healing: An Introduction to Comparative Religion
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.

ASB220
Anthropology Goes to the Movies
3 Credits. 3 Periods.
Archaeology and anthropology through the lens of popular films of the 20th and 21st Century. Explores the popularity of ancient humans as a topic for film ventures and how accurately they are portrayed. Provides the student with a basic knowledge of anthropology and offers film images of anthropologists and archaeologists and the practice of archaeology and anthropology. Analyzes accuracy of films depicting culture and our human past. Prerequisites: None.

ASB222
Buried Cities and Lost Tribes: Old World
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 lifeways, 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.

ASB223
Buried Cities and Lost Tribes: New World
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 lifeways, 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.

**ASB234**  
Art and Archaeology of Ancient Egypt  
3 Credits. 3 Periods.  
Archaeology and anthropology through the lens of popular films of the 20th and 21st Century. Explores the popularity of ancient humans as a topic for film ventures and how accurately they are portrayed. Provides the student with a basic knowledge of anthropology and offers film images of anthropologists and archaeologists and the practice of archaeology and anthropology. Prerequisites: None.

**ASB235**  
Southwest Archaeology  
3 Credits. 3 Periods.  
Anthropological perspective and comparative study of the cultures of prehistoric native peoples of the North American southwest. Prerequisites: None.

### Art

**ART100**  
Introduction to Computer Graphic Art  
1 Credits. 2 Periods.  
Conceptualization, visualization, and production of art using the computer. Prerequisites: None.

**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.

**ART112**  
Two-Dimensional Design  
3 Credits. 6 Periods.  
Study of fundamental elements and principles of two-dimensional design. Prerequisites: None. Cross-References: ADA112

**ART113**  
Color  
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.

**ART115**  
Three-Dimensional Design  
3 Credits. 6 Periods.  
Fundamental principles of three-dimensional design. Prerequisites: ART112. Cross-References: ADA115

**ART116**  
Life Drawing I  
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.

**ART122**  
Drawing and Composition II  
3 Credits. 6 Periods.  
Emphasis on composition and exploration of drawing media. Prerequisites: ART111.

**ART131**  
Photography I  
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.

**ART132**  
Photography II  
3 Credits. 6 Periods.  
Advanced camera and darkroom techniques. Aesthetic awareness with personal expression. Prerequisites: ART131 or permission of instructor.

**ART133**  
Photography III  
3 Credits. 6 Periods.  
Refinement of aesthetic and technical aspects producing convincing images of highest quality. Prerequisites: ART132 or permission of Instructor.

**ART134**  
Photography IV  
3 Credits. 6 Periods.  
Emphasis on personal statement and style. Related graphic art forms explored. Development of portfolio Prerequisites: ART133 or permission of Instructor.

**ART135**  
Photojournalism I  
3 Credits. 6 Periods.  
Basic technical knowledge of photographic process as applied by mass media. Prerequisites: ART131 or permission of instructor.

**ART138**  
Commercial Photography I  
3 Credits. 6 Periods.  
Basic techniques of lighting, camera work, and reproduction of commercial photography. Cooperation with commercial art community. Prerequisites: (ART131 or ART142) or permission of Instructor.

**ART142**  
Introduction to Digital Photography  
3 Credits. 6 Periods.  
Fundamentals of digital photography. Includes camera operations, exposure techniques, introduction to digital output, and theory of digital photography. Prerequisites: None.

**ART151**  
Sculpture I  
3 Credits. 6 Periods.  
Exploration of sculptural form and expression in clay, plaster, stone, wood and metal. Prerequisites or Corequisites: ART115 or permission of instructor.

**ART161**  
Ceramics I  
3 Credits. 6 Periods.  
Introduction to ceramic materials and techniques of hand construction, decorating, glazing and throwing on potters’ wheel. Prerequisites: None.
ART165  Watercolor Painting I
3 Credits.  6 Periods.
Transparent and Gouache watercolor painting. Prerequisites: (ART111 and ART112), or permission of instructor.

ART167  Painting I
3 Credits.  6 Periods.
Exploration of technical and expressive possibilities of various painting media in easel painting. Prerequisites: ART111 and ART112 or permission of instructor.

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. Corequisites: ART100 or permission of instructor. Cross-Reference: ADA169

ART173  Computer Art
3 Credits.  6 Periods
Introduction to the multiple elements of paint software programs using the microcomputer. Basic foundation in the use of computer techniques including color paint programs for the production of computer images. Use of electronic input and output devices. Prerequisites: ART100, or permission of instructor. Cross-References: ADA173

ART177  Computer-Photographic Imaging
3 Credits.  6 Periods.
Introduction to the multiple elements of microcomputer-photographic imaging. Basic foundation in the use of the photographic manipulation of images using software programs. Special attention to aesthetic foundations underlying photographic composition. Corequisites: ART100 or permission of instructor. Cross-References: ADA177

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. Prerequisites or Corequisites: ART100 or permission of Instructor. Cross-References: ADA183

ART211  Drawing and Composition III
3 Credits.  6 Periods.
Advanced development of drawing skill with emphasis on compositional theory. Prerequisites: ART122 or permission of instructor.

ART222  Drawing and Composition IV
3 Credits.  6 Periods.
Further study of drawing techniques with emphasis on individual problems and techniques. Prerequisites: ART211 or permission of instructor.

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: ART111 and ART113

ART255AA  Self Promotion
1 Credit.  1 Period.
Career goals, presentation of artist, communication skills, keeping files and records, developing self-promotional materials. Prerequisites: None.

ART255AB  The Portfolio
1 Credit.  1 Period.
Choosing the right pieces to include, presenting art work, developing the portfolio. Prerequisites: ART182, or ART/MMT185, or ART255AA, or permission of Instructor.

ART255AC  Marketing Fine Art
1 Credit.  1 Period.
Exhibitions and galleries, establishing a studio, alternative markets. Prerequisites: ART255AB or permission of Instructor.

ART298AA  Special Projects
Lab 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.

ART298AB  Special Projects
Lab 2 Credit.  2 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.

ART298AC  Special Projects
Lab 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.
Course Descriptions

Art Humanities

ARH100
Introduction to Art
3 Credits. 3 Periods.
Understanding and enjoyment of art through study of painting, sculpture, architecture design, photography, and decorative arts. Emphasis on contemporary topics and cultural diversity in the arts. Prerequisites: None.

ARH101
Prehistoric through Gothic Art
3 Credits. 3 Periods
History of art from prehistoric to medieval period. Prerequisites: None.

ARH102
Renaissance through Contemporary Art
3 Credits. 3 Periods
History of art from around the world from the Renaissance through contemporary period. Prerequisites: None.

ARH115
History of Photography
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.

ARH145
History of American Indian Art
3 Credits. 3 Periods
Survey of American Indian Art from precontact to present. Reviews the impact of these art forms on contemporary American society, other world societies and on the visual arts. Explores characteristics, cultural influences and concerns represented in various art forms past and present. Features field trips to galleries and collections. Prerequisites: None.

ARH201
Art of Asia
3 Credits. 3 Periods
Introduction to the origins and historic development of art in Asia, with emphasis on China, Japan, and India. Prerequisites: None.

ARH217
Mexican Art History
3 Credits. 3 Periods.
Art of Mexico and related cultures, from the prehistoric to the contemporary period. Prerequisites: None.

Astronomy

AST111
Introduction to Solar System Astronomy
3 Credits. 3 Periods.
Introduction to astronomy for the non-science major. History of astronomy, properties of light, instruments, the solar system and nearby stars. Prerequisites: MAT092 or equivalent.

AST112
Introduction to Stars, Galaxies, and Cosmology
3 Credits. 3 Periods.
Introduction to astronomy for the non-science major. Structure and evolution of stars; star clusters; galaxies; cosmology. Prerequisites: MAT092 or equivalent.

AST113
Introduction to Solar System Astronomy Lab
1 Credit. 3 Periods.
Astronomical observations and exercises to supplement AST111. Corequisites: AST111.

AST114
Introduction to Stars, Galaxies, and Cosmology Lab
1 Credit. 3 Periods.
Astronomical observations and exercises to supplement AST112. Prerequisites or Corequisites: AST112.

AST294AA
Special Topics in Astronomy
2 Credits. 2 Periods.
Conceptual, experimental, and computational aspects of a special topic in astronomy. Prerequisites: Permission of Department or Division.

AST294AB
Special Topics in Astronomy
1 Credit. 1 Periods.
Conceptual, experimental, and computational aspects of a special topic in astronomy. Prerequisites: Permission of Department or Division.

AST294AC
Special Topics in Astronomy
0.5 Credits. 0.5 Periods.
Conceptual, experimental, and computational aspects of a special topic in astronomy. Prerequisites: Permission of Department.

Automation Technology

ATP101
Introduction to Automated Systems and Robotics
2 Credits. 2 Periods
An introduction to automation, distribution systems, Automated Storage and Retrieval Systems (ASRS), and the role of manufacturing technician. Includes general manufacturing techniques, industry standards, and statistical process control.

Biology

BIO100
Biology Concepts
LEC 4 Credits. 3 Periods.
LAB 0 Credits. 3 Periods.
A one-semester introductory course covering basic principles and concepts of biology. Methods of scientific inquiry and behavior of matter and energy in biological systems are explored. Field trips may be required at student's expense. Prerequisites: None.

BIO105
Environmental Biology
LEC 4 Credits. 3 Periods.
LAB 0 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.

BIO107
Introduction to Biotechnology
LEC 4 Credits. 3 Periods.
LAB 0 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.
Course Descriptions

**BIO109**
Natural History of the Southwest

| LEC  | 4 Credits. 3 Periods. |
| LAB  | 0 Credits. 3 Periods. |

Study of the common plants and animals of the Southwest including their distribution, adaptation, behavior, and ecology. Introduction to basic field and laboratory techniques used in the study of natural history. Specific field problems presented dealing with plant and animal analysis and ecological interrelationships. Prerequisites: None. Course Note: Field trips may be required.

**BIO1181**
General Biology I (Majors)

| LEC  | 4 Credits. 3 Periods. |
| LAB  | 0 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 RDG091 or higher or eligibility for CRE101 as indicated by appropriate reading placement test score. One year of high school or one semester of college-level biology and chemistry is strongly recommended.

**BIO1182**
General Biology (Majors) II

| LEC  | 4 Credits. 3 Periods. |
| LAB  | 0 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. Prerequisites: A grade of C or better in BIO181 or BIO181XT. Course Note: Field trips may be required.

**BIO156**
Introductory Biology for Allied Health

| LEC  | 4 Credits. 3 Periods. |
| LAB  | 0 Credits. 3 Periods. |

An introductory biology course for allied health majors with an emphasis on humans. Topics include fundamental concepts of cell biology, histology, microbiology, and genetics. Prerequisites: A grade of "C" or better in RDG091 or higher or eligibility for CRE101 as indicated by appropriate reading placement test score. One year of high school or one-semester of college level biology is strongly recommended.

**BIO160**
Introduction to Human Anatomy and Physiology

| LEC  | 4 Credits. 3 Periods. |
| LAB  | 0 Credits. 3 Periods. |

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.

**BIO182**
General Biology (Majors) II

| LEC  | 4 Credits. 3 Periods. |
| LAB  | 0 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. Prerequisites: A grade of C or better in BIO181 or BIO181XT. Course Note: Field trips may be required.

**BIO201**
Human Anatomy and Physiology I

| LEC  | 4 Credits. 3 Periods. |
| LAB  | 0 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: Prerequisites: (A grade of "C" or better in BIO156 or BIO156XT or BIO181 or BIO181XT or one year of high school biology) and a grade of "C" or better in RDG091 or higher or eligibility for CRE101 as indicated by reading placement test score. CHM130 or higher or one year of high school chemistry suggested but not required.

**BIO202**
Human Anatomy and Physiology II

| LEC  | 4 Credits. 3 Periods. |
| LAB  | 0 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 BIO201 or BIO201XT.

**BIO205**
Microbiology

| LEC  | 4 Credits. 3 Periods. |
| LAB  | 0 Credits. 3 Periods. |

Study of microorganisms and their relationship to health, ecology, and related fields. Prerequisites: (A grade of "C" or better in BIO156 or BIO156XT or BIO181 or BIO181XT or one year of high school biology) and a grade of "C" or better in RDG091 or higher or eligibility for CRE101 as indicated by reading placement test score. CHM130 or higher or one year of high school chemistry suggested but not required.

**BPC101AA**
Introduction to Computers I:

| 1 Credit. 2 Periods. |

Computer software applications for the personal computer, including electronic spreadsheet and word processing, keyboarding review, and a desktop environment. Prerequisites: None.

**BPC101BA**
Introduction to Computers II:

| 1 Credit. 1 Period. |

Computer software applications for the personal computer, including database management, computer graphics, electronic spreadsheet, and word processing, and operating system commands. Prerequisites: BPC101AA.

**BPC106AH**
MS Outlook: Level I

| .5 Credits .5 Periods |

Messaging and word processing functions of a Microsoft Outlook electronic work state. Prerequisites: None.

**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: BPC106AH or permission of instructor.

**BPC110**
Computer Usage and Application

| 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.

**BPC111AA**
Computer Keyboarding I

See description under cross-reference course OAS111AA.
Course Descriptions

BPC113  Micro-Alphabetic Indexing  
See description under cross-reference course OAS113

BPC128  Introduction to Desktop Publishing  
1 Credit.  2 Periods.  
Previews 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.

BPC138CA  Windows Desktop Design and Publishing Using Pagemaker  
3 Credit.  4 Periods.  
Use of Windows based microcomputers and appropriate commercial software package to compose and print textual and graphic materials of high quality. Includes overview of micro operating system, word processing of copy, use of graphics programs, layout of design elements, and printing alternatives. Prerequisites: CIS105 or BPC110 or permission of instructor.

BPC170  Computer Maintenance: A+ Exam Prep Level I  
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: CIS105, or permission of instructor.

BPC171  Recycling Used Computer Technology  
1 Credit.  2 Periods.  
Use of hardware maintenance knowledge and skills to refurbish used computers. May be repeated for a total of three (3) credits. Prerequisites or Corequisites: BPC170 or permission of instructor.

BPC238BA  Windows Advanced Desktop Design & Publishing Using Quark Express  
3 Credits.  4 Periods.  
Advanced use of Windows microcomputers and commercial software packages to compose and print textual and graphic materials of high quality. Includes review of fundamental desktop techniques and concepts, alternative treatment of copy, use of complex graphics programs, typographical manipulation, color separating, exploration of alternative layout programs, preparation of larger-scale and unusual publications, and additional printing alternatives. Prerequisites: BPC138BA or permission of instructor.

BPC238CA  Windows Advanced Desktop Design & Publishing Using Pagemaker  
3 Credits.  4 Periods.  
Advanced use of Windows microcomputers and commercial software packages to compose and print textual and graphic materials of high quality. Includes review of fundamental desktop techniques and concepts, alternative treatment of copy, use of complex graphics programs, typographical manipulation, color separating, exploration of alternative layout programs, preparation of larger-scale and unusual publications, and additional printing alternatives. Prerequisites: BPC138CA or permission of instructor.

BPC270  Computer Maintenance: A+ Exam Prep Level II  
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+ technician examinations. Prerequisites: BPC170 with grade of C or better, or permission of instructor.

BPC273  Advanced Server Computer Maintenance: Server+ Prep  
3 Credits.  4 Periods.  
Focuses on complex technical aspects of the microcomputer server, including hardware installation, configuration, and trouble-shooting. Strong emphasis on network operating systems installations, data storage subsystems, and data recovery. Preparation for the CompTIA Server+ examination. Prerequisites: (BPC170 and MST140) or permission of instructor.

Chemistry

CHM130  CHM1130  Fundamental Chemistry  
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. Prerequisites: Grade of "C" or better in CHM090, or MAT090, or MAT091, or MAT092, or MAT093, or MAT102, (MAT103AA and MAT103AB), or satisfactory score on math placement exam.

CHM130LL  CHM1130  Fundamental Chemistry Laboratory  
1 Credit.  3 Periods.  
Laboratory experience in support of CHM130. Corequisites: CHM130.

CHM130AA  Fundamental Chemistry with Lab  
LEC 4 Credits.  3 Periods.  
LAB 0 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. Prerequisites: A grade of "C" or better in [CHM090 or MAT090 or MAT091 or MAT092 or (MAT092AA and MAT092AB)] or MAT093 or (MAT103AA and MAT103AB) or higher or satisfactory score on math placement exam [and RDG091 or higher or eligibility for CRE101 as indicated by appropriate reading placement test score].
CHM150AA
General Chemistry I
LEC 5 Credits. 4 Periods.
LAB 0 Credits 3 Periods.
Detailed study of principles of chemistry for science majors and students in professional curricula. Prerequisites: ([CHM130 and CHM130LL], or CHM130AA, or one year of high school chemistry with a grade of "C" or better taken within the last five years), and completion of MAT151 or higher level mathematics course with grade of "C" or better. Completion of all prerequisites within the last two years is recommended. Course Notes: Student may receive credit for only one of the following: CHM150 and CHM151LL, or CHM151 and CHM151LL, or CHM150AA, or CHM151AA.

CHM151
SUN# CHM1151
General Chemistry I
3 Credits. 3 Periods.
Detailed study of principles of chemistry for science majors and students in professional curricula. Prerequisites: ([CHM130 and CHM130LL], or one year of high school chemistry with a grade of C or better taken within the last five years), and completion of intermediate algebra or equivalent. Completion of all prerequisites within the last two years is recommended.

CHM151LL
SUN# CHM1151
General Chemistry I Lab
1 Credit. 3 Periods.
Laboratory experience in support of CHM151. Prerequisites: CHM130LL or permission of instructor. Corequisites: CHM150 or CHM151.

CHM151AA
SUN# CHM1151
General Chemistry I
LEC 4 Credits. 4 Periods.
LAB 0 Credits 3 Periods.
Detailed study of principles of chemistry for science majors and students in pre-professional curricula. Prerequisites: ([CHM130 and CHM130LL], or CHM130AA, or one year of high school chemistry with a grade of "C" or better taken within the last five years), and completion of MAT151 or higher level mathematics course with grade of "C" or better. Completion of all prerequisites within the last two years is recommended. Course Notes: Student may receive credit for only one of the following: CHM150 and CHM151LL, or CHM151 and CHM151LL, or CHM150AA, or CHM151AA.

CHM152
SUN# CHM1152
General Chemistry II
3 Credits. 3 Periods.
A study of the chemical properties of the major groups of elements, thermodynamics, electricity, and other topics. Prerequisites: Completion of CHM152LL required to meet the Natural Science requirement. Prerequisites: CHM150 or CHM151 and CHM151LL. Completion of CHM150 or CHM151 and CHM151LL within the last two years recommended.

CHM152LL
SUN# CHM1152
General Chemistry II Lab
1 Credit. 3 Periods.
Laboratory experience in support of CHM152. Prerequisites: CHM151LL or permission of instructor. Corequisites: CHM152.

CHM152AA
SUN# CHM1152
General Chemistry II
LEC 4 Credits. 3 Periods.
A study of the chemical properties of the major groups of elements, equilibrium theory, thermodynamics, electrochemistry, and other selected topics. Prerequisites: A grade of "C" or better in ([CHM150 or CHM151) and CHM151LL), or CHM150AA, or CHM151AA. Completion of prerequisites within the last two years recommended.

CHM152
SUN# CHM1152
General Chemistry II
3 Credits. 3 Periods.
A study of the chemical properties of the major groups of elements, equilibrium theory, thermodynamics, electrochemistry, and other selected topics. Prerequisites: Completion of CHM152LL required to meet the Natural Science requirement. Prerequisites: CHM150 or CHM151 and CHM151LL. Completion of CHM150 or CHM151 and CHM151LL within the last two years recommended.

CHM152LL
SUN# CHM1152
General Chemistry II Lab
1 Credit. 3 Periods.
Laboratory experience in support of CHM152. Prerequisites: CHM151LL or permission of instructor. Corequisites: CHM152.

CHM152AA
SUN# CHM1152
General Chemistry II
LEC 4 Credits. 3 Periods.
A study of the chemical properties of the major groups of elements, equilibrium theory, thermodynamics, electrochemistry, and other selected topics. Prerequisites: A grade of "C" or better in ([CHM150 or CHM151) and CHM151LL), or CHM150AA, or CHM151AA. Completion of prerequisites within the last two years recommended.

CHM235
SUN# CHM2235
General Organic Chemistry I
3 Credits. 3 Periods.
Rigorous introduction to chemistry of carbon-containing compounds. Reaction mechanisms and recent methods of synthesis emphasized. Prerequisites: A grade of "C" or better in (CHM152 and CHM152LL), or CHM152AA, or (CHM154 and CHM154LL). Completion of prerequisites within the last two years recommended.

CHM235LL
SUN# CHM2235
General Organic Chemistry I Laboratory
1 Credit. 4 Periods.
Laboratory experience in support of CHM235. Prerequisites or Corequisites: A grade of "C" or better in CHM235. Completion of prerequisites within the last two years recommended.

CHM236
SUN# CHM2236
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. Prerequisites: CHM235 and CHM235LL. Completion of CHM235 and CHM235LL within the last two years recommended.

CHM236LL
SUN# CHM2236
General Organic Chemistry IIA Laboratory
1 Credit. 4 Periods.
Laboratory experience in support of CHM236. Prerequisites: CHM235 and CHM235LL. Completion of CHM235 and CHM235LL within the last two years recommended.

CHM238
SUN# CHM2238
General Organic Chemistry IIB
3 Credits. 3 Periods.
Alternate to CHM236. Study of chemistry of carbon-containing compounds continued. Structural determination and additional reaction mechanisms and modern methods of synthesis emphasized. Recommended for chemistry, chemical engineering and mining engineering majors. Prerequisites: CHM235 and CHM235LL.
CHM238LL
General Organic Chemistry IIB Laboratory
2 Credits. 6 Periods.
Laboratory experience in support of CHM238. Prerequisites: CHM235LL or equivalent. Corequisites: CHM238

CFS205
Human Development
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.

CFS235
Developing Child: Theory into Practice, Prenata-Age 8
3 Credits. 3 Periods.
Understanding and working with young children, birth through age 8. Analysis of young children’s physical, social, emotional, cognitive and linguistic development within their home, school, and cultural contexts. Typical and atypical development. Implications for teachers and parents. Emphasis on observations and planning curriculum based on theories, research, and child-specific data. Prerequisites: None.

CCS101
Chicana and Chicano Studies
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, testimonios, and films. Prerequisites: ENG101, or ENG107, or equivalent.

CCS212
The Mexican American Novel
3 Credits. 3 Periods.
Introduction to the wealth and diversity of a study of the social, historical, and cultural backgrounds as well as the form and content of the Mexican American novel. Prerequisites: ENG101 ENH112 suggested but not required.

CCS176
Child Development
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. Cross-References: ECH176

CFS157
Marriage and Family Life
3 Credits. 3 Periods.
Study of the marriage and the family as a social system, including models of family analysis, intra- and interpersonal relations, and cross-cultural and historical patterns. Prerequisites: None

CNT140
Cisco Networking Basics
4 Credits. 6 Periods.
Introduction to the computer networking field. Covers network terminology and protocols, local area networks (LAN), and wide area networks (WAN). Includes Open Systems Interconnection (OSI) models, cabling and cabling tools, routers, router programming, Ethernet, Internet Protocol (IP) addressing, and network standards. Preparation for the Cisco Certified Network Associate examination. Prerequisites: None.

CNT148
CCNA Discovery - Working at a Small-to-Medium Business or Internet Service Provider
3 Credits. 5 Periods.
Prepares students as network technicians. Develops skills for computer and help desk technicians including soft skills. Provides overview of routing, remote access, addressing, and security. Provides familiarity with e-mail, web, and authenticated access servers. Presents network monitoring and basic troubleshooting skills in context. Prerequisites: CNT138.

CNT150
Cisco Networking Router Technologies
4 Credits. 6 Periods.
Knowledge of skills to install, configure, customize, maintain and troubleshoot Cisco routers and components. Preparation for Cisco certification examination. Prerequisites: CNT140 or permission of Instructor.

CNT150AA
Cisco - Routing and Switching Essentials
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, RIPV2, single-area and multi-area OSPF, virtual LANs, and inter-VLAN routing in both IPv4 and IPv6 networks. Preparation for Cisco certification examination. Prerequisites: CNT140AA or permission of Instructor.
Course Descriptions

CNT158  
CCNA Discovery - Introduction to Routing and Switching in the Enterprise  
4 Credits.  6 Periods.  
Familiarizes students with the equipment, applications and protocols installed in enterprise networks, with a focus on switched networks, Internet Protocol (IP) Telephony requirements, and security. Introduces advanced routing protocols such as Enhanced Interior Gateway Routing Protocol (EIGRP) and Open Shortest Path First (OSPF) Protocol. Hands-on exercises include configuration, installation, and troubleshooting. Prerequisites: CNT148.

CNT160  
Cisco Switching Basics and Intermediate Routing  
3 Credits.  4 Periods.  
Advanced Internet Protocol (IP) addressing techniques, Variable Length Subnet Masking (VLSM), Intermediate routing protocols, Routing Internet Protocol version 2 (RIPv2), Single-area Open Shortest Path First (OSPF), and Enhanced Interior Gateway Routing Protocol (EIGRP), Command Line Interface configuration of switches, Ethernet switching, Virtual Local Area Networks (VLANs), Spanning Tree Protocol (STP) and Virtual local-area Network Trunking Protocol (VTP). Preparation for Cisco Certified Network Associate certification examination. Prerequisites: CNT150 or permission of instructor.

CNT160AA  
Scaling Networks  
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: CNT150AA or permission of instructor.

CNT168  
CCNA Discovery - Designing and Supporting Computer Networks  
4 Credits.  6 Periods.  
Networking design and customer support including gathering requirements, designing basic networks, establishing proof-of-concept, and performing project management tasks. Lifecycle services, including upgrades, competitive analyses, and system integration, in the context of pre-sale support. Prerequisites: CNT158.

CNT170  
Cisco Wide Area Networks (WAN) Technologies  
3 Credits.  4 Periods.  
Advanced Internet Protocol (IP) addressing techniques including Network Address Translation (NAT) Port Address Translation (PAT) and Dynamic Host Control Protocol (DHCP). Also covers Wide Area Network (WAN) technology and terminology, Point-to-Point Protocol (PPP), Integrated Services Digital Network (ISDN), Dial on Demand Routing (DDR), Frame Relay, and network management. Preparation for Cisco Certified Network Associate certification examination. Prerequisites: CNT160 or permission of instructor.

CNT170AA  
Cisco - Connecting Networks  
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: CNT160AA or permission of instructor.

CNT181  
Cisco Securing IOS Networks  
4 Credits.  5 Periods.  
Applications of Cisco Networking technologies in designing and implementing security solutions to reduce risk of revenue loss and vulnerability. Hands-on experience and skills in security policy design and management, security technologies, products and solutions, secure router installation, configuration, and maintenance, AAA (Authentication, Authorization, and Accounting), and VPN (Virtual Private Network) implementation using routers. Preparation for the Securing Cisco IOS Networks (SECUR) exam, which applies toward the Cisco Certified Security Professional (CCSP), Virtual Private Network (VPN) Specialist, Intrusion Detection System (IDS) Specialist and the Firewall Specialist certifications. Prerequisites: CNT170 or permission of instructor.

CNT185  
Cisco Network Security  
4 Credits.  5 Periods.  
Applications of Cisco Networking technologies in designing and implementing security solutions to reduce risk of revenue loss and vulnerability. Hands-on experience and skills in security policy design and management, security technologies, products and solutions, firewall and secure router design, installation, configuration and maintenance, AAA (Authentication, Authorization, and Accounting) and VPN (Virtual Private Network) implementation using firewalls and routers. Preparation for the MCVN (Managing Cisco Network Security) and CSPFA (Cisco Secure PIX Firewall Advanced) exams toward certification as a Cisco Firewall Specialist. Exams also apply to CCSP (Cisco Certified Security Professional) certification. Prerequisites: CNT170, or permission of instructor.

CNT205  
Cisco Certified Network Associate Security  
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.Perequisites: CNT170 or CNT170AA or Certified Cisco Networking Associate (CCNA) certification or permission of Instructor.

CNT206  
Cisco Certified Network Associate Wireless  
4 Credits.  6 Periods.  
Associate-level knowledge and skills required in Cisco wireless networks. Includes comprehensive hands-on labs to design, plan, implement, operate, secure, and troubleshoot wireless networks. Prerequisites: CNT170, or CNT170AA, or permission of Instructor.
Course Descriptions

Communication

COM100
Introduction to Human Communication
3 Credits. 3 Periods.
Theory and practice of communication skills in public, small group, and interpersonal settings. Includes study of the speech communication process. Prerequisites: None.

COM100AA
Introduction to Human Communication Part I
1 Credit. 1 Period.
Theory and practice of communication skills in public, small group, and interpersonal settings. Includes study of the speech communication process. Prerequisites: None.

COM100AB
Introduction to Human Communication Part II
1 Credit. 1 Period.
Theory and practice of communication skills in public, small group, and interpersonal settings. Includes study of the speech communication process. Prerequisites: None.

COM100AC
Introduction to Human Communication Part III
1 Credit. 1 Period.
Theory and practice of communication skills in public, small group, and interpersonal settings. Includes study of the speech communication process. Prerequisites: None.

COM110
Interpersonal Communication
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 interpersonal conflict, developing and maintaining personal and professional relationships. Prerequisites: None.

COM110AA
Interpersonal Communication Part I
1 Credit. 1 Period.
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 interpersonal conflict, developing and maintaining personal and professional relationships. Prerequisites: None.

COM110AB
Interpersonal Communication Part II
1 Credit. 1 Period.
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 interpersonal conflict, developing and maintaining personal and professional relationships. Prerequisites: None.

COM110AC
Interpersonal Communication Part III
1 Credit. 1 Period.
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 interpersonal conflict, developing and maintaining personal and professional relationships. Prerequisites: None.

COM207
Introduction to Communication Inquiry
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. Prerequisites: ENG101 or ENG107 or equivalent and COM100 or equivalent or permission of Instructor.

COM222
Argumentation
3 Credits. 3 Periods.
Discussion and practice of the use of evidence, applied reasoning, recognition of fallacies, selection of arguments, and methods of analyzing issues. Prerequisites: ENG101 or ENG107 or equivalent.

COM225
Public Speaking
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: ENG101 or ENG107, or equivalent.

COM230
Small Group Communication
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.

COM241
Oral Interpretation of Literature
3 Credits. 3 Periods.

COM250
Introduction to Organizational Communication
3 Credits. 3 Periods.
Introduction to the study of communication in organizations including identification of variables, roles and patterns influencing communication in organizations. Prerequisites: None.

COM263
Elements of Intercultural Communication
3 Credits. 3 Periods.
Basic concepts, principles, and skills for improving oral communication between persons from different minority, racial, ethnic, and cultural backgrounds. Prerequisites: None.
Course Descriptions

COM271
Voice and Diction
See description under cross-reference course THP271

Computer Aided Drafting

CAD100
Fundamentals of 2D AutoCAD
3 Credits. 6 Periods.
Utilize AutoCAD software to generate two-dimensional (2-D) drawings and components in a generic installation. Apply basic AutoCAD commands and properties to format, draw, edit, layer, dimension, import/export, and manage drawing files. Creation, manipulation, and hardcopy production of 2-D drawing files from major AutoCAD command and display environments and plot options. Prerequisites: None.

CAD101
Elements of CAD Graphics (AutoCAD)
3 Credits. 6 Periods.
Computer generation of drafting and design components using pure elements and basic geometric procedures. Incorporates concept illustration based on standard pictorial methods and develops multiview projection techniques and presentation methods. Introduction to the fundamentals of 3D modeling and the construction and printing of 3D objects. Prerequisites or Corequisites: CAD100 or permission of Instructor.

CAD145
Survey of CAD
3 Credit. 6 Periods.
Survey of the basic standards and procedures for drawing setups and design documentation in the fields of architecture, manufacturing, and civil technology. Multisource hardcopy design presentation. Prerequisites: CAD100 and CAD101, or permission of Instructor.

CAD164
Residential Working Drawings
3 Credit. 6 Periods.
Team projects in the development of a set of architectural working drawings for a residence. Prerequisites: CAD162 or permission of instructor.

CAD165
Architectural Software (AutoCAD Architecture)
3 Credit. 6 Periods.
Introduction to AutoCAD Architecture, a modeling software used by architecture professionals. Procedures unique to advanced software and pertinent to architectural documentation. Emphasis on residential working drawings. Prerequisites: CAD145 or permission of Instructor. CAD255 is highly recommended.

CAD167
Architectural Drawings (REVIT) I: Residential CAD
3 Credit. 6 Periods.
Introduction to REVIT architectural modeling software used by the architectural industry. Advanced software utilization and skills pertinent to architectural documentation. Emphasis on residential working drawings. Prerequisites: (ARC251 or CAD145) or permission of Instructor. CAD255 recommended.

CAD175
Manufacturing Modeling and Design
3 Credit. 6 Periods.
Specialized training in parametric parts and assembly modeling with an emphasis in manufacturing design. Design, construction and documentation of primitive, regional, and composite models using American National Standards Institute (ANSI) and International Organization for Standardization (ISO) standards. Prerequisites: (CAD145, CAD155 and CAD215) or permission of Instructor.

CAD215
Three-Dimensional AutoCAD Modeling
3 Credit. 6 Periods.
Reduction of 3D design concepts to coordinate space and procedural syntax required for AutoCAD 3D file development. Manipulation of wireframes; surfacing techniques; development of solids using Boolean operations. Production of standard displays and outputs involving 3D objects. Prerequisites: (CAD100 and CAD101) or permission of Instructor.

Computer Information Systems

CIS102
Interpersonal and Customer Service Skills for IT Professionals
1 Credit. 1 Period.
Examines behaviors necessary to develop and support an effective client service organization. Focuses on methods of increasing the effectiveness of help-desk professionals when responding to a range of customer conditions. Prerequisites: None.

CIS102DA
Customer User Support
3 Credit. 4 Periods.
Examines skills, tools and strategies necessary for becoming a computer help-desk or end-user support professional. Prerequisites: None.

CIS105
Survey of Computer Information Systems
3 Credit. 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.

CIS108
Electronic Portfolio Development
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: (CIS105 or BPC110), or permission of instructor.

CIS110
Home Entertainment and Computer Networking
3 Credit. 4 Periods.
Fundamentals of networking for the home user including internet connectivity, wired and wireless local area networks, networking device configuration, integration of entertainment electronics, security and ethics. Prerequisites: None.
Course Descriptions

CIS111
Ethics in Information Technology
1 Credits. 3 Periods.
Ethical issues that arise as a result of increasing use of computers, and the responsibilities of those who work with computers, either as computer science professionals or end users. Critical inquiry and review of ethical challenges in information technology business, including professional and corporate responsibility, government regulation, fiduciary responsibilities of information, infringement of intellectual property, privacy, compliance, social networking, and the ethics of IT corporations. Prerequisites: None.

CIS113DE
Microsoft Word: Word Processing
3 Credits. 4 Periods.
Using word processing software to create, name and manage files, edit text, format, apply themes and styles, create and modify tables, apply desktop publishing features, and print a variety of types of documents. Prerequisites: None.

CIS114AE
Excel: Level I
1 Credits. 2 Periods.
Computer spreadsheet skills for solving business problems using Excel, including calculations, forecasting, and projections. Prerequisites: None.

CIS114DE
Excel Spreadsheet
3 Credits. 5 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.

CIS117DM
Microsoft Access: Database Management
3 Credits. 5 Periods.
Introduction to the basic elements, exploration of additional components and common database management problems related to the Microsoft Access program. Prerequisites: None.

CIS118AB
PowerPoint: Level I
1 Credit. 2 Periods.
Use of PowerPoint software to produce professional-quality presentation visuals. Prerequisites: None.

CIS118DB
Desktop Presentation: PowerPoint
3 Credits. 5 Periods.
Use of PowerPoint to produce professional-quality presentation visuals with animation and sound. Prerequisites: None.

CIS119DO
Introduction to Oracle: SQL
3 Credits. 4 Periods.
Use of Oracle tools and methodologies to fulfill real-world business information requirements. Hands-on exercises for designing, creating, and maintaining database structures to store, retrieve, update, and display data in a relational database using the SQL programming language. Creating and maintaining database objects. Advanced retrieval techniques. Prerequisites: CIS105 or permission of instructor.

CIS120AF
Computer Graphics: Adobe Photoshop: Level I
1 Credit. 2 Periods.
Provides students with the capability to use Adobe Photoshop graphics software on a computer. Basic foundation course in the use of electronic techniques to select, manipulate, and edit images, for graphic design and image correction. Prerequisites: None.

CIS120BF
Computer Graphics: Adobe Photoshop: Level II
1 Credit. 1 Period.
Provides students with the capability to use Adobe Photoshop graphics software on a computer. Includes working with masks, channels and layers, and combining raster and vector graphics. Prerequisites: CIS120AF.

CIS120CF
Computer Graphics: Adobe Photoshop: Level III
1 Credit. 1 Period.
Provides students with the capability to use Adobe Photoshop graphics software on a computer. Includes color printing, color management, creation of graphics for the Web. Prerequisites: CIS120BF.

CIS120DB
Computer Graphics: 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.

CIS120DC
Flash: Digital Animation
3 Credits. 4 Periods.
Provides students with the ability to use Flash graphics software on microcomputers. Covers basic animation techniques used in the creation, manipulation, and editing of Flash animation graphics. Prerequisites: None.

CIS120DF
Computer Graphics: Adobe Photoshop
3.7 Credits. 4 Periods.
Provides students with the capability to use Adobe Photoshop graphics software on a computer. Basic foundation course in the use of electronic techniques to select, manipulate, and edit images, work with masks, channels and layers; combine raster and vector graphics; print in color, manage color, and create graphics for the web. Prerequisites: None.

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.

CIS121AB
Microsoft Command Line Operations
1 Credit. 2 Periods.
Use of the Microsoft command line interface: basic concepts, internal and external commands, subdirectories, and editor. Prerequisites: None.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
<th>Periods</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS121AE</td>
<td>Windows Operating System: Level I</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>CIS121AH</td>
<td>Microsoft PowerShell/Command Line Operations</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>CIS121Al</td>
<td>Mac Operating System</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>CIS126AA</td>
<td>Unix Operating System: Level I</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>CIS126AL</td>
<td>Linux Operating System I</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>CIS126BA</td>
<td>Unix Operating System: Level I</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>CIS126BL</td>
<td>Unix Operating System: Level II</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>CIS126CA</td>
<td>Unix Operating System: Level III</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>CIS126CL</td>
<td>Linux Operating System III</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>CIS126DA</td>
<td>UNIX Operating System</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>CIS126DL</td>
<td>Linux Operating System</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>CIS127DL</td>
<td>Linux Utilities</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>CIS132</td>
<td>HTML/CSS</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>CIS133AA</td>
<td>Internet/Web Development Level I-A</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>CIS133BA</td>
<td>Internet/Web Development Level I-B</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>CIS133CA</td>
<td>Internet/Web Development Level I - C</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

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.

Prerequisites: None.

Day-to-day command line administration tasks of Microsoft Windows. PowerShell used to create scripts to administer Microsoft windows environment. Prerequisites: None. MST150 suggested but not required.

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.

Use of the UNIX operating system: system components, built-in commands, files and directories, editors, and UNIX Shell and command lines. Prerequisites: None.

Introduction to the Linux Operating system. Develop knowledge and skills required to install, configure a Linux-based workstation including basic network functions. Prerequisites: None.

Installation, configuration, and maintenance of the UNIX operating system Prerequisites: CIS126A.

Introduction to the Linux Operating system. Develop knowledge and skills required to configure a Linux-based workstation including basic printing functions. Learn basic command line and Graphical User Interface (GUI) desktop environment utilities and applications. Prerequisites: CIS126AL or permission of instructor.

Create login scripts and batch files, and maintain system communications. Prerequisites: CIS126BA.

Introduction to the Linux Operating system. Develop knowledge and skills required to install and configure applications, and to troubleshoot a Linux-based workstation including basic network functions. Learn basic command line and Graphical User Interface (GUI) desktop environment utilities and applications. Prerequisites: CIS126BL or Permission of Instructor.

Overview of the Internet and its resources. Hands-on experience with various Internet communication tools. Prerequisites: None.

Exploration of additional Internet resources. Hands-on experience with a variety of resource discovery and information retrieval tools as well as enhancement of Web pages. Prerequisites: CIS133AA.

Web site development using the enhancement codes. Includes frames, style sheets and javascript as well as design principles and typography. Prerequisites: CIS133BA.
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.

CIS136
Content Management Systems: WordPress
3 Credits.  3 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.

CIS138DA
Desktop Design and Publishing Using Adobe InDesign
3 Credits.  4 Periods.
Use of Adobe InDesign to compose and print textual and graphic materials of high quality. Includes word processing of copy, use of graphics programs, layout of design elements, printing alternatives, and file formats. Prerequisites: CIS105, or BPC110, or permission of instructor.

CIS140
Survey of Multimedia Technology
2 Credits.  3 Periods.
Introduction to multimedia technology and its uses. Overview of the various hardware and software used in developing and delivering multimedia. Emphasis on how multimedia is used in education and training. Provides a basic understanding of the process used to define and develop multimedia applications. Prerequisites: CIS105, or permission of instructor. Cross-reference: MMT140.

CIS150
Programming Fundamentals
3 Credits.  4 Periods.
Structured program design and logic tools. Use of computer problems to demonstrate and teach concepts using appropriate programming language. Prerequisites: CIS105 or permission of instructor.

CIS150AB
Object-Oriented Programming Fundamentals
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: CIS105 or permission of instructor.

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 development tools. Prerequisite: CIS105 or permission of instructor.

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: CIS105 or permission of instructor.

CIS162
C Programming I
3 Credits.  4 Periods.
Beginning C programming. Includes features needed to construct programs, functions, pointers, input and output options, data types, structures, and unions, and disk file operations. Prerequisites: CIS105 or permission of instructor.

CIS162AB
C++: Level I
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: CIS105 or permission of instructor.

CIS162AD
C#: Level I
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: CIS105, or permission of instructor.

CIS163AA
Java Programming: Level I
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: CIS105, or permission of instructor.

CIS165
Introduction to IOS Application Programming
3 Credits.  4 Periods.
Introduction to iPhone/iPad/iPod Touch programming utilizing the application XCode, and the programming language Objective-C with Cocoa Touch frameworks. Understand iPhone hardware and feature basics. Go through entire design process from concept to final product delivery. Prerequisites: CIS150, or CIS150AB, or CIS162AC, or permission of Instructor.
Course Descriptions

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 interface, working with activities, intents and views, to using databases, providing data persistence, accessing device features and services, to debugging and publishing applications. Prerequisites: CIS163AA, or permission of Instructor.

CIS166DB
C#/VB.NET: Windows 8 App Development
3 Credits. 4 Periods.
Building upon desktop application development with Visual Studio using VB.NET or C# languages, developing apps for Windows 8 utilizes Extensible Application Markup Language (XAML) for interface design. Windows 8 utilizes UI design standards that are unique from previous versions. Develop apps for Windows 8 smartphones and tablets that utilize touch input methods, translate into different resolutions, states, and orientations, and can tap into mobile features such as location and acceleration sensors. Includes working with external data and packaging for Windows Store distribution. Prerequisites: CIS159 or CIS162AD or permission of Instructor.

CIS166
Web Scripting/Programming
3 Credits. 4 Periods.
Software development for Web sites, including client-side script and Common Gateway Interface (CGI) scripting. Covers Web-based transaction processing and use of databases in conjunction with the Web. Includes security issues. Prerequisites: CIS133CA or CIS133DA or permission of instructor.

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: CIS133CA or CIS133DA or permission of instructor.

CIS166AC
Web Scripting with Active Server Pages (ASP).NET
3 Credits. 4 Periods.
Introduction to web scripting using Microsoft’s ASP.Net (Active Server Pages). Web application development using Hypertext Markup Language (HTML), ASP.Net Web Forms, programming logic, and Structured Query Language (SQL). Prerequisites: ((CIS133CA or CIS133DA) and (CIS159 or CIS162AD)) or permission of instructor.

CIS166AD
Web Scripting with Java Server Pages (JSP)
3 Credits. 4 Periods.
Introduction to web scripting using JSP (Java Server Pages). Web application development using Hypertext Markup Language (HTML), JSP, programming logic, and Structured Query Language (SQL). Prerequisites: (CIS133CA or CIS133DA) and CIS163AA or permission of instructor.

CIS166AE
Web Scripting with PHP: Hypertext Preprocessor (PHP)
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: CIS133CA or CIS133DA or permission of instructor.

CIS166AF
Web Scripting with Python
3 Credits. 4 Periods.
Introduction to web scripting with Python. Web application development using HTML, Python and Structured Query Language (SQL). Prerequisites: CIS133CA or CIS133DA or permission of instructor.

CIS166AB
Web Scripting with Perl/CGI
3 Credits. 4 Periods.
Introduction to basic server-side programming using the common gateway interface (CGI) with the Perl programming language. Covers basic form development programming logic, Structured Query Language (SQL) and the Perl Database Interface (DBI) and CGI modules. Prerequisites: CIS133CA or CIS133DA or permission of instructor.

CIS166AC
Web Scripting with Active Server Pages (ASP).NET
3 Credits. 4 Periods.
Introduction to web scripting using Microsoft’s ASP.Net (Active Server Pages). Web application development using Hypertext Markup Language (HTML), ASP.Net Web Forms, programming logic, and Structured Query Language (SQL). Prerequisites: ((CIS133CA or CIS133DA) and (CIS159 or CIS162AD)) or permission of instructor.

CIS166AD
Web Scripting with Java Server Pages (JSP)
3 Credits. 4 Periods.
Introduction to web scripting using JSP (Java Server Pages). Web application development using Hypertext Markup Language (HTML), JSP, programming logic, and Structured Query Language (SQL). Prerequisites: (CIS133CA or CIS133DA) and CIS163AA or permission of instructor.

CIS166AE
Web Scripting with PHP: Hypertext Preprocessor (PHP)
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: CIS133CA or CIS133DA or permission of instructor.

CIS166AF
Web Scripting with Python
3 Credits. 4 Periods.
Introduction to web scripting with Python. Web application development using HTML, Python and Structured Query Language (SQL). Prerequisites: CIS133CA or CIS133DA or permission of instructor.

CIS166AB
Web Scripting with Perl/CGI
3 Credits. 4 Periods.
Introduction to basic server-side programming using the common gateway interface (CGI) with the Perl programming language. Covers basic form development programming logic, Structured Query Language (SQL) and the Perl Database Interface (DBI) and CGI modules. Prerequisites: CIS133CA or CIS133DA or permission of instructor.

CIS166AC
Web Scripting with Active Server Pages (ASP).NET
3 Credits. 4 Periods.
Introduction to web scripting using Microsoft’s ASP.Net (Active Server Pages). Web application development using Hypertext Markup Language (HTML), ASP.Net Web Forms, programming logic, and Structured Query Language (SQL). Prerequisites: ((CIS133CA or CIS133DA) and (CIS159 or CIS162AD)) or permission of instructor.

CIS166AD
Web Scripting with Java Server Pages (JSP)
3 Credits. 4 Periods.
Introduction to web scripting using JSP (Java Server Pages). Web application development using Hypertext Markup Language (HTML), JSP, programming logic, and Structured Query Language (SQL). Prerequisites: (CIS133CA or CIS133DA) and CIS163AA or permission of instructor.

CIS166AE
Web Scripting with PHP: Hypertext Preprocessor (PHP)
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: CIS133CA or CIS133DA or permission of instructor.

CIS166AF
Web Scripting with Python
3 Credits. 4 Periods.
Introduction to web scripting with Python. Web application development using HTML, Python and Structured Query Language (SQL). Prerequisites: CIS133CA or CIS133DA or permission of instructor.

CIS181
IBM Mainframe Z OS - Level I
3 Credits. 4 Periods.
Fundamental knowledge and skills to begin using the basic functions of a mainframe computer. User interfaces of the z/OS mainframe operating system and the role of mainframes in today’s business world. Tools, utilities and processes for developing a simple program to run on z/OS. Prerequisites: CIS105 and CIS150, or permission of instructor.

CIS190
Introduction to Local Area Networks
3 Credits. 4 Periods.
Overview of local area networks. Emphasis on the elements of a local area network, current issues and products, and use of a local area network. Includes terminology, hardware and software components, connectivity, resource monitoring and sharing, electronic mail and messaging, and security issues. Prerequisites: CIS105 or permission of instructor.

CIS197
VMware ESXI Server Enterprise
4 Credits. 6 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 including basic network functions. Prerequisites: (CIS126DL or MTS150 (any module)) and (CIS190 or MTS140 or CNT140) or permission of Instructor.

CIS214DE
Advanced Excel Spreadsheet: Level II
3 Credits. 5 Periods.
Advanced Excel spreadsheet features including formatting techniques, macros and Visual Basic for applications. Templates, built-in functions and lists as well as analysis tools including Pivot Tables and Goal Seek covered. Import and export data, workgroup collaboration and Internet features of Excel emphasized. Prerequisites: CIS114DE or permission of instructor.
CIS217AM  
**Advanced Microsoft Access: Database Management**  
3 Credits.  4 Periods.  
Advanced database concepts including database design, primary and secondary key selection and relationships between tables. Queries, sub forms, macros, events, Visual Basic modules and Access Internet features also covered. Prerequisites: CIS117DM or CIS117CM.

CIS220DC  
**Flash: 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: CIS120DC or permission of instructor.

CIS220DF  
**Advanced Photoshop**  
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: (CIS120AF, CIS120BF and CIS120CF) or CIS120DF, or permission of instructor.

CIS221AB  
**Microsoft Power Shell**  
1 Credit.  2 Periods.  
Microsoft Power Shell (PS) is used to aid system administrators of Microsoft Network Operating Systems (NOS) in automating many administrative tasks through shell script automation. Prerequisites: BPC/CIS121AB or permission of Instructor.

CIS224  
**Project Management Microsoft Project for Windows**  
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 ccMail. Prerequisites: None.

CIS225  
**Business Systems Analysis and Design**  
3 Credits.  3 Periods.  
Investigation, analysis, design, implementation and evaluation of business computer systems. Prerequisites: Any programming language or permission of Instructor.

CIS225AB  
**Object-Oriented Analysis and Design**  
3 Credits.  3 Periods.  
Methodologies and notations for fundamental object-oriented analysis and design including use cases, objects, classes, stereotypes, and relationships. Object-oriented iterative process for system development. A continuous application development exercise for applying the analysis and design concepts. Prerequisites: Any program language, or permission of instructor.

CIS226AL  
**Internet/Intranet Server Administration-Linux**  
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: CIS126 (any module) or permission of Instructor.

CIS228  
**Advanced UNIX System Administration**  
3 Credits.  4 Periods.  
System administration tasks using one or more versions of UNIX. Topics include: installing the operation system, configuring peripherals, security, monitoring system performance, networking, and troubleshooting. Prerequisites: CIS126DA, or permission of instructor.

CIS233DC  
**Internet Web Development: Dreamweaver**  
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: CIS132, or CIS133CA, or CIS133DA, or permission of Instructor.

CIS234  
**XML Application Development**  
3 Credits.  4 Periods.  
The use of Extensible Markup Language (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: CIS133CA or CIS133DA, or permission of the Instructor.

CIS235  
**e-Commerce**  
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 coverage. Also includes current issues in e-commerce. Prerequisites: CIS133CA, or CIS133DA, or permission of instructor.

CIS238  
**Advanced UNIX System Administration**  
3 Credits.  4 Periods.  
System administration tasks using one or more versions of UNIX. Topics include: installing the operation system, configuring peripherals, security, monitoring system performance, networking, and troubleshooting. Prerequisites: CIS126DA, or permission of instructor.
### Course Descriptions

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Periods</th>
<th>Prerequisites</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS238DL</td>
<td>Linux System Administration</td>
<td>3</td>
<td>4</td>
<td>3 Credits. 4 Periods.</td>
<td>Managing Linux Operating Systems including sophisticated manipulation of file structures, backup systems, printing processes, troubleshooting, user account management, hard disk maintenance and configuration, process monitoring and prioritizing, kernel customization, and system resource control. Preparation for industry certifications such as the SAIR/GNU LCP and LCA certificates, CompTIA's Linux+, RHCT, RHCE, and LPIC. Prerequisites: CIS126AL, CIS126BL and CIS126CL; or CIS126DL or permission of instructor.</td>
</tr>
<tr>
<td>CIS240</td>
<td>Local Area Network Planning and Design</td>
<td>3</td>
<td>3</td>
<td>3 Credits. 3 Periods.</td>
<td>Analysis of the needs and requirements for a local area network (LAN). Emphasis on basic systems analysis and design for a local area network, selection of appropriate hardware and software components. Includes current and future issues, needs analysis, cost estimation, selection of connectivity and network components, and issues relating to access, security, and support. Prerequisites: CIS190, or MST140, or permission of instructor.</td>
</tr>
<tr>
<td>CIS240DL</td>
<td>Linux Network Administration</td>
<td>3</td>
<td>4</td>
<td>3 Credits. 4 Periods.</td>
<td>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 SAIR/GNU LCP and LCA certificates, CompTIA's Linux+, RHCT, RHCE, and LPIC. Prerequisites: CIS126AL, CIS126BL and CIS126CL; or CIS126DL or instructor approval.</td>
</tr>
<tr>
<td>CIS241DL</td>
<td>Apache Web Server Administration (Linux/Unix)</td>
<td>3</td>
<td>4</td>
<td>3 Credits. 4 Periods.</td>
<td>Knowledge and skills to install, configure and securely manage a Linux/Unix Apache web server in an Open Source Environment. Securely incorporates Common Gateway Interface (CGI) handlers, Secure Socket Layer (SSL), dynamic content, and customization of the Apache web server with add-in modules. Preparation for entry-level industry certification exams will be covered. Prerequisites: CIS266AA, or CIS226AL, or CIS238DL, or permission of instructor.</td>
</tr>
<tr>
<td>CIS250</td>
<td>Management Information Systems</td>
<td>3</td>
<td>4</td>
<td>3 Credits. 4 Periods.</td>
<td>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: CIS105.</td>
</tr>
<tr>
<td>CIS251</td>
<td>Computer Game Development -Level II</td>
<td>3</td>
<td>4</td>
<td>3 Credits. 4 Periods.</td>
<td>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: CIS151 or permission of instructor.</td>
</tr>
<tr>
<td>CIS259</td>
<td>Visual Basic Programming II</td>
<td>3</td>
<td>4</td>
<td>3 Credits. 4 Periods.</td>
<td>Use of the Visual Basic programming language to identify and solve advanced problems using suitable examples from business or other disciplines. Prerequisites: CIS159 or permission of instructor.</td>
</tr>
<tr>
<td>CIS262</td>
<td>C Programming II</td>
<td>3</td>
<td>4</td>
<td>3 Credits. 4 Periods.</td>
<td>Advanced level C Programming. Programming with emphasis on data management, dynamic allocation, varied memory models, interfacing with the operating system, efficiency, and advanced debugging techniques. Prerequisites: CIS162, or permission of instructor.</td>
</tr>
<tr>
<td>CIS262AC</td>
<td>Visual C++: Level II</td>
<td>3</td>
<td>4</td>
<td>3 Credits. 4 Periods.</td>
<td>Advanced level C++ programming with emphasis on data management, dynamic allocation, object-oriented programming concepts, input/output operations, libraries, and debugging techniques. Includes overview of other advanced applications of C++. Prerequisites: CIS162AC or permission of instructor.</td>
</tr>
<tr>
<td>CIS262AD</td>
<td>C# Level II</td>
<td>3</td>
<td>4</td>
<td>3 Credits. 4 Periods.</td>
<td>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: CIS162AD or permission of Instructor.</td>
</tr>
<tr>
<td>CIS263AA</td>
<td>Java Programming: Level II</td>
<td>3</td>
<td>4</td>
<td>3 Credits. 4 Periods.</td>
<td>Intermediate Java programming. Includes features needed to construct object-oriented programming, multithreading, multimedia, files, streams and data structure. Prerequisites: CIS163AA or permission of the instructor.</td>
</tr>
</tbody>
</table>
| CIS270      | Essentials of Network and Information Security   | 3       | 4       | 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 GIAC Security Essentials Certificate (GSEC). Prerequisites: CNT150, or (MST150 or MST150 any module), or permission of instructor.

**CIS271DB**  
**Information Security Essentials**  
3 Credits.  
4 Periods.  
Overview of information security principles, access control, risk management, and compliance. Provides partial preparation for certification in one or all of the following: Comptia Security + exam, International Information Systems Security Certification Consortium (ISC)², Systems Security Certified Practitioner (SSCP) exam, the Committee on National Security Systems (CNSS) 4011 certification, or GIAC Security Essentials Certificate (GSEC). Prerequisites: CNT140AA and (MST150SV or CIS126DL) and CIS250.

**CIS271DL**  
**Linux Security**  
3 Credits.  
4 Periods.  
Implementing in-depth security methods and techniques in a Linux-based network environment. Utilizes 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: CIS240DL or permission of instructor.

**CIS272DB**  
**Informational Security Principles**  
3 Credit.  
4 Periods.  
Covers threats to the IT infrastructure and how they can impact operations. Demonstrates strategies to mitigate risk impacts as they relate to the IT infrastructure. Provides technical knowledge required to execute on the essentials of information security. Provides partial preparation for certification in one or all of the following: Comptia Security + exam, International Information Systems Security Certification Consortium (ISC)², Systems Security Certified Practitioner (SSCP) exam, the Committee on National Security Systems (CNSS) 4011 certification, or GIAC Security Essentials Certificate (GSEC). Prerequisites: Prerequisites: CIS271DB.

**CIS274DL**  
**Linux Enterprise Network Security**  
3 Credit.  
4 Periods.  
Develop knowledge and skills to configure and securely manage a Linux enterprise network environment. Utilize applications, utilities, and Linux Kernel modules to install and configure Linux Enterprise Networking services. Prerequisites: CIS271DL or permission of instructor.

**CIS275DL**  
**Linux Capstone**  
3 Credits.  
4 Periods.  
The Linux Capstone course aggregates the skills, knowledge, communication, and critical thinking skills from the Linux Program. This course is to emulate a production environment that prepares students to work as a Linux Systems Administrator. The course helps to prepare students for Linux Industry certification exams. Prerequisites: CIS271DL or permission of instructor.

**CIS276DA**  
**MySQL Database**  
3 Credit.  
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: CIS105 or permission of Instructor.

**CIS276DB**  
**SQL Server Database**  
3 Credit.  
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: CIS105 or permission of Instructor.

**CIS281**  
**IBM Mainframe Z OS - Level II**  
3 Credit.  
4 Periods.  
Examines the major categories of z/OS mainframe operating system interactive workloads such as transaction processing, database management and web-serving. Introduces z/OS system programming concepts including system libraries, security and network communications. Prerequisites: CIS181, or permission of instructor.

**CIS282AB**  
**Volunteerism for Computer Information Systems: A Service Learning Experience**  
2 Credits.  
2 Periods.  
Service learning field experience within private/public agencies, educational institution, and citizen volunteer groups. Prerequisites: Permission of Instructor. Course Notes: CIS282AB may be repeated for a total of six (6) CIS282 credit hours. Standard grading available according to procedures outlined in catalog.

**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.

**CIS290AC**  
**Computer Information Systems Internships**  
3 Credits.  
18 Periods.  
Work experience in business or industry. Prerequisites: Permission of instructor.
Course Descriptions

CIS296WA
Cooperative Education
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 at least twelve (12) college credits, minimum 2.6 grade point average, and be able to obtain a position related to student's academic or career goals (student's present job may qualify); or permission of instructor. Corequisites: Must be concurrently enrolled in at least one class which is related to student's major or career interest or with permission of the instructor.

CIS296WB
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 at least twelve (12) college credits, minimum 2.6 grade point average, and be able to obtain a position related to student's academic or career goals (student's present job may qualify); or permission of instructor. Corequisites: Must be concurrently enrolled in at least one class which is related to student's major or career interest or with permission of the instructor.

CIS296WC
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 at least twelve (12) college credits, minimum 2.6 grade point average, and be able to obtain a position related to student's academic or career goals (student's present job may qualify); or permission of instructor. Corequisites: Must be concurrently enrolled in at least one class which is related to student's major or career interest or with permission of the instructor.

CIS296WD
Cooperative Education
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 at least twelve (12) college credits, minimum 2.6 grade point average, and be able to obtain a position related to student's academic or career goals (student's present job may qualify); or permission of instructor. Corequisites: Must be concurrently enrolled in at least one class which is related to student's major or career interest or with permission of the instructor.

CSC100
Introduction to Computer Science (C++)
3 Credits. 3 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. Prerequisites: MAT120, or MAT121, or MAT122.

CSC100A
Introduction to Computer Science (C++)
3 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. Prerequisites: MAT120, or MAT121, or MAT122.

CSC100AB
Introduction to Computer Science (C++)
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. Prerequisites: MAT120, or MAT121, or MAT122.

CSC110
Introduction to Computer Science (Java)
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: MAT120 or MAT121 or MAT122.

CSC110A
Introduction to Computer Science (Java)
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: MAT120 or MAT121 or MAT122.
computer system concepts. Social and ethical responsibilities. Intended for Computer Science and Computer Systems Engineering Majors. Prerequisites: MAT120, or MAT121, or MAT122.

CSC120
Digital Design Fundamentals
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: CSC100, or CSC110, or CSC181, or ELE181, or NET181, or equivalent, or permission of Instructor. Cross-References: EEE120

CSC205
Object Oriented Programming and Data Structures
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: CSC110, or permission of Instructor.

CSC205AB
Object Oriented Programming and Data Structures
4 Credits. 4 Periods.
Covers Object-Oriented design and programming: elementary data structures; arrays; lists; stacks; queues; binary trees; recursion; searching and sorting algorithms. Prerequisites: CSC110, or permission of Instructor.

CSC2205
Object Oriented Programming and Data Structures
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: CSC110, or permission of Instructor.

CSC240
Introduction to Different Programming Languages
3 Credits. 5 Periods.
Introduction to procedural (C/C++), applicative (LISP), and declarative (Prolog) languages. Prerequisites: CSC205 or permission of Instructor.

CNS175
Working Drawing Analysis: Blueprint Reading
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.

CNS282AC
Volunteerism for Construction: A Service Learning Experience
3 Credits. 3 Periods.
Service-learning field experience within private/public agencies and citizen volunteer groups. Prerequisites: permission of department. Course Note: May not repeat specific assignment for more than three (3) credit hours. Standard grading available according to procedures outlined in college catalog.

CNS290AC
Construction Internship
3 Credits. 15 Periods.
Construction internship office/field experience with private/public agencies or citizen volunteer groups. Prerequisites: CNS282, or permission of department.

CNS290AE
Construction Internship
3 Credits. 25 Periods.
Construction internship office/field experience with private/public agencies or citizen volunteer groups. Prerequisites: Permission of Department or Division.

CNS296WC
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 at least twelve (12) college credits, minimum 2.6 grade point average, and ability to obtain a position related to student’s academic or career goals (student’s present job may qualify); or permission of instructor. Corequisites: Must be concurrently enrolled in at least one class which is related to student’s major or career interest or with permission of instructor.
CPD115
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. Cross-Reference: AAA115.

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. Cross-Reference: AAA150.

CPD150AA
College Orientation & Personal Growth
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. Cross-Reference: AAA150AA.

CPD150AC
Educational & Career Planning
1 Credit. 1 Period.
Emphasis on increasing student success through educational and career planning. Prerequisites: None. Cross-Reference: AAA150AC.

CPD298AA
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.

Creative Writing

CRW120
Introduction to Writing Children's Literature
3 Credits. 3 Periods.
Overview of writing children's literature. Emphasis on genres and standards for quality. Development of techniques in reading, evaluating, writing, revising, and editing literature written for children. Prerequisites: None. ENH291 suggested but not required.

CRW150
Introduction to Creative Writing
3 Credits. 3 Periods.
Introduces the student to elements and techniques of creative writing in a variety of genres; teaches terminology and concepts needed for successful participation in writing workshops; facilitates writing practice and evaluation; offers individual guidance on the student’s development as a writer. Prerequisites: None.

CRW160
Introduction to Writing Poetry
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.

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; production of marketable quality short fiction. Prerequisites: None. CRW150 recommended but not required.

CRW172
Introduction to Comic Book Writing
3 Credits. 3 Periods.
Introduction to elements and techniques of comic book writing in its specific form; teaches terminology and concepts needed for the successful participation in writing workshops; focuses on proposal outline, planning, structure facilitates writing practice (including character study) and evaluation; offers individual suggestions in the student’s development in this genre. Prerequisites: None.

CRW180
Introduction to Writing Nonfiction
3 Credits. 3 Periods.
Practice in writing creative nonfiction, including autobiography and biography, the essay, reviews, and humor using a process of invention and discovery, writing, analysis, evaluation, and revision. Combines lecture, discussion, and workshop, leading to the production of marketable quality creative nonfiction. Prerequisites: None. CRW150 recommended but not required.

CRW190
Introduction to Screenwriting
3 Credits. 3 Periods.
Overview of screenwriting elements; introduction to screenwriting techniques. Prerequisites: None. CRW150 recommended but not required.

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: CRW150, or permission of Instructor.

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. Prerequisites: (Acceptance into Creative Writing Certificate Program and completion of at least nine (9) credit hours in creative writing (CRW)), or permission of Program Director.

CRW202
The Writer as Witness
3 Credits. 3 Periods.
Studio course focusing on writing with the writer as witness of the world: pre-writing, writing, analysis, evaluation, and writing of monologue and dialogue in various formats. Prerequisites: CRW150 or permission of instructor.
CRW203
Dialogue
3 Credits. 3 Periods.
Studio course focusing on writing dialogue in a variety of genres; prewriting, writing, analysis, evaluation, and writing of monologue and dialogue in various formats. Prerequisites: CRW150 or permission of instructor.

CRW204
Journaling
3 Credits. 3 Periods.
Studio course focusing on journal writing. Prerequisites: CRW150 or permission of instructor.

CRW220
Intermediate Writing Children’s Literature
3 Credits. 3 Periods.
Application of techniques in writing literature for children. Emphasis on independent writing, self-evaluation, and revision. Includes completion of a major writing project of marketable quality. Prerequisites: CRW120, CRW150 or permission of instructor.

CRW251
Topics in Creative Writing
3 Credits. 3 Periods.
Analysis, writing, and revision focused on a selected element applicable to all genres of creative writing. Prerequisites: None. CRW150 recommended.

CRW260
Intermediate Poetry Writing
3 Credit. 3 Period.
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 workshopping. Prerequisites: CRW160 or permission of instructor.

CRW261
Topics in Writing: Poetry
3 Credits. 3 Periods.
Analysis, writing, and revision of genre or element within poetry. Prerequisites: CRW150 or permission of instructor.

CRW270
Intermediate Fiction Writing
3 Credits. 3 Periods.
Writing a series of original short stories; analysis of established works of fiction; concentration on revising students’ fiction through intensive workshopping. Prerequisites: CRW170 or permission of instructor.

CRW271
Topics in Writing: Fiction
3 Credits. 3 Periods.
Analysis, writing, and revision of genre or element within fiction. Prerequisites: CRW150 or permission of instructor.

CRW272
Planning and Structuring the Novel
3 Credits. 3 Periods.
Focus on planning, structuring, and beginning a novel; prewriting, writing, analysis, evaluation, and revision of novel plans and excerpts. Prerequisites: CRW150 or permission of instructor.

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: CRW272 or permission of instructor.

CRW274
Revising the Novel
3 Credits. 3 Periods.
Studio course workshop format. Requires a complete novel finished, in manuscript, ready for revision and polishing. Prerequisites: CRW273 or permission of instructor.

Critical Reading

CRE101
College Critical Reading
3 Credits. 3 Periods.
Apply critical inquiry skills to varied and challenging reading materials. Includes analysis, synthesis, and evaluation 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 RDG091 or RDG095 or RDG100 or RDG111 or RDG112 or RDG113 or permission of Instructor).

CRE111
Critical Reading for Business and Industry
3 Credits. 3 Periods.
Emphasis on reading skills required for success in business and technology. Includes interpretation of technical and professional materials with an emphasis on critical analysis and reading. Prerequisites: Reading Asset test score, or grade of “C” or better in RDG091, or permission of instructor.

Culinary Arts

CUL101
Culinary Fundamentals: Culinary Basics
4 Credits. 4 Periods.
Theory and practice of basic elements of culinary arts fundamentals. Emphasis on safety, sanitation and uniform requirements, culinary terminology, basic nutritional guidelines, equipment needs and usage, standard measurements, knife selection and care, basic knife cuts, and fruit and vegetable identification and preparation. Prerequisites: None.

CUL102
Culinary Fundamentals: Hot Foods
4 Credits. 4 Periods.
Cooking techniques and preparation of varied meat, fish and poultry items. Theory and practice of production of stocks, sauces, and soups. Study of butchering, yields, purchasing and grade classification. Prerequisites: None.
CUL103
Culinary Fundamentals: Breakfast and Garde Manager
4 Credits. 4 Periods.
Cooking techniques and preparation of breakfast items, salads, sandwiches, and
dressings. Theory and practice of production of egg, pasta, cheeses, and fruit dishes,
Canapés and hors d’oeuvre creations. Study of lettuce, fruits, grains, cheeses and dressings
as components of salads and sandwiches. Prerequisites: None.

CUL104
Culinary Fundamentals: Bakery and Pastry
4 Credits. 4 Periods.
Provides a study of cooking techniques and
preparation methods for cakes, pies, cookies
and simple desserts as well as production
of doughs and breads. Includes preparation
of various bakery sauces and toppings, uses
of chocolate, and appropriate presentation
methods for various types of desserts. Prerequisites: None.

CUL105
Principles and Skills for Professional Cooking
3 Credits. 5 Periods.
Introductory principles and skills for professional cooking. Introduces
organizational structure of kitchen staff in different types of kitchens. Includes basic
principles of safety and sanitation, equipment
and utensil use, French cooking terms, recipe
use, measuring techniques, identification
and use of seasoning agents, and basic
cooking methods applied to stocks, sauces
and soups, vegetables, starches, entrees, and
eggs. Emphasis on practical experiences in
a commercial kitchen. Prerequisites: None.

CUL107
Principles and Techniques of Garde Manager
3 Credits. 5 Periods.
Prepares students for employment in garde manager pantry positions in restaurants and
resorts. Includes costing out and ordering
food products; food and safety factors;
preparing and garnishing pantry product.
Emphasis on classical food presentation. Prerequisites: None.

CUL109
Menu Planning Development
2 Credits. 2 Periods.
Principles and techniques of menu planning
for food service operations where food is
served in quantity; includes applications for
health care institutions, commercial kitchens,
school cafeterias, and industrial facilities. Prerequisites: None. Cross-References:

CUL111
Purchasing for Food Service Systems
3 Credits. 3 Periods.
Food purchasing for institutions: cost factors,
quality standards, purchasing practices and
controls. Prerequisites: None.

CUL113
Commercial Baking Techniques
3 Credits. 5 Periods.
Principles and techniques for preparation,
storage, and serving of bakery products.
Includes breads, cakes, pies, pastry, cookies,
fillings, and icings. Emphasis on practical
experiences in a commercial bakery. Prerequisites: None.

CUL117
Catering - Planning and Production
1 Credit. 3 Periods.
Focuses on the basic steps of the catering
process in a commercial food setting. Includes
a review of safety and sanitation principles.
Emphasizes practical experiences in booking
and record keeping, planning, ordering,
production, and service set-up and break-
down for both in-house and off-premise
catered events. Prerequisites: CUL105

CUL119
Baking Theory and Retail Operations
3 Credits. 3 Periods.
Baking principles to include detailed study of
ingredients, heat transfer, and recipe
conversions. Basic business operations for a
retail bakery including bakery product line
and floor plan design. Prerequisites: None.

CUL123
Customer Service Practicum
4 Credits. 11 Periods.
Professional food and beverage experience in a commercial food service operation.
Focuses on food server, host/hostess cashier,
busperson. Includes beverage preparation,
application of sanitation and safety concepts.
Stresses professionalism in service, demeanor,
and appearance. Prerequisites: FON104

CUL123AB
Customer Service Practicum
2 Credits. 5 Periods.
Professional food and beverage experience in a commercial food service operation.
Focuses on food server, host/hostess cashier,
bus person. Includes beverage preparation,
application of sanitation and safety concepts.
Stresses professionalism in service, demeanor,
and appearance. Prerequisites: FON104

CUL127
Commercial Baking: Classical Desserts
3 Credits. 5 Periods.
Advanced principles and techniques in commercial baking and dessert preparation.
Focus on fine pastries with European flair
and on desserts served in better hotels,
restaurants, and resorts. Preparation of
macaroons, tarts, puff pastries, specialty
cakes, and desserts such as Bavarian creams,
mousses, custards, soufflés, crepe desserts,
and flanmeries. Preparation and use of
sausage, techniques for using nuts and chocolate, and exploration of new recipes.
Prerequisites: None.

CUL137
Specialty Breads and Breakfast Pastry
3 Credits. 5 Periods.
The preparation of classical and artisan breads using advanced production techniques
and skills. Classic breakfast pastry, with the
production of laminated doughs, sweet
doughs, and rich yeast doughs to include
Danish, croissant, puff pastry, brioche, and
other international classics. Completion of
edible centerpieces made out of various styles
of bread. Prerequisites: CUL113 or permission of Program Director.
Course Descriptions

CUL201
International Cuisine
3 Credits. 5 Periods.
Gourmet international food preparation applied to restaurants. Review principles of sanitation and safety. Explores history and customs, serving styles, and preparation techniques of foods unique to selected international cultures. Emphasis on practical cooking experiences in a restaurant kitchen. Cultures to include, but not limited to: Italian, German, Oriental, Middle Eastern, and Spanish. Prerequisites: None.

CUL203
American Regional Cuisine
3 Credits. 5 Periods.
American regional food preparation applied to restaurants. Review principles of sanitation and safety. Explores history and customs, serving styles, and preparation techniques of foods unique to selected American regions. Emphasis on practical cooking experiences in a restaurant setting. American regions to include, but not limited to: Southern, Cajun/Creole, New England, Mid-West, and Pacific Coast. Prerequisites: None

CUL205
French Cuisine
3 Credits. 5 Periods.
Principles of French cooking applied to restaurant kitchens. Includes review of safety and sanitation principles, orientation to French culture, use of French terms and recipes, and reading French menus. Emphasis on practical experiences in preparing French meals in a restaurant kitchen. Introduces preparation of appetizers, hors-d’oeuvres, charcuterie items, pastries, and desserts. Prerequisites: A grade of “C” or better in CUL105.

CUL213
Buffet Catering
3 Credits. 5 Periods.
Focuses on the basic steps of the catering process in a commercial food setting. Includes an overview of safety and sanitation principles. Emphasizes practical experiences in booking and record keeping, function planning, ordering, production, and service set-up and breakdown for both in-house and off-premise catered events. Prerequisites: A grade of “C” or better in CUL105.

CUL217
Commercial Wedding Cake Production
3 Credits. 5 Periods.
Basic and advanced execution for special occasion, wedding, and groom’s cakes to include initial design work, baking, icing, and advanced finishing techniques to include the use of fondant and gum paste. Enhancement of cakes to include basic sugar, pastillage, and chocolate decoration. Prerequisites: CUL113 or permission of Program Director.

CUL219
Professional Pastry Techniques
3 Credits. 5 Periods.
Advanced production techniques for plated desserts, frozen desserts, modern and classical gateaux, petits fours, and chocolates. Prerequisites: CUL113 and CUL127, or permission of Program Director.

CUL223
Food Service Management
3 Credits. 3 Periods.
Administrative procedures and personnel relationships: Management of materials costs, record keeping and legal aspects of food and beverage service operations. Prerequisites: None.

CUL231A
Culinary Studies Internship
1 Credits. 5 Periods.
Work experience preparing hot and cold foods in a commercial food service operation, experience in volume food production preparing salads, soups, stocks, sauces, entrees, starches, and vegetables. Fifteen (15) hours of work weekly. Supervision and evaluation by an internship coordinator. Prerequisites: CUL105, FON104, and permission of Department or Division.

CUL231AB
Culinary Studies Internship
2 Credits. 10 Periods.
Work experience preparing hot and cold foods in a commercial food service operation, experience in volume food production preparing salads, soups, stocks, sauces, entrees, starches, and vegetables. Ten (10) hours of work weekly. Supervision and evaluation by an internship coordinator. Prerequisites: CUL105, FON104, and permission of Department or Division.

CUL231AC
Culinary Studies Internship
3 Credits. 15 Periods.
Work experience preparing hot and cold foods in a commercial food service operation, experience in volume food production preparing salads, soups, stocks, sauces, entrees, starches, and vegetables. Fifteen (15) hours of work weekly. Supervision and evaluation by an internship coordinator. Prerequisites: CUL105, FON104, and permission of Department or Division.

CSM101
Quality Customer Service
3 Credits. 3 Periods.
Examines the nature of quality customer service and the attitudes, knowledge, and skills needed to work effectively in a quality customer service environment. Foundation skills for quality customer service are taught, applied and practiced. Prerequisites: None. Cross-References: TQM101

CSM202
Principles of Process Improvement
3 Credits. 3 Periods.
Examines the concepts and tools of quality/continuous customer service improvement. Includes mapping processes, flow charts, focus groups, customer satisfaction surveys, statistical measurement, problem-solving tools and methods of presenting findings, evaluating, and implementing changes to improve customer service. Prerequisites: None.

CSM203
Teamwork Dynamics
3 Credits. 3 Periods.
Theory and practice of how team members and team leaders use listening, negotiating and interpersonal skills for the enhancement of team process to improve customer service based on employee evaluations and employee feedback. Included are concepts of team development and team problem-solving techniques. Prerequisites: None.
DAN115
Contemporary Dance Trends
1 Credit.  3 Periods.
Theory and practice of current social dance trends. Development of movement quality and performance skills. Prerequisites: None. Course Note: DAN115 may be repeated for credit.

DAN120
World Dance
1 Credit.  3 Periods.
Theory and practice of world dance. Development of movement quality and performance skills, individually, with a partner or in a group setting. Prerequisites: None. Course Note: DAN120 may be repeated for credit.

DAN120AE
World Dance: Middle Eastern Dance
1 Credit.  3 Periods.
Theory and practice of Middle Eastern dance. Development of movement quality and performance skills. Prerequisites: None. Course Note: DAN120AE may be repeated for credit.

DAN125AA
Social Dance: Ballroom
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. May include Salsa, Mambo, Cha Cha Cha, Merengue, Rumba, East Coast Swing, Lindy Hop, West Coast Swing, Foxtrot, Waltz, American Tango, International Ballroom, or Ballroom Performance. Prerequisites: None. Course Note: DAN125AA may be repeated for credit.

DAN125AC
Social Dance: Latin
1 Credit.  2 Periods.
Theory and practice of Latin dance. Development of movement quality and performance skills individually, with a partner or in a group setting. May include Salsa, Mambo, Cha Cha Cha, Merengue, Rumba, Bachata, International Latin Ballroom, or Latin Ballroom Performance. Prerequisites: None. Course Note: DAN125AC may be repeated for credit. DAN129

DAN129
Musical Theatre Dance I
1 Credit.  3 Periods.
Introduction to the theory and practice of musical theatre dance at the beginning level. Development of movement quality and performance skills. Prerequisites: None. Course Note: DAN129 may be repeated for credit.

DAN130
Musical Theatre Dance II
1 Credit.  3 Periods.
Theory and practice of musical theatre dance at the advanced beginning level. Development of movement quality and performance skills. Prerequisites: DAN129 or permission of Instructor. Course Notes: DAN130 may be repeated for credit.

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. Course Note: DAN131 may be repeated for credit.

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. Course Note: DAN132 may be repeated for credit.

DAN133
Modern Dance II
1 Credit.  3 Periods.
Introduction to the theory and practice of modern dance at the advanced beginning level. Development of movement quality and performance skills. Prerequisites: None. Course Note: DAN133 may be repeated for credit.

DAN134
Ballet II
1 Credit.  3 Periods.
Theory and practice of ballet at the advanced beginning level. Development of movement quality and performance skills. Prerequisites: DAN131 or permission of Instructor. Course Notes: DAN134 may be repeated for credit.

DAN135
Modern Dance II
1 Credit.  3 Periods.
Theory and practice of modern dance at the advanced beginning level. Development of movement quality and performance skills. Prerequisites: DAN132 or permission of Instructor. Course Notes: DAN135 may be repeated for credit.

DAN136
Modern Jazz Dance II
1 Credit.  3 Periods.
Theory and practice of modern jazz dance at the advanced beginning level. Development of movement quality and performance skills. Prerequisites: DAN133 or permission of Instructor. Course Note: DAN136 may be repeated for credit.

DAN138
Dance Seminar I
1 Credit.  1 Periods.
Level I scientific evaluation and in-depth discussion of the theory and practice of work done in dance technique class. Corequisites: Any ballet modern dance or modern jazz dance technique course.
DAN210
Dance Production I
3 Credits.  3 Periods.
Introduction to the elements of light, sound, and scenery as they relate to the art of dance. Prerequisites: None.

DAN221
Rhythmic Theory for Dance I
2 Credits.  3 Periods.
Exploration of the ways in which music, time, pitch, and energy work with the art of dance. Emphasis on reading and writing music notation and performing movement that correlates to the notation and vice versa. Prerequisites: None.

DAN229
Musical Theatre Dance III
1 Credit.  3 Periods.
Theory and practice of musical theatre dance at the beginning intermediate level. Development of movement quality and performance skills. Prerequisites: DAN232 or permission of Instructor. Course Notes: DAN229 may be repeated for credit.

DAN230
Musical Theatre Dance IV
1 Credit.  3 Periods.
Theory and practice of musical theatre dance at the intermediate level. Development of movement quality and performance skills. Prerequisites: DAN229 or permission of Instructor. Course Notes: DAN230 may be repeated for credit.

DAN231
Ballet III
1 Credit.  3 Periods.
Theory and practice of ballet at the beginning intermediate level. Development of movement quality and performance skills. Prerequisites: DAN134 or permission of Instructor. Course Notes: DAN231 may be repeated for credit.

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. Prerequisites: DAN135 or permission of Instructor. Course Notes: DAN232 may be repeated for credit.

DAN232AA
Modern Dance III: Intensive
2 Credit.  5 Periods.
Theory and intensive practice of modern dance at the beginning intermediate level. Development of movement quality and performance skills. Prerequisites: DAN135 or permission of Instructor.

DAN233
Modern Jazz Dance III
1 Credit.  3 Periods.
Theory and practice of modern jazz dance at the beginning intermediate level. Development of movement quality and performance skills. Prerequisites: DAN136 or permission of Instructor. Course Notes: DAN233 may be repeated for credit.

DAN234
Ballet IV
1 Credit.  3 Periods.
Theory and practice of ballet at the intermediate level. Development of movement quality and performance skills. Prerequisites: DAN231 or permission of Instructor. Course Notes: DAN234 may be repeated for credit.

DAN234AA
Ballet IV: Intensive
2 Credit.  5 Periods.
Theory and intensive practice of ballet at the advanced intermediate level. Development of movement quality and performance skills. Prerequisites: DAN231AA or permission of Instructor. Course Notes: DAN234AA may be repeated for credit.

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. Prerequisites: DAN232 or permission of Instructor. Course Note: DAN235 may be repeated for credit.

DAN235AA
Modern Dance IV: Intensive
2 Credit.  5 Periods.
Theory and intensive practice of modern dance at the advanced intermediate level. Development of movement quality and performance skills. Prerequisites: DAN232AA or permission of Instructor.

DAN236
Modern Jazz Dance IV
1 Credit.  3 Periods.
Theory and practice of modern jazz dance at the intermediate level. Development of movement quality and performance skills. Prerequisites: DAN233 or permission of Instructor. Course Note: DAN236 may be repeated for credit.

DAN237
Ballet Pointe I
1 Credit.  1 Period.
An introduction to the theory and practice of pointe work at the beginning level. Development of strength and movement quality. Prerequisites: DAN134 or permission of Instructor. Corequisites: DAN231 or DAN234. Course Notes: DAN237 may be repeated for credit.

DAN250
Dance Performance III
1 Credit.  3 Period.
Continued study of the process and practice of dance performance at a level III. Prerequisites: DAN155 or permission of Instructor.

DAN264
Choreography I
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.

DAN265
Choreography II
3 Credits.  3 Periods.
Exploration of the craft of choreography at the intermediate level. Experimentation with the various approaches to contemporary choreography as established by 20th century artists. Prerequisites: DAN264.
DAN280
Dance Practicum
2 Credits. 6 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.

DAH100
Introduction to Dance
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.

DAH110
Dance in Film
3 Credits. 3 Periods.
Survey of the history and development of dance in film and video including basic film technology and critical analysis and evaluation. Prerequisites: None. DAH100 strongly suggested but not required.

DAH201
World Dance Studies
3 Credits. 3 Periods.
Exploration, analysis, synthesis, and evaluation of the role of dance in various cultures around the world. Prerequisites: None.

DPR139
Emergency Response to Terrorism
See description under cross-reference course AJS139

DPR146
Disaster Recovery Operations
See description under cross-reference course AJS146

DPR147
Emergency Preparedness
See description under cross-reference course AJS147

DPR148
Fundamentals of Emergency Management
See description under cross-reference course AJS148

DPR149
Hazard Mitigation
See description under cross-reference course AJS149

ECH176
Child Development
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. Cross-References: CFS176

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

EED200
Foundations of Early Childhood Education
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. Prerequisites: None

EED210
Creative and Cognitive Play
3 Credits. 3 Periods.
Benefits of play for children birth to 8 years of age. Inclusion of art, music, and movement used in all dimensions of play. Identify uses and roles in the development of children. Prerequisites: CFS176, ECH176, or CFS235, or EED205.

EED211
Language Acquisition in the Young Child
3 Credits. 3 Periods.
Define speech and language and discuss theories of language acquisition in young children, birth to 8 years of age in a variety of settings. Explore techniques to encourage and support the development of language, assessment techniques and family involvement. Prerequisites: CFS176, ECH176, or CFS235, or EED205.

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

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

EED220
Child, Family, Community and Culture
3 Credits. 3 Periods.
Examines family, community and cultural influences on development of the young
Course Descriptions

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.

EED222
Introduction to the Exceptional Young Child: Birth to Age Eight
3 Credits. 3 Periods.
Overview of the exceptional learner (birth-age eight), one who differs from the average or the norm, with emphasis on observation, techniques, characteristics, identification, types of programs, and work with families. Issues related to learning exceptionalities, sensory and communication disorders, social and emotional problems, physical and health related disorders, and giftedness. Includes field experience. Prerequisites: None.

EED250
Early Literacy Development
3 Credits. 3 Periods.
Overview of emergent literacy, early literacy development, and appropriate early experiences with books, reading, and writing. Emphasis placed on reading and writing readiness, methods to enhance literacy development, and strategies for selecting and sing children's books. Prerequisites: None.

EED255
Portfolio Development and Writing for the Profession
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: Completion of twelve (12) credit hours of EED coursework and permission of Program Coordinator.

EED260
Early Childhood Infant/Toddler Internship
1 Credits. 1 Periods.
Work experience with infants and toddlers in early care and education settings. 80 hours of designated work per credit. Prerequisites: Permission of Department or Division.

EED261
Early Childhood Preschool Internship
1 Credits. 1 Periods.
Work experience with preschoolers in early care and education settings. 80 hours of designated work per credit. Prerequisites: Permission of Department or Division.

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: EED200.

EED280
Standards, Observation and Assessment of Typical/Atypical Behaviors of Young Children Birth to Age Eight
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 professionals. Prerequisites: CFS176, ECH176 or CFS235 or EED205.

ECN211
Macroeconomic Principles
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.

ECN212
Microeconomic Principles
3 Credits. 3 Periods.
Microeconomic analysis including the theory of consumer choice, price determination, resource allocation and income distribution. Includes non-competitive market structures such as monopoly and oligopoly; and the effects of government regulation. Prerequisites: None.

EDU112
Inquiry-Based Instructional Approaches for Science and Mathematics II
1 Credit. 2 Periods.
Exploring teaching as a career option through observations and active participation in science or mathematics lessons. Supervised experience in planning and implementing inquiry-based science and/or mathematics lessons in middle school classroom settings. Prerequisites: EDU111. Course Notes: EDU112 requires additional lab time outside of class.

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
Course Descriptions

**EDU221**
Introduction to Education
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. Course Note: Requires minimum of 30 hours of field experience in elementary or secondary classroom environment.

**EDU222**
Introduction to the Exceptional Learner
3 Credits. 3 Periods.
Overview of the exceptional learner, one who differs from the average or normal, with emphasis on factors relating to current practices, identification, characteristics, and educational adaptations. Issues related to mildly disabled, severely disabled, emotionally and behaviorally disordered, mentally retarded, and gifted students. Includes school-based practicum Prerequisites: None.

**EDU230**
Cultural Diversity in Education
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.

**EDU233**
Structured English Immersion (SEI), English as a Second Language (ESL), and Bilingual Teaching Methods
3 Credits. 3 Periods.
Methods of planning, developing, and analyzing lesson plans in all content areas using English Language Learners (ELL) Standards. Emphasis on components of curriculum content, teaching strategies, development/evaluation/adaptation of teaching materials, and the role of culture in learning. Examines the alignment of ELL Proficiency Standards to the state academic standards. Covers multiple assessment techniques, tracking of student progress using the state mandated English language proficiency assessment, and use of assessment results for placement and accommodation. Prerequisites: (EDU220 or EPD220) or permission of Department or Division. Course Note: Approved school-based practicum required. EDU233 incorporates curricular framework for the 45-clock hour requirement for SEI endorsement through the Arizona Department of Education.

**EDU250**
Teaching and Learning in the Community College
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.

**EDU280**
Volunteerism for Education: A Service Learning Experience
2 Credit. 2 Period.
Service-learning field experience within educational systems, citizen advocacy groups, and human service organizations/agency. May be repeated for a total of six (6) EDU280 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.

**EDU282AC**
Volunteerism for Education: A Service Learning Experience
2 Credit. 2 Period.
Service-learning field experience within educational systems, citizen advocacy groups, and human service organizations/agency. May be repeated for a total of six (6) EDU282 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.

**EDU282AA**
Volunteerism for Education: A Service Learning Experience
1 Credit. 1 Period.
Service-learning field experience within educational systems, citizen advocacy groups, and human service organizations/agency. May be repeated for a total of six (6) EDU282 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.

**EDU282AB**
Volunteerism for Education: A Service Learning Experience
3 Credit. 3 Period.
Service-learning field experience within educational systems, citizen advocacy groups, and human service organizations/agency. May be repeated for a total of six (6) EDU282 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.

**EDU282AC**
Volunteerism for Education: A Service Learning Experience
3 Credit. 3 Period.
Service-learning field experience within educational systems, citizen advocacy groups, and human service organizations/agency. May be repeated for a total of six (6) EDU282 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.

**EDU291**
Children's Literature
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. Cross-References: ENH291

**EDU292**
The Art Of Storytelling
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. Cross-References: HUM292, STO292.

**EDU294**
Multicultural Folktales
3 Credits. 3 Periods.
Study of multicultural folktales, exploring the impact of the oral tradition in American society and showing classroom applications. Prerequisites: None. Cross-References: ENH294, STO294
EDU296WA
Cooperative Education
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 at least twelve (12) college credits, minimum 2.6 grade point average, and be able to obtain a position related to student's academic or career goals (student's present job may qualify); or permission of instructor. Corequisites: Must be concurrently enrolled in at least one class which is related to student's major or career interest or with permission of the instructor.

EDU296WB
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 at least twelve (12) college credits, minimum 2.6 grade point average, and be able to obtain a position related to student's academic or career goals (student's present job may qualify); or permission of instructor. Corequisites: Must be concurrently enrolled in at least one class which is related to student's major or career interest or with permission of the instructor.

EDU296WC
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 at least twelve (12) college credits, minimum 2.6 grade point average, and be able to obtain a position related to student's academic or career goals (student's present job may qualify); or permission of instructor. Corequisites: Must be concurrently enrolled in at least one class which is related to student's major or career interest or with permission of the instructor.

Course Descriptions

Education Professional Development

EPD220
Introduction to Serving the English Language Learner for Certified Teachers
3 Credits.  3 Periods.
Rationale for and current educational and legal issues for 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. Includes SEI, ESL, and bilingual strategies. Prerequisites: Provisional or standard elementary, or secondary, or special or career and technical education teaching certificate, or permission of Department or Division. Course Note: Approved school-based practicum is required. EPD220 incorporates the 45-hour curricular framework for SEI endorsement through the Arizona Department of Education.

EPD225
Foundations of Gifted Education and Identification of Gifted Learners
3 Credits.  3 Periods.
Students explore the definition of giftedness, ways of identifying gifted and talented students, and types of programs and services developed for this population. Students address issues in educating gifted and talented students. Prerequisites: Must hold a provisional or standard early childhood, elementary, secondary or special education teaching certificate.

EPD226
Social and Emotional Needs of Gifted and Talented Students
3 Credits  3 Periods.
Students explore the intellectual, social, emotional, developmental, and educational characteristics of gifted and talented students. Prerequisites: Must hold a provisional or standard early childhood, elementary, secondary or special education teaching certificate and EPD225 or (permission of Department or Division chairperson).

EPD227
Methods and Models for Differentiating Curriculum for Gifted Learners
3 Credits  3 Periods.
Students explore the theory and practice of teaching methods and differentiating curriculum and instruction for gifted learners. Prerequisites: Must hold a provisional or standard early childhood, elementary, secondary or special education teaching certificate and EPD225 (or permission of Department or Division chairperson).

EPD228
Creativity and Critical Thinking Skills in Gifted Education
3 Credits  3 Periods.
Students explore the concept of creativity, including theories and characteristics. Brain research on critical thinking and implications for gifted education is examined. Prerequisites: Must hold a provisional or standard early childhood, elementary, secondary or special education teaching certificate and EPD225 (or permission of Department or Division chairperson).

EPD229
Gifted Education Practicum I
3 Credits  4.5 Periods.
Practical application of theories, models, and instruction for gifted education. Provides an opportunity to receive guided, practical, on-site experience working with gifted students. Requires observations of gifted students in a variety of settings, evaluation of teaching techniques, and critical review of academic standards as they relate to gifted learners and related professional organizations. Prerequisites: Must hold a provisional or standard early childhood, elementary, secondary or special education teaching certificate and EPD225, EPD226, EPD227, and EPD228 (or permission of Department or Division chairperson).

EPD230
Gifted Education Practicum II
3 Credits  4.5 Periods.
Supervised practicum. Emphasis on the provision of instruction and assessment to gifted and talented students. Covers lesson plan development, classroom procedures, classroom management, and assessment. Includes learner preparation, learner engagement, and learner outcome awareness. Prerequisites: Must hold a provisional or standard early childhood, elementary, secondary or special education teaching certificate and EPD225, EPD226,
Course Descriptions

EPD227, EPD228, and EPD229 (or permission of Instructor or Department or Division Chairperson).

EPD233
SEI and ESL Teaching Methods for Certified Teachers
3 Credits. 3 Periods.
Methods of planning, developing, and analyzing lesson plans in all content areas using English Language Learners (ELL) Standards. Emphasis on components of curriculum content, teaching strategies, development/evaluation/adaptation of teaching materials, and the role of culture in learning. Examines the alignment of ELL Proficiency Standards to the Arizona Language Arts Academic Standards. Covers multiple assessment techniques, tracking of student progress using the state mandated English language proficiency assessment, and use of assessment results for placement and accommodation. Prerequisites: Provisional or standard teaching certificate for elementary, secondary, special, or career and technical education and (EDU220 or EPD220), or permission of Department or Division. Course Note: Approved school-based practicum required. EPD233 incorporates curricular framework for the 45-clock hour requirement for SEI endorsement through the Arizona Department of Education.

EEE120
Digital Design Fundamentals
See description under cross-reference course CSC120

EEE202
Circuits and Devices
LEC 5 Credits. 4 Periods.
LAB 0 Credits. 3 Periods.
Introduction to circuits and devices. Component models, transient analysis, steady state analysis, Laplace transform, and active and passive filter networks. Prerequisites: ECE103 or ECE103AB. Prerequisites or Corequisites: (MAT261 or MAT262) and (PHY116 or PHY131).

EEE230
Computer Organization and Assembly Language
See description under cross-reference course CSC230

Electricity

ELC105
Electricity for Industry
3 Credits. 3 Periods.

ELC105LL
Electricity for Industry Lab
1 Credits. 3 Periods.
Diagramming and assembling series circuits, parallel circuits and wiring relays, thermostats, switches and lights. Electrical readings on compressors. Emphasis on safety. Prerequisites: None. Corequisites: ELC/FAC/HVA105 or permission of instructor. Cross-References: FAC105LL, HVA105LL.

ELC115
Motors Controls and Wiring Diagrams
3 Credits. 3 Periods.

ELC119
Concepts of Electricity and Electronics
3 Credits. 3 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.

ELC120
Solid State Fundamentals
3 Credits. 3 Periods.
Theory of operation of semi-conductor devices, component and system construction, operation, installation, and service. Specific and practical applications in relations to temperature, light, speed and pressure control. Includes amplifiers, power supplies, integrated circuits, fiberoptics, and safety. Prerequisites: None.

ELC210
AC Machinery and DC Machinery
3 Credits. 3 Periods.
Principles and operation of AC (Alternating current) and DC (direct current) motors, generators, and alternators. Includes single-phase motors along with induction, synchronous, and wound-rotor types of three-phase motors. DC motors including shunt-field, series field, wound rotor, permanent magnet, stepper and brushless types. Prerequisites: None.

ELC217
Motor Controls
3 Credits. 3 Periods.
Electrical symbols, line diagrams and logic. Contacts and starters, control devices, reversing circuits and power distribution systems. Magnetism and magnetic solenoids, reduced voltage starters, and circuits. Hard tools and safety procedures. Prerequisites: None.

ELC218
Variable Frequency Drives
3 Credits. 3 Periods.
Principles and operation of frequency controlled AC (Alternating current) motor drives, including current source inverters (CSI), variable voltage inverters (VVI) and pulse width modulated inverters (PWM). Heating, ventilation and air conditioning (HVAC) applications along with energy savings, motor pump sizing and torque load calculations. Prerequisites: Permission of instructor.
**Course Descriptions**

**ELT101**
**Mathematics for Electronic I**
3 Credits. 3 Periods.
Basic principles of Algebra with applications to the analysis of electronic circuits. Emphasis on the use of the calculator for conversions and DC (direct current) circuit problems. Prerequisites: None.

**ELT102**
**Educational Application of Technology**
1 Credit. 1 Period.

**ELT113**
**Basic Electronics**
LEC 4 Credits. 3 Periods. 
LAB 0 Credits. 3 Periods. 
Direct and alternating current electrical circuits. Theory and practical lab experience, using the appropriate test equipment and computer solutions. Ohm's Law, Kirchhoff's Laws, and various network theorems applied to the study and analysis of series, parallel, and series-parallel circuit configurations. Includes complex algebra, impedance, frequency response, and resonance. Prerequisites or Corequisites: ELT102 or equivalent.

**ELT131**
**Digital and Logic Circuits**
LEC 4 Credits. 3 Periods. 
LAB 0 Credits. 3 Periods. 
Digital concepts and fundamentals, number systems and codes, Boolean algebra and combinational logic, logic reduction techniques, and logic hardware. Memories and programmable logic arrays. Hands-on hardware and computer-aided logic design experiments. Prerequisites: ELT113 or permission of instructor. Cross-References: SMT131.

**ELT195**
**Solid State Electronics**
LEC 4 Credits. 3 Periods. 
LAB 0 Credits. 3 Periods. 
Characteristics and use of solid state devices in practical circuit applications. Circuit analysis techniques and computer simulations. Includes, diodes, transistors, four-layer devices, operational amplifiers, and interfacing devices. Prerequisites: ELT113 or departmental approval.

**ELT251**
**Electronic Instrumentation**
LEC 3 Credits. 2 Periods. 
LAB 0 Credits. 3 Periods. 
Electronic instruments and their usage in measuring and analyzing electronic circuits. Includes both analog and digital meters, oscilloscopes, and digital logic analyzers. Covers automatic test equipment, various transducers, and reliability requirements. Prerequisites: (ELT195 and ELT131) or departmental approval.

---

**Emergency Medical Technology**

**EMT101**
**Cardiopulmonary Resuscitation/Basic Cardiac Life Support**
.5 Credits .45 Periods 
Designed to train students in the skills of cardiopulmonary resuscitation to include mouth-to-mouth, mouth-to-mask, and cardiac compression, stabilization of adult, infant, and child victims with airway obstruction, respiratory, and cardiac arrest. Prerequisites: None. Cross-References: HLR101

**EMT104**
**Basic 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, Sudden Infant Death Syndrome (SIDS), patient-assisted medication administration, automated external defibrillators (AEDs), and blood-glucose monitoring. Includes participation in an eight-hour rotation consisting of patient assessment through clinical, vehicular, and or scenario-based education at a local emergency department outside normal class hours. Requires personal pocket mask, stethoscope, pen light, and trauma scissors. Prerequisites: Must be at least 18 years of age prior to applying to the BLS (Basic Life Support) Training Program per Arizona Revised Statutes, and must have a current validation in Basic Life Support (BLS) Health Care Provider/Professional Rescuer. Minimum tenth grade level reading proficiency on the Nelson-Denney Examination or appropriate Reading course placement score. Proof of: TB testing or chest x-ray with a negative result within 6 months prior to registration; Immunity to tuberculosis (TB), rubella (German measles) and rubeola. Cross-Reference: FSC104.
Course Descriptions

EMT235
Basic ECG Rhythm Analysis and Interpretation in the Emergency Setting
3 Credits. 3 Periods.
Designed to acquaint all levels of emergency care providers with basic electrocardiographic (ECG) rhythm analysis and interpretation and related care in a clinical and prehospital setting. Required content for the identification and treatment of cardiac emergencies. Prerequisites: EMT/FSC104 or permission of instructor.

EMT236
Pharmacology in an Emergency Setting
3 Credits. 3 Periods.
Designed for the Emergency Medical Technician dealing with the administration of emergency medications in the field as outlined in current paramedic legislation. In-depth coverage of medications enumerated in the algorithms of patient care as defined by the American Heart Association (AHA), Advanced Cardiac Life Support (ACLS). Coverage of medications that interact or interfere with the AHA ACLS algorithms. Indications, therapeutic effect, contraindications, toxicology, and side effects to medications. Prerequisites: EMT/FSC104 or permission of instructor. MAT082 or equivalency suggested but not required.

EMT240
Advanced Cardiac Life Support
2 Credits. 2 Periods.
Designed to provide the healthcare professional with comprehensive information to identify emergency cardiovascular care and protocols for the patient in cardiac arrest, post-resuscitative patient management, and core cases in Advanced Cardiac Life Support (ACLS) according to current Guidelines for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care 2004. Includes the ACLS approach to cardiovascular emergencies, elements of emergency cardiovascular care, ethical and legal issues, airway assessment and management, ventilation techniques, oxygen therapy, intravenous therapy, analyzing and interpreting the electrocardiogram (ECG), analyzing and interpreting the 12-lead ECG, myocardial ischemia, injury, and infarction, electrical interventions, cardiovascular pharmacology, acute coronary syndromes, emergency cardiovascular care algorithms, acute stroke and transient ischemic attack, and special resuscitation situations. Prerequisites: Current validation in Basic Life Support (BLS) Health Care Provider/Professional Rescuer and (EMT235 and EMT236, or permission of instructor).

EMT242
Pediatric Advanced Life Support
1 Credit. 1 Period.
Didactic and psychomotor skill education and training in techniques of Pediatric Advanced Life Support. Includes endotracheal intubation, defibrillation, arrhythmia recognition, pharmacology, and intraosseous infusion. Required for American Heart Association Provider approval and validation. Prerequisites: (Current validation in Basic Life Support (BLS) Health Care Provider/Professional Rescuer or (EMT235 and EMT236)) or permission of instructor.

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.

EMT246
Trauma Management II
4 Credits. 4 Periods.
Designed to instruct advanced prehospital care personnel the critical skills necessary to manage the trauma victim and the emergency scene through the Incident Command System (ICS). Enhances advanced emergency medical technology (EMT) skills by focusing on emergency care interventions. Provides advanced exposure to victim assessment, initial treatment, resuscitative skills, invasive techniques, electrical and pharmacologic interventions, stabilization, transportation of the victim to an emergency care facility, and documentation. Prerequisites: Certified as a Basic EMT, Intermediate EMT, Paramedic, or Arizona registered prehospital nurse, or permission of instructor.

EMT258
Victimology and Crisis Management
3 Credit. 3 Period.
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. Cross-References: AIS/FSC/SWU258.

EMT265
Pediatric Education for Prehospital Providers: Advanced
1 Credit. 1.43 Period.
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 a 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.

EMT272AA
Advanced Emergency Medical Technology
12.5 Credits. 17.37 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: (MAT102 or equivalent, or a satisfactory score on the

[Estrella Mountain Community College | 2016-2017 Catalog] [211]
Course Descriptions

ASSET, or COMPASS, or Accuplacer placement exam), (ENG101 or ENG107), EMT235, and EMT236), or permission of Program Director. Comprehensive written, oral and practical evaluation on all EMT272AA prerequisite courses. Valid Arizona certification and employment as an EMT for one full calendar year or permission of Program Director. Corequisites: EMT272AB and EMT272LL.

EMT272AB
Advanced Emergency Medical Technology
12.5 Credits. 17.39 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: ([MAT102 or equivalent, or a satisfactory score on the ASSET, or COMPASS, or Accuplacer placement exam], (ENG101 or ENG107), EMT235, and EMT236), or permission of Program Director. Comprehensive written, oral and practical evaluation on all EMT272AB prerequisite courses. Valid Arizona certification and employment as an EMT for one full calendar year or permission of Program Director. Corequisites: EMT272AA and EMT272LL.

EMT272LL
Advanced Emergency Medical Technology Practicum
7.5 Credits. 37.5 Periods.
Clinical and vehicular practicum in support of EMT272AA and EMT272AB. Prerequisites or Corequisites: EMT272AA and EMT272AB.

Engineering Science

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: Two years of high school algebra or MAT122 or departmental approval. Corequisites: MAT151 or MAT182 or MAT187.

ECE102AA
SUN# ECE1102
Engineering Analysis Tools and Techniques
LEC 2 Credits. 2 Periods.
LAB 0 Credits. 2 Periods.
Learning culture of engineering, engineering use of computer tools, and computer modeling as applied to engineering analysis and design. Prerequisites: Two years of high school algebra or MAT122 or departmental approval. Corequisites: MAT151 or MAT182 or MAT187.

ECE103
SUN# EGR1102
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 process-based improvements to the design process. Introduction to engineering as a profession. Prerequisites: (ECE102 or ECE102AA) and (high school physics, or PHY111, or PHY111AA).

ECE103AB
SUN# ECE1102
Engineering Problem Solving and Design
LEC 2 Credits. 2 Periods.
LAB 0 Credits. 2 Periods.
Fundamentals of the design process: engineering modeling, communication and problem-solving skills in a team environment. Emphasis on process-based improvements to the design process. Introduction to engineering as a profession. Prerequisites: (ECE102 or ECE102AA) and (high school physics, or PHY111, or PHY111AA).

ECE111
Bioengineering Systems
LEC 3 Credits. 3 Periods.
LAB 0 Credits. 2 Periods.
Introduction to biological concepts and application of engineering to biological and earth systems. Analysis of materials, structures, fluid mechanics, bioelectricity, and dynamics as applied to biological and environmental systems. Prerequisites: None.

ECE202
Introduction to Engineering Dynamics
LEC 2 Credits. 2 Periods.
LAB 0 Credits. 1 Period.
Introduction to engineering dynamics, including kinematics and kinetics of particles, mass moments of inertia, introduction to kinematics and kinetics of rigid bodies, introduction to energy and momentum principles for rigid bodies. Prerequisites: ECE201. Corequisites: MAT240 or MAT241.

ECE211
Engineering Mechanics-Statics
LEC 3 Credits. 3 Periods.
LAB 0 Credits. 2 Periods.
Mathematical treatment of the basic physical principles of statics. Methods of vector algebra and vector calculus. Prerequisites: ECE103, (MAT230 or MAT231), and (PHY115 or PHY121).Corequisites: MAT241.

ECE214
Engineering Mechanics
LEC 4 Credits. 4 Periods.
LAB 0 Credits. 2 Periods.
Foundations of engineering mechanics, including force systems, resultants, equilibrium of particles and rigid bodies, centroids and centers of mass, area and mass moments of inertia, friction, internal forces in structures, kinematics and kinetics of particles, kinematics and kinetics of rigid bodies, energy and momentum principles. Prerequisites: (ECE103 or ECE103AB), (MAT230 or MAT231), and (PHY115 or PHY121).Corequisites: MAT240 or MAT241.

ECE215
Mechanics of Materials
3 Credits. 5 Periods.
Designed to provide students with a strong fundamental foundation in the mechanics of solids. Includes the concepts of stress and strain applied to the analysis and design of members subjected to axial and torsional loads and members subjected to shear and...
Course Descriptions

bending, applications and transformation of plane stress and plane strain, deformation of beams, and elastic buckling of columns. Prerequisites: ECE214 or (ECE211 and ECE212) and MAT262.

ECE216
Computer-Aided Engineering
2 Credits.  2 Periods.
Introduction to engineering graphics, including tolerancing and fasteners, as well as creation and use of engineering drawings. Prerequisites or Corequisites: ECE214 or (ECE211 and ECE212). Corequisites: ECE216LL.

ECE216LL
Computer-Aided Engineering Laboratory
1 Credit.  2 Periods.
Laboratory experience in support of ECE216. Prerequisites or Corequisites: ECE214 or (ECE211 and ECE212). Corequisites: ECE216.

ECE294
Special Topics in Engineering
3 Credit. 3 Periods.
Exploration and investigation of a focused topic in engineering. Prerequisites: Permission of Instructor, or Department or Division Chair.

ECE198AB
Special Projects
2 Credit. 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.

ENG081
Preparatory Academic Writing II
3 Credits.  3 Periods.
Emphasizes preparation for college-level composition and related reading tasks with a focus on critical writing, reading, and thinking skills and processes. Prerequisites: Appropriate writing placement test score, or a grade of C or better in ENG071 or ESL077, or permission of Department or Division.

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.

ENG101
First-Year Composition
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 test score, or a grade of C or better in ENG091 or ESL097.

ENG108
First Year Composition for ESL
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: Grade of C or better in ENG107.

ENG111
Technical Writing
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.

ENG112
Creative Writing
3 Credits.  3 Periods.
Skills and techniques used in the production of marketable materials for contemporary publications that buy prose/fiction, poetry, and expository articles. May be repeated for a total of six (6) credit hours with departmental approval. Prerequisites: ENG102 with a grade of “C”, or better, or permission of department.

ENG113
Introduction to the Study of Language
3 Credits.  3 Periods.
Study of language as code; phonetics, phonology, morphology, syntax, semantics; language acquisition; historical and sociolinguistics. Prerequisites: ENG102, or ENG111 with a grade of “C”, or better, or permission of instructor.
Course Descriptions

ENG217
Personal and Exploratory Writing
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: ENG101 or ENG107 or equivalent.

ENG235
Magazine Article Writing
3 Credits. 3 Periods.
Basics skills and techniques used by professional writers for publication in magazines. Includes analyzing markets, identifying article slant, writing query letters, research techniques, editing, and submission procedures. Emphasis on nonfiction. Prerequisites: None.

ENG260
Film Analysis
3 Credits. 3 Periods.
Understanding and enjoyment of film and its correlation to literature, art, music, and other disciplines. Prerequisites: ENG101 or ENG107 or equivalent.

ESL001
Basic English as a Second Language I
6 Credits. 6 Periods.
Listening, speaking, reading, and writing in English at a basic level. Focus on survival skills related to life in the United States. Introduction to elementary grammatical patterns. Prerequisites: None.

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. Credit (P) or no credit (Z). Standard grading available according to procedures outlined in catalog. May be repeated for a maximum of six (6) credits. Prerequisites: Appropriate ESL placement test score.

ESL011
ESL I - Listening & 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. May be repeated for a maximum of six (6) credits. Prerequisites: Appropriate ESL placement test score or ESL002.

ESL02
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. Prerequisites: Appropriate ESL placement test score or permission of Instructor.

ESL016
Reading English as a Second Language I
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. Cross-Reference: RDG016

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. Prerequisites: Appropriate ESL placement test score or permission of Instructor.

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. Credit (P) or no credit (Z). Standard grading available according to procedures outlined in catalog. May be repeated for a maximum of six (6) credits. Prerequisites: Appropriate ESL placement test score or a grade of “P” or “C” or better in ESL010, or (ESL010AA, ESL010AB, and ESL010AC).

ESL021
ESL II - Listening & Speaking
3 Credits. 3 Periods.
Emphasis on listening and speaking skills involving social exchange. Asking and answering questions, using tag questions. Polite questions and responses. May be repeated for a maximum of six (6) credits. Prerequisites: Appropriate ESL placement test score or ESL010 or ESL011 or ESL012 or RDG010.

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 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.

ESL026
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. Cross-Reference: RDG026

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. Credit (P) or no credit (Z). Standard grading available according to procedures outlined in catalog. May be repeated for a maximum of six (6) credits. Prerequisites: Appropriate ESL placement test score or a grade of “P” or “C” or better in ESL020 or (ESL020AA, ESL020AB and ESL020AC).
Course Descriptions

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. May be repeated for a maximum of six credits. Prerequisites: Appropriate ESL placement test score or ESL020 or ESL021 or ESL022 or RDG020.

ESL032
ESL III-Writing with Oral Practice
3 Credits. 3 Periods.
Emphasis on complex sentence patterns in writing and speaking. 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.

ESL036
Reading English as a Second Language II
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.

ESL040
English as a Second Language IV:
Grammar
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 practice. Credit (P) or no credit (Z). Standard grading available according to procedures outlined in catalog. May be repeated for a maximum of six (6) credits. Prerequisites: Appropriate ESL placement test score, or a grade of “P” or “C” or better in ESL030, or (ESL030AA, ESL030AB, and ESL030AC).

ESL041
English as a Second Language IV:
Listening and Speaking
3 Credits. 3 Periods.
Emphasis on academic skills. Listening to lectures, notetaking, peer interaction, accessing and using media resources, formal oral presentations. May be repeated for a maximum of six (6) credits. Prerequisites: Appropriate ESL placement test score or ESL030 or ESL031 or ESL032 or RDG030.

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.

ESL046
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.

ESL049
General Vocational English as a
Second Language
3 Credits. 3 Periods.
General English speaking, listening, reading, and writing skills needed for use at work. Prerequisites: Appropriate ESL placement test score or a grade of “C” or better in ESL010 or (ESL010AA ESL010AB and ESL010AC) or permission of Instructor.

ESL050
Review Grammar For ESL
3 Credits. 3 Periods.
Review of grammatical concepts for ESL (English as a Second Language) students who have some previous experience in reading and writing English. Appropriate for students who want to practice sentence skills in English. May be repeated for a total of six (6) credits. Prerequisites: Appropriate ESL course placement score, or a grade of “C” or better in ESL040, or permission of instructor.

ESL051
Pronunciation Improvement for
ESL Speakers
3 Credits. 3 Periods.
Individualized pronunciation practice and drills for English as a second language (ESL) speakers. May be repeated for a maximum of six (6) credits. Prerequisites: Appropriate ESL course placement score, or a grade of “C” or better in ESL020 or ESL021 or ESL022 or RDG020, or permission of instructor.

ESL061
Informal Conversational and
Written English for Non-native
Speakers
3 Credits. 3 Periods.
Practice speaking and writing English in informal settings. Emphasis on friendly conversational techniques and effective use of the computer and the Internet to communicate in a friendly, relaxed manner. Prerequisites: Appropriate ESL placement test score, or completion of ESL020 or ESL021 or ESL022 or RDG020 with a grade of “P” or “C” or better.

ENH110
Introduction to Literature
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.

ENH112
Chicano Literature
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.
Course Descriptions

ENH114
African-American Literature
3 Credits. 3 Periods.
Survey of major African-American writers from Colonial period through the present; analysis of trends and movements within African-American literary history; analysis of literary types and selected works. Prerequisites: None.

ENH117
Rap Literature: The Oral Tradition
3 Credits. 3 Periods.
Survey of selected rap poetry looking at the oral tradition of Africa, the Caribbean, and the United States as precursors to East Coast, West Coast, Southern, North Central, and International development of the genre. Investigation of cultural environments, historical events, competitions (the “battles”), artists’ biographies, and parallel art forms as they relate to the analysis of the genre and its themes. Prerequisites: None.

ENH202
World Literature After the Renaissance
3 Credits. 3 Periods.
Includes a selection of the world’s literary masterpieces from the Renaissance to modern times. Prerequisites: None.

ENH206
Nature and Environmental Literature
3 Credits. 3 Periods.
Investigates major themes in nature and environmental writing. Explores relationship between humanity and the environment as expressed through fiction, non-fiction, and poetry. Examines how literature drives attitudes and policies. Prerequisites: None.

ENH235
Survey of Gothic Literature
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.

ENH241
American Literature Before 1860
3 Credits. 3 Periods.
Includes literature written prior to 1860 in the United States. Prerequisites: None.

ENH242
American Literature After 1860
3 Credits. 3 Periods.
Includes literature written after 1860 in the United States. Prerequisites: None.

ENH245
J.R.R. Tolkien and C.S. Lewis: Battling Modernism
3 Credits. 3 Periods.
Focuses on the writings, language, themes, influences and vision of J.R.R. Tolkien and C.S. Lewis in contrast to the ideas and literature of the Modernist movement. Prerequisites: None.

ENH251
Mythology
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.

ENH254
Literature and Film
3 Credits. 3 Periods.
Presents works of literature and their film versions and analyzes distinguishing techniques of each medium. Prerequisites: ENG101 or ENG107 or equivalent.

ENH255
Contemporary U.S. Literature and Film
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: ENG101.

ENH256
Shakespeare on Film
3 Credits. 3 Periods.
Presents cinematic versions of Shakespeare’s plays and explains and analyzes how the dramatist’s major tragedies, comedies, histories and romances have been presented on film. Prerequisites: None.

ENH259
American Indian Literature
3 Credits. 3 Periods.
Contemporary American Indian forms of literary expression. Selected oral traditions of American Indians. Trends and movements within American Indian literary history. Prerequisites: None.

ENH260
Literature of the Southwest
3 Credits. 3 Periods.
Investigates major themes in Southwestern American literature including the Western myth, minority roles in the region’s literature, control of nature versus primacy of nature, and growth. Both prose and poetry are examined with an emphasis on contemporary Southwestern writing. Prerequisites: None.

ENH284
19th Century Women Writers
3 Credits. 3 Periods.
Investigates major themes in literature by women writing in the 19th century including the nature of women’s lives in the family, in work situations, and in society. Poetry, prose, essays and drama are examined with an emphasis on common themes. Prerequisites: None. Cross-reference: WST284

ENH285
Contemporary Women Writers
3 Credits. 3 Periods.
Explores twentieth century literature (short stories, essays, plays, and poetry) written by women and about women. Focus on themes relevant to women’s lives regardless of age, creed, or ethnic background. Prerequisites: None. Cross-reference: WST285

ENH291
Children’s Literature
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. Cross-reference: EDU291

ENH292
Literature for Adolescents
3 Credits. 3 Periods.
Reviews selected literature written for adolescents. Develops and applies literary criteria for the evaluation of adolescent literature. Prerequisites: None.
ENH294
Multicultural Folktales
3 Credits.  3 Periods.
Study of multicultural folktales, exploring the impact of the oral tradition in American society and showing classroom applications. Prerequisites: None.  Cross-References: EDU294, STO294.

ENH295
Banned Books and Censorship
3 Credits.  3 Periods.

Entrepreneurial Studies

EPS150
Introduction to Entrepreneurship
2 Credits.  2 Periods.
Fundamentals of starting or buying a new business. The nature of the entrepreneurial process and the skills required to be successful, including planning, financing, starting and managing the business. Prerequisites: None.

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.

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.

Exercise Science

EXS101
Introduction to Exercise Science
3 Credits.  3 Periods.
Introductory course that will provide the student with a general overview of the disciplines, professions, and research areas associated with the fields of Exercise Science. Basic history, philosophy, theory, educational pathways and career options will be examined. Prerequisites: None.

EXS112
Professional Applications of Fitness Principles
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.

EXS125
Intro to Exercise Physiology
3 Credits.  3 Periods.
Principles of exercise science applied to teaching fitness/aerobics. Major factors related to the function of the human body. Emphasis on anatomy/physiology, exercise physiology, and biomechanics. Prerequisites: None. BIO160 recommended but not required.

EXS130
Strength Fitness-Physiological Principles and Training Techniques
3 Credits.  4.5 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 stress injury prevention. Prerequisites: None.

EXS138
Starting Your Own Personal Training Business
1 Credit.  1 Period.
Overview of the personal training business in the fitness industry. Skills for becoming a successful and effective personal training business owner. Prerequisites: None.

EXS145
Guidelines for Exercise Testing and Prescription
3 Credits  3 Periods.
Follows the current ACSM guidelines for health appraisal, risk assessment, safety of exercise, exercise testing, and exercise prescription. Prerequisites: None.

EXS190
Small Group Personal Training in a Studio Setting
2 Credits.  2 Periods.
Planning and teaching of group exercise and fitness classes in a studio setting. Leadership techniques for effective cueing, appropriate use of music, safety concerns, warm up, cool down and various formats for current popular classes. Prerequisites: EXS125 and EXS130, or accredited national fitness certification, or permission of Instructor.

EXS192
Small Group Personal Training in a Gym
2 Credits.  2 Periods.
Planning and leading small groups in various formats in a gym or health club setting. Development and implementation of safe and effective use of various types of popular equipment in a small group workout. Prerequisites: EXS125 and EXS130, or accredited national fitness certification, or permission of Instructor.

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. Prerequisites: EXS220, or HES154 within the past two years, or current CPR certification, or permission of Department or Division. Course Notes: CPR certification must be current through the duration of the internship. EXS239 may be repeated for a maximum of six (6) credits.
Course Descriptions

certification, or permission of Department or Division. Course Notes: CPR certification must be current through the duration of the internship. EXS239AA may be repeated for a maximum of six (6) credits.

EXS239AB
Practical Applications of Personal Training Skills and Techniques Internship
2 Credits. 3.6 Periods.
Work experience in a fitness or health related facility. Eighty (80) hours of designated work per credit. Prerequisites: EXS220, or HES154 within the past two years, or current CPR certification, or permission of Department or Division. Course Notes: CPR certification must be current through the duration of the internship. EXS239AB may be repeated for a maximum of six (6) credits.

Facilities Management

FAC101
Refrigeration Components and Applications I
2 Credits. 2 Periods.

FAC101LL
Refrigeration Applications and Components I Lab
1 Credits. 3 Periods.
Servicing refrigeration units. Includes soldering tubing, installing/removing manifold gauge set, evacuating and charging the system. Emphasis on safety. Prerequisites: None. Corequisites: FAC/HVA101 or permission of instructor. Cross-References: HVA101LL

FAC105
Electricity for Industry
3 Credits. 3 Periods.

FAC105LL
Electricity for Industry Lab
1 Credits. 3 Periods.
Diagramming and assembling series circuits, parallel circuits and wiring relays, thermostats, switches and lights. Electrical readings on compressors. Emphasis on safety. Prerequisites: None. Corequisites: ELC/FAC/HVA105 or permission of instructor. Cross-References: HVA105LL, HVA105

FAC106
Industrial Safety
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, fire safety, first response to fire and medical emergencies, safety signs and color codes, recognition of safety and health hazards accident prevention, and management’s responsibilities. Prerequisites: None. Cross-References: GTC106, MIT106, OSH106

FAC115
Motors, Controls and Wiring Diagrams
3 Credits. 3 Periods.

FAC115LL
Motors, Controls and Wiring Diagrams Lab
1 Credits. 3 Periods.
Drawing wiring diagrams, wiring systems and checking electrical circuits. Troubleshooting electrical problems of three-phase motors and controls. Safety stressed. Prerequisites: ELC/FAC/HVA105, or permission of department, or ELC/FAC/HVA105LL, or permission of department. Corequisites: ELC/FAC/HVA115 or permission of department. Cross-References: ELC115LL, HVA115LL

FAC210
Facilities Air Conditioning Systems
3 Credits. 3 Periods.
Fundamental principles of air conditioning including all-air, all-water (hydronic) and air-water combination systems. Overview of the physical principles, including air distribution systems and heating and cooling load calculation. System components and application theory for boilers, chillers, pumps, fans, and cooling towers. Theory and application of central air conditioning systems, air cleaning and humidification devices, pressure boosting, heat storage, expansion and pressurization equipment. Properties of water, pressure distribution in hydronic systems, flow in pipes, pressure drop/head loss, pump applications and pressurization of open and closed hydronic systems. Fundamentals of low and high temperature water systems. Prerequisites: (FAC/HVA101, HVA112 and ELC/FAC/HVA115) or permission of department. Corequisites: FAC/HVA210LL or permission of department. Cross-References: HVA210

FAC210LL
Facilities Air Conditioning Systems Lab
1 Credits. 3 Periods.
Routine procedures on operational central forced-air conditioning systems and hydronic pumping systems. Components and function of large chillers, cooling towers, hot water boilers, associated piping, pumps and constant volume and variable air volume (VAV) air handlers. Perform pump sizing calculations and measurements. Perform measurements and calculations of pressure and air velocity in ducts. Apply the principles of psychrometrics to central air handling systems. Evaluation of the energy balance of components and systems. Personal and equipment safety. Prerequisites: (FAC/HVA101, HVA112 and ELC/FAC/HVA115), or permission of department. Corequisites: FAC/HVA210 or permission of department. Cross-References: HVA210LL.
Course Descriptions

Fire Science Technology

FSC102
Fire Department Operations
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: (EMT/FSC104, FSC105 and FSC130) and permission of Instructor. Corequisites: FSC134.

FSC104
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, Sudden Infant Death Syndrome (SIDS), patient-assisted medication administration, automated external defibrillators (AEDs), and blood-glucose monitoring. Includes participation in an eight-hour rotation consisting of patient assessment through clinical, vehicular, and or scenario-based education at a local emergency department outside normal class hours. Requires personal pocket mask, stethoscope, pen light, and trauma scissors. Prerequisites: Must be at least 18 years of age prior to applying to the BLS (Basic Life Support) Training Program per Arizona Revised Statutes, and must have a current validation in Basic Life Support (BLS) Health Care Provider/Professional Rescuer. Minimum tenth grade level reading proficiency on the Nelson-Denny Examination or appropriate Reading course placement score. Proof of: TB testing or chest x-ray with a negative result within 6 months prior to registration; Immunity to rubella (German measles) and rubeola. Cross-References: EMT104

FSC105
Hazardous Materials/First Responder
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.

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.

FSC108
Fundamentals of Fire Prevention
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.

FSC111
Emergency Vehicle Driver Operator
2 Credits. 2 Periods.
Emergency vehicle operators training including the problems facing operators; the personal qualities of emergency vehicle operator candidates; legal responsibilities of operators; and physical forces involved in driving an emergency vehicle. Includes hands-on training in an emergency response vehicle. Prerequisites: None.

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.

FSC117
Fire Apparatus
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.

FSC118
Fire Hydraulics
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 pumper operators. Prerequisites: None.

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.

FSC130
Fitness for Firefighters/CPAT
1 Credit. 1.5 Period.
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.

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.

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. Cross-Reference: AJS139, DPR139
Course Descriptions

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. Cross-References: AJS146

FSC147
Emergency Preparedness
3 Credits.  3 Periods.
Emergency preparedness related to natural and manmade disasters. Planning concepts and the planning process; awareness and education programs and strategies for the general community as well as business and industries. Prerequisites: None. Cross-References: AJS147

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. Cross-References: AJS148, DPR148

FSC149
Hazard Mitigation
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 manmade hazards. Prerequisites: None. Cross-References: AJS149, DPR149

FSC200
Fire Service Instructor-Level I
3 Credits.  3 Periods.
Designed to prepare students for Level I Training Officer as defined by the National Fire Protection Association (NFPA) 1041 standards. Includes methods of delivering instructional materials, preparation of lesson plans, instructional aids and evaluation instruments; techniques and strategies for organizing the learning environment and management of recordkeeping are also included. Prerequisites: None.

FSC202
Supervisory Training for Firefighters
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.

FSC204
Firefighting Tactics and Strategy
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: FSC113, or permission of instructor, or equivalent

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: FSC204.

FSC208
Firefighter Safety and Building Construction
3 Credits.  3 Periods.
Actions necessary to provide for the safety of firefighters operating on the fireground. Effects that fire and heat may have on various types of building construction resulting in the loss of structural integrity. Includes signs and symptoms of structural damage. Prerequisites: FSC113, or permission of instructor, or equivalent

FSC209

FSC210
Fire Investigation I
3 Credits.  3 Periods.
Methods of determining point of fire origin, path of fire travel, and fire cause. Includes recognizing and preserving evidence; interviewing witnesses; arson laws and types of arson fires; and court testimony, reports, and records. Prerequisites: None.

FSC211
Fire Investigation II
3 Credits.  3 Periods.
Focus on practical skills for fire investigators. Emphasis on hands-on application with practice examining and recording the fire/arson scene. Includes class room and field exercises on each section. Prerequisites: FSC209 or permission of Instructor.

FSC212
Fire Investigation III
3 Credits.  3 Periods.
Focus on case building for fire investigators. Emphasis on hands-on application, practice examining and recording the fire/arson scene. Includes field exercises with arson task force to investigate a crime scene. Prerequisites: FSC210 or permission of Instructor.

FSC214
Human Resource Management in Fire Service
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: FSC202 or four years in the fire service.
Course Descriptions

FSC215
Customer Service in the Public Sector
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.

FSC224
Incident Command Systems
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.

FSC258
Victimology and Crisis Management
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. Cross-References: ASJ/EMT/SWU258.

FSC282AC
Service-Learning Experience in Fire Science
3 Credits. 3 Periods.
Unpaid Service-Learning (SL) experience, completed with approved community partner. Prerequisites: Permission of Instructor.

FON100
Introductory Nutrition
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.

FON104
Certification in Food Service Safety and Sanitation
1 Credit 1 Period.
Preparation for and certification in a national food sanitation and safety program. Emphasis on food from purchasing, receiving, and storing to preparation, holding, and serving. Focuses on safe and sanitary food service facilities and equipment, employee habits and personal hygiene, and role of management in safety and sanitation. Includes time-temperature principles, foodborne illnesses, pest control, accident prevention, standards for cleaning and sanitizing, and regional regulations and standards. Prerequisites: None.

FON144
Gourmet Foods
3 Credits 4 Periods.
The art and appreciation of gourmet foods, accompanied by preparation and appropriate services. Prerequisites: None. Cross-References: HRM144.

FON144LL
Principles of Human Nutrition Laboratory
1 Credit 3 Periods.
Managing and understanding the nutrition needs of special populations. These populations include people who are diagnosed with heart disease, diabetes, women who are pregnant, children who are suffering from obesity, and senior adults. Prerequisites: FON100 or permission of instructor.

FON241
Principles of Human Nutrition
3 Credits. 3 Periods.
Scientific principles of human nutrition. Emphasis on health promotion and concepts for conveying accurate nutrition information in a professional setting. Addresses therapeutic nutrition principles for treatment of common health conditions. Includes exploration of food sources of nutrients, basic metabolism of nutrients in the human body, relationship between diet and other lifestyle factors, use of supplements, current recommendations for food selection throughout the life cycle, and use of nutrition tools for planning food intake or assessment of nutritional status. Prerequisites: None.

FON247
Weight Management Theory
3 Credits. 3 Periods.
Comprehensive study of genetic, physiological, psychological, metabolic, and environmental influences on body weight. In-depth study of the theories of body weight with emphasis on distinguishing between behavioral and biological approaches. Focus on discovering successful healthful long-term weight management strategies. Prerequisites: FON100 or FON241 or permission of instructor.

General Business

GBS103
Principles of Banking
3 Credits. 3 Periods.
History, characteristics and significance of American banking system, includes types of accounts, banking services and the relationship of commercial banks to their depositors. Prerequisites: None.

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.
Course Descriptions

GBS141 Principles of Quality Service 3 Credits. 3 Periods.
Quality service principles in credit/service industries emphasizing total quality and continuous improvement as a model for change. Identifying/understanding customer requirements, mapping a work process, measuring the amount of change in a process' performance and solving work process problems. Collecting data and data analysis. Prerequisites: None.

GBS131 Business Calculations 3 Credits. 3 Periods.
Review of basic arithmetic and application of mathematics to business problems, includes percentage, interest, discount, and markups. Prerequisites: None.

GBS132 Personal and Family Financial Security 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. Cross-Reference: HEC132.

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.

GBS161 Mathematics of Business 3 Credits. 3 Periods.
Applications of basic financial mathematics; includes interest, financial statement, stocks and bonds, and international business. Prerequisites: GBS131, or MAT102, or permission of department/division.

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.

GBS206 Business Law (UCC) 3 Credits. 3 Periods.
Legal and ethical aspects of contracts, sales, commercial paper, secured transactions, documents of title, letter of credit, bank deposits, and collections. Prerequisites: None.

GBS207 Business Law (General Corporate) 3 Credits. 3 Periods.
Legal and ethical aspects of agency, partnerships, corporations, bankruptcy, antitrust, securities, and other regulations of business. Prerequisites: None.

GBS220 Quantitative Methods in Business 3 Credits. 3 Periods.
Business applications of quantitative optimization methods in operations management decisions. Prerequisites: (Grade of "C" or better in MAT150, or MAT151, or MAT152) or equivalent, or satisfactory score on district placement exam.

GBS221 Business Statistics 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: Grade of C or better in GBS220 or MAT217.

GBS233 Business Communication 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/division.

GBS261 Investments I 3 Credits. 3 Periods.
Evaluation of various investment forms including study of inflation, taxation, government securities, stocks and bonds, real estate and retirement plans. Prerequisites: None.

GBS270AC Business Internship 3 Credits. 3 Periods.
General business work experience in a business or industry. Eighty hours of designated work per credit. Prerequisites: Permission of Department.

GBS294 Consumer Credit 3 Credits. 3 Periods.
Consumer lending by financial institutions. Prerequisites: None.

GBS298AA 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.

GBS298AB Special Projects 2 Credit. 2 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.

General Technology

GTC106 Industrial Safety 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, and management's responsibilities. Prerequisites: None. Cross-References: FAC106, MIT106, OSH106.
GTC107
Technical Mathematics I
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.

GTC108
Technical Mathematics II
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: GTC107 or permission of Instructor.

GTC206
CNC Programming
3 Credits. 4 Periods.
CNC Programming of Word Address Language (G&M Code) for computer numerical control (CNC) Machine tools. 2, 3 and 4-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: MET231 or machine shop experience or permission of Program Director. Cross-References: MET206

GTC216
Properties of Materials
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.

GTC236
CAD/CAM Computer Numerical Control (CNC) Programming
3 Credits. 6 Periods.
Programming of Computer Numerical Control (CNC) machine tools such as CNC Milling Machines, and Turning Centers. Utilize Computer Aided Drafting and Computer Aided Manufacturing (CAD/CAM) for design and generation of part geometry. Verification of tool path using CAM graphics. Generate program media using a CAM post processor. Prerequisites: None.

GCU121
World Geography I: Eastern Hemisphere
3 Credits. 3 Periods.
Description and analysis of areal variations in social, economic, and political phenomena in major world regions. Emphasis on Europe, Russia, North Africa, and the Asian world. Prerequisites: None.

GCU122
World Geography II: Western Hemisphere
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.

GLG101
Intro to Geology I: Physical Lecture
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.

GLG103
Introduction to Geology I: Physical Lab
1 Credit. 3 Periods.
May accompany GLG101. Study of common rock-forming minerals, rocks, and maps. Prerequisites: None.

GLG110
Geological Disasters and the Environment
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.

GLG111
Geological Disasters and the Environment Lab
1 Credit. 3 Periods.
May accompany GLG110. Basic geological processes and concepts. Emphasis on geology-related environmental problems concerning Arizona. Case histories and field studies. May require field trips. Prerequisites: None.

GER102
SUN# GER1102
Elementary German II
4 Credits. 4 Periods.
Continued study of grammar and vocabulary of the German language. Emphasis on German culture, practice of listening, speaking, reading and writing skills. Prerequisites: GER101 or equivalent.

HCR210
Clinical Health Care Ethics
3 Credits. 2 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: ENG102.
considered. Prerequisites: BIO202 or BIO205, or permission of Instructor.

**Health Core Curriculum**

**HCC109**  
**CPR for Health Care Provider**  
.5 Credit.  .5 Period.  
Current American Heart Association standards for one and two rescuer cardiopulmonary resuscitation (CPR) and obstructed airway procedures on the adult, infant, and pediatric victim. Use of automatic, external defibrillation and resuscitation equipment. Prerequisites: None.  Cross-References: EMT109, RES109

**HCC130AA**  
**Health Care Today**  
.5 Credit.  .5 Period.  
Overview of current health care professions including career and labor market information. Health care delivery systems, third-party payers, and facility ownership. Health organization structure, patient rights and quality care. Prerequisites: None.

**HCC130AB**  
**Workplace Behavior in Health Care**  
.5 Credit.  .5 Period.  
Health care and life values. Definition and importance of values, ethics, and essential behaviors in the workplace. Worker rights and responsibilities. Prerequisites: None.

**HCC130AC**  
**Personal Wellness and Safety**  
.5 Credit.  .5 Period.  
Introduces healthful living practices to include nutrition, stress management and exercise. Includes Occupational Safety and Health Administration (OSHA) standard precautions and facility safety. Use of principles of body mechanics in daily living activities. Prerequisites: None.

**HCC130AD**  
**Communication and Teamwork in the Health Care Organizations**  
.5 Credit.  .5 Period.  
Emphasis on basic communication skills which facilitate team work in the health care setting. Focus on development of personal communication skills and an understanding of how effective communication skills promote team work. Focus on intercultural communication strategies. Prerequisites: None.

**HCC130AE**  
**Legal Issues in Health Care**  
.5 Credit.  .5 Period.  
Basic legal terminology used in the health care setting. Legal concepts related to health care employment, medical documentation, and communication. Introduction to regulatory requirements in health care. Prerequisites: None.

**HCC130AF**  
**Decision Making in the Health Care Setting**  
.5 Credit.  .5 Period.  
Principles and application of the decision making model. Description and application of ethics and process improvement and the relationship of both to the decision making model. Prerequisites: None.

**HCC130AE**  
**Legal Issues in Health Care**  
.5 Credit.  .5 Period.  
Basic legal terminology used in the health care setting. Legal concepts related to health care employment, medical documentation, and communication. Introduction to regulatory requirements in health care. Prerequisites: None.

**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.

**HES271**  
**Prevention and Treatment of Athletic Injuries**  
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.

**HVA101**  
**Refrigeration Components and Applications I**  
See description under cross-reference course FAC101

**HVA101LL**  
**Refrigeration Applications and Components I Lab**  
See description under cross-reference course FAC101LL

**HVA105**  
**Electricity for Industry**  
See description under cross-reference course FAC105

**HVA105LL**  
**Electricity for Industry Lab**  
See description under cross-reference course FAC105LL

**HVA115**  
**Motors, Controls and Wiring Diagrams**  
See description under cross-reference course FAC115
HVA115LL
Motors, Controls and Wiring
Diagrams Lab
See description under cross-reference course FAC115LL

HVA210
Facilities Air Conditioning Systems
See description under cross-reference course FAC210

HVA210LL
Facilities Air Conditioning Systems Lab
See description under cross-reference course FAC210LL

HEO117
Forklift Operations
See description under cross-reference course PPT117

History

HIS100
History of Western Civilization to the Middle Ages
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
Middle Ages to 1789
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.

HIS102
History of Western Civilization
1789 to Present
3 Credits. 3 Periods.
Survey of origin and development of Western civilization and its institutions from French Revolution through the present. Prerequisites: None.

HIS103
U.S. History to 1865
See description under cross-reference course SUN#1131
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.

HIS104
U.S. History 1865 to Present
See description under cross-reference course SUN#1132
3 Credits. 3 Periods.
The political, economic, and social development of United States from 1865 to the present time. Prerequisites: None.

HIS106
Southwest History
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.

HIS108
United States History 1945 to the Present
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.

HIS109
Mexican-American History and Culture
3 Credits. 3 Periods.
Examination of origins and development of Spanish-American and Mexican-American peoples and their contribution to culture, history and development of United States. Emphasis on Mexican-American War and its impact on educational, social, and economic conditions of the Mexican-Americans of the southwest. Prerequisites: None.

HIS110
World History to 1500
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.

HIS111
World History 1500 to the Present
3 Credits. 3 Periods.
Survey of the economic, social, cultural, and political elements of world history from 1500 to the present. Prerequisites: None.

HIS145
History of Mexico
3 Credits. 3 Periods.
Survey of the political, economic, and social forces which have shaped the development of Mexico from Pre-columbian times to the present. Prerequisites: None.

HIS173
United States Military History
3 Credits. 3 Periods.
Focuses on the impact of the United States military in both peace and war on American society, politics and foreign relations from the colonial period to the present. Prerequisites: None.

HIS201
History of Women in America
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.

HIS203
African-American History I
3 Credits. 3 Periods.
History and cultural heritage of African-Americans from their beginnings in Ancient Africa through the experience of chattel slavery in the Americas to their eventual emancipation and participation in the American Civil War. Prerequisites: None.

HIS204
African-American History 1865 to Present
3 Credits. 3 Periods.
Multifaceted experiences of African-American people from the post-Civil War period (1865) to the present, including the collective struggle for freedom, equality, and self-determination in the United States. Prerequisites: HIS203.

HIS209
The Chicano in Twentieth Century America
3 Credits. 3 Periods.
Analysis of the twentieth century Chicano experience. Historical perspective of the...
emergence of Chicanos as an influential minority in the United States. Prerequisites: None.

HIS273
US Experience in Vietnam
1945 - 1975
3 Credits. 3 Periods.
Survey of the US experience in Vietnam, 1945-1975, in view of political, economic, and social forces of the Cold War. Prerequisites: None.

HIS277
The Modern Middle East
3 Credits. 3 Periods.
Survey of the political, religious and economic development of the Middle East since 1500. Emphasis on the decline of the Moslem empire(s), the resurgence of contemporary Pan-Arabism, the Palestinian-Israeli question, jihadism, fundamentalist terrorism, the Taliban and Al Qaeda, and the impact of oil production on the region and the rest of the world. Prerequisites: None.

HRM102
Menu Planning Development
See description under cross-reference course CUL102

HRM110
Introduction to Hospitality and Tourism Management
3 Credits. 3 Periods.
A fundamental overview of the hotel, restaurant, and tourism segments of the hospitality and tourism industry. Provides an overview of the operational sectors of the industry and reviews management components and skills. Contains components to develop communication skills and a professional career plan. Prerequisites: None.

HRM126
Food Service Cost Systems
2 Credits. 2 Periods.
Basic skills necessary to understand and utilize cost controls. Overview of systems for purchasing, storage, production control, and budgeting. Mechanical and mathematical details emphasized. Accounting process taught with aid of microcomputer. Introduction to standardized accounting software. Prerequisites: None.

HRM130
Guest Services Management
3 Credits. 3 Periods.
Examines organization and management of the hotel front office and guest service operations. Explores key front office functions and related systems and skills necessary to ensure guest satisfaction and efficient operations. Prerequisites: None.

HRM140
Food Production Concepts
3 Credits. 3 Periods.
Concepts related to preparation of hot foods, pantry, and bakery items for commercial kitchens. Emphasis on essential components and techniques of food production, food cost control, setting standards, ordering, and inventory. Prerequisites: None.

HRM244
Quality Sanitation Management
3 Credits. 3 Periods.
Systems approach to answering public health concerns, reducing sanitation risks, and ensuring satisfaction for guests, staff members, and owners. Definition and implementation of sanitation quality, cost control, and risk reduction in a hospitality operation. Prerequisites: None.

HRM260
Hospitality Human Resource Management
3 Credits. 3 Periods.
Examines concepts and applications of human resource management in the hospitality industry. Topics include recruitment, selection, training and evaluation. Emphasis on current management methods and productivity in the service environment. Prerequisites: HRM110 or approval of instructor.

HRM270
Hospitality Marketing
3 Credits. 3 Periods.
Essential skills of defining a service market, developing a market plan, and directing personnel to follow market plan. Emphasis on marketing in the hospitality industry and understanding segmentation, positioning and promotion in that market. Prerequisite: HRM110.

HRM275
Restaurant Management
3 Credits. 3 Periods.
Overview of restaurant industry with focus on the major segments. Emphasis on developing plans for: marketing, accounting system, staffing, training, menu development and cost controls for restaurant operation. Special emphasis on safety and sanitation, and legal regulations in the restaurant industry. Prerequisites: None.

HRM280
Hospitality and Tourism Law
3 Credits. 3 Periods.
Examines legal aspects of hotel, restaurant and tourism management. Uses case study approach to develop understanding of the laws and regulations governing guest relationships, contracts, employee relations, civil rights, alcoholic beverages, safety and product liability. Prerequisites: HRM110.

HRM296WA
Cooperative Education
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 at least twelve (12) college credits, minimum 2.6 grade point average, and be able to obtain a position related to student’s academic or career goals (student’s present job may qualify); or permission of instructor. Corequisites: Must be concurrently enrolled in at least one class which is related to student’s major or career interest or with permission of the instructor.

HRM298AA
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.
### Humanities

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Periods</th>
<th>Prerequisites</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUM107</td>
<td>Humanities Through the Arts</td>
<td>3</td>
<td>3</td>
<td>None</td>
<td>Introduction to humanities including film, drama, music, literature, painting, sculpture, and architecture. Prerequisites: None.</td>
</tr>
<tr>
<td>HUM108</td>
<td>Contemporary Humanities</td>
<td>3</td>
<td>3</td>
<td>None</td>
<td>An exploration of human expression in contemporary arts and sciences. Prerequisites: None.</td>
</tr>
<tr>
<td>HUM190AA-AD</td>
<td>Honors Forum</td>
<td>1</td>
<td>1</td>
<td>None</td>
<td>Interdisciplinary studies of selected issues confronting the individual and society. Formal lectures followed by informal discussion with outstanding scholars and social leaders. Supplemented by readings and pre- and post-forum discussion and critique. Varied content from module to module due to changing forum themes and issues. Prerequisites: Admission to the College Honors Program or Permission of the Instructor.</td>
</tr>
<tr>
<td>HUM120</td>
<td>Cultural Viewpoints in the Arts</td>
<td>3</td>
<td>3</td>
<td>None</td>
<td>Introduction to the influence of culture and ethnicity on the artist, including factors such as race, religion, gender, class, sexual preference, age, and region. Lecture and discussion on various art forms, including literature, visual arts, music, dance, film, and theater. Prerequisites: None.</td>
</tr>
<tr>
<td>HUM201</td>
<td>Humanities: Universal Themes</td>
<td>3</td>
<td>3</td>
<td>None</td>
<td>Origins and creation myths, the materials world, and the spiritual world as themes in the humanities. Prerequisites: None.</td>
</tr>
<tr>
<td>HUM205</td>
<td>Introduction to Cinema</td>
<td>See cross-reference course</td>
<td>See cross-reference course</td>
<td>None</td>
<td>See description under cross-reference course THE205</td>
</tr>
<tr>
<td>HUM206</td>
<td>Introduction to Television Arts</td>
<td>See cross-reference course</td>
<td>See cross-reference course</td>
<td>None</td>
<td>See description under cross-reference course THE206</td>
</tr>
<tr>
<td>HUM209</td>
<td>Women and Films</td>
<td>3</td>
<td>3</td>
<td>None</td>
<td>Analysis of images of women in films from both historical and contemporary perspectives. Prerequisites: None. Cross-References: WST209</td>
</tr>
<tr>
<td>HUM210</td>
<td>Contemporary Cinema</td>
<td>See cross-reference course</td>
<td>See cross-reference course</td>
<td>None</td>
<td>See description under cross-reference course THE210</td>
</tr>
<tr>
<td>HUM212</td>
<td>Documentary Film</td>
<td>3</td>
<td>3</td>
<td>None</td>
<td>Survey of documentary (non-fiction) film with an emphasis on international issues. Focus on primary types of documentary film, including direct address, direct cinema, interviews, etc. Prerequisites: None.</td>
</tr>
<tr>
<td>HUM213</td>
<td>Hispanic Film</td>
<td>3</td>
<td>3</td>
<td>None</td>
<td>Analysis of Hispanic film as an art form and as social commentary. Prerequisites: None.</td>
</tr>
<tr>
<td>HUM214</td>
<td>African-Americans in Film</td>
<td>3</td>
<td>3</td>
<td>None</td>
<td>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.</td>
</tr>
<tr>
<td>HUM219</td>
<td>Women and Films</td>
<td>3</td>
<td>3</td>
<td>None</td>
<td>Analysis of images of women in films from both historical and contemporary perspectives. Prerequisites: None. Cross-References: WST209</td>
</tr>
<tr>
<td>HUM225</td>
<td>Introduction to Popular Culture</td>
<td>3</td>
<td>3</td>
<td>None</td>
<td>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: ENG101 or ENG107.</td>
</tr>
<tr>
<td>HUM250</td>
<td>Ideas and Values in the Humanities</td>
<td>3</td>
<td>3</td>
<td>None</td>
<td>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: ENG101.</td>
</tr>
<tr>
<td>HUM251</td>
<td>Ideas and Values in the Humanities</td>
<td>3</td>
<td>3</td>
<td>None</td>
<td>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: ENG101.</td>
</tr>
<tr>
<td>HUM292</td>
<td>The Art Of Storytelling</td>
<td>3</td>
<td>3</td>
<td>None</td>
<td>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. Cross-References: EDU292, STO292.</td>
</tr>
</tbody>
</table>

### Industry

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Periods</th>
<th>Prerequisites</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>IND133</td>
<td>Speaking in Business</td>
<td>3</td>
<td>3</td>
<td>None</td>
<td>Practical, effective speech techniques for everyday business interactions. Listening skills and stages of and barriers to the perception process. Examination of effective message preparation skills and communication styles and techniques. Interaction emphasizing conflict management and resolution in oral communication. Prerequisites: None.</td>
</tr>
<tr>
<td>ITS210</td>
<td>Information Security Fundamentals</td>
<td>3</td>
<td>4</td>
<td>None</td>
<td>Fundamental concepts of information technology security. Topics include authentication methods, access control, cryptography, Public Key Infrastructure (PKI), network attack and defense methods, hardening of operating systems and network devices, securing remote access and wireless technologies and securing infrastructures and topologies. Emphasis on hands-on labs in both the Windows and Linux environments. Builds on thorough understanding of Transmission Control Protocol/Internet Protocol (TCP/IP) and security concepts and Microsoft (MS) Windows and Linux Administration. Prerequisites: CIS126DA, or CIS126DL, or permission of Program Director. Prerequisites or Corequisites: Any MST150++ course.</td>
</tr>
</tbody>
</table>
Course Descriptions

**ITS240 Ethical Hacking and Network Defense**
3 Credits. 4 Periods.
Preparation for the EC-Council Certified Ethical Hacking examination. In-depth exploration of how to effectively protect computer networks from risks ranging from malicious infiltration to cyberwarfare. Includes examination of ethical hacking, relevant tools and methodologies, and its importance to network security. Resources to identify new computer network vulnerabilities and counter security strategies will be discussed as well as an overview of relevant computer crime laws and penalties. Prerequisites: ITS110, or CNT205, or CIS270, or permission of Instructor.

**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.

**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.

**INT115 Historical Architecture and Furniture**
3 Credits. 3 Periods.
Historical survey of the development of furniture, interiors, and architecture from antiquity to the 19th Century. Prerequisites: None.

**INT120 Modern Architecture and Furniture**
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.

**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.

**INT160 Fabrics for Interiors**
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.

**JRN201 News Writing**
3 Credits. 5 Periods.
Writing and producing news for the media. Associated Press editing style, writing skills, and organizational structure for news. Prerequisites: ENG101 or ENG107.

**JRN203 Writing for Online Media**
3 Credits. 3 Periods.
Writing using the modes and resources available on the Internet. Use of information and resources available on the Internet in writing, as well as writing for the Internet itself. Prerequisites: Placement into ENG101 on a District-approved writing placement test.

**JRN2034 Feature Writing**
3 Credits. 3 Periods.
Emphasis on crafting stylized human interest stories for publications. Includes research, interviewing, writing techniques, editing and professional concerns. Includes best practices for writing features for traditional and digital media. Prerequisites: ENG101, or ENG107, or permission of Instructor.

**JRN205 Writing for Online Media**
3 Credits. 5 Periods.
Writing using the modes and resources available on the Internet. Use of information and resources available on the Internet in writing, as well as writing for the Internet itself. Prerequisites: Placement into ENG101 on a District-approved writing placement test.

**International Business**

**IBS101 Introduction to International Business**
3 Credits. 3 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.

**Leadership**

**LDR101 Emerging Leaders I**
2 Credits. 2 Periods.
Concepts and application of leadership skills and service learning to promote social change and value clarification. Development of organizational leadership skills through experiential learning. Prerequisites: None.

**Management**

**MGT101 Techniques of Supervision**
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.

**Journalism**

**JRN133 Development of Small Publications**
3 Credits. 3 Periods.
Design, plan and write newsletters, brochures, and advertisements. Desktop computer production and paste-up techniques Computer experience and (BPC138AA or BPC138AB) suggested but not required. Prerequisites: None. Computer experience and (BPC138AA or BPC138AB) suggested but not required.
MGT175
Business Organization and Management
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.

MGT179
Utilizing the Human Resources Department
3 Credits. 3 Periods.
Provides the opportunity to learn how to appropriately utilize the human resources department within an organization in order to improve job performance. Topics include staffing, training and development, manpower planning, compensation and benefits, federal labor laws and why people seek outside representation. Prerequisites: None.

MGT229
Management and Leadership I
3 Credits. 3 Periods.
Covers management concepts and applications for business, industry, and government organizations. Prerequisites: None.

MGT259
Management Seminar
1 Credit. 1 Period.
Classroom portion of the management internship experience, including student development of specific job-related objectives to be accomplished at the work site. Exploration of general business and specific work-related topics in a seminar setting. Prerequisites: Permission of Department or Division. Corequisites: MGT260AA. Course Notes: MGT259 may be repeated for a total of two (2) credits.

MGT276
Personnel/Human Resources Management
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.
Course Descriptions

MET110
Survey of Manufacturing Materials
1 Credits. 1 Periods.
Survey of metallurgy, composites, plastics, ceramics and other materials used in manufacturing. Material properties, classification and structure. Elementary strength of materials, heat treatment, and other materials processing requirements. Emphasis on relating materials and processes to specific hardware. Prerequisites: None.

MET111
Geometric Dimensioning and Tolerancing-Technologist Level
3 Credits. 3 Periods.
Symbols, terminology, modifiers, and units of measurement specific to geometric dimensioning and tolerancing (GDT). Rules and engineering tolerances as applied to engineering drawings and documents. Datum features and targets. Inspection process for verifying geometric tolerances. Prerequisites: MAT082 or equivalent or permission of department.

MET112
Inspection Techniques
3 Credits. 3 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. Select, complete and interpret information from inspection forms. Inspection alternatives, tool control activities and application of geometric dimensioning and tolerance. Prerequisites: MET109 or permission of Program Director.

MET113
Applied Geometric Dimensioning and Tolerance
3 Credits. 5 Periods.
Terminology and application of symbols, modifiers, and datum relationships specific to geometric dimensioning and tolerance (GDT) in prints and solid models using the Y14.5-2009 Standard. Use of geometric controls to document design intent and demonstrate the application of material condition modifiers through the use of simulation/SolidWorks application. Incorporation of SolidWorks to demonstrate and evaluate the correctness of GDT applied to manufacturing, quality, and verification processes. Prerequisites: (A grade of “C” or better in MAT082, or higher level mathematics course, or satisfactory score on District Placement exam) and MET109, or permission of Department or Division. Corequisites: None. MET231 is recommended.

MET114
Quality Systems
1 Credits. 1 Periods.
Quality system models and their application to a manufacturing organization. Cost of quality in a manufacturing organization. Prerequisites: None.

MET115
Teamwork Dynamics in Manufacturing
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. Concepts of team development and team problem-solving techniques. Prerequisites: None.

MET131
Lean Manufacturing
3 Credits. 6 Periods.
Lean manufacturing methodologies and application to a manufacturing organization. Identification of waste and application of cost to poor quality process within a manufacturing organization. Lean manufacturing tools and implementation. Organizational buy-in. Prerequisites: None.

MET140
Computer-Aided Drafting for Manufacturing
3 Credits. 6 Periods.
Use of Computer Aided Drafting (CAD) equipment (hardware and software) in manufacturing and engineering drawings. Prerequisites: None.

MET203
Machine Tools
5 Credits. 9 Periods.
Set up and operation of machine tools including engine lathes, drill presses, grinders, and milling machines. Emphasis on safety procedures during machine operation. Completion of operator certification checklist. Prerequisites: MET102, MET/GTC107, and MET109.

MET206
CNC Programming
3 Credits. 6 Periods.
CNC Programming of Word Address Language (G&M Code) for computer numerical control (CNC) Machine tools. 2, 3 and 4-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: MET231 or machine shop experience or permission of Program Director. Cross-References: GTC206

MET231
Manufacturing Processes and Materials
3 Credits. 5 Periods.
Basic machining operations related to drilling, milling, grinding, and lathe processes. Development of fundamental skills, practices and safety in working with machine tools, measurement instruments, and related equipment common to manufacturing. Theoretical and practical experiences related to the machining of plastics, ferrous and nonferrous metals. Laboratory projects and inspection sheets for each project. Prerequisites: (A grade of “C” or better in MAT082, or higher level mathematics course, or satisfactory score on District Placement exam) and MET112, or permission of Department or Division. Prerequisites or Corequisites: MET113.

MET260
Tooling and Fixturing
3 Credits. 3 Periods.
Various types of jigs and fixtures and their function as related to Numerically Controlled (NC) machines. Clamping and workholding principles and also use of common jigs and fixture hardware. Prerequisites: (MET111 and MET140) or permission of department.

MET264
Manufacturing Process Planning
3 Credits. 3 Periods.
Development of a production plan (routing) from basic pre-production information in the product drawing, expected volume, available equipment, set-up reduction requirements, and other planning requirements. Prerequisites or Corequisites: MET260.

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.
**Course Descriptions**

**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.

**MKT267**  
Principles of Salesmanship  
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.

**MKT268**  
Merchandising  
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.

**MKT271**  
Principles of Marketing  
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.

**MKT280AA**  
Marketing Internship  
1 Credit.  
1 Period.  
Marketing work experience in a business or industry. 80 hours of designated work per credit. Maximum of 8 credits allowed. Prerequisites: Departmental approval.

**MKT280AB**  
Marketing Internship  
2 Credit.  
2 Period.  
Marketing work experience in a business or industry. 80 hours of designated work per credit. Maximum of 8 credits allowed. Prerequisites: Permission of Department or Division.

**MKT280AC**  
Marketing Internship  
3 Credit.  
3 Period.  
Marketing work experience in a business or industry. 80 hours of designated work per credit. Maximum of 8 credits allowed. Prerequisites: Permission of Department or Division.

**MKT298AC**  
Special Projects  
3 Credit.  
3 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.

**MAT082**  
Basic Arithmetic  
3 Credits.  
3 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. Requisites: Prerequisites: Satisfactory score on district placement exam. Course Notes: Student may receive credit for only one of the following: MAT 051 and MAT 052 and MAT 053 and MAT 054, or MAT081, or MAT082.

**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. 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. Requisites: Prerequisites: A grade of “C” or better or satisfactory Math Diagnostic Assessment score for (MAT051, MAT 052, MAT 053, and MAT 054), or MAT081, or MAT082. Course notes: Student may receive credit for only one of the following: MAT055 and MAT 056 and MAT057, or MAT090, or MAT091, or MAT092.

**MAT091**  
Introductory Algebra  
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. 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. Requisites: Prerequisites: A grade of “C” or better or satisfactory Math Diagnostic Assessment score for (MAT051, MAT 052, MAT 053, and MAT 054), or MAT081, or MAT082. Course notes: Student may receive credit for only one of the following: MAT055 and MAT 056 and MAT057, or MAT090, or MAT091, or MAT092.

MAT092 Introductory Algebra
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. 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. Requisites: Prerequisites: A grade of “C” or better or satisfactory Math Diagnostic Assessment score for (MAT051, MAT 052, MAT 053, and MAT 054), or MAT081, or MAT082. Course notes: Student may receive credit for only one of the following: MAT055 and MAT 056 and MAT057, or MAT090, or MAT091, or MAT092.

MAT102 Mathematical Concepts and Applications
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: A grade of “C” or better in MAT090, or MAT091, or MAT092, or MAT093, or successful completion of Maricopa Modules, or satisfactory score on District placement exam.

MAT112 Mathematical Concepts and Applications
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: A grade of “C” or better in MAT090, or MAT091, or MAT092, or MAT093, or successful completion of Maricopa Modules, or satisfactory score on District placement exam.

MAT1160 Elements of Statistics
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 MAT140 or MAT141 or MAT142 or MAT182 or MAT187. 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.

MAT120 Intermediate Algebra
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. Prerequisites: (A grade of “C” or better in MAT090, or MAT091, or MAT092, or MAT093), or successful completion of required Maricopa Modules, or satisfactory score on District placement exam. Course Note: Students may receive credit for only one of the following: MAT120, MAT121, or MAT122.

MAT121 Intermediate Algebra
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. Prerequisites: (A grade of “C” or better in MAT090, or MAT091, or MAT092, or MAT093), or successful completion of required Maricopa Modules, or satisfactory score on District placement exam. Course Note: Students may receive credit for only one of the following: MAT120, MAT121, or MAT122.

MAT122 Brief Calculus
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. Prerequisites: Grade of “C” or better in MAT150, or MAT151, or MAT152, or MAT187, or appropriate Math placement test score.

MAT150 Elements of Statistics
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 MAT140 or MAT141 or MAT142 or MAT182 or MAT187. 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.

MAT151 College Mathematics
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. Prerequisites: (A grade of “C” or better in MAT090, or MAT091, or MAT092, or MAT093), or successful completion of required Maricopa Modules, or satisfactory score on District placement exam, or a grade of “C” or better in MAT120, or MAT121, or MAT122.

MAT152 College Mathematics
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. Prerequisites: (A grade of “C” or better in MAT090, or MAT091, or MAT092, or MAT093), or successful completion of required Maricopa Modules, or satisfactory score on District placement exam, or a grade of “C” or better in MAT120, or MAT121, or MAT122.

MAT153 College Mathematics
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. Prerequisites: (A grade of “C” or better in MAT090, or MAT091, or MAT092, or MAT093), or successful completion of required Maricopa Modules, or satisfactory score on District placement exam, or a grade of “C” or better in MAT120, or MAT121, or MAT122.

MAT154 College Mathematics
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. Prerequisites: (A grade of “C” or better in MAT090, or MAT091, or MAT092, or MAT093), or successful completion of required Maricopa Modules, or satisfactory score on District placement exam, or a grade of “C” or better in MAT120, or MAT121, or MAT122.

MAT155 College Mathematics
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. Prerequisites: (A grade of “C” or better in MAT090, or MAT091, or MAT092, or MAT093), or successful completion of required Maricopa Modules, or satisfactory score on District placement exam, or a grade of “C” or better in MAT120, or MAT121, or MAT122.

MAT156 College Mathematics
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. Prerequisites: (A grade of “C” or better in MAT090, or MAT091, or MAT092, or MAT093), or successful completion of required Maricopa Modules, or satisfactory score on District placement exam, or a grade of “C” or better in MAT120, or MAT121, or MAT122.

MAT157 College Mathematics
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. Prerequisites: (A grade of “C” or better in MAT090, or MAT091, or MAT092, or MAT093), or successful completion of required Maricopa Modules, or satisfactory score on District placement exam, or a grade of “C” or better in MAT120, or MAT121, or MAT122.

MAT158 College Mathematics
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. Prerequisites: (A grade of “C” or better in MAT090, or MAT091, or MAT092, or MAT093), or successful completion of required Maricopa Modules, or satisfactory score on District placement exam, or a grade of “C” or better in MAT120, or MAT121, or MAT122.

MAT159 College Mathematics
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. Prerequisites: (A grade of “C” or better in MAT090, or MAT091, or MAT092, or MAT093), or successful completion of required Maricopa Modules, or satisfactory score on District placement exam, or a grade of “C” or better in MAT120, or MAT121, or MAT122.
MAT217  
**Mathematical Analysis for Business**  
3 Credits. 3 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.

MAT220  
**Calculus with Analytic Geometry I**  
5 Credits. 5 Periods.  
Limits, continuity, differential and integral calculus of functions of one variable. Prerequisites: Grade of “C” or better in [MAT182 and (MAT150, MAT151 or MAT152)], or MAT187, or appropriate Math placement test score.

MAT221  
**Calculus with Analytic Geometry I**  
4 Credits. 4 Periods.  
Limits, continuity, differential and integral calculus of functions of one variable. Prerequisites: Grade of “C” or better in [MAT182 and (MAT150, MAT151 or MAT152)], or MAT187, or appropriate Math placement test score. Course Notes: Student may receive credit for only one of the following: MAT220 or MAT221.

MAT225  
**Elementary Linear Algebra**  
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.

MAT227  
**Discrete Mathematical Structures**  
3 Credits. 3 Periods.  
Introduction to lattices, graphs, Boolean algebras, and groups. Emphasis on topics relevant to computer science. Prerequisites: Grade of “C” or better in CSC100 and (MAT220, or MAT221, or equivalent) permission of Instructor.

MAT230  
**Calculus with Analytic Geometry II**  
5 Credits. 5 Periods.  
Limits, continuity, differential and integral calculus of functions of one variable. Prerequisites: Grade of “C” or better in [MAT182 and (MAT150, MAT151 or MAT152)], or MAT187, or appropriate Math placement test score.

MAT231  
**Calculus with Analytic Geometry II**  
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. Prerequisites: Grade of “C” or better in MAT220, or MAT221, or equivalent. Course Notes: Student may receive credit for only one of the following: MAT230 or MAT231.

MAT241  
**Calculus with Analytic Geometry III**  
4 Credits. 4 Periods.  
Multivariate calculus including vectors, vector-valued functions, partial differentiation, multiple integration and an introduction to vector fields. Prerequisites: Grade of “C” or better in MAT230 or MAT231. Course Note: Student may receive credit for only one of the following: MAT240 or MAT241.

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: A grade of “C” or better in (MAT150 or MAT151 or MAT152 or higher), or a grade of “C” or better in [(MAT120 or MAT121 or MAT122) and (MAT140 or MAT141 or MAT142 or higher)], or [a grade of “C” or better in (MAT140 or MAT141 or MAT142) and satisfactory score on District placement exam to permit enrollment in (MAT150 or MAT151 or MAT152 or 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: MAT256 or permission of Instructor.

MAT276  
**Modern Differential Equations**  
4 Credits. 4 Periods.  
Introduces differential equations, theoretical and practical solution techniques with applications. Problem solving using MATLAB. Prerequisites: Grade of “C” or better in MAT230, or MAT231, or permission of Department or Division. Course Notes: Students may receive credit for only one of the following: MAT276 or MAT277.

MAT298AC  
**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. Course Notes: MAT298AC may be repeated for a total of six (6) credit hours.

**Microsoft Technology**

**MST140  Microsoft Networking Essentials**  
3 Credits. 4 Periods.  
Emphasis on local area network with overview of wide area networks. Includes terminology, hardware and software components, connectivity, network architecture, packet structure, topologies, communication standards and protocols, and security issues. Preparation for Microsoft certification examination. Prerequisites: None. (BPC110 or CIS105, and BPC121AB) suggested but not required.
## MST141
**Supporting Microsoft Windows Desktop Operating Systems**

3 Credits. 4 Periods.

Troubleshooting and repairing problems with Microsoft Windows desktop operating systems. Basic knowledge of system architecture and security as needed to provide skills required to support users. Preparation for Microsoft Certified Desktop Support Technician (MCDST) certification examination. Prerequisites: None. CIS190, or CNT140, or MST140 suggested but not required.

## MST150
**Microsoft Windows Professional Administration**

3 Credits. 4 Periods.

Knowledge and skills necessary to perform day-to-day administration tasks in a Microsoft Windows-based network. Preparation for Microsoft certification examination. Prerequisites: None. CIS190, or CNT140, or MST140 suggested but not required.

## MST150SV
**Microsoft Windows 7 Configuration**

3 Credits. 4 Periods.

Knowledge and skills necessary to perform installation and day-to-day support of the Microsoft Windows 7 operating system. Prerequisites: None. CIS190, or CNT140AA, or MST140 suggested but not required.

## MST150VI
**Microsoft Windows Vista Administration**

3 Credits. 4 Periods.

Knowledge and skills necessary to perform day-to-day workstation administration tasks of Microsoft Windows Vista. Preparation for Microsoft certification examination. Prerequisites: None. CIS190, or CNT140, or MST140 suggested but not required.

## MST150XP
**Microsoft Windows XP Professional**

3 Credits. 4 Periods.

Knowledge and skills necessary to perform day-to-day administration tasks of Microsoft Windows XP Professional. Preparation for Microsoft certification examination Prerequisites: None. CIS190, or CNT140, or MST140 suggested but not required.

## MST152
**Microsoft Windows Server**

4 Credits. 5 Periods.

Knowledge and skills necessary to install, configure, customize, optimize, network, integrate, and troubleshoot Windows Server. Preparation for Microsoft certification examination. Prerequisites or Corequisites: Any MST150 course or permission of instructor.

## MST152DA
**Microsoft Windows 2000 Server**

4 Credits. 6 Periods.

Knowledge and skills necessary to install, configure, customize, optimize, network, integrate, and troubleshoot Microsoft Windows 2000 Server. Preparation for Microsoft certification examination. Prerequisites or Corequisites: Any MST150 course or permission of instructor.

## MST152DB
**Microsoft Windows 2003 Server**

4 Credits. 5 Periods.

Knowledge and skills necessary to install, configure, customize, optimize, network, integrate, and troubleshoot Microsoft Windows 2003 Server. Preparation for Microsoft certification examination. Prerequisites or Corequisites: Any MST150 course or permission of instructor.

## MST154
**Microsoft Windows Network Enterprise**

3 Credits. 4 Periods.

Knowledge and skills to plan, install, configure, customize, and integrate networks with Windows server operating system in a heterogeneous, multiple-domain environment. Preparation for Microsoft certification examination. Prerequisites: MST150 or permission of instructor. Corequisites: MST152 or permission of instructor.

## MST155
**Implementing Windows Network Infrastructure**

3 Credits. 4 Periods.

Knowledge and skills to install, configure, maintain, and support a Microsoft Windows network infrastructure. Prerequisites or Corequisites: MST150, or any MST150++ course, or permission of Instructor. Course Notes: Preparation for Microsoft certification examination.
Course Descriptions

MST157DB
Administering Windows Server
4 Credits. 5 Periods.
In-depth exploration of how to effectively manage Windows Server. Designed to prepare students for the Administering Microsoft Windows Server examination (70-411). Prerequisite: MST158++ or permission of Instructor.

MST158DA
Windows Server Administration
Knowledge and skills necessary to install, configure, customize, optimize, network, integrate, and troubleshoot Windows Server. Prerequisites: (MST155 or any MST155++ course) and (MST157 or any MST157++ course), or permission of Instructor. Course Notes: MST158DA is a preparation for Microsoft 70-646 certification examination.

MST158DB
Installing and Configuring Windows Server
4 Credits. 5 Periods.
In-depth exploration of how to effectively install and configure Windows Server. Includes roles and features of Server, virtualization with Hyper-V, core network services, Active Directory, and Group Policy. Designed to prepare students for the corresponding Microsoft Windows Server Installation and Configuration examination (70-410). Prerequisites: MST140 or CNT140++ and MST150++, or permission of Instructor.

MST244
Microsoft SQL Administration
3 Credits. 4 Periods.
Knowledge and skills required to install, configure, and administer Microsoft SQL server. Prerequisites: Any MST15+ course, or MST 15+++ course, or permission of Instructor. Course Notes: Preparation for Microsoft certification examination.

MST259
Designing Windows Network Security
3 Credits. 4 Periods.
Knowledge and skills to analyze business requirements and processes to design a security solution for a Microsoft Windows network. Prerequisites or Corequisites: MST157, or any MST157++ course, or permission of Instructor. Course Notes: Preparation for Microsoft certification examination.

MST298AC
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.

MMT140
Survey of Multimedia Technology
See description under cross-reference course CIS140

Music: Performance

MUP133
Class Voice I
2 Credits. 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.

MUP134
Class Voice II
2 Credits. 3 Periods.
Continuation of Class Voice I including the elements of stage presence and diction. Prerequisites: MUP133 or permission of instructor.
Course Descriptions

MUP150
Community Chorus
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.

MUP163
Jazz Ensemble
1 Credit. 3 Periods.
Practical and performance experience in various jazz styles. Open to all students on the basis of auditions. Prerequisites: None.

MUP225
Class Guitar I
2 Credits. 3 Periods.
Emphasis on note-reading and folk-style harmonic accompaniment. Includes finger-style playing. Stresses development of efficient practicing techniques and proper sitting and hand positions. Prerequisites: None.

MUP226
Class Guitar II
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: MUP225 or permission of instructor.

MUP233
Class Voice III
2 Credits. 3 Periods.
Interpretive singing through a closer examination of coloring, tone production, dynamics, and tempo indications. Prerequisites: MUP134.

MUP298AA
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.

MTC101
Introduction to Music Theory
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: MTC100, or MTC101, or permission of instructor. Corequisites: MTC156.

MTC105
Music Theory I
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: MTC100, or MTC101, or permission of instructor. Corequisites: MTC156.

MTC106
Aural Perception I
1 Credit. 2 Periods.
The development of listening and performing skills through dictation, sight singing and keyboard harmony. Prerequisites: None. Corequisites: MTC105.

MTC113
Songwriting Techniques
1 Credit. 1 Period.
The chronological study of music theory 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.

MTC155
Music Theory II
3 Credits. 3 Periods.
A continuation of Music Theory I with emphasis on harmony and part-writing procedures. Prerequisites: MTC105. Corequisites: MTC156.

NET183AA
Operating Systems/PC
2 Credits. 2 Periods.
PC operating systems, such as Windows 95, Windows NT, and others; system management; files, commands, and usage; output redirection and piping, editors, batch and configuration files; file folders and directories; installation on floppy and hard disks; networking capabilities; disaster recovery. Shortcuts to folders and directories. Prerequisites: None. Course Notes: MTC103 may be repeated for a total of four (4) credit hours.

NUR104AA
Structured Nursing Review
.5 Credits .5 Periods.
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: Enrollment in the Nursing program or permission of Department Chair. Course Note: Course offered as Credit (P) No credit (Z) basis. May be repeated for a total of six (6) credit hours.

NUR104AB
Structured Nursing Review
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 Note: Course offered as Credit (P) No credit (Z) basis. NUR104AB may be repeated for a total of eight (8) credits.

NUR151
Nursing Theory and Science I
10 Credit. 5 Period
Introduction to fundamentals of nursing theory and practice utilizing critical thinking
Course Descriptions

Based on the nursing process and principles of evidence based practice. Focus on meeting basic human needs within the wellness/illness continuum. Theoretical concepts related to holistic care of well, geriatric, and adult clients. Provides safe nursing care to clients with selected alterations in health. Introduction to professional nursing practice. Applies concepts of health promotion, disease/illness prevention. Provides care based upon integration of pathophysiology, nutrition, communication and physical, biological, psycho-social sciences. Uses information technology in performing and evaluating client care. Prerequisites: Admission into the Nursing Program.

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.

NUR158 Nurse Assisting
LEC 6 Credits. 4 Periods.
LAB 0 Credits. 6 Periods.
Introduction to the role of the nursing assistant for clients across the wellness/illness continuum within the nursing 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: College Placement Exam indicating eligibility for CRE101, or HESI-A2 exam English Composite score of 75% or higher. Completed MCCD Background Clearance check, Health and Safety Documentation, and Health Care Provider signature form.

NUR171 Nursing Theory and Science II
8 Credits. 4 Periods.
Application of nursing theory and practice utilizing critical thinking based on the nursing process and evidence based practice. Holistic nursing concepts of health promotion, disease/illness prevention, and health restoration for adult geriatric clients. Role development as the professional nurse member of the healthcare team. Participation in client teaching and discharge planning. Application of previous knowledge of physical, biologic, psycho-social sciences, and the cultural and spiritual aspects of nursing care. Application of nursing concepts in the development of plan of care to include pathophysiology, nutrition, pharmacology, and skills in communication. Uses of information technology in planning, documenting, and evaluating client care. Prerequisites" NUR151 or permission of Nursing Department Chairperson.

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: (BIO202 and NUR152) or permission of Nursing Department Chairperson.

NUR187 Pharmacology and Medication Administration II
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, and nursing implications for safe practice. Requires application of previous knowledge of physical, biological, and social sciences. Prerequisites: Permission of Nursing Department/Division Chair.

NUR192 Practical Nursing Transition
3 Credits. 5 Periods.
Overview of the role of the practical nurse in care of clients. Includes nursing standards and scope of practice of the practical nurse.

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: (CRE101 and NUR172 and PSY101) or permission of Nursing Department Chair.

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: (BIO205 and NUR252) or permission of Nursing Department Chair.

NUR291 Nursing Clinical Capstone
2 Credits. 6 Periods.
Synthesis of the nursing process to facilitate role transition from student to graduate nurse within a preceptorship experience. Development of nurse leadership and management roles. Prerequisites: NUR271 or permission of Nursing Department Chairperson.
Occupational Safety & Health

OSH101
Introduction to Occupational Safety, Health, and Environmental Technology
3 Credits. 3 Periods.
Overview of occupational safety, health, and environmental regulations and technology. Career opportunities and the relationship to business management. Prerequisites: None. Cross-References: HMT101

OSH102
Introduction to Industrial Hygiene
3 Credits. 3 Periods.
Fundamental concepts of Industrial Hygiene, including terminology, basic toxicology, body entry routes, the threshold limit values, and measurement. Control of typical occupational physical and chemical hazards, radiation and environmental concerns. Instruction and practice in basic sampling techniques. Prerequisites: None.

OSH106
Industrial Safety
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, and management’s responsibilities. Prerequisites: None. Cross-References: FAC106, GTC106, MIT106.

Office Automation Systems

OAS101AA
Computer Typing I: Keyboard Mastery
1 Credit. 1.7 Periods.
Incorporates correct touch typing principles. Prerequisites: None.

OAS101AB
Computer Typing I: Letters, Tables & Reports
1 Credit. 1.7 Periods.
Letter, table, and report formatting. Prerequisites: OAS101AA or permission of department/division.

OAS101AC
Computer Typing I: Production & Manuscript
1 Credit. 1.7 Periods.
Simple office projects and manuscripts. Prerequisites: OAS101AB or permission of department/division.

OAS102
Computer Typing II: Document Production
3 Credits. 5 Periods.
Arrangement of letters, memos, manuscripts, and tabulation; speed/accuracy improvement. Prerequisites: OAS101 or permission of department/division.

OAS103AA
Computer Typing: Skill Building I
1 Credit. 1.7 Periods.
Individual progression on speed/accuracy drills. Prerequisites: Ability to touch type at 25 words per minute or permission of department/division.

OAS103AB
Computer Typing: Skill Building II
1 Credit. 1.7 Periods.
Progression on speed/accuracy drills. Prerequisites: OAS103AA or permission of department/division.

OAS108
Computer Typing: Skill Building III
3 Credits. 3 Periods.
Individual progression on speed/accuracy drills. Prerequisites: Ability to touch type at 25 words per minute or permission of department/division.

OAS113
Micro-Alphabetic Indexing
1 Credit. 1.7 Periods.
Mastery of essential microcomputer filing skills. Emphasis on indexing and alphabeticizing individual and business names; subject, geographic, and numeric methods; and cross referencing. Prerequisites: None. Cross-References: BPC113

OAS118
10-Key By Touch
1 Credit. 1.7 Periods.
Touch system of numeric keys on ten-key pads. Prerequisites: None.

OAS120
Financial Record Keeping
3 Credits. 3 Periods.
Computerized application of concepts and procedures of office record keeping; includes finance and personnel records, inventory systems, banking procedures and cash control; decision-making process for solving financial problems. Prerequisites: None.

OAS135DK
Word: Level I
2 Credits. 2 Periods.
Using Word word processing software to create and name files, edit text, format, and print a variety of documents. Prerequisites: None. Cross-References: BPC135DK

Office Career Success

OCS100
Basic Office Skills
1 Credit. 2 Periods.
Develop techniques and workplace skills to achieve professional office etiquette. Broad, basic knowledge and skills necessary for the workplace. Includes knowledge of basic business equipment, office documents and procedures, and telephone etiquette. Develop rapid writing techniques for note taking of messages and minutes. Use appropriate software and computers for office communications. Develop skills to enable efficient workflow management in a business setting. Investigate functionality and protocol of electronic mail systems. Prerequisite: None.
OCS102  
Office Career Preparation  
1 Credit.  2 Periods.  
Identify and investigate career goals and opportunities in the workplace. Generate an individual education plan and a career portfolio to include preparing a résumé, cover letter and practicing interview techniques. Review current business attire and associated images in the workplace. Prerequisite: None.

OCS104  
Office Communications  
1 Credit.  2 Periods.  
Plan and develop effective oral communications and written documents using PowerPoint. Identify appropriate and inappropriate language and topics in the business setting. Investigate verbal and non-verbal communication techniques in the office. Investigate basic contents of memorandums, letters and reports. Investigate various communication devices including fax, network systems and machines. Prerequisite: None.

OCS122  
Office Orientation and Essential Skills  
3 Credits.  6 Periods.  
Develops a comprehensive understanding of essential workplace skills and reinforces learning with structured hands-on practices. Includes fundamental knowledge of office etiquette, note taking, protocol of electronic mail systems, and preparation of oral and written presentations. Identifies individual career opportunities to include preparing a résumé and practicing interview techniques. Prerequisites: None.

Philosophy

PHI101  
Introduction to Philosophy  
3 Credits.  3 Periods.  
General consideration of human nature and the nature of the universe. Knowledge, perception, freedom and determinism, and the existence of God. Prerequisites: None.

PHI103  
Introduction to Logic  
3 Credits.  3 Periods.  
Informal logic, logical fallacies, elementary symbolic logic, analysis of argument forms, and construction of proofs for validity. Prerequisites: ENG101 or ENG107 or equivalent.

PHI104  
World Philosophy  
3 Credits.  3 Periods.  
Examination of questions such as the meaning of life and death, social justice, appearance and reality, human nature, the identity of the self freedom and destiny, the ethical life, and the relationship of science and religion. Comparative analysis of diverse Eastern and Western viewpoints. Prerequisites: None.

PHI105  
Introduction to Ethics  
3 Credits.  3 Periods.  
A survey of ethical theory in Western Philosophy, including the major normative theories and selected metaethical theories. Prerequisites: None.

PHI1103  
Introduction to Logic  
3 Credits.  3 Periods.  
Informal logic, logical fallacies, elementary symbolic logic, analysis of argument forms, and construction of proofs for validity. Prerequisites: ENG101 or ENG107 or equivalent.

PHI213  
Medical and Bio-Ethics  
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.

PHI216  
Environmental Ethics  
3 Credits.  3 Periods.  
Philosophical consideration of diverse theories and perspectives on the environment, and application of these theories to global moral issues such as animal rights, preservation of wilderness and species, population, world hunger and poverty, and air and water pollution. Prerequisites: None.

PHI218  
Philosophy of Sexuality  
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. Prerequisites: ENG101, or ENG107, or permission of Instructor. Student must be 18 years or older.

PHI244  
Philosophy of Religion  
3 Credits.  3 Periods.  
Predominant figures and theories in Euroamerican political philosophy from Plato to contemporary social/political philosophers. Prerequisites: ENG101, or ENG107, or permission of Instructor.

Physical Education

PED101AD  
Aerobic Dance  
1 Credit.  2 Periods.  
A cardiovascular workout through dance. Prerequisites: None.

PED101BB  
Basketball  
1 Credit.  2 Periods.  
Basic skills and game strategy of basketball. Class emphasis on competition and drills.

PED101BC  
Boot Camp  
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.

PED101BP  
Backpacking  
1 Credit.  2 Periods.  
Covers basic skills and techniques of backpacking and the application of these to wilderness travel. Prerequisites: None.

PED101CY  
Cycling-Indoor  
1 Credit.  2 Periods.  
Basic skills for bike set up and proper body mechanics. Increase leg strength, lung capacity, and metabolism. Prerequisites: None.
PED101DF
Self Defense
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. Course Note: PED101DF may be repeated for credit.

PED101FB
Self Defense
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. Course Note: PED101DF may be repeated for credit.

PED101GO
Golf
1 Credit. 2 Periods.
Instruction and practice for all skill levels, beginning through advanced. Assistance on shot making, club selection and etiquette on the course. Prerequisites: None. Course Note: PED101GO may be repeated for credit.

PED101HH
Hip Hop
1 Credit. 2 Periods.
Basic skills of hip hop with instruction, practice, and performance including proper body mechanics, choreography, and behavioral competencies. Prerequisites: None. Course Note: PED101HH may be repeated for credit.

PED101JC
Tai Chi
1 Credit. 2 Periods.
Fundamentals of Tai Chi including moves, breathing and meditation. Prerequisites: None.

PED101KB
Kickboxing
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.

PED101QG
Qi Gong
1 Credit. 2 Periods.
Ancient Chinese Qi Gong breathing exercises for healing and opening channels of energy. Includes Power of Positive thought along with relaxation and meditation techniques. Prerequisites: None. Course Note: PED101QG may be repeated for credit.

PED101SM
Swimming
1 Credit. 2 Periods.
Basic strokes, breathing and improving cardiovascular endurance. Prerequisites: None.

PED101ST
Strength Training
1 Credit. 2 Periods.
Introduction to techniques of basic weight training, concentrating on incorporating an exercise regimen for increased strength. Prerequisites: None.

PED101WT
Weight Training
1 Credit. 2 Periods.
Access to Olympic and Free Weights with a qualified instructor. Prerequisites: None. Course Note: PED101WT may be repeated for credit.

PED101YG
Gentle Yoga
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. Course Notes: PED101YG may be repeated for credit.

PED101YO
Yoga
1 Credit. 2 Periods.
Promotion of overall health by strengthening muscles and stimulating glands and organs. Basic postures, breathing and relaxation techniques. Prerequisites: None.

PED101ZU
Zumba® Fitness
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.
PED102BC
Boot Camp - Intermediate
1 Credit. 2 Periods. Vigorous training at an intermediate level incorporating cardiovascular, core fitness, strength training, and flexibility. Emphasis will be placed on proper body mechanics and safety. Prerequisites: None. Prior experience recommended. Course Note: PED102BC may be repeated for credit.

PED102DF
Self Defense - Intermediate
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. Prior experience recommended. Course Note: PED102DF may be repeated for credit.

PED102FL
Fitness for Life - Intermediate
1 Credit. 2 Periods. Intermediate level design and implementation of a personalized fitness program to increase your fitness level in the areas of Cardiovascular Fitness, Weight Control, Muscular Strength and Flexibility. Prerequisites: None. Prior experience recommended. Course Note: PED102FL may be repeated for credit.

PED102GO
Golf-Intermediate
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. Course Note: PED102GO may be repeated for credit.

PED115
Lifetime Fitness
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. May be repeated credit. Prerequisites: None.

PED117
Weight Training for Wellness
2 Credits 4 Periods. Strength training and muscular fitness activity to help develop a lifetime of regular exercise and muscular strength maintenance. Development of full body strength and stability of the body's core musculature, translating to increased power, balance, and functional movement ability including assessment of current strength and goal-specific program design to increase strength and muscular fitness. Prerequisites: None.

PED124
Strength and Conditioning for Sport Performance: Basic
2 Credits 4 Periods. Introduction to the principles and training techniques of strength and conditioning for sport performance. Emphasis is placed on beginning instructional techniques and safety of Olympic lifts; plyometrics; muscular endurance, strength and power development; anaerobic and aerobic capacity. Prerequisites: None.

PED125
Exercise Science
2 Credits 4 Periods. Principles and training techniques of strength and conditioning for sport performance. Emphasis is placed on instructional techniques and safety of Olympic lifts; plyometrics; muscular endurance, strength and power development; anaerobic and aerobic capacity. Prerequisites: PED124. Course Note: PED125 may be repeated for a total of eight (8) credit hours.

Course Descriptions

PHS110
Fundamentals of Physical Science
LEC 4 Credits. 3 Periods. LAB 0 Credits. 3 Periods. Survey of the principles of physics and chemistry. Prerequisites: Grade of “C” or better in MAT090, or MAT091, or MAT092, or MAT093, or equivalent, or satisfactory score on Math Placement exam.

PHY101
Introduction to Physics
LEC 4 Credits. 3 Periods. LAB 0 Credits. 3 Periods. A survey of physics emphasizing applications of physics to modern life. Prerequisites: Grade of “C” or better in MAT090, or MAT091, or MAT092, or MAT093, or equivalent, or satisfactory score on Math Placement exam. Course Note: Students may receive credit for only one of the following: PHY101 or PHY101AA.

PHY111
General Physics I
SUN# PHY111
LEC 4 Credits. 3 Periods. LAB 0 Credits. 3 Periods. Includes motion, energy, and properties of matter. Prerequisites: MAT182, or MAT 187, or one year high school Trigonometry with a grade of C or better, or permission of Department or Division. Course Note: PHY111 is recommended for preprofessional and suggested for certain other majors. Students may receive credit for only one of the following: PHY111 or PHY111AA.

PHY112
General Physics II
SUN# PHY112
LEC 4 Credits. 3 Periods. LAB 0 Credits. 3 Periods. Includes electricity, electromagnetism, and modern physics. Prerequisites: PHY105 or PHY111.

PHY115
University Physics I
LEC 5 Credits. 4 Periods. LAB 0 Credits. 3 Periods. General physics course using calculus to develop the principles of mechanics and thermodynamics. Recommended for majors in the sciences and mathematics. Required for Engineering majors. Prerequisites: MAT220 or MAT221 or permission of Department or Division. Corequisites: MAT230 or MAT231. One year High School physics or PHY111 and PHY112 is strongly recommended.
Course Descriptions

PHY116
University Physics II
LEC 5 Credits. 4 Periods.
LAB 0 Credits. 3 Periods.
Principles of electricity, magnetism, waves, and optics. Required for Engineering majors. Prerequisites: PHY115 and (MAT230 or MAT231). Corequisites: MAT241.

PHY121
University Physics I: Mechanics
LEC 4 Credits. 3 Periods.
LAB 0 Credits. 3 Periods.
Kinematics, Newton’s laws, work, energy, momentum, conservation laws, dynamics of particles, solids, fluids, mechanical waves, and sound. Prerequisites: MAT220, or MAT221, or permission of Department or Division. One year of High School physics or PHY111 and PHY112 suggested but not required.

PHY131
University Physics II: Electricity and Magnetism
LEC 4 Credits. 3 Periods.
LAB 0 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: 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
LEC 4 Credits 3 Periods.
LAB 0 Credits 3 Periods.
Heat, entropy, and laws of thermodynamics; wave propagation; geometrical and physical optics; introduction to special relativity. Prerequisites: PHY131.

PHY298AB
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.

Political Science

POS100
Introduction to Political Science
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.

POS110
American National Government
3 Credits. 3 Periods.
Study of the historical backgrounds, governing principles, and institutions, of the national government of the United States. Prerequisites: None.

POS115
Issues in American Politics
3 Credits. 3 Periods.
Examination of major issues in current affairs in the fields of politics, economics, social relations, foreign affairs, aesthetics, and others through the reading and viewing of secondary information sources. Prerequisites: ENG101 or ENG107 or equivalent.

POS120
World Politics
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.

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.

POS221
Arizona Constitution
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.

POS222
U.S. Constitution
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.

POS223
Civil Rights
3 Credits. 3 Periods.
The historic background and current status of major civil rights issues in the United States. Prerequisites: None.

Power Plant Technology

PPT101
Hand and Power Tools
1 Credit. 1 Period.
Identification and use of hand and handheld power tools used in a power plant. Tool construction and purpose. Maintenance of hand and power tools. Prerequisites: None.

PPT103
Print Reading and Plant Drawings
1 Credit. 1 Period.
Introduction to print reading and plant drawings. Flow diagrams and symbols on drawings. Dimension, tolerance and clearance on drawings. Amendments to drawings. Specific types of drawings. Proper procedures when using plant drawings. Prerequisites: None.

PPT104
Properties of Materials
1 Credit. 1 Period.
Basic properties of solids, liquids and gases. Basic properties and classifications of metals. Hazards of mixing different materials. Causes, effects and prevention of corrosion. Correct storage and handling of materials. Prerequisites: None.

PPT105
Air Compressor Principles
1 Credit. 1 Period.
Air compressor terminology. Principles of gas behavior and inter-cooling. Internal and external factors affecting compressor
Course Descriptions

operation. Operating principles, components, preventive and corrective maintenance procedures. Compressor troubleshooting procedures. Prerequisites: None.

PPT106
Diesel Engine Systems
1 Credits. 1 Periods.
Diesel operating principles and diesel engine systems. Practical knowledge of safety precautions, inspection and maintenance of diesel engines. Prerequisites: None.

PPT107
Lubrication
1 Credits. 1 Periods.
Principles, properties, and safe handling requirements of lubricants. Lubrication of bearings, lubrication systems, and system components. Oil settling systems. Construction, operation, and maintenance of oil purifiers. Prerequisites: None.

PPT108
Pumps I
2 Credits. 2 Periods.
Types of pumps, applications and principles of operation and safety. Pump components identification. Inspection, use and maintenance of pumping and mechanical seals. Prerequisites: None.

PPT110
Hydraulic and Pneumatic Safety
2 Credits. 2 Periods.
Hydraulic and pneumatic safety, physical concepts, and fluid laws. Hydraulic and pneumatic system components and operation. Troubleshooting procedures of hydraulic and pneumatic systems. Prerequisites: None.

PPT111
Introduction to Welding and Metal Fabrication
3 Credits. 3 Periods.
Principles of metallurgy and material identification. Technical theory and basic skill training in oxyacetylene and shielded metal arc welding. Welding equipment safety and weld joints methods. Prerequisites: None.

PPT112
Forklift Operations
1 Credits. 1 Periods.
Safe and proper operation of forklift. Parts and function of forklift, principles of operation, and safety precautions. Inspection procedures, proper care, and industry standards. On-the-job operation of a forklift. Prerequisites: None.

PPT113
Conduct of Maintenance
1 Credits. 1 Periods.

PPT119
Instrument Air Compressor Maintenance
2 Credits. 2 Periods.

PPT120
Energy Industry Fundamentals
3 Credits. 3 Periods.
Various types of energy and their conversion to useable energy such as electrical power. How generated electrical power is transmitted and distributed to the point of use. Prerequisites: None.
Course Descriptions

PPT203  
Power Plant Systems II  
3 Credits.  3 Periods.  

PPT204  
Measuring and Test Equipment  
1 Credits.  1 Periods.  
Administrative controls for precision measurement. Use of precision measuring equipment. Emphasis on proper use, accuratereading, and calculations using precision measuring devices. Prerequisites: None.

PPT205  
Rigging  
2 Credits.  2 Periods.  
Safe and proper operation of lifting equipment. Weight calculations. Identification and proper location of rigging equipment. Hand signals and industry standards. Safe rigging practices. Inspection and maintenance procedures. Operation of pendant cranes. Prerequisites: None.

PPT206  
Bearings  
1 Credits.  1 Periods.  
Application, inspection and maintenance of plant bearings. Design and operation of sliding and anti-friction bearings. Function, design and applications of bearing seals. Reasons for bearing failure and related preventative maintenance procedures. Prerequisites: None.

PPT207  
Heat Exchangers  
1 Credits.  1 Periods.  

PPT208  
Thermal Insulation  
0.50 Credits.  0.50 Periods.  
Principles of heat transfer and insulation. Types and temperature ranges for insulation. Safe and proper handling of insulation materials. Practical experience in removing and installing insulation. Prerequisites: None.

PPT209  
Pipefitting Auxiliaries II  
2 Credits.  2 Periods.  

PPT210  
Valve Maintenance II  
3 Credits.  3 Periods.  

PPT211  
Couplings  
0.50 Credits.  0.50 Periods.  
Types, functions, and specific applications of couplings. Coupling removal and inspection procedures. Coupling rework and installation. Prerequisites: None.

PPT212  
Control Valves and Actuators  
1 Credits.  1 Periods.  
PPT219
Milling Machine Operations
2 Credits.  2 Periods.

PPT221
Reactor Theory I
3 Credits.  3 Periods.
Basic nuclear reactor theory to include atomic and nuclear physics, thermodynamics, and heat transfer and fluid flow. Prerequisites: PPT120, and GTC108.

PPT222
Reactor Plant Chemistry and Materials
2 Credits.  2 Periods.
Basic nuclear reactor theory to include reactor chemistry, water chemistry, radiation detection and protection principles, and reactor plant materials. Prerequisites: PPT224MM.

PPT224MM
Mechanical Components for Maintenance Technicians
1 Credit.  1 Period.
Mechanical component types and characteristics, common failure mechanisms, and operating principles of plant components. Prerequisites: PPT202 or PPT203.

PPT228
Electric Plant Systems for Operators
1 Credit.  1 Period.
Operation, components, instrumentation and controls, automatic features, and precautions and limitations of the Electric Plant Systems. Prerequisites: PPT202 and PPT203.

PPT229
Auxiliary Plant Systems for Operators
3 Credit.  3 Period.
Operation, components, instrumentation and controls, automatic features, and precautions and limitations of Auxiliary Plant Systems. Prerequisites: PPT228.

PPT230
Primary Plant Systems for Operators
3 Credit.  3 Period.
Operation, components, instrumentation and controls, automatic features, and precautions and limitations of Primary Plant Systems. Prerequisites: PPT228.

PPT231
Secondary Plant Systems for Operators
3 Credit.  3 Period.
Operation, components, instrumentation and controls, automatic features, and precautions and limitations of Secondary Plant Systems. Prerequisites: PPT228.

PSY101
Introduction to Psychology
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.

PSY132
Psychology and Culture
3 Credits.  3 Periods.
Presents current knowledge about human diversity in behavior and culture using examples from a variety of contexts and nations. Highlights topics in cross-cultural psychology, such as intergroup relations, ethnocentrism, gender, personality, emotion, language, communication, work and health. Emphasis on applications of behavioral and cognitive principles to enhance interactions in a multicultural world. Prerequisites: None.

PSY225
Psychology and Religion
3 Credits.  3 Periods.
Provides an introduction to the history, varieties and theories of the psychology of religion from an empirical, research-based perspective. Specific areas of study include the role of gender, age, socioeconomic status, and personality on religious experience, the effects of religion and prayer on mental and physical health, the development of religious thought and behavior over the lifespan, and the social psychology of new religious movements. In addition, the role of cultural differences on religious attitudes both within the USA and around the world is also addressed. Prerequisites: PSY101 or Permission of Instructor.

PSY230
Introduction to Statistics
3 Credits.  3 Periods.
An introduction to the 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: PSY101 with a grade of “C” or better and MAT092 or equivalent, or permission of instructor.
Course Descriptions

PSY235
Psychology of Gender
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.

PSY240
Developmental Psychology
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 the instructor.

PSY250
Social Psychology
3 Credits. 3 Periods.
The scientific study of how people’s thoughts, feelings, and behaviors are influenced by other people and situations. Includes how we think about ourselves and others, persuasion and influence, sexual and romantic attraction, friendship, and helping others, aggression and prejudice. Prerequisites: PSY101 with a grade of “C” or better or permission of the instructor.

PSY260
Psychology of Personality
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.

PSY266
Abnormal Psychology
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.

PSY275
Biopsychology
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” or better or permission of Instructor.

PSY277
Psychology of Human Sexuality
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. Prerequisites: PSY101 with a grade of “C” or better, or permission of instructor. Student must be 18 years or older.

PSY290AB
Research Methods
4 Credits. 3 Periods.
0 Credits. 3 Periods. (Lab)
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. Prerequisites: ENG101, ENG107. Prerequisites or Corequisites: PSY230 with a grade of “C” or better, or permission of Instructor.

PSY296WA
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 at least twelve (12) college credits, minimum 2.6 grade point average, and be able to obtain a position related to student’s academic or career goals (student’s present job may qualify); or permission of instructor. Corequisites: Must be concurrently enrolled in at least one class which is related to student’s major or career interest or with permission of the instructor.

PAD101
Survey of Public Administration
3 Credits. 3 Periods.
The history, present and future of public administration. Covers roles of public administrators, organizational relationships, intergovernmental relations and human resources as well as ethical issues, financial management, communication skills, and productivity issues. Prerequisites: None.

PAD296WB
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 at least twelve (12) college credits, minimum 2.6 grade point average, and be able to obtain a position related to student’s academic or career goals (student’s present job may qualify); or permission of instructor. Corequisites: Must be concurrently enrolled in at least one class which is related to student’s major or career interest or with permission of the instructor.

RPT103
Radiation Fundamentals
3 Credits. 3 Periods.
Overview of physics and chemistry of radiation and radioactive materials. Basic understanding of radiation and its uses and interactions. Prerequisites: MAT092, or satisfactory score on placement exam, or permission of instructor.

RPT113
Radiation Monitoring
3 Credits. 3 Periods.
Monitoring radiation with a focus on theory and operation of radiation monitors and the evaluation of radioactive hazards. Prerequisites: RPT103 or permission of instructor.

RPT223
Radiation Dosimetry
3 Credits. 3 Periods.
Assessing internal and external exposure of personnel to ionizing radiation. Prerequisites or Corequisites: RPT113 or permission of instructor.

RPT233
Radioactive Materials Handling
3 Credits. 3 Periods.
Protects Technicians are required to present scenarios in which Radiation Protection Technicians are required to

Radiation Protection Technician

[Estrella Mountain Community College | 2016-2017 Catalog]
provide safe control, movement, use, storage, transportation and disposal of radioactive materials. Prerequisites: RPT223 or permission of instructor.

RPT243
Radiological Safety and Response
3 Credits. 3 Periods.
Conceptual understanding and skills for ensuring and maintaining safety in the use of radioactive materials, with an emphasis on implementing ALARA (As Low as Reasonably Achievable) principles. Concepts of time, distance and shielding, and protective clothing to minimize dose in a variety of situations (both routine and off-normal) within radiological environments. Prerequisites or Corequisites: RPT233 or permission of instructor.

RPT253
Radiation Protection
3 Credits. 3 Periods.
Practical application of radiation protection principles and sources of radiation such as nuclear power plant, medical, and industrial operations. Prerequisites: RPT243 or permission of instructor.

RPT290
Radiation Protection Internship
5 Credits. 25 Periods.
Provides approximately 320 hours with an industry, governmental, or educational institution that uses radioactive materials to allow students an opportunity for a hands-on practical application of radiation protection principles. Prerequisites: RPT233, or permission of instructor.

RDG008
Phonics
3 Credits. 3 Periods.
Designed for students who are learning English as a second language. Includes the study of the speech sounds used in English as represented by the written symbols of the alphabet; recognition of spelling patterns and resulting pronunciation; and diacritical markings. Prerequisites: Reading placement score (CELSA).

RDG016
Reading English as a Second Language I
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.

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.

RDG030
Reading English as a Second Language III
3 Credits. 3 Periods.
Designed for students who are learning English as a second language. Includes instruction for more advanced vocabulary and reading comprehension skills. Prerequisites: Appropriate ESL placement test score or grade of “C” or better in RDG020 or permission of instructor.

RDG040
Reading English as a Second Language IV
3 Credits. 3 Periods.
Developed for students of English as a second language. Includes development of advanced vocabulary, comprehension skills, and culture awareness. Prerequisites: Appropriate ESL placement test score or grade of “C” or better in RDG030 or permission of instructor.

RDG071
Basic Reading
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. Prerequisites: Prerequisites: Appropriate reading placement test score, or grade of “C” or better in RDG040.

RDG081
Reading Improvement
3 Credits. 3 Periods.
Designed to improve basic reading skills. Includes word recognition, inter disciplinary 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.

RDG091
College Preparatory Reading
3 Credits. 3 Periods.
Designed to improve basic reading and study skills, vocabulary and comprehension skills. Recommended to all students whose placement test scores indicate a need for reading instruction. Prerequisites: Appropriate reading placement test score, or grade of “C” or better in RDG081.

RDG095
Intensive Foundations for College Reading
6 Credits. 6 Periods.
Accelerated format to improve basic reading skills, study skills, and information literacy skills including vocabulary development, main idea identification, patterns of organization recognition, and comprehension improvement. Prerequisites: Appropriate reading placement test score, or grade of “B” or better in RDG071. Course Notes: RDG095 is an accelerated and intensive learning program for students and meets the requirements for RDG081 and RDG091 in one semester.
textsbooks and assessments, how to navigate information technology and development of academic vocabulary. Prerequisites: A grade of C or better in RDG081 or appropriate reading placement score or permission of Instructor. Corequisites: Any 100-level course in another content area or permission of Instructor.

**RDG015**
**Speed Reading**
2 Credits. 2 Periods.
Development of skills that result in increased reading speed while maintaining satisfactory comprehension of a variety of materials. Prerequisites: A grade of "C" or better in RDG091 or permission of instructor.

**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.

**REA180**
**Real Estate Principles II**
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: REA179 or permission of instructor.

**REC100**
**World Religions**
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

**REL101**
**Introduction to Religion**
3 Credits. 3 Periods.
Various religious expressions of humankind. Focuses on basic religious themes common to religions, such as encounter with the Holy, search for self and community, mystical illumination, spiritual discipline. Prerequisites: None

**REL112**
**Religion and Film**
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

**REL202**
**Classics of Asian Religions**
3 Credits. 3 Periods.
Academic study of selected works from Hindu, Buddhist, Taoist and Confucian traditions. Study of cultural and concepts of the world, history, culture, and human nature as represented in these works. Prerequisites: None

**REL203**
**American Indian Religions**
3 Credits. 3 Periods.
An examination of the historical and cultural background of diverse lifeways and worldviews belonging to the peoples indigenous to the North American continent over time, including a study of modern day American Indian beliefs and practices. Prerequisites: ENG101 or ENG107 or equivalent.

**REL207**
**Ritual, Symbol, and Myth**
3 Credits. 3 Periods.
Introduction to the academic study of religion through the study of myths, symbols, and rituals. Includes methods and theories used by scholars to study the complex subject of religion. Attention to literate and nonliterate cultures. Prerequisites: Grade of C or better in ENG101, or ENG107, or permission of Department or Division.

**REL243**
**World Religions**
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

**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: ENG101, or ENG107, or permission of Instructor

**REL270**
**Introduction to Christianity**
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

**REL290**
**Women and Religion**
3 Credits. 3 Periods.
The role of women in several organized religions and/or religious sects, including a study of myth and symbols as they are used to establish, maintain, and enforce sex-roles within specific religions. Prerequisites: None. Cross-References: WST290.
REL291  
Religions and Sexuality  
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: Student must be 18 years or older.

SLG101  
American Sign Language I  
4 Credits.  4 Periods.  

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/division.

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: SLG102 with a grade of C or better, or permission of Department or Division. Suggested but not required: (ENG101 or ENG107) and (CRE101, or CRE111, or exemption by score on the reading placement test (ASSET)). Completion of prerequisites within the last three years is required.

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: SLG201 with a grade of C or better, or permission of Department or Division. Suggested but not required: (ENG101 or ENG107), SLG200, and (CRE101, or CRE111, or exemption by score on the reading placement test). Completion of prerequisites within the last three years is required.

SLG203  
Financing and Cash Management For a Small Business  
1 Credit.  1 Period.  
Planning for and meeting the financial needs of the small business including cash flow planning, identification of financial needs and sources, equity and debt financing, and preparation of loan packages. Participants complete a financial plan for their individual company, with emphasis on cost controls, sales revenue projection, expense allocation, and inventory cost control. Day-to-day operational budgeting also included. Prerequisites: None.

SLG204  
Small Business Marketing and Advertising  
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.

SBS200  
Small Business Operations  
2 Credits.  2 Periods.  
In-depth analysis of and individual plan development for the “day-to-day” problems encountered in the operation of a small business. Includes the development of an individual business operations plan including finance, purchasing, production scheduling, maintenance, shipping/receiving, personnel management and insurance/risk management requirements. Investigation of daily problems related to inventory control and business expansion. Prerequisites: None.

SBS202  
Small Business Bookkeeping and Tax Preparation  
1 Credit.  1 Period.  
Introduces accounting and record-keeping business. Prerequisites: None.

SBS203  
Starting/Managing a Home Business  
1 Credit.  1 Period.  
Analysis of the successful operation of a home-based business. Includes study of economic feasibility, practicality, and adjustments for the family. Analysis of the advantages/disadvantages of operating a home based business, versus a “store-front” business. Review of current trends in home business opportunities and franchises. Descriptions of home businesses that have succeeded in local, national, and international markets. Prerequisites: None.

SBS204  
Internet Marketing for Small Business  
2 Credits.  2 Periods.  
Focuses on “e-Commerce”-doing business on the Internet and planning a website. Topics include: how the Internet can help growth and success of business; examples of successful marketing on the Internet; availability of Internet services; necessary hardware and software for marketing on the Internet; determining products/services appropriate for Internet marketing; budget constraints and on-going operations of the Internet site. Prerequisites: None.
## Social Work

**SWU102**  
**Introduction to Social Work**  
3 Credits.  
3 Periods.

An introduction to the fields within the area of social work through a study of the disciplines of social case work, social group work, and community organization. Opportunities to experience the various techniques of practice within each discipline. Required for students enrolled in the associate degree program of the social work curriculum. Prerequisites: Eligibility for ENG101 and CRE101

**SWU258**  
**Victimology and Crisis Management**  
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. Cross-reference: AJS/, EMT/FSC258.

**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: or Corequisites: SWU102 or SWU171 or permission of Department or Division

**SWU292**  
**Effective Helping in a Diverse World**  
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. (SOC101 and SWU102) or SWU171 suggested but not required.

## Society & Business

**SBU200**  
**Society and Business**  
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.

**SOC101**  
**Society & Business**  
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.

## Sociology

**SOC101**  
**Sociology**  
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.

**SOC130**  
**Human Sexuality**  
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 the sexuality of males and females in contemporary society. Prerequisites: Student must be 18 years or older.

**SOC157**  
**Sociology of Families and Relationships**  
3 Credits.  
3 Periods.

Systematic 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.

**SOC210**  
**The Child In Society**  
3 Credits.  
3 Periods.

Explores childhood within the context of society and culture. Focuses on the socialization process and examines contemporary issues and current sociological research related to children. Prerequisites: SOC101 or PSY101 or ECH176 or permission of instructor.

**SOC212**  
**Gender and Society**  
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.

**SOC241**  
**Race & Ethnic Relations**  
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.

**SOC251**  
**Social Problems**  
3 Credits.  
3 Periods.

A sociological exploration of selected social problems and inequalities. Analyzes issues in health care, dependencies, crime/violence, inequalities in race/class/gender/region/age, family, education, work, the economy, population migration/immigration, the environment, war and global insecurity. Prerequisites: None.

**SOC266**  
**Sociology through Film**  
3 Credits.  
3 Periods.

Examines movie-going and the experience of spectatorship. Studies how motion pictures reflect, influence, and are influenced by American culture and societal institutions. Explores the role of the movie industry as a vehicle for social commentary, analysis, and criticism. Prerequisites: None.
## Spanish

### SPA085AA
**Speedy Spanish I**
- 1 Credits.
- 1 Periods.
- Basic vocabulary and grammar to develop conversational skills in Spanish. Emphasis on speaking skills. Prerequisites: None

### SPA085AB
**Speedy Spanish II**
- 1 Credits.
- 1 Periods.
- Intermediate development of vocabulary and grammar to develop conversational skills in Spanish. Emphasis on speaking skills. Prerequisites: SPA085AA. Completion of prerequisites within the last three years is required.

### SPA085AC
**Speedy Spanish III**
- 1 Credits.
- 1 Periods.
- Advanced development of vocabulary and grammar to develop conversational skills in Spanish. Emphasis on speaking skills. Prerequisites: SPA085AB. Completion of prerequisites within the last three years is required.

### SPA101
**Elementary Spanish I**
- 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.

### 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 permission of Department or Division.

### SPA103
**Elementary Spanish for Spanish Speakers I**
- 4 Credits.
- 4 Periods.
- Review of basic Spanish grammar and pronunciation. Emphasis on reading and writing skills in Spanish. For native speakers needing review of essential language skills. Prerequisites: Spanish-speaking or departmental approval.

### SPA201
**Intermediate Spanish I**
- 4 Credits.
- 4 Periods.
- Continued study of essential Spanish grammar and Spanish-speaking cultures. Emphasis on fluency and accuracy in spoken Spanish. Prerequisites: Grade of “C” or better in SPA102, or SPA111, or permission of Department or Division.

### SPA202
**Intermediate Spanish II**
- 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.

### SPA203
**Spanish for Spanish-Speaking Students I**
- 4 Credits.
- 4 Periods.
- Designed for Spanish-speaking students. Emphasis on written composition, grammar review, punctuation and spelling, literature and conversation. May be taken in lieu of SPA201. Prerequisites: Permission of instructor or Department Chair.

### SPA204
**Spanish for Spanish-Speaking Students II**
- 4 Credits.
- 4 Periods.
- Designed for Spanish-speaking students. Advanced study of Spanish grammar, composition, literature, and conversation. May be taken in lieu of SPA204. Prerequisites: SPA203, or SPA201, or permission of instructor or department chair.

## Spanish Humanities

### SPH241
**Spanish and Latin American Film in Translation**
- 3 Credits.
- 3 Periods.
- A survey of Spanish and Spanish-American film as art form and as social commentary. Includes documentary, biography, and films based on works of literature. Coursework, class participation, and oral and written reports conducted in English. Prerequisites: None.

## Speech Language Pathology

### SLP104
**Speech, Language, and Hearing Development**
- 3 Credits.
- 3 Periods.
- Focuses on the processes involved in the normal development of human communication. Emphasis on normative processes involved in speech, language, and hearing development. Examines normal processes of bilingual speech and language development. Prerequisites: None.

### SLP205
**Introduction to Communication Disorders**
- 3 Credits.
- 3 Periods.
- Provides an overview of normative aspects of human communication including language, hearing, and speech. Focuses on causes, characteristics and implications of developmental and acquired communication disorders across the lifespan. Prerequisites: None.

### SLP210
**Speech and Hearing Anatomy and Physiology**
- 3 Credits.
- 3 Periods.
- Studies the anatomical systems that underlie human speech including the respiratory system and related nervous system processes. Examines the physical characteristics of sound and the structure and function of the human auditory system. Prerequisites: None.

### SLP212
**Language Disorders and Rehabilitation**
- 3 Credits.
- 3 Periods.
- Explores nature, causes and treatment of language disorders Across the lifespan,
including treatments specific to bilingual populations. Prerequisite: SLP104 and SLP205; or permission of instructor.

**SLP214**

**Speech Sound Disorders and Phonetics**

3 Credits. 3 Periods.
Provides an overview of English phonetics. Focuses on speech sound production from a linguistic, physiologic, acoustic and clinical perspective. Transcription of normal and disordered speech at the entry-level using the International Phonetic Alphabet (IPA). Reviews characteristics and treatment procedures for a variety of speech disorders. Prerequisites: SLP104 and SLP205; or permission of the instructor.

**SLP215**

**Speech, Language Hearing Disorders and Rehabilitation**

3 Credits. 3 Periods.
Focuses on speech sound production from a linguistic, physiologic, acoustic and clinical perspective. Reviews characteristics and treatment procedures for a variety of speech and hearing disorders. Prerequisites: SLP212 and SLP214; or permission of the Instructor.

**SLP217**

**Clinical Ethics and Documentation**

3 Credits. 3 Periods.
Focuses on issues associated with clients’/patients’ rights, professional and ethical behaviors, as specified by American Speech-Language and Hearing Association (ASHA) and other resources. Includes an overview of the educational service system and the health care industry. Reviews documentation required in planning, implementing and evaluating communicative behaviors. Prerequisites or Corequisites: SLP212 and SLP214; or permission of the Instructor.

**SLP218**

**Behavior Management**

3 Credits. 3 Periods.
Studies a variety of behavior management techniques including classical conditioning, operant conditioning modeling, motor learning and cognitive learning. Examines how to apply these techniques in working with speech-language disordered clients. Prerequisites or Corequisites: SLP212 and SLP214; or permission of the Instructor.

**SLP235AA**

**Speech-Language Pathology Practicum**

1 Credit. 1 Periods.
Practical experience in conducting speech-language therapy. Provides opportunities to create lesson plans, implement therapy, record client performance and maintain appropriate documentation for a variety of speech-language disorders in a variety of therapeutic environments. A minimum of 50 hours in a therapeutic environment required. Prerequisites: SLP212, SLP214, and SLP217; or permission of the Instructor.

**SLP235AB**

**Speech-Language Pathology Practicum**

2 Credits. 2 Periods.
Practical experience in conducting speech-language therapy. Provides opportunities to create lesson plans, implement therapy, record client performance and maintain appropriate documentation for a variety of speech-language disorders in a variety of therapeutic environments. A minimum of 100 hours in a therapeutic environment required. Prerequisites: SLP212, SLP214, and SLP217; or permission of the Instructor.

**SLP240**

**Assistive Technology and Augmentative Communication**

3 Credits. 3 Periods.
Provides and overview about the type of client who may need AT/AAC as well as the professional team involved in that decision. Reviews use of computer hardware and software that has been adapted for disabled individuals as well as low-tech and high-tech assistive technology and augmentative/alternative communication systems. Prerequisites: SLP215 and SLP218; or permission of the Instructor.

**SLP242**

**Low Incidence Disabilities**

3 Credits. 3 Periods.
Provides overview of disabilities with a focus on treatment techniques for low incidence disabilities, including blindness, low vision, deafness, hard-of-hearing, moderate to severe mental impairment, deaf-blindness, significant developmental delay, complex health issues, serious physical impairment, multiple disability, traumatic brain injury, genetic syndromes, and autism. Prerequisites: SLP104 and SLP205; or permission of the Instructor.

**SLP298AA**

**Special Projects**

1 Credit. 1 Period. (LAB)
Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and 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.

**SLP298AC**

**Special Projects**

3 Credits. 3 Periods. (LAB)
Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and 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.

**STO282AA**

**Volunteerism for Education: A Service Learning Experience**

1 Credit. 1 Period.
Service-learning field experience within educational systems, citizen advocacy groups, and human service organizations/agency. Prerequisites: Permission of Instructor. Course Notes: STO282AA may be repeated for a total of six (6) STO282 credit hours; may not repeat specific agency assignment for more than three (3) credit hours. Standard grading available according to procedures outlined in catalog.

**STO286**

**Using Storytelling in a Variety of Settings**

3 Credits. 3 Periods.
The application of storytelling and storytelling activities in the world of health care, business, parks, museums, hospitals, and education. Prerequisites: None.
STO288  
Telling Sacred Stories from Around the World  
3 Credits.  3 Periods.  
Introduction to sacred stories as a genre.  
Researching, developing, and crafting traditional and personal sacred stories.  
Finding appropriate applications and venues for telling. Prerequisites: None.

STO289AA  
Using Storytelling in Educational Settings  
1 Credits.  1 Periods.  
The application of storytelling and storytelling activities in educational settings. Prerequisites: None. Cross-References: EDU283AA

STO289AC  
Using Storytelling in Healing Settings  
1 Credits.  1 Periods.  
The application of storytelling and storytelling activities in healing settings. Prerequisites: None.

STO292  
The Art of Storytelling  
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. Cross-References: EDU292, HUM292.

STO293  
The Art of Storytelling II  
3 Credits.  3 Periods.  
Further exploration of the art of storytelling.  
Provide opportunities for the expansion of storytelling skills and a deeper appreciation of storytelling and its applications. Prerequisites: EDU292 or HUM292 or STO292.

STO294  
Multicultural Folktales  
3 Credits.  3 Periods.  
Study of multicultural folktales, exploring the impact of the oral tradition in American society and showing classroom applications. Prerequisites: None. Cross-References: EDU294, ENH294

STO297  
Creating and Telling Personal Stories  
3 Credits.  3 Periods.  
Exploration of the art and craft of finding, developing and telling personal stories. Prerequisites: EDU292, or HUM292, or STO292.

Textiles and Clothing

TEC106  
History of Fashion  
3 Credits.  3 Periods.  
Consideration of historic factors influencing fashion and fashion change with special emphasis on historic costume. Prerequisites: None.

Theatre

THE111  
Introduction to Theatre  
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.

THE118  
Playwriting  
3 Credits.  3 Periods.  
Practice and study of theories and techniques of writing for the stage; creating characters, dialogue, and plot for monodramas, scenes, and plays. Prerequisites: None.

THE119  
Film Analysis  
3 Credits.  3 Periods.  
Understanding and enjoyment of film and its correlation to literature, art, music, and other disciplines. Prerequisites: None. Cross-References: ENG260

THE205  
Introduction to Cinema  
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. Cross-References: HUM205

THE210  
Contemporary Cinema  
3 Credits.  3 Periods.  
A study of contemporary films, directors and critics with emphasis on evaluating film as an art form. Prerequisites: None. Cross-References: HUM210

THE220  
Modern Drama  
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: ENG101 or ENG107 or equivalent.

THE260  
Film Analysis  
3 Credits.  3 Periods.  
Understanding and enjoyment of film and its correlation to literature, art, music, and other disciplines. Prerequisites: None. Cross-References: ENG260

Theater Performance/Production

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.

THP115  
Theatre Makeup  
3 Credits.  4 Periods.  
Purpose, materials, and techniques of theatrical makeup. Prerequisites: None.
Course Descriptions

THP120AA
Audition Techniques: Prepared Monologue
1 Credit. 2 Periods.
Practice in the techniques of auditioning for the stage. Identifies and illustrates techniques of the prepared monologue audition. Prerequisites: None.

THP120AB
Audition Techniques: Cold Readings
1 Credit. 2 Periods.
Practice in the techniques of auditioning for the stage. Identifies and illustrates techniques of the cold reading audition. Prerequisites: None.

THP130
Stage Combat
3 Credits. 4 Periods.
Analysis and practice of physical movement, including basic techniques in staged personal combat with and without weapons. Emphasis on stunt fighting and fencing. Prerequisites: None.

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.

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. Course Notes: THP201AA may be repeated for up to a maximum of four (4) credits.

THP201AB
Theatre Production II
2 Credits. 4 Periods.
Designed to give college credit to the cast and technical production crews of college theatre productions. Prerequisites: None. Course Notes: THP201AB may be repeated for up to a maximum of four (4) credits.

THP210
Acting: TV/Film
3 Credits. 4 Periods.
Special technical aspects of acting before a camera. Prerequisites: THP112 or permission of instructor.

THP211
Creative Drama
3 Credits. 3 Periods.
Theory and practice of creative drama, including improvisation, storytelling, puppetry, and script and program development in drama, and their application to elementary and secondary school levels. Prerequisites: None.

THP212
Acting II
3 Credits. 4 Periods.
Fundamental techniques of acting through script analysis, rehearsal, and performance. Prerequisites: THP112 or departmental approval.

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.

THP214
Directing Techniques
3 Credits. 3 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: THP112 and THE220, or permission of instructor.

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: THP213 or permission of instructor.

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.

THP219
Introduction to Puppetry
3 Credits. 6 Periods.
Use of different types of puppets in a variety of performance settings. Practical experience with diverse audiences. Prerequisites: None

THP241
Oral Interpretation of Literature
See description under cross-reference course COM241

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: THP213

THP271
Voice and Diction
See description under cross-reference course COM271.

Total Quality Management

TQM101
Quality Customer Service
3 Credits. 3 Periods.
Examines the nature of quality customer service and the attitudes, knowledge, and skills needed to work effectively in a quality customer service environment. Foundation skills for quality customer service are taught, applied and practiced. Prerequisites: None. Cross-References: CSM101.

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.
### Welding Technology

**WLD101**
**Quality Customer Service**
3 Credits. 3 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.

**WLD106**
**Arc Welding**
5 Credits. 8 Periods.
Electric welding with emphasis on metallic arc welding in out-of-position practice and procedures. Prerequisites: None.

**WLD201**
**Welding II**
3 Credits. 6 Periods.
Further study of electric arc and oxyacetylene welding with emphasis on GTAW (heliarc) and GMAW (mig) processes to weld both ferrous and nonferrous metal. Prerequisites: WLD101

**WLD106**
**Advanced Welding-Heliarc and Wire Feed**
5 Credits. 8 Periods.
Instruction in theory and practice on tungsten inert gas and wire feed welding. Welding procedures on ferrous and nonferrous metals. Set up and operation of all types of machines used in tig and mig welding. Prerequisites: WLD106 or permission of Department or Division.

**WLD208**
**Advanced Welding-Certification**
5 Credits. 8 Periods.
Advanced metallic arc welding emphasizing out-of-position welding in preparation for certification. Includes various test methods. Provides training on machine flame cutting and gouging and arc air cutting and gouging. Prerequisites: WLD106 or permission of Instructor.

### Wellness Education

**WED110**
**Principles of Physical Fitness and Wellness**
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.

### Women’s Studies

**WST209**
**Women and Films**
See description under cross-reference course HUM209
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://chancellor.maricopa.edu/public-stewardship/governance/administrative-regulations

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

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

2.4.2 Nondiscrimination (see 5.1.1 Maricopa EEO Policy)
It is the policy of the Maricopa District (consisting of Chandler-Gilbert Community College, the District Office, Estrella Mountain Community College, GateWay Community College, Glendale Community College, Maricopa Skill Center, Mesa Community College, Paradise Valley Community College, Phoenix College, Rio Salado Community College, Scottsdale Community College, and South Mountain Community College) to:

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 or education, against any applicant, employee, or student on the basis of race, color, religion, sex, sexual orientation, gender identity, national origin, citizenship status (including document abuse), age, disability, veteran status or genetic information.

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 continue to be administered without regard to race, color, religion, sex, sexual orientation, gender identity, national origin status, citizenship status(including document abuse) , age, disability, veteran status or genetic information.

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.

2.4.3 Equal Opportunity Statement (see 5.1.3 EEO Policy Statement)
It is the policy of Maricopa 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, 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, veteran status or genetic information.

In addition, lack of English language skills is not a barrier to admission into Career and Technical Education (CTE) programs or skill centers. Students who enroll will be supported in the development of these skills by classes in English as a second language and other resources. Translation services and bilingual instruction can also be provided: contact college designee for more information.

AFFIRMATIVE ACTION STATEMENTS

Affirmative Action Policy Statement for Individuals with Disabilities
In conformance with the provisions of Section 503 of the Rehabilitation Act of 1973, as amended, and the implementing regulations, 41 CFR 60-741.5 (a), as amended, Maricopa County Community College District 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. Maricopa 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. Maricopa will also continue to administer these practices without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, citizenship status (including document abuse), age, disability, veteran status or genetic information. Additionally, all applicants and employees are protected from coercion, intimidation, interference, or discrimination for filing a complaint or assisting in an investigation under the Act.

Affirmative Action Policy Statement for Other Eligible Veterans, Special Disabled Veterans, and Vietnam Era Veterans
In conformance with the Vietnam Era Veterans Readjustment Assistance Act of 1974, the Veterans Employment Opportunities Act of 1998, and the implementing regulations, 41 CFR 60-250 (k), Maricopa County Community College District will not discriminate, nor tolerate discrimination in employment or education, against any applicant, employee, or student because he or she is a special disabled veteran or Vietnam era veteran in regard to any position for which the known applicant or employee is qualified. Maricopa 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. Maricopa 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, Maricopa 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.
MCCCD Policies and Procedures

Notice of Americans with Disabilities Act (ADA)/ Section 504 of the Rehabilitation Act/Title IX Coordinator

ADA/504/Title IX Coordinator | Address | Phone # | Email address
Under the ADA and Section 504, Maricopa recognizes the obligation to provide overall program accessibility throughout its locations for disabled individuals. 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.

Students with disabilities may request catalog information in an alternative format from the college ADA/504 Coordinator.

DECLARACIÓNES DE ACCIÓN AFIRMATIVA

Mandato de No Descriminación
Es el mandato de los Colegios Comunitarios del Condado de Maricopa (The Maricopa Community Colleges) que consisten del Centro de Apoyo del Distrito, los colegios comunitarios de Chandler-Gilbert, Estrella Mountain, Gateway, Glendale, Mesa, Paradise Valley, Phoenix, Rio Salado, Scottsdale, South Mountain y el Centro de Capacitación de Maricopa, proveer igualdad en las oportunidades de empleo mediante un programa continuo y positivo. Esto significa que Maricopa no descriminará o tolerará descriminación en empleo o educación en contra de ningún aplicante, empleado, o estudiante debido a su raza, color, religión, sexo, orientación sexual, identidad sexual, origen nacional, ciudadanía (incluyendo abuso de documentos), edad, incapacidad, estado de veterano/a o discriminación referente a raza, color, religión, sexo, orientación sexual, identidad sexual, origen nacional, ciudadanía (incluyendo abuso de documentos), edad, incapacidad, estado de veterano/a o información genésica. Este mandato de no descriminar cubre todos los aspectos de contratación del empleado, ingreso, acceso a, y tratamiento de alumnos en los Colegios Comunitarios de Maricopa los cuáles incluyen también programas de educación vocacional. Este mandato también prohíbe descriminación en base de orientación sexual en la admisión y tratamiento de estudiantes, en sus programas y actividades y en la contratación, tratamiento, promoción/ascensos, evaluación y despido de empleados.

Declaración de Igualdad de Oportunidad
Es el mandato de los Colegios Comunitarios del Condado de Maricopa promover igualdad en las oportunidades de empleo mediante un programa continuo y positivo. Esto significa que Maricopa no descrminará o tolerará descriminación en contra de ningún aplicante o empleado debido a su raza, color, religión, sexo, orientación sexual, identidad sexual, origen nacional, ciudadanía (incluyendo abuso de documentos), edad, incapacidad, estado de veterano/a o información genésica. Agregando, es el mandato de los Colegios Comunitarios promover para cada aplicante y empleado un ambiente libre de acoso sexual como también de acoso e intimidación referente a la raza, color, religión, sexo, orientación sexual, identidad sexual, origen nacional, ciudadanía (incluyendo abuso de documentos), edad, incapacidad, estado de veterano/a o información genésica.

Declaración de Acción Afirmativa
Mandato y Declaración de Acción Afirmativa para Individuos con Incapacidades De acuerdo a las provisiones en la Sección 503 de la Ley de Rehabilitación de 1973, como enmienda, y las leyes de implementación, 41 CFR 60-741.5 (a), declara que el Distrito de Colegios Comunitarios de Maricopa no descrminará o tolerarán descrminación en contra ningún aplicante o empleado debido a su desabilidad/incapacitación física o mental referente a cualquier posición para la cuál el aplicante o empleado ha calificado. Maricopa promete tomar acción afirmativa para emplear, dar ascenso en empleo y tratar a dichos individuos con incapacidades sin hacer incapaz en sus incapacidades físicas o
mentales en la selección de recursos humanos y prácticas decisivas como son las siguientes: anuncios, beneficios, compensación, disciplina (incluyendo periodo de prueba, suspensión, y/o terminación de empleo por causa de paro forzoso), facilidades para empleados, evaluación de trabajo, reclutamiento, programas sociales/recreacionales y entrenamiento. Maricopa continuará llevando a cabo éstas prácticas de no discriminar por razones de raza, color, religión, sexo, orientación sexual, identidad sexual, origen nacional, ciudadanía (incluyendo abuso de documentos), edad, incapacidad, estado de veterano/a o información genésica. Así mismo, todo los aplicantes y empleados están protegidos en contra de coacción, intimidación, interferencia o discriminación por quejas o por ayudar en una investigación cubierta bajo éste Acto.

Declaración de Mandato de Acción Afirmativa para Otros Veteranos Elegibles, Veteranos con Incapacitación Especial y Veteranos de la Era Vietnamita
Conforme a la ley de Reajuste y Asistencia para los Veteranos de la Era Vietnamita de 1974, acta de Oportunidades de Empleo para Veteranos de 1998 y reglamentos de implementación, 41 CFR 60-250(k), el Distrito de Colegios Comunitarios del Condado de Maricopa no discriminará ni tolerará discriminación en empleo o educación en contra de ningún aplicante, empleado, o estudiante veterano o veterana de la Era Vietnamita con desabilidad/incapacitación especial referente a cualquier posición la cual dicho aplicante o empleado califique. Maricopa promete aplicar acción afirmativa para emplear, ascender en empleo y tratar a dichos veteranos incapacitados y de la Era Vietnamita que califiquen sin discriminar base a su desabilidad/incapacitación o condición de veterano en todas las áreas de recursos humanos y decisiones como son las siguientes: anuncios, beneficios, compensación, disciplina (incluyendo periodo de prueba, suspensión, y/o despido por causa o paro forzoso), facilidades para empleados, evaluación de trabajo, reclutamiento, programas sociales/recreacionales y entrenamiento. Maricopa continuará llevando a cabo estas prácticas sin discriminar por razones de raza, color, religión, sexo, orientación sexual, identidad sexual, origen nacional, ciudadanía (incluyendo abuso de documentos), edad, incapacidad, estado de veterano/a o información genésica. Maricopa promete anunciar todas las oportunidades de empleo disponibles en la oficina local del servicio de empleo del Estado donde el empleo esté disponible. Esto incluye empleo de tiempo completo, temporal de más de tres días de duración y empleo de tiempo medio. Finalmente, todos los aplicantes y empleados están protegidos en contra de coacción, intimidación, interferencia o discriminación por quejas o por ayudar en una investigación cubierta sobre este Acto.

Notificación del Acta de Americanos con Impedimentos (ADA)/Sección 504 del Acta de Rehabilitación/Coordinador del Título IX
(Nombre y Posición), ADA/504/Coordinador del Título IX (dirección y número telefónico)
De acuerdo a ADA y a la sección 504, el distrito y sus colegios reconocen la obligación de proveer acceso a programas en todas sus localidades a personas incapacitadas. El coordinador designado de ADA/504/Título IX proveerá información tocante a la existencia y localidad de servicios, actividades y facilidades que son accesibles y de utilidad a personas incapacitadas. Solicitudes para acomodación deben ser dirigidas al coordinador. Del mismo modo, bajo el Título IX, hay obligación de proveer acceso a servicios y programas de una manera imparcial según el género.

Estudiantes incapacitados pueden solicitar información de catálogo en una forma diferente por medio del Coordinador designado por ADA/504 en cada colegio.

Governing Values (Board Policy 4.1)
Our Vision: A Community of Colleges—Colleges for the Community—working collectively and responsibly to meet the life-long learning needs of our diverse students and communities.

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

[Estrella Mountain Community College | 2014-2015 Catalog] [259]
Our Institutional Values: The Maricopa Community Colleges are committed to:

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

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

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

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

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

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

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

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

1. General Statement

Compliance with Policies, Rules and Regulations

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

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

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

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

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

2. Outcomes Assessment

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

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

2.2.1 Admission Policy

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

Admission Classifications

1. Admission of Regular Students

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

A. Is a graduate of a high school, which is accredited by a regional accrediting association as defined by the United States Office of Education or approved by a State Department of Education or other appropriate state educational agency.

B. Has a high school certificate of equivalency.
2. Admission of Students Under 18 Years of Age
   A. Admission to the community colleges in Arizona shall be granted to any student who is under age 18 and who completes course prerequisites and meets any one of the following requirements:
      i. A composite score of 93 or more on the Preliminary Scholastic Aptitude Test (PSAT).
      ii. A composite score of 930 or more on the Scholastic Aptitude Test (SAT).
      iii. A composite score of twenty-two or more on the American College Test (ACT).
      iv. A passing score on the relevant portions of the Arizona Instrument to Measure Standards test (AIMS).
   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. A student shall not be denied admission because of age, lack of a high school diploma or high school certificate of equivalency, grade in school, lack of permission of school officials or lack of concurrent enrollment in a public or private school, if the student has achieved at least a specified score on a college entrance examination.

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.

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), 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-of-state students and expect to receive the WUE tuition rate after admitted. Once admitted as WUE students, students may not petition for in-state residency. Further information may be obtained from the Admissions and Records Office/Office of Student Enrollment Services.

5. Admission of F-1 Nonimmigrant Students
   Prospective students should contact the Admissions and Records Office/Office of Student Enrollment Services or designated office for the international student application form(s). 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.

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.

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.

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

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuition and Fees</td>
<td>$ 8,010(1)</td>
</tr>
<tr>
<td>Living Expenses</td>
<td>$10,140(2)</td>
</tr>
<tr>
<td>Books</td>
<td>$1100(3)</td>
</tr>
<tr>
<td>Health Insurance</td>
<td>$1100(4)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$20,350(5)</strong></td>
</tr>
</tbody>
</table>

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

E. Health Insurance
All F-1 and M-1 students who have an I-20 issued by one of the Maricopa Community Colleges are required to purchase the Maricopa Community Colleges' international student health insurance plan. Health insurance coverage for dependents of F-1 and M-1 students is highly recommended. The Maricopa Community Colleges contracts with an insurance provider annually to offer a health insurance plan for F-1
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 2014-2015 insurance premiums for the mandatory Maricopa Community Colleges' International Student Health Plan.
(5) Applicants must provide evidence of this minimum amount of financial support before an I-20 is issued.

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.

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.

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

3. Residency for Tuition Purposes (see also 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)

   Residency for tuition purposes is determined in accordance with state law (ARS §§15-1801et 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.

   A. Implementation
      i. 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.
      ii. 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.
      iii. 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 days of receipt of notification of classification as a non-resident. Failure to properly file a request for review within the prescribed time limit constitutes a waiver of review for the current enrollment period. The decision of the review committee shall be final.

   B. Definitions
      i. “Armed Forces of the United States” means the Army, the Navy, the Air Force, the Marine Corps, the Coast Guard, the commissioned corps of the United States Public Health Services, the National
Oceanographic and Atmospheric Administration, the National Guard, or any military reserve unit of any branch of the Armed Forces of the United States.

ii. "Continuous attendance" means enrollment at one of Maricopa Community Colleges as a full-time or part-time student for a normal academic year since the beginning of the period for which continuous attendance is claimed. Students need not attend summer sessions or other such intersession beyond the normal academic year in order to maintain continuous attendance.

iii. "Maricopa County resident" means an individual who has lived in Maricopa County for at least fifty (50) days before the first day of classes of the semester. 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.

v. "Emancipated person" means a person who is neither under a legal duty of service to his parent nor entitled to the support of such parent under the laws of this state.

vi. "Full-time student" means one who registers for at least twelve (12) credit hours per semester.

vii. "Part-time student" means one who registers for fewer than twelve (12) credit hours per semester.

viii. "Parent" means a person's father, or mother, or if one parent has custody, that parent, or if there is no surviving parent or the whereabouts of the parents are unknown, then a guardian of an unemancipated person if there are not circumstances indicating that such guardianship was created primarily for the purpose of conferring the status of an in-state student on such unemancipated person.

C. Criteria for Determining Residency

i. In-State Student Status

1. Except as otherwise provided in this article, no person having a domicile elsewhere than in this state is eligible for classification as an in-state student for tuition purposes. Applicants 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.

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 honorable discharge from the uniformed services of the United States from either active duty or reserve or national guard status, or who has retired from active duty or reserve or national guard status, shall be granted immediate classification as an in-state student and, while continuously enrolled, does not lose in-state student classification if the person has demonstrated objective evidence of intent to be a resident of Arizona that, for the purposes of this section, includes at least one of the following:

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

8. A 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.

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
MCCCD Policies and Procedures

7. 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 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 this state. After meeting other domicile requirements, students holding valid, unexpired visas in the following categories may be classified as in-state students:
   A=Foreign Government Official or Adopted Child of a Permanent Resident
   E=Treaty Traders
   G=Principal Representative of Recognized Foreign Member Government to International staff
   K=Spouse or Child of Spouse of a US Citizen, Fiancé or Child of Fiancé of US Citizen
   L=Intra company Transferee or Spouse or Child
   N6=NATO-6
   U=Victim of Criminal Activity
   V=Spouses and Dependent Children of Lawful Permanent Residents

4. Students who hold a current visa and have submitted an I-485 to Citizenship and Immigration Services (CIS), 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 CIS Notice of Action letter (I-797) confirming application for permanent resident status. Students must provide required residency documentation in addition to the 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.

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 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:
MCCCD Policies and Procedures

- An Arizona Driver’s license issued after 1996 or an Arizona non-operating identification license or an Arizona Instruction Permit
- A birth certificate or delayed birth certificate issued in any state, territory, or possession of the United States (A hospital record/certificate and certified Abstract of Birth are not acceptable).
- A United States certificate of birth abroad.
- A United States Passport.
- A Foreign Passport with a United States Visa.
- An I-94 Form with a Photograph.
- A United States Permanent Resident Card
- A United States Certificate of Naturalization.
- A United States Certification of Citizenship.
- A Tribal Certificate of Indian Blood.
- A Tribal or Bureau of Indian Affairs Affidavit of Birth.

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

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

** 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. Any 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. Other relevant information

2. County Residency
   a. An affidavit signed by the student must be filed with the person responsible for verifying domicile to prove continuous residency in a county for fifty (50) days, and
   b. Any of the following may be used to determine a student’s county residency:
      1. Notarized statements of landlord and/or employer
      2. Source of financial support
      3. Place of graduation from high school
      4. Ownership of real property
      5. Bank accounts
      6. Arizona income tax return
      7. Dependency as indicated on a Federal income tax return
      8. Other relevant information

D. Concurrent Enrollment in Arizona Public Institutions of Higher Education (ARS §15-1807) (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 by Direct Chancellor Approval, August 30, 2015
AMENDED by Direct Chancellor Approval, May 20, 2015

2.2.3 Other Admission Information
1. Veterans
   By Arizona statute, any failing grades from any Arizona university or community college that were received prior to military service will not be used to determine admission to the community college for the honorably discharged veterans with two years’ service in the Armed Forces of the United States. Students admitted or readmitted to the community college under this statute are subject to progression, retention, graduation and other academic regulations and standards. (Also see Withdrawal - Appendix S-7)

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 requiring developmental/remedial coursework and is pursuing a degree/certificate in an eligible program.
   iii. "Special" status, for the purpose of 2.2.3.2, is granted to a student admitted to the college for concurrent enrollment or pursuing one or more courses of special interest and who meets all the requirements for admission.

3. Transcripts
   The Maricopa Community Colleges reserve the right to require an official transcript for admission to specific programs, for verification of course requisites and for determination of academic standing. The official transcript must be mailed directly from the source institution to the college Admissions and Records Office/Office of Student Enrollment Services. 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. Students entering as GED recipients may be required to present a copy of the high school equivalency certificate or official report of qualifying GED scores.

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

2.2.4 Credit for Prior Learning
   The Maricopa Community Colleges recognize that learning takes place in a variety of situations and circumstances. Many students have significant, demonstrable learning from experiences outside the traditional academic environment. Therefore, prior learning, not life experience, is the basis for the award of college credit. Students may be awarded no more than 30 credit hours, unless required by a specific program of study, within the Maricopa Community Colleges using one or more of the following assessment methods recommended by the Council for Adult and Experiential Learning (CAEL) and the American Council on Education (ACE):
   • Articulated Programs;
   • Credit by Evaluation; and
   • College-Level Equivalency Examinations.
Credit awarded for prior learning does not count as hours in residence for graduation requirements. Exceptions may be granted at some MCCD colleges for specially approved programs. No more than 20 credit hours may be applied to AGEC. 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 meet with a program advisor or contact the college or university they plan to attend. For further information on Prior Learning Assessment, contact the Admissions and Records Office/Office of Student Enrollment Services.

1. **Credit by Evaluation**

   The Maricopa Community Colleges offer credit by evaluation. The American Council on Education (ACE) evaluates military training and experiences as well as non-collegiate sponsored training programs and recommends credit awards based on this evaluation. 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. The credits are included on a student's transcript.

   A. **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:

      i. Training parallels a discipline area offered through the Maricopa Community Colleges, and
      ii. 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.

   B. **College Credit Recommendation Service (CREDIT)**

      ACE evaluates training programs offered by business, industry, and government and publishes its credit recommendations in The National Guide to College Credit for Workforce Training. If a student has received training that appears in the guide, he or she may receive college credit if:

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

   C. **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 Office/Office of Student Enrollment Services, and completing applicable paperwork and other requirements of the college, including payment of required fee. See fee schedule for appropriate fee. Fees are not refundable if a student fails to obtain credit. Students may not request:

      i. The evaluation of a course a second time;
      ii. The evaluation of a course while currently enrolled in the course;
      iii. To establish credit in a previously completed course; and
      iv. To establish credit for a lower level of a course in which credit has been received. Exceptions may be granted at some MCCD colleges for their unique programs of study.

      Certain departments have additional requirements that must be met before credit may be granted through departmental credit by evaluation. When credit is granted as outlined above, 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.

2. **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 Maricopa Community Colleges coursework as well as elective credit. Scores must be sent directly to the Admissions and Records Office/Office of Student Enrollment Services from the specific testing company(s) before credit is awarded. All equivalency is subject to future review and possible catalog change.

A. Advanced Placement Examinations

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 with a score of 3, 4 or 5. Scores must be received directly from CEEB before credit is awarded.

English AP Recommendation:

<table>
<thead>
<tr>
<th>Exam</th>
<th>Score</th>
<th>Credit Hours/Equivalency</th>
</tr>
</thead>
<tbody>
<tr>
<td>English-Language and Composition</td>
<td>5 or 4</td>
<td>3 credit hrs/ENG 101 or Elective Credit (and placement into hours composition at universities)</td>
</tr>
<tr>
<td>English-Literature</td>
<td>5 or 4</td>
<td>3 credit hrs/ENG 101 or Elective Credit (and placement into hours composition at universities)</td>
</tr>
</tbody>
</table>

Math AP Recommendation:

<table>
<thead>
<tr>
<th>Exam</th>
<th>Score</th>
<th>Credit Hours/Equivalency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Math-Calculus AB</td>
<td>5, 4, or 3</td>
<td>4 CREDIT HRS/MAT 221</td>
</tr>
<tr>
<td>MATH-CALCULUS BC</td>
<td>2 OR 1</td>
<td>4 CREDIT HRS/MAT 221</td>
</tr>
<tr>
<td>(with AB subscore 3 or higher)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Math-Calculus BC</td>
<td>5, or 4</td>
<td>8 CREDIT HRS/MAT 221 &amp; MAT 231,</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>4 CREDIT HRS/MAT 221</td>
</tr>
<tr>
<td>Computer Science A</td>
<td>5 or 4</td>
<td>3 CREDIT HRS/CSC 100 or CSC 110</td>
</tr>
</tbody>
</table>

B. College Level Examination Program

The Maricopa Community Colleges may award credit to individuals who have received a score of 500 or more for the 1986 version of the College Level Examination Program (CLEP) General Examinations (610 on the 1978 version) and who meet or exceed the American Council on Education (ACE) recommended scores for awarding credit on the CLEP subject examinations. The ACE credit-granting score recommendation will be 50 (on the 20-80 scale) for all CLEP computer-based exams beginning July 1, 2001.

- Credit received through CLEP is transferable within the Maricopa Community Colleges, but is not necessarily transferable to other colleges and universities.
- Rio Salado College and Paradise Valley Community College are national CLEP test sites. For more information on registering for the CLEP examinations, contact Rio Salado College or Paradise Valley Community College.

College Composition:

<table>
<thead>
<tr>
<th>Exam</th>
<th>Score</th>
<th>Credit Hours/Equivalency</th>
</tr>
</thead>
<tbody>
<tr>
<td>College Composition</td>
<td>50</td>
<td>ENG 101 (3) or Elective Credit (and placement into honors composition at universities)</td>
</tr>
</tbody>
</table>

The Maricopa Community Colleges do not award credit for ENG 102 through CLEP examination.

Foreign Languages:

Credit earned through CLEP examination for French, German, and Spanish meets the language proficiency requirements of the Maricopa Community Colleges. For CLEP examinations taken prior to July 1, 2001, the Maricopa Community Colleges will grant credit based on the scaled scores indicated below:

<table>
<thead>
<tr>
<th>Course</th>
<th>Spanish</th>
<th>French</th>
<th>German</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>101</td>
<td>50-54</td>
<td>50-54</td>
<td>39-45</td>
<td>4 (101)</td>
</tr>
<tr>
<td>102</td>
<td>55-65</td>
<td>55-61</td>
<td>46-50</td>
<td>8 (101 &amp; 102)</td>
</tr>
<tr>
<td>201</td>
<td>66-67</td>
<td>62-65</td>
<td>51-59</td>
<td>12 (101 &amp; 102 &amp; 201)</td>
</tr>
</tbody>
</table>
MCCCD Policies and Procedures

At the discretion of the individual college, an oral exam at the 202 level may be administered.

C. Defense Activity for Non-traditional Education Support Examination Program
The Maricopa Community Colleges may award credit for the Defense Activity for Non-Traditional Education Support (DANTES) Examination Program to individuals who meet or exceed the ACE recommended scores for awarding credit on the DANTES subject examinations. The Maricopa Community Colleges do not award credit for ENG 102 through DANTES examination. Credit received through DANTES 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 national test site. For additional information on registering for DANTES examinations, call (480) 517-8560.

D. 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.

E. Departmental Credit By Examination
Students may apply for Departmental Credit By Examination in certain courses by obtaining the appropriate form in the Admissions and Records Office/Office of Student Enrollment Services, paying the required fee, and completing the examination and other requirements of the college. See fee schedule for appropriate fees.

Students may not request:
   i. To challenge a course a second time;
   ii. To challenge a course while currently enrolled in the course;
   iii. To establish credit in a previously completed course; and
   iv. To establish credit for a lower level of a course in which credit has been received.

- Exceptions may be granted at some MCCCD colleges for their unique programs of study.
- Certain 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.

College Level Examination Program (CLEP)

NOTE: Changes to exams and scores are determined by the respective Statewide Articulation Task Force (ATF). The credit awarded and equivalent courses are established by MCCCD Instructional Councils (ICs).

DISCLAIMER: Test scores are continually reviewed and may be updated at any time. Changes will be noted as they occur.

Table Revised March 2016

<table>
<thead>
<tr>
<th>Examination</th>
<th>MCCC</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>General</td>
<td>Score</td>
<td></td>
<td></td>
</tr>
<tr>
<td>College Composition</td>
<td>50 or higher</td>
<td>3</td>
<td>ENG101(3) or Elective Credit (3) (and placement into honors composition at universities)</td>
</tr>
<tr>
<td>College Composition—Modular</td>
<td>50 or higher</td>
<td>0</td>
<td>NT</td>
</tr>
<tr>
<td>Humanities</td>
<td>50 or higher</td>
<td>6</td>
<td>Elective Credit*</td>
</tr>
<tr>
<td>Natural Sciences</td>
<td>50 or higher</td>
<td>3</td>
<td>Elective Credit*</td>
</tr>
<tr>
<td>Social Sciences and History</td>
<td>56</td>
<td>3</td>
<td>Elective Credit</td>
</tr>
</tbody>
</table>

| **Subject** | | | |
| American Government | ACE Score | 3 | POS110 |
| American Literature | 50 or higher | 6 | ENH241* & ENH242 |
| Analyzing and Interpreting Literature | ACE Score | 3 | Elective Credit* |
| Biology | 50 or higher | 3 | BIO Elective Credit* |
| Calculus (Previously Calculus with Elem Functions) | ACE Score | 4 | MAT221 |
| Chemistry | 50 or higher | 4 | CHM151(3) and CHM151LL(1)* |
| College Algebra | 50 or higher | 3 | MAT152 |
| College Composition (Replaces English Composition with Essay) | 50 or higher | 4 | ENG101 or Elective Credit (and placement into honors composition at universities) |
| English Literature | ACE Score | 3 | Elective Credit* |
| Financial Accounting | 50 or higher | 3 | Elective Credit (students pursuing an AAS at a community college may be able to substitute this exam course to meet an accounting requirement, but a substitution is not allowed in a transfer degree. Contact the appropriate department at your community college to see if this is an option.) |

| French Language, Level 1 (Previously French Language) | 50-54 | 4 | FRE101 |
| | 55-61 | 8 | FRE101, 102 |
| French Language, Level 2 (Previously French Language) | 62-65 | 12 | FRE101, 102, 201 |
| | 66-80 | 16 | FRE101, 102, 201, 202 |
| German Language, Level 1 (Previously German Language) | 39-45 | 4 | GER101 |
| | 46-50 | 8 | GER101, 102 |
| German Language, Level 2 (Previously German Language) | 51-59 | 12 | GER101, 102, 201 |
| | 60-80 | 16 | GER101, 102, 201, 202 |
| Human Growth and Development | 50 or higher | 3 | CFS205 |
| Information Systems and Computer Applications | 50 or higher | 0 | Not accepted |
| Intro to Educational Psychology | ACE Score | 3 | EDU Elective Credit |
| Introductory Business Law | 50 or higher | 3 | Elective Credit |
| Introductory Psychology | 50 or higher | 3 | PSY101 |
| Introductory Sociology | 50 or higher | 3 | SOC101 |
| Macroeconomics, Principles of (Replaces Introductory Macroeconomics) | ACE Score | 3 | ECN211 |
| Management, Principles of | 50 or higher | 0 | Not Accepted |
| Marketing, Principles of | 50 or higher | 0 | Not Accepted |
| Microeconomics, Principles of (Replaces Introductory Microeconomics) | ACE Score | 3 | ECN212 |
| Precalculus | 50 or higher | 5 | MAT187 |
| Spanish Language, Level 1 (Previously Spanish Language) | 50-54 | 4 | SPA101 |
| | 55-65 | 8 | SPA101, 102 |
| Spanish Language, Level 2 (Previously Spanish Language) | 66-67 | 12 | SPA101, 102, 201 |
### Spanish Language

<table>
<thead>
<tr>
<th>Examination</th>
<th>Score</th>
<th>MCCCD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trigonometry</td>
<td>68-80</td>
<td>16</td>
</tr>
<tr>
<td>ACE Score</td>
<td>3</td>
<td>MAT182</td>
</tr>
<tr>
<td>U.S. History I – Early Colonization to 1877</td>
<td>56</td>
<td>3</td>
</tr>
<tr>
<td>U.S. History II – 1865 to the Present</td>
<td>56</td>
<td>3</td>
</tr>
<tr>
<td>Western Civilization I – Ancient Near East to 1648</td>
<td>56</td>
<td>6</td>
</tr>
<tr>
<td>Western Civilization II – 1648 to the Present</td>
<td>56</td>
<td>3</td>
</tr>
</tbody>
</table>

*The general studies requirement in natural sciences (SQ and SG) and Literacy and Critical Inquiry (L) are not satisfied by CLEP.

### Examination Table

#### Advanced Placement Credit (AP)

**NOTE:** Changes to exams and scores are determined by the respective Statewide Articulation Task Force (ATF). The credit awarded and equivalent courses are established by MCCCD Instructional Councils (ICs).

**DISCLAIMER:** Test Scores are continually reviewed and may be updated at any time. Changes will be noted as they occur.

*Table Revised March 2016*

<table>
<thead>
<tr>
<th>Examination</th>
<th>Score</th>
<th>MCCCD</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art – History</td>
<td>5 or 4</td>
<td>ARH101, 102</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>ARH101 or 102</td>
<td>3</td>
</tr>
<tr>
<td>Art – Studio Art (2-D Design) (Previously Art – Studio – General)</td>
<td>5</td>
<td>ART 112</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Art – Studio Art (3-D Design)</td>
<td>5 or 4</td>
<td>ART115</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biology</td>
<td>5 or 4</td>
<td>BIO181, 182</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>BIO100 or Equivalent</td>
<td>4</td>
</tr>
<tr>
<td>Chemistry</td>
<td>4</td>
<td>CHM151/151LL</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>CHM151 &amp; 151LL &amp; CHM152 &amp; 152LL</td>
<td>8</td>
</tr>
<tr>
<td>Calculus AB (Previously Mathematics – Calculus AB)</td>
<td>5, 4, or 3</td>
<td>MAT221</td>
<td>4</td>
</tr>
<tr>
<td>Calculus (With Ab subscore 3 or Higher)</td>
<td>2 or 1</td>
<td>MAT221</td>
<td>4</td>
</tr>
<tr>
<td>Calculus BC (Previously Mathematics – Calculus BC)</td>
<td>5 or 4</td>
<td>MAT221 &amp; MAT231</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>MAT221</td>
<td>4</td>
</tr>
<tr>
<td>Chinese Language and Culture (Previously Chinese – Language)</td>
<td>5</td>
<td>CHI101 &amp; 102 &amp; 201 &amp; 202</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>CHI101 &amp; 102 &amp; 201</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>CHI101 &amp; CHI102</td>
<td>10</td>
</tr>
<tr>
<td>Comparative Government and Politics (Previously Political Science – Comparative Government and Politics)</td>
<td>5 or 4</td>
<td>POS140</td>
<td>3</td>
</tr>
<tr>
<td>Computer Science A</td>
<td>5 or 4</td>
<td>CSC100 or CSC110</td>
<td>3</td>
</tr>
<tr>
<td>Economics – Macroeconomics</td>
<td>5 or 4</td>
<td>ECN211</td>
<td>3</td>
</tr>
<tr>
<td>Economics – Microeconomics</td>
<td>5 or 4</td>
<td>ECN212</td>
<td>3</td>
</tr>
<tr>
<td>English – Language and Composition</td>
<td>5 or 4</td>
<td>ENG101 or Elective Credit</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(and placement into honors)</td>
<td></td>
</tr>
<tr>
<td>English – Literature</td>
<td>5 or 4</td>
<td>ENG101 or Elective Credit</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(and placement into honors)</td>
<td></td>
</tr>
<tr>
<td>Course</td>
<td>Credits</td>
<td>Composition at Universities</td>
<td></td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>---------</td>
<td>-----------------------------</td>
<td></td>
</tr>
<tr>
<td>Environmental Science</td>
<td>5 or 4</td>
<td>Elective Credit</td>
<td></td>
</tr>
<tr>
<td>European History</td>
<td>5 or 4</td>
<td>HIS101, HIS102</td>
<td></td>
</tr>
<tr>
<td>French – Language</td>
<td>5, 4, or 3</td>
<td>FRE101, 102, 201, 202</td>
<td></td>
</tr>
<tr>
<td>French – Literature</td>
<td>5, 4, or 3</td>
<td>FRE101, 102, 201, 202</td>
<td></td>
</tr>
<tr>
<td>German – Language</td>
<td>5, 4, or 3</td>
<td>GER101, 102, 201, 202</td>
<td></td>
</tr>
<tr>
<td>German – Literature</td>
<td>5, 4, or 3</td>
<td>GER101, 102, 201, 202</td>
<td></td>
</tr>
<tr>
<td>History - World</td>
<td>5 or 4</td>
<td>HIS 110 &amp; HIS 111</td>
<td></td>
</tr>
<tr>
<td>Human Geography</td>
<td>5 or 4</td>
<td>GCU 102</td>
<td></td>
</tr>
<tr>
<td>Japanese Language and Culture (Previously)</td>
<td>5</td>
<td>JPN101, 102, 201 and 202</td>
<td></td>
</tr>
<tr>
<td>Japanese – Language</td>
<td>4</td>
<td>JPN101, 102 and 201</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>JPN101 and 102</td>
<td></td>
</tr>
<tr>
<td>Latin: Vergil (Previously Latin – Language)</td>
<td>5</td>
<td>LAT101, 102, 201, 202</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>LAT101, 102, 201</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>LAT101, 102</td>
<td></td>
</tr>
<tr>
<td>Music Theory (Previously Music)</td>
<td>5 or 4</td>
<td>MTC105 &amp; MTC 106</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>PHY111</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4 or 5</td>
<td>NT</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>PHY112</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4 or 5</td>
<td>NT</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>PHY112</td>
<td></td>
</tr>
<tr>
<td>Physics B (2013-14)</td>
<td>5</td>
<td>PHY111 and PHY112</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>PHY111</td>
<td></td>
</tr>
<tr>
<td>Physics C – Electricity and Magnetism</td>
<td>5, 4, or 3</td>
<td>PHY112</td>
<td></td>
</tr>
<tr>
<td>Physics C – Mechanics</td>
<td>5, 4, or 3</td>
<td>PHY111</td>
<td></td>
</tr>
<tr>
<td>Psychology</td>
<td>5 or 4</td>
<td>PSY101</td>
<td></td>
</tr>
<tr>
<td>Spanish – Language</td>
<td>5, 4, or 3</td>
<td>SPA101, 102, 201, 202</td>
<td></td>
</tr>
<tr>
<td>Spanish – Literature</td>
<td>5, 4, or 3</td>
<td>SPA101, 102, 201, 202</td>
<td></td>
</tr>
<tr>
<td>Statistics</td>
<td>5, 4, or 3</td>
<td>MAT206</td>
<td></td>
</tr>
<tr>
<td>U.S. Government and Politics (Previously Political Science – American Government)</td>
<td>5 or 4</td>
<td>POS110</td>
<td></td>
</tr>
<tr>
<td>U.S. History (Previously History – American)</td>
<td>5 or 4</td>
<td>HIS103, HIS104</td>
<td></td>
</tr>
</tbody>
</table>

Amended by CCTA November 2015

F. International Baccalaureate Diploma/Certificate

Students who present an International Baccalaureate Diploma/Certificate may qualify for college credit.

MCCCD College grants credit for college-level courses only. Credit is awarded according to the "International Baccalaureate Diploma/Certificate Credit" table.

International Baccalaureate Diploma/Certificate Credit (IB)

Note: Changes to exams and scores are determined by the respective Statewide Articulation Task Force (ATF). The credit awarded and equivalent courses are established by MCCCD Instructional Councils (ICs).

DISCLAIMER: Test scores are continually reviewed and may be updated at any time. Changes will be noted as they occur.

Table Revised March 2016

<table>
<thead>
<tr>
<th>Examination</th>
<th>Score</th>
<th>Sem. Hrs.</th>
<th>MCCCD Equivalency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology</td>
<td>7 or 6</td>
<td>8</td>
<td>BIO181, 182</td>
</tr>
<tr>
<td></td>
<td>4 or 5</td>
<td>4</td>
<td>BIO100 or equivalent</td>
</tr>
<tr>
<td>Business and Management</td>
<td>5 or higher</td>
<td>3</td>
<td>Elective credit</td>
</tr>
</tbody>
</table>
### MCCCD Policies and Procedures

#### Chemistry
- 7, 6, or 5
- 4
- 8
- CHM151 & 151LL & CHM 152LL
- CHM151 & CHM151LL

#### Computer Science
- 5 or higher
- 3
- CSC110 or CSC110AA or CSC110AB

#### Economics
- 7, 6, or 5
- 6
- ECN211, 212

#### English A
- 7, 6, or 5
- 3
- ENG101
- or Elective Credit

#### English B
- No Credit
- NT

#### Foreign Language A or B
- 7, 6, or 5
- 8
- Foreign Language 201, 202
- Foreign Language 101, 102

#### Geography (Previously Human Geography)
- 5 or higher
- 3
- GCU102

#### History (Previously History – American)
- 7, 6, or 5
- 6
- HIS103, 104
- HIS103

#### History (Previously History – European)
- 7, 6, or 5
- 6
- HIS101, 102
- HIS101

#### Mathematics HL
- 7, 6, or 5
- 4
- MAT221

#### Mathematics SL
- Mathematical Studies SL
- Further Mathematics SL
- (Previously Mathematics)

#### Physics
- 7, 6, or 5
- 4
- 8
- 4
- PHY111, 112
- PHY111

#### Psychology
- 5 or higher
- 3
- PSY101

#### Social and Cultural Anthropology
- 7, 6, 5, or 4
- 3
- ASB102

#### Visual Arts (Previously Art/Design)
- 7, 6, or 5
- 4
- 6
- 3
- ART111, 112
- ART112

---

### Cambridge International Examinations (CIE) A and AS Level

*Changes to exams and scores are determined by the respective Statewide Articulation Task Force (ATF). The credit awarded and equivalent courses are established by MCCCD Instructional Councils (ICs). DISCLAIMER: Test scores are continually reviewed and may be updated at any time. Changes will be noted as they occur.*

<table>
<thead>
<tr>
<th>CIE Examination</th>
<th>Score</th>
<th>Sem. Hrs.</th>
<th>MCCCD Equivalency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting-A Level</td>
<td>D or E</td>
<td>6</td>
<td>Elective Credit</td>
</tr>
<tr>
<td>Accounting-AS Level</td>
<td>D or E</td>
<td>3</td>
<td>Elective Credit</td>
</tr>
<tr>
<td>Art &amp; Design-A Level</td>
<td>D or E</td>
<td>6</td>
<td>ART111 &amp; ART112</td>
</tr>
<tr>
<td>Art &amp; Design-AS Level</td>
<td>D or E</td>
<td>3</td>
<td>ART111</td>
</tr>
<tr>
<td>Biology-A Level</td>
<td>D</td>
<td>8</td>
<td>BIO181 &amp; BIO182</td>
</tr>
<tr>
<td>Biology-AS Level</td>
<td>D</td>
<td>4</td>
<td>BIO181</td>
</tr>
<tr>
<td>Economics-A Level</td>
<td>D or higher</td>
<td>6</td>
<td>ECN211 &amp; ECN212</td>
</tr>
<tr>
<td>Geography-A Level</td>
<td>D or E</td>
<td>6</td>
<td>Elective Credit</td>
</tr>
<tr>
<td>Geography-AS Level</td>
<td>D or E</td>
<td>3</td>
<td>Elective Credit</td>
</tr>
<tr>
<td>Marine science-A Level</td>
<td>D or higher</td>
<td>8</td>
<td>BIO 145 (4), BIO149AK (1) &amp; BIO DEPT ELECTIVE (3)</td>
</tr>
<tr>
<td>Marine Science-AS Level</td>
<td>D or higher</td>
<td>4</td>
<td>BIO145</td>
</tr>
</tbody>
</table>

---

### 3. Health Care Integrated Educational System (HCIES) Credit for Prior Learning

*National/Regional Credential Recognition*

[Estrella Mountain Community College | 2014-2015 Catalog] [278]
Students who have recognized credentials related to healthcare may request an evaluation for course competency equivalency on a case-by-case basis through the Integrated Competency Assessment Network (ICAN). For more information contact the ICAN office at (480) 731-8240 or by email at ican@domain.maricopa.edu. Website: http://healthcare.maricopa.edu/healthcarecourses.php When national or regional credentials are determined to be equivalent to the competencies demonstrated in corresponding courses, the recognition of external credentials will fulfill graduation credit requirements for the identified courses through Credit by Evaluation.

Credit by Examination and Credit by Skills Demonstration Assessment
Health care students may apply for credit for prior learning in certain courses. Specific information and required forms can be found on http://healthcare.maricopa.edu/healthcarecourses.php Credit by Examination in the HCIES is determined through the use of HCIES Competency Assessment Tests (CATs) and/or Skills Demonstration Assessment under the direction of the HCIES Integrated Competency Assessment Network (ICAN). Students may apply for HCIES Health Care Pathway/Program Advanced Placement in certain courses by obtaining the appropriate form(s) in the Admissions and Records Office/Office of Student Enrollment Services, paying the required fee(s), and successfully completing the examination and/or skills demonstration and other requirements of the college. See fee schedule for appropriate fee. Fees are not refundable if a student fails to obtain credit. Students may not request:
A. To challenge a course a second time;
B. To challenge a course while currently enrolled in the course;
C. To establish credit in a previously completed course; or
D. To establish credit for a lower level of a course in which credit has been received.

Certain health care pathways/programs have additional requirements which must be met before credit may be granted through HCIES credit by examination and credit by skills demonstration assessment.

Grades of A, B, C, D, or P, earned as a result of examination or skills assessment will be recorded on the student's transcript. Fees are not refundable after the examination/skills demonstration has been administered, regardless of results. A grade of P/Z is not used in computing the grade point average.

When credit is granted as outlined above, a notation of "Credit by Examination," "Credit by Evaluation," or "Credit by Skills Demonstration" and the number of credits will appear on the student's transcript. If a grade is assigned, it will be used in computing the grade point average.

4. Transferring To the Maricopa Community Colleges
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 directly from the source institutions to the Admissions and Records/Enrollment Services Offices of the receiving institutions. The Admissions and Records/Enrollment Services Offices at the receiving institutions will complete course-by-course evaluations for all submitted transcripts upon student request.

The Maricopa Community Colleges may transfer in coursework if:
• The coursework was completed at colleges and universities accredited by the following regional accrediting agencies: New England Association of Schools and Colleges, Middle States Association of Colleges and Schools, North Central Association of Colleges and Schools, Northwest Association of Schools and Colleges, Southern Association of Colleges and Schools, and/or Western Association of Schools and Colleges. The Maricopa Community Colleges will not award credit for courses completed at institutions not regionally accredited.
The coursework was earned with a grade of C or better.

The coursework was taken at another Arizona community college to fulfill general education requirements for the Arizona General Education Curriculum (AGEC).

Conditions of Transfer Credit:

- Acceptance and applicability of courses from another Maricopa Community College that fulfill requirements other than general education is determined by individual Maricopa Community Colleges.
- The award of transfer credit shall not express or imply that all transfer credit will be fully applicable toward all Maricopa associate’s degree and certificate requirements.
- Developmental coursework (below 100-level) is accepted for the purpose of fulfilling course prerequisites. The credit does not apply toward a degree or certificate.
- 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.
- 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 one of the international credential evaluation to be translated into English, evaluated on a course-by-course-basis, and sent directly to the receiving colleges. Contact your college admissions and records/enrollment services office to obtain a list of approved agencies.
- For military credit, credit by examination, credit by evaluation, and CLEP/AP/IB see the section for Credit For Prior Learning.

A. Transfer Credit from MCCCD and Established Articulation Agreements

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 private, public, and international baccalaureate degree granting institutions that have achieved full accreditation or candidacy status with a regional accreditation commission. 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 from all institutions attended.

Articulated transfer programs and pathways between the Maricopa Community Colleges and Baccalaureate-granting institutions [such as the Maricopa-ASU Pathway Program (MAPP), the U of A Bridge program, CONNECT2NAU and 90/30 transfer agreements] are official, recognized programs of study that fulfill both Associate’s 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.

B. Articulation and Transfer Agreements

i. Maricopa Skill Center and the Southwest Skill Center: The Maricopa Community Colleges have articulation agreements with the Maricopa Skill Center and the Southwest Skill Center in limited areas of study. Students who have participated in these agreements may be granted credit for prior learning. No fees will be assessed for credits awarded for prior learning. Articulated course/program credit is transferable within the Maricopa Community Colleges, but may not necessarily be transferable to other
MCCCD Policies and Procedures

universities and colleges. Students should contact the admissions and records office/office of student enrollment services for specific information related to these agreements.

ii. Arizona Public Community Colleges and Universities: Maricopa is a participant in the Arizona statewide transfer system. The aztransfer.com website 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 how institutions have agreed to transfer coursework from Arizona 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.

https://www.aztransfer.com/cgi-bin/WebObjects/Admin_CEG

iii. Domestic (U.S) and International Institutions: The Maricopa Community Colleges have transfer agreements with U.S. universities and colleges that are regionally accredited as well as international institutions that have been approved by the Ministry of Education. These partnerships are formalized through district-wide articulation agreements and are designed to help students maximize their transfer credit toward a bachelor’s degree. To access a list of institutions with which Maricopa has established articulation agreements, visit: http://www.maricopa.edu/academic/cccta/artic/partner_list.php

C. Limitations on the Transfer of Credit

Generally, the following types of courses are not intended for transfer. Contact the Admissions and Records office at your college for specific information.

i. Remedial/developmental courses or courses numbered below 100
ii. Arizona government university courses
iii. Cooperative education
iv. Experimental courses
v. Post baccalaureate courses
vi. Contractual training for business, industry, and government
vii. Some forms of credit for prior learning
viii. Non-credit courses

D. 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.

E. 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 could 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 www.azsunsystem.com.

5. Servicemen’s Opportunity College

The Maricopa Community Colleges recognize the unique educational problems confronting many active duty military personnel in attaining their educational goals. The colleges have, therefore, established themselves as Servicemen's Opportunity Colleges. This means that the colleges recognize the peculiar needs of military personnel in that they provide courses on the various military bases located in Maricopa County and provide opportunities to complete courses through non-traditional means when education is interrupted by military
obligations. Maricopa Community Colleges maintain liberal entrance requirements, offer maximum credit for educational experiences obtained in the Military Services, and follow residency statutes applicable to the special needs of servicemen. Maricopa Community Colleges follow the recommendations established by the American Council on Education. If, for any reason, Maricopa Community Colleges' status as a Servicemen's Opportunity College District is discontinued, it will nonetheless maintain its commitment to students previously enrolled. In addition, the option to enter into a "contract for a degree" allows the community college, as the college of record, to grant a degree upon completion of twelve (12) credit hours at the college and the satisfaction of graduation requirements.

2.2.6 Academic Advising and New Student Orientation

1. Academic Advising
   A. Students who will be attending college for the first time, and intend to earn an Associate’s degree or to transfer on 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 MCCCDD college.
   i. Recent high school students who received MCCCDD credits through Dual/Concurrent Enrollment, ACE, Hoop of Learning, or any MCCCDD Early Outreach Program are considered first time to college.

2. New Student Orientation
   Students who will be attending college for the first time, and intend to earn 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 MCCCDD College.
   i. Recent High School students who received MCCCDD credits through Dual/Concurrent Enrollment, ACE, Hoop of Learning, or any MCCCDD Early Outreach Program are considered first time to college.

3. Students who will be attending college for the first time and intend to earn an Associate’s degree or transfer to a college/university to complete a Bachelor’s degree, and who test into one or more developmental education courses, will be required to successfully complete a College Success Course (CPD 150 or CPD/AAA115) within the first two semesters at a MCCCDD College.
   i. Recent high school students who received MCCCDD credits through dual/concurrent enrollment, ACE, Hoop of Learning, or any MCCCDD Early Outreach Program are considered first time to college.

2.2.7 Student Assessment and Course Placement

1. Testing for Course Placement
   A. Students will be required to complete a course placement test 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 scores 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 is taking his or her first English as a Second Language class is required to take a test of English proficiency.
   B. Course placement scores will be valid for two years.
   C. Reading Placement Scores that indicate “Exempt from CRE101” Do Not Expire.
   D. Students will be permitted one re-test in English, reading, or by math level 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.
E. 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.

F. Students will be exempt from a course placement test 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.
G. The student who is exempt from a course placement test must fulfill the minimum graduation requirements.

2. Course Placement
   A. Students who enroll in English, Reading, or Math will be advised and placed into courses based valid district approved scores.
   B. Students who test into course(s) that are below college-level (I.E., Below 100-Level) will be advised and placed into the course(s) within the first two semesters enrolled.
   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.

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 instruments.
   B. All colleges shall adhere to the same approved cut-off scores.
   C. Course placement scores will be valid for two years.
   D. Reading Placement Scores that Indicated “Exempt from CRE101” Do Not Expire.

4. Evaluation
   The Maricopa Community Colleges will provide an ongoing evaluation of the course placement process. An annual report shall be submitted to the Governing Board to indicate the policy’s effectiveness noting the number of students assessed, their placement scores and their success in courses. Every three years a thorough review of the policy and procedures shall be implemented, including recommendations from the English, Reading and Math Instructional Councils regarding cut-off scores, course placement assessment tools and procedures.

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.

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.

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 the Concurrent Enrollment in Arizona Public Institutions of Higher Education policy under the Residency section of this publication.)

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, 2015 for fall, spring and summer Sessions)*
   Current information can be found at http://www.maricopa.edu/publicstewardship/governance/adminregs/appendices/S-4.php.

The following is a tuition and fees schedule for 2016-2017 and is provided for reference. **These tuition and fees are subject to change.** Consult the college's Admissions and Records Office/Office of Student Enrollment Services for course fees in effect during the semester/term in which you intend to register. See Appendix S-4.

**Appendix S-4: Tuition & Fee Schedule**

**Student Status**
### MCCCD Policies and Procedures

![Policy Table]

<table>
<thead>
<tr>
<th>Credit Hours</th>
<th>A</th>
<th>B</th>
<th>C*</th>
<th>D**</th>
<th>E</th>
<th>F***/+</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>86.00</td>
<td>111.00</td>
<td>383.00</td>
<td>327.00</td>
<td>206.00</td>
<td>215.00</td>
<td>129.00</td>
</tr>
<tr>
<td>2</td>
<td>172.00</td>
<td>222.00</td>
<td>766.00</td>
<td>654.00</td>
<td>412.00</td>
<td>430.00</td>
<td>258.00</td>
</tr>
<tr>
<td>3</td>
<td>258.00</td>
<td>333.00</td>
<td>1149.00</td>
<td>981.00</td>
<td>618.00</td>
<td>645.00</td>
<td>387.00</td>
</tr>
<tr>
<td>4</td>
<td>344.00</td>
<td>444.00</td>
<td>1532.00</td>
<td>1308.00</td>
<td>824.00</td>
<td>860.00</td>
<td>516.00</td>
</tr>
<tr>
<td>5</td>
<td>430.00</td>
<td>555.00</td>
<td>1915.00</td>
<td>1635.00</td>
<td>1030.00</td>
<td>1075.00</td>
<td>645.00</td>
</tr>
<tr>
<td>6</td>
<td>516.00</td>
<td>666.00</td>
<td>2298.00</td>
<td>1962.00</td>
<td>1236.00</td>
<td>1290.00</td>
<td>774.00</td>
</tr>
<tr>
<td>7</td>
<td>602.00</td>
<td>777.00</td>
<td>2681.00</td>
<td>2289.00</td>
<td>1442.00</td>
<td>1505.00</td>
<td>903.00</td>
</tr>
<tr>
<td>8</td>
<td>688.00</td>
<td>888.00</td>
<td>3064.00</td>
<td>2616.00</td>
<td>1648.00</td>
<td>1720.00</td>
<td>1032.00</td>
</tr>
<tr>
<td>9</td>
<td>774.00</td>
<td>999.00</td>
<td>3447.00</td>
<td>2943.00</td>
<td>1854.00</td>
<td>1935.00</td>
<td>1161.00</td>
</tr>
<tr>
<td>10</td>
<td>860.00</td>
<td>1100.00</td>
<td>3830.00</td>
<td>3270.00</td>
<td>2060.00</td>
<td>2150.00</td>
<td>1290.00</td>
</tr>
<tr>
<td>11</td>
<td>946.00</td>
<td>1221.00</td>
<td>4213.00</td>
<td>3597.00</td>
<td>2266.00</td>
<td>2365.00</td>
<td>1419.00</td>
</tr>
<tr>
<td>12</td>
<td>1032.00</td>
<td>1332.00</td>
<td>4596.00</td>
<td>3924.00</td>
<td>2472.00</td>
<td>2580.00</td>
<td>1548.00</td>
</tr>
<tr>
<td>13</td>
<td>1118.00</td>
<td>1443.00</td>
<td>4979.00</td>
<td>4251.00</td>
<td>2678.00</td>
<td>2795.00</td>
<td>1677.00</td>
</tr>
<tr>
<td>14</td>
<td>1204.00</td>
<td>1554.00</td>
<td>5362.00</td>
<td>4578.00</td>
<td>2884.00</td>
<td>3010.00</td>
<td>1806.00</td>
</tr>
<tr>
<td>15</td>
<td>1290.00</td>
<td>1665.00</td>
<td>5745.00</td>
<td>4905.00</td>
<td>3090.00</td>
<td>3225.00</td>
<td>1935.00</td>
</tr>
<tr>
<td>16</td>
<td>1379.00</td>
<td>1776.00</td>
<td>6128.00</td>
<td>5232.00</td>
<td>3296.00</td>
<td>3440.00</td>
<td>2064.00</td>
</tr>
<tr>
<td>17</td>
<td>1462.00</td>
<td>1887.00</td>
<td>6511.00</td>
<td>5559.00</td>
<td>3502.00</td>
<td>3655.00</td>
<td>2193.00</td>
</tr>
<tr>
<td>18</td>
<td>1548.00</td>
<td>2109.00</td>
<td>6894.00</td>
<td>5886.00</td>
<td>3708.00</td>
<td>3870.00</td>
<td>2322.00</td>
</tr>
</tbody>
</table>

* 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 this state. A district is not entitled to state aid payments for students who are provided courses and services outside of this state. + 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 Maricopa Community Colleges Districts (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.

Skill Center Tuition Rates
Regular $5.00 per contact hour
Nursing Assistant $6.00 per contact hour
Practical Nursing $6.00 per contact hour

Credit by Examination & Credit by Evaluation (excludes Allied Health courses)
Regular Rate $86.00 per credit hour
Contract Rate $43.00 per credit hour

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.
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.

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.

2.2.10 Refund Policy
1. Refund Policy for Credit Classes
   Students who officially withdraw from credit classes (in fall, spring, or summer) within the withdrawal deadlines listed below will receive a 100% refund for tuition, class and registration processing 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.

<table>
<thead>
<tr>
<th>Length of Class</th>
<th>Official Withdrawal Deadlines for 100% Refund</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-9 calendar days</td>
<td>Prior to the class start date</td>
</tr>
<tr>
<td>10-19 calendar days</td>
<td>1 calendar day including the class start date</td>
</tr>
<tr>
<td>20-29 calendar days</td>
<td>2 calendar days including the class start date</td>
</tr>
<tr>
<td>30-39 calendar days</td>
<td>3 calendar days including the class start date</td>
</tr>
<tr>
<td>40-49 calendar days</td>
<td>4 calendar days including the class start date</td>
</tr>
<tr>
<td>50-59 calendar days</td>
<td>5 calendar days including the class start date</td>
</tr>
<tr>
<td>60-69 calendar days</td>
<td>6 calendar days including the class start date</td>
</tr>
<tr>
<td>70+ calendar days</td>
<td>7 calendar days including the class start date</td>
</tr>
</tbody>
</table>

*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.

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.

3. Canceled Classes
   When a class is canceled by the college, a 100% refund will be made.

4. Refund Exceptions

[Estrella Mountain Community College | 2014-2015 Catalog]
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

### 2.2.11 Student Financial Assistance

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

### Appendix S-5: Student Financial Assistance

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 agency, another institution, a professional or similar organization, or any other resource that might provide information helpful to the evaluation;
- A transcript or other record received from another institution the student may have attended;
MCCCD Policies and Procedures

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

How to Apply for Federal Financial Aid
New students must complete the Free Application for Federal Student Aid (FAFSA) or FAFSA on the Web at 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.

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://mccdf.org/ or by calling 480-731-8400.

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

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

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

Refunds and Repayments
In accordance with federal regulations (CFR 668.22), a student may be required to repay federal financial aid funds if they completely withdraw, are withdrawn, or fail to earn a passing grade from all classes during a semester. Further information is available at the college Office of Student Financial Aid. This could affect a student’s ability to receive Financial Aid in the future at any school. For a student receiving Financial Aid, also see Appendix S-7 for Withdrawal procedures.

Verification of Information
1. A Free Application for Federal Student Aid (FAFSA) or a change to that FAFSA may be selected for verification. If a student’s FAFSA is selected for verification, the student will be notified via the Student Center in 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.

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.

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

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

Evaluation Period
Standards of Satisfactory Academic Progress (SAP) will be evaluated at the end of each semester; fall, spring and summer. Programs less than one year in length will be evaluated at the midpoint of the program. Non-standard sessions will be evaluated at the completion of the session.

Standards of Satisfactory Academic Progress
Standards of Satisfactory Academic Progress (SAP) are evaluated on each of the three measurements outlined below. Failure to meet any of these standards will result in suspension of eligibility for financial aid.

Note: Grades of F,I,N,W,X,Y,Z, and courses not yet graded are considered attempted but not meeting progress standards for the purposes of financial aid.
• **Grade Point Measurement:** Students must meet the following credit hour/cumulative grade point average (CGPA).

<table>
<thead>
<tr>
<th>Total Credits Attempted*</th>
<th>Min CGPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 15.75</td>
<td>1.60</td>
</tr>
<tr>
<td>16-30.75</td>
<td>1.75</td>
</tr>
<tr>
<td>31-45.75</td>
<td>1.90</td>
</tr>
<tr>
<td>46 +</td>
<td>2.00</td>
</tr>
</tbody>
</table>

*for which grade points are computed

• **Pace of Progression Measurement:** Students must successfully complete 2/3 (66.67%) of all attempted course work.

• **Maximum Time Frame Measurement:** Students who have attempted more than 150% of the published credits required for their program of study are considered not meeting SAP.

**Coursework Treatment in SAP Calculation**

Course work taken during the semester also included in the evaluation:
- Courses funded through a consortium agreement
- All attempted remedial credits
- Repeated course work

Coursework included in the Pace of Progression evaluation:
- All of those included in the semester evaluation
- All evaluated transfer credits

Course work included in the Maximum Time Frame evaluation:
- All of those included in the Pace of Progression evaluation
- Any Associates degree or higher earned will be considered to have exhausted maximum timeframe eligibility
- All coursework forgiven through the academic renewal process

Course work not included in SAP evaluation:
- Audited courses
- Non-credit courses
- Credit by examination
- Credit for prior learning option (as outlined in the college general catalog)

**Notification**

Students that have applied for federal assistance, but who do not meet the standards, will be notified. This notification will direct students to information regarding the appeal process.

**Ineligibility Determination Appeal**

Any student who has lost financial aid eligibility due to extenuating circumstances may appeal. Appeal must:
- Be in writing and submitted to the Financial Aid Office where the student is applying for aid.
- Include the extenuating circumstances that caused the student not to meet SAP standards.
- Include appropriate supporting documentation.
- Include how that condition or situation has been resolved thus allowing the student the ability to meet SAP standards.
MCCCD Policies and Procedures

Students will be notified of the results of their appeal and any restrictions or conditions pertaining to their appeal. The outcome of an appeal may include a probationary term or denial.

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

Regaining Eligibility
A student who has lost financial aid eligibility may only regain eligibility by meeting the minimum SAP standards. Course work taken at other colleges will not be considered for reinstatement purposes.

Terminology and Information Pertaining to this Policy

- **Summer Sessions** – Enrollment in any or all Summer Sessions within the same calendar year will be considered one term.
- **Non-Standard Session** – Sessions that do not follow the traditional start and end dates for the semester.
- **Attempted Credit** – Any credit for which a grade of A, B, C, D, F, I, IP, N, P, W, X, Y, or Z is received and courses not yet graded.
- **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.
- **Appeal** – “A process by which a student who is not meeting the institution’s satisfactory academic progress standards petitions the institution for reconsideration of the student’s eligibility for title IV, HEA program assistance.”
- **Extenuating Circumstance** – Examples are: personal injury or illness, serious illness or death within the immediate family, or other circumstance beyond the reasonable control of the student.
- **Supporting Documentation** – Examples could include: an obituary notice, divorce decree, an accident report, or a letter from a physician, attorney, social services agency, etc.
- **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.”
- **Academic Plan** – A plan developed through the SAP Appeal Process which will lead a student to qualify for further title IV, HEA program funds.
- **Financial Aid Suspension** – The status assigned upon failing to meet the minimum SAP standards or the terms of a probationary status. Students in this status are not eligible to receive title IV, HEA assistance.

For more information, contact the college Financial Aid Office.

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

Treatment of Title IV Aid When a Student Withdraws
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://chancellor.maricopa.edu/public-stewardship/governance/administrative-regulations/2-students/2.2-admission-registration-enrollment

2.2.12 Vaccinations (As Required By 20 USC §1092(a)(1)(V)):
The Maricopa County Community Colleges District does not require that students receive vaccinations prior to enrollment. Certain professional or occupational programs do require particular vaccinations for participation in those programs. More information about these programs can be found on college websites.

2.9 Veterans Services
The Maricopa Community Colleges' veterans' services offices act as liaisons with the Department of Veterans Affairs. Each program must be approved by the Department of Veterans Affairs. 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 and tutoring are available for students who are eligible for veteran's educational benefits. Students applying for veteran's educational benefits should allow eight to ten weeks before receiving benefits. The amount of benefits awarded is determined by the Department of Veterans Affairs, and is based on the number of credit hours or clock hours for which a student is enrolled and the length of the enrollment period for each course.

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

It is the student's responsibility to notify the office that serves veterans at their campus regarding any change in enrollment, address, program of study, enrollment at another institution, or any other change that may impact their veteran's educational benefits.

Those students receiving benefits must follow the VA academic progress policy to continue to receive benefits.

Department of Veterans Affairs regulations require that all persons using any type of veteran educational assistance program make satisfactory academic progress toward achievement of their educational objective (program of study). A student who does not meet the minimum standards of 2.0 upon completion of 12 or more credit hours will be placed on probation, at which point the student will have no more than two semesters in which to improve academic standing to acceptable. At this point, if satisfactory academic progress has not been demonstrated, veteran educational benefits will be terminated. Benefits may be resumed when the student raises the cumulative grade point average to the required minimum standards or demonstrates the ability to meet these standards through the approval of a written appeal. For appeal procedures, contact the office that serves veterans at your campus.

For additional details and information regarding veteran's educational benefits, contact the office that serves veterans at your campus.

**Distance Learning:**
The course content and competencies for distance learning classes are the same as courses offered in-person or in a hybrid format. The courses offered in this format lead to completion of 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.
Externship Programs:
The Maricopa Community College’s official District course descriptions for credited experiential learning opportunities (Internships, Externships, Practicums, and Clinicals) state the amount of hours required in order for a student to receive college credit. The descriptions also indicate if a maximum amount of credit is allowable for any given experiential learning opportunity. Each course that includes an experiential learning opportunity is assigned a Maricopa Instructor of Record who is responsible for ensuring that the student completes the required hours and assignments in order to receive credit. Additionally, the instructor works extensively with a site supervisor to ensure that the student is making satisfactory progress and meeting the time requirements. The experiential credit process for the student includes the specific course details and learning outcomes, how hours will be tracked, and what is required for grading and course completion. The instructor submits the final grade for the experience. Maricopa’s experiential learning process is in compliance with CFR 38 21.4265

A complete list of internship courses, along with course objectives, can be found on the Maricopa Community College’s District – Center for Curriculum and Transfer Articulation website, located at: https://asa.maricopa.edu/departments/center-for-curriculum-transfer-articulation

Prior Credit Evaluation:
Department of Veterans Affairs requires that all persons using any type of veteran’s educational assistance must have all prior education and training evaluated. Students will be required to request transcripts from all prior institutions, including military training. Without all prior institutions and military training, veteran educational assistance may not be certified. Transcripts will be evaluated and credit will be granted, as appropriate.

SCHOLASTIC STANDARDS

2.3.1 Academic Load
A credit hour is defined as an amount of work represented in course competencies and verified by evidence of student achievement that reasonably approximates not less than one hour of classroom or direct faculty instruction and a minimum of two hours of out-of-class student work each week for approximately fifteen weeks for one semester hour of credit, or the equivalent amount of work over a different amount of time, or at least an equivalent amount of work for other academic activities, including laboratory work, internships, practica, studio work, and other academic work leading to the award of credit hours. In accordance with common practice in higher education, instruction representing a credit hour is typically delivered in a 50 minute class period.

Students carrying at least twelve (12) credit hours will be considered full-time students for the fall and spring semesters. Three-quarter-time is 9 - 11.9 credit hours. Half-time is 6 - 8.9 credit hours. Fewer than six (6) credit hours is considered less than half-time. Academic load for summer and special terms may be defined differently. Contact the Admissions and Records Office/Office of Student Enrollment Services for clarification. As provided in the Reduced Course Load administrative regulation, a student may be deemed a full-time student carrying fewer than twelve credit hours pursuant to an accommodation of a disability.

Courses may vary in length, and begin and end throughout the year. A credit hour indicates the value of an academic credit. Standards for the awarding of credit hours may be time based or competency based. To obtain credit, a student must be properly registered and must pay fees for the course. The fall and spring semesters are typically sixteen (16) weeks in length. Summer sessions are typically five or eight weeks in length.
Students desiring to take more than eighteen (18) credit hours must obtain approval from the designated college official. Ordinarily, only students with a grade point average of 3.0 or higher for the preceding semester or first semester students who were in the upper quarter of their high school graduating class are permitted to carry more than eighteen (18) credit hours.

Students participating in extra-curricular or co-curricular activities or receiving financial assistance may be required to maintain a specified minimum academic load.

Students who are working, have considerable extra-curricular or co-curricular activities, or have been reinstated from academic suspension/probation should plan their academic load accordingly.

Schedule Changes
Students may change their schedule by following the designated procedures at their college of enrollment. It is the student's responsibility to notify the college if he/she will no longer be attending the class (see Appendix S-7 for Withdrawal Procedures).

2.3.2 Attendance
• Only persons who are registered for a class at any of the Maricopa Community Colleges may attend that class. Attendance requirements are determined by the course instructor. Students who do not meet the attendance requirement as determined by the course instructor may be withdrawn.
• Students who fail to attend the first scheduled class meeting, or to contact the instructor regarding absence before the first scheduled class meeting may, at the option of the instructor, be withdrawn.
• At the beginning of each course, each faculty member will provide students with written attendance requirements. It is the student’s responsibility to consult with the instructor regarding official or unofficial absences. Absences begin to accumulate with the first scheduled class meeting.
• Students bear the responsibility of notifying the Admissions and Records Office/Office of Student Enrollment Services when they discontinue studies in a course or at the college. Please refer to Appendix S-7 for Withdrawal Procedures.

1. Official Absences
   A. Official absences are those that occur when students are involved in an official activity of the college, i.e., field trips, tournaments, athletic events, and present an official absence excuse form. Absences for such events shall not count against the number of absences allowed by an instructor or department. Students who must miss a class for an official reason must obtain an official absence verification card from the appropriate vice president or designee and present it to the appropriate instructor(s) before the absence. Prior arrangements must be made with each instructor for make-up work. If prior arrangements have been made, the student will not be penalized.
   B. Other official absences include jury duty and subpoenas. Appropriate documentation will be required. Prior arrangements must be made with each instructor for makeup work. If prior arrangements have been made, the student will not be penalized.
   C. In the event of military commitments. Absences for periods of up to one week will not be counted against the number of absences allowed by an instructor or department. The student is required to provide appropriate documentation of the specific orders, length of assignment and location. Prior notification must be initiated with each instructor to discuss make-up work. If the length of the absence will be longer than one week, the instructor and the student will determine whether there is sufficient opportunity for the student to make up the work. If it is determined that the length of absence for the military commitment provides an undue hardship on the student’s ability to make up the assignments, he or she will be provided
MCCCD Policies and Procedures

an opportunity to request an incomplete grade or drop the class or, in the case of open-entry classes, the opportunity to request an extension.

D. In the event of the death of an immediate family member, absences for periods of up to one week will not be counted against the number of absences allowed by an instructor or department. Students should contact instructor(s) as soon as possible to arrange for make-up work. Appropriate documentation will be required (for example, a copy of the obituary or funeral program). In specialized programs that require clinical rotations, this regulation may not apply.

2. Religious Holidays
Students shall have the right to observe major religious holidays without penalty or reprisal by any administrator, faculty member or employee of the Maricopa Community Colleges. Absences for such holidays shall not count against the number of absences allowed by an instructor or department. At least one week before the holiday, students shall submit to their instructor(s) a written statement that includes both the date of the holiday and the reason why class attendance is impossible. Prior arrangements must be made with each instructor for make-up work. If prior arrangements have been made, the student will not be penalized.

2.3.3 Grading
1. Policy
It is the policy of the Maricopa Community Colleges that a grade will be assigned at the conclusion of the course. Official grades are available on designated college web sites.

<table>
<thead>
<tr>
<th>Grade Key</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Excellent 4 grade points per credit hour</td>
</tr>
<tr>
<td>B</td>
<td>Above Average 3 grade points per credit hour</td>
</tr>
<tr>
<td>C</td>
<td>Average 2 grade points per credit hour</td>
</tr>
<tr>
<td>D</td>
<td>Passing 1 grade point per credit hour</td>
</tr>
<tr>
<td>F</td>
<td>Failure 0 grade points per credit hour</td>
</tr>
<tr>
<td>I</td>
<td>Incomplete Not computed in grade point average</td>
</tr>
<tr>
<td>IP</td>
<td>Course in Progress Not computed in grade point average</td>
</tr>
<tr>
<td>N</td>
<td>Audit Not computed in grade point average</td>
</tr>
<tr>
<td>P*</td>
<td>Credit Not computed in grade point average</td>
</tr>
<tr>
<td>W</td>
<td>Withdrawn, passing Not computed in grade point average</td>
</tr>
<tr>
<td>Y</td>
<td>Withdrawn, failing 0 grade points per credit hour</td>
</tr>
<tr>
<td>Z</td>
<td>No Credit Not computed in grade point average</td>
</tr>
</tbody>
</table>

* A "P" is judged to be equivalent to a grade of C or higher.

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.
3. Repeating a Course/Improving a Grade
Students who wish to improve a previously earned grade, students may repeat a course within the Maricopa Community Colleges up to three times after the initial attempt to improve a grade. (A “W” or “Y” 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, students must submit a repeated course petition and an electronic official transcript(s), from that college to the Admissions and Records Office/Office of Student Enrollment Services at the college where the repeated course is to be excluded. 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. All enrollments in a course will appear on the transcript. Check individual courses and programs for exceptions.

4. Credit/No Credit Courses (P/Z)
A. Some courses may be taken under a credit/no credit grading system. These courses carry grades of P (credit, equivalent to a grade of C or higher) or Z (no credit) and are not computed in the student’s grade point average. Credits earned with a grade of P may be counted toward graduation with the exception of AGEC (Arizona General Education Curriculum).
B. The prescribed time limits are for full-semester classes. Time limits for courses which meet fewer than sixteen (16) weeks are adjusted accordingly. See "Important Deadlines for Students".
C. In courses with credit/no credit (P/Z) grading, the student may request standard grading (A, B, C, D, F), within fourteen (14) days including the date of the first class meeting. The instructor must immediately notify the Admissions and Records Office/Office of Student Enrollment Services.
D. In courses with standard grading (A, B, C, D, F), the instructor determines if the credit/no credit option is available. If the option is available, the student must obtain the permission of the instructor. The instructor must notify the Admissions and Records Office/Office of Student Enrollment Services within fourteen (14) days including the day of the first class meeting.
E. It is the student’s responsibility to verify the transferability of credit/no credit courses. Some universities place a limitation on the number of credit/no credit courses that can be transferred.

Advisory note: Some institutions outside the Maricopa Community Colleges may translate the Z grade as failing.

5. Audit Courses
A. Auditors are those who enroll in a course for the sole purpose of obtaining information; they receive no credit, grades, homework, or tests. If an auditor wishes to earn credit, he or she must change from audit status to credit status within the first week. If a student wishes to audit a course for which he or she is enrolled for credit, the change must be made within the first five (5) weeks of a semester. Auditors are subject to the same attendance policies as other students and must meet the same prerequisite requirements or obtain approval of the instructor. See the fee schedule for charges. Financial aid is not available for audited courses.
B. The prescribed time limits are for full-semester classes. Time limits for courses which meet fewer than sixteen (16) weeks are adjusted accordingly and appear in the "Important Deadlines for Students."

6. Important Deadlines for Students (See Appendix S-12)

<table>
<thead>
<tr>
<th>Class Length</th>
<th>Deadline for Students to Withdraw with Guaranteed Grade of W</th>
<th>Deadline for Students to Request Complete Withdrawal</th>
<th>Deadline to Change Type of Grading (A-F to P/Z, or P/Z to A-F)</th>
<th>Deadline to Change From Audit Grade to Credit Grade</th>
<th>Deadline to Change from Credit Grade to Audit Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>One Week or Less (1 to 7 days)</td>
<td>1st Day of Class 1st Day of Class or Prior to the Last Day of Class</td>
<td>1st Day of Class or Prior to the Last Day of Class</td>
<td>1st Day of Class</td>
<td>1st Day of Class</td>
<td>1st Day of Class</td>
</tr>
<tr>
<td>Two Weeks (8 to 14 days)</td>
<td>3rd Calendar Day 6th Calendar Day</td>
<td>6th Calendar Day</td>
<td>1st Day of Class</td>
<td>1st Day of Class</td>
<td>3rd Calendar Day</td>
</tr>
<tr>
<td>Three Weeks (15 to 21 days)</td>
<td>6th Calendar Day 12th Calendar Day</td>
<td>12th Calendar Day</td>
<td>2nd Calendar Day</td>
<td>1st Day of Class</td>
<td>5th Calendar Day</td>
</tr>
</tbody>
</table>
### 2.3.4 Academic Probation (Progress)

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

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.

### 2.3.5 Instructional Grievance Process

A student who feels that he or she has been treated unfairly or unjustly by a faculty member with regard to an academic process such as grading, testing, or assignments, has the right to appeal according to the approved procedures.

The appeal process for grades must be initiated no later than sixty (60) calendar days from the date the grade was issued. Steps outlining the process are available in Appendix S-6.

### Appendix S-6: Instructional Grievance Process

A student who feels that he/she has been treated unfairly or unjustly by a faculty member (full-time or part-time) 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.

2.3.12 Non-Instructional Complaint Resolution Process

A student who feels that he or she has been treated unfairly or unjustly by any employee with regard to a non-instructional process such as a student or administrative services has the right to file a formal and written complaint according to the approved procedures. See Appendix S-8.

Appendix S-8: Non-Instructional Complaint Resolution Process

A student who feels that he or she has been treated unfairly or unjustly by any employee with regard to a non-instructional process such as a student or administrative services has the right to file a formal and written complaint according to the approved procedures. Steps for students to follow:

1. Discuss the issue with the employee involved. The student should request this conference within fifteen (15) working days from the time the student knew or reasonably should have known about the unfair or unjust treatment.

2. If, within ten (10) working days of the request for the conference with the employee, the problem is not resolved or the employee has been unable to meet with the student, the student may continue the process by filing a written complaint with the appropriate supervisor of the employee where authority exists to take corrective action. This written complaint must be filed within ten (10) working days following the previous
deadline. The written complaint will be given to the employee five (5) working days before any official meetings are convened.

3. Upon receipt of a written complaint, the appropriate supervisor will work with the parties in an attempt to resolve the conflict. Every attempt will be made to maintain confidentiality during this process. An employee will not be required to respond to a complaint which is not in writing and which, when appropriate, does not have specific documentation including dates, times, actions, supporting documents, etc. The written complaint will be made available to the employee.

4. If the complaint is not resolved at this level within ten (10) working days, the student should forward to the Vice President of Student Affairs or Designee, a copy of the original written complaint with an explanation regarding action taken at each prior level. The dean and/or associate dean will meet with the student, the employee, and the relevant supervisor and attempt to resolve the issues.

5. If the associate dean and/or dean do not resolve the complaint, the student may forward it in writing to the college president for final resolution. The college president or designee will issue a final written determination in the complaint process.

2.3.6 Withdrawal
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.

Appendix S-7: Student and Faculty Withdrawal Procedures

Student Withdrawal Procedures

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 consultation with the student, the faculty member approves the request, a grade of W (withdrawn, passing--not computed in the grade point average) or Y (withdrawn, failing--computed in the grade point average as a failing grade) will be assigned. If the request is not approved, the student will remain in the course.
   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.

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.

**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). Students withdrawn for excessive absences may be reinstated only with the approval of the faculty member. A grade of W will be assigned through the 7th week*. After the 7th week*, a grade of W or Y will be assigned. Faculty members electing to withdraw students must record the withdrawal through the online system, including last date of attendance and withdrawal code. *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.

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.
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.

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.

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.

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. 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 required degree or certificate application fee.
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”

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.

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:
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 MCCCDC 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 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 MCCCDC and the institutions to which MCCCDC 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.

**2.2.5 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
Continued at a Public Community
College Transferred to a University

Fall ‘05 (Active)
Spring ‘06, Fall ‘06 (Active)
Spring ‘07 (2005 or Any Subsequent Catalog)
EXAMPLE B
Admitted & Earned Course Credit at a Public Community College or University    Fall '02 (Active)
Enrolled But Earned All Ws, Zs, or Fs          Spring '03 (Inactive)
Enrolled in Audit Courses Only                  Fall '03 (Inactive)
Nonattendance                                      Spring '04 (Inactive)
Transferred to a University                       Fall '04 (2004 or Any Subsequent Catalog)

2. Students who do not meet the minimum enrollment standard stipulated in No. 1 during three consecutive semesters (fall/spring) and the intervening summer term* at any public Arizona community college or university are no longer considered continuously enrolled, and must meet requirements 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 '02 (Active)
Nonattendance                                      Spring '03, Fall '03, Spring '04 (Inactive)
Readmitted & Earned Course Credit at a Public Community College     Fall '04 (Active)
Transferred to a University                        Spring '05 (2004 or Any Subsequent Catalog)

EXAMPLE B
Admitted & Earned Course Credit at a Public Community College or University    Fall '02 (Active)
Nonattendance                                      Spring '03 (Inactive)
Readmitted & Earned Course Credit at a Public Community College     Fall '03, Spring '04 (Inactive)
Nonattendance                                      Summer '03 (Active)
Transferred to a University                        Fall '04 (2002 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 '04 (Active)
Continued at a Public Community College                      Fall '04, Spring '05 (Active)
Nonattendance                                      Fall '05 (Inactive)
Readmitted & Earned Course Credit at a Public Community College     Spring '06 (Active)
Transferred to a University                        Summer '06 (2004 or Any Subsequent Catalog)

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.

The college reserves the right to make necessary course and program changes in order to meet current educational standards.
2.3.10 Transcripts for Transfer
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 Student Rights and Responsibilities 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.

COLLEGE ENVIRONMENT

2.4.4 Sexual Harassment Policy for Students
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.

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 submission 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.

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. SEXUAL ASSAULT
An act involving forced or coerced sexual penetration or sexual contact.
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.

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.

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.

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.

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.

II. DEFINITIONS

**ALLEGED VICTIM**
The person who is the victim of any alleged Sexual Harassment or Discrimination in violation of this Policy.

**COMPLAINANT**
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.

**RESPONDENT**
The person who is alleged to have engaged in Sexual Harassment or Discrimination prohibited under this Policy.

**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://asa.maricopa.edu/departments/office-of-student-affairs/student-affairs-your-college](https://asa.maricopa.edu/departments/office-of-student-affairs/student-affairs-your-college)

III. REPORTING DISCRIMINATION

**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.

**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.

**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.
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.

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).

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.

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.

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.
MCCCD Policies and Procedures

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.

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.

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.

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.

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.

**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.

**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.
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.

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:

- 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**

**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.

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.

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.

5.1.12 Complaints
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.

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.

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.

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.

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.

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.

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.

*****NEW SECTION TO INCLUDE IN HANDBOOK*****
AMENDED by Direct Chancellor Approval, April 1, 2015

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.

**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.

**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.

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.
MCCCD Administrative Review Process

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.

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.

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.

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.

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.
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.

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.

External Filing of Discrimination Complaint
MCCCD encourages students to use the MCCCD Discrimination Complaint Procedure for students to resolve discrimination concerns. Students also have the right to file civil rights complaints with appropriate external agencies. No retaliation will be taken against a person for filing a complaint with an external agency. The following agency accepts discrimination charges filed by, or on behalf of, students:

Office for Civil Rights, Region VIII (OCR)
Denver Office
U.S. Department of Education
Federal Building
1244 Speer Boulevard, Suite 310
Denver, Colorado 80204-3582
Phone: 303-844-5695
Fax: 303-844-4303
TDD: 303-844-3417
E-mail: OCR_Denver@ed.gov

AMENDED by Direct Chancellor Approval, April 1, 2015

*****END SECTION*****

2.4.6 Emissions Control Compliance
Pursuant to ARS §15-1444 C. no vehicle shall be allowed to park in any college parking lot unless it complies with ARS §49-542 (the annual vehicle emissions inspection program). At the time of course registration, every out-of-county and out-of-state student will be required to sign an affidavit stating that the student’s vehicle meets the requirements of ARS §49-542. Vehicles that are not in compliance are subject to being towed at the owner's expense.

2.4.8 Petition Signature Solicitation
1. This regulation shall govern access to college premises by representatives who wish to solicit signatures on petitions for the purpose of submission of a ballot proposition to voters, or nomination of a candidate for elective office, in a city-, county-, or state-wide election.
2. Each college president shall designate general hours of accessibility for solicitation and a location on college premises where all representatives on behalf of any candidate or ballot proposition may solicit signatures. The location shall be in a common area where the solicitation will not serve as an obstruction to student activities or otherwise disrupt the college environment.
3. All solicitation must take place in designated areas. Standard space may include one or two tables and chairs. Campus restrictions regarding amplification will apply. Representatives may not distribute or make available to
students, employees, or college visitors any tangible item, except for informational literature about the proposed candidate or ballot initiative.

4. Representatives shall notify the designated official at each college or center for their intent to be present on college premises no fewer than three working days prior to soliciting signatures. Upon obtaining authorization, representatives shall be provided a written version of this regulation.

Specific procedures on how to implement the Petition Signature regulation can be found in Appendix S-14.

2.4.9 Use of College Grounds by Non-MCCCD-Affiliated Users

In contrast to traditional public forums such as a public square, park, or right of way, Maricopa’s campuses are dedicated by law to the purpose of formal education. They are, and have been since their creation, for the use and benefit of prospective and enrolled students, the Maricopa employees who serve them, and those who are invited to campus by members of the College community to attend or participate in sponsored events. The Maricopa County Community College District (MCCCD) has a long history of regulating the time, place, and manner in which expressive activities are conducted on campuses, for the purposes of avoiding disruption or interference with its educational activities, and protecting the rights of the members of the campus community and their invited guests to express themselves and access information. While members of the general community always have been welcome to share their ideas with the campus community, they are subject to reasonable, content-neutral regulation of the time, place and manner of the event and to the institution’s mission-based priorities – including but not limited to the need to provide an environment conducive to teaching and learning.

POLICY

This administrative regulation governs use of the college grounds, defined as the open areas and walkways of the campus by non-MCCCD-affiliated users. Use of college facilities is governed by a separate administrative regulation. Parking lots are not available for events and activities other than those sponsored and authorized by the College president.

Camping is not permitted anywhere on the campuses. Camping is defined as the use of college grounds or facilities for living accommodations or housing purposes such as overnight sleeping or making preparations for overnight sleeping (including the laying down of bedding for the purpose of sleeping), the making of any fire for cooking, lighting or warmth, or the erection or use of tents, motor vehicles, or other structures for living or shelter. These activities constitute camping when it reasonably appears, in light of all the circumstances, the participants conducting these activities intend to use or are using the facilities or grounds for living accommodations or housing, regardless of the duration or other purpose of the use.

Lawful use of college grounds for events or expressive activities by individuals, groups, and organizations may be authorized by college officials when the events and activities are lawful and consistent with the non-profit, educational nature of the campus, authorized and conducted in accordance with MCCCD policies, administrative regulations and priorities, and compliant with reasonable restrictions as to time, place, and manner. The content of the expression will not be a factor in authorizing, locating, or scheduling decisions. However, events and activities will not be permitted to disrupt or obstruct the teaching, research, or administrative functioning of the College by means of physical obstacles and crowds, by the creation of sound or noise that would interfere with teaching, learning, and the conduct of College business, or by any other means. Each College president will designate a Responsible College Official with delegable authority to approve, locate, and schedule use of college grounds.

Permit Application: Any non-MCCCD-affiliated organization, group, or individual desiring to use campus grounds for an event or activity must submit a request form to the Responsible College Official in advance of the use date.
If the activities proposed in the application are limited to low-impact, non-commercial activities the request form shall be submitted at least two business days in advance of the expected use date. For purposes of this administrative regulation, “low-impact, non-commercial activities” are defined as: (1) activities that do not seek to sell or promote a product or service for direct or indirect financial gain; (2) activities that are limited to gatherings of five people or less at any given time; and (3) activities that do not involve machinery, temporary structures, tables, chairs, displays or electronic equipment, including amplifiers, or the distribution of food products.

For events that are not low-impact, non-commercial activities, the request form shall be submitted at least seven business days before the expected use. The additional advance time is required to allow the College to prepare for conditions that may affect the flow of foot traffic, involve signs and displays, create crowds, involve significant numbers of participants, or require the use of significant amounts of space and/or use of equipment and resources.

**Designated Areas:** Because each College has a limited amount of outdoor space, activities and events sponsored by non-MCCCD-affiliated users, including speech and literature distribution, shall be restricted to designated areas. For each College, the Responsible College Official shall establish specific designated areas for such activities. A written description of these areas shall be maintained at the office of Student Life and Leadership for each College. Consistent with the goal of providing a healthy, comfortable, and educationally productive environment, the Responsible College Official should attempt to locate the designated areas in prominent locations on campus where there is a likelihood of significant pedestrian traffic. The designated areas shall not be located in building stairways and entryways, parking lots, or congested areas. The Responsible College Official will make every effort to assign users to their requested space when a specific space is desired. However, in order to ensure the potential success of all scheduled events, the College reserves the right to assign an event or activity to the area the College deems most appropriate in light of the campus capacity, other activities scheduled, and the type of event or activity being planned.

**Use Fees and Proof of Insurance:** To offset the costs associated with the use of college grounds, non-MCCCD-affiliated users shall be required to pay a fee of $50 per day or $125 per week. In order to protect the health and safety of College students, faculty and staff and to protect MCCCD resources, non-MCCCD-affiliated users shall also be required to provide proof of insurance that indicates at least $1 million in general liability coverage and names the MCCCD as an additional insured for the anticipated use date.

The fee and proof-of-insurance provisions of this Administrative Regulation shall not be applied to low-impact, non-commercial users. A user may request designation as a low-impact, non-commercial user from the applicable College’s Responsible College Official. Any questions or comments about the criteria for approval or denial of such request shall be directed to the District Ombudsman.

**Permits:** The approved request form will describe the location of the authorized activity and any other restrictions specific to the event. Violation of the terms of the permit, District policy, administrative regulation or law shall be grounds for immediate revocation of the permit, and the individual violators and their organizations may be banned from the campus.

**Priorities and Criteria for Approval of Permits:** The content or subject of the proposed expressive activity or event will not affect approval of the application. Availability of space is not guaranteed. Reservations shall be approved on a space-available basis and will be addressed on a first come-first served basis, subject to the following priorities and criteria for the use and scheduling of space on campus grounds:
MCCCD Policies and Procedures

Scheduling Priorities (in order)
1. The use of facilities and grounds for the operations of the College. For example, there are times when the college is unusually crowded by members of the campus community, such as registration and orientation at the beginning of the semester. Other uses may reasonably be precluded during those times.
2. Activities and events sponsored by the College administration.
3. Activities and events sponsored by MCCCD student organizations or employee groups.
4. Activities of non-MCCCD-affiliated individuals and organizations.
5. Commercial advertising or activities.

Criteria
1. Capacity of college grounds to accommodate the number of participants at the scheduled time and proposed location.
2. Capacity of College Safety staff to provide security for all events and activities scheduled at the time.
3. Possible interference or conflict with College operations or other scheduled activities and events on the grounds.
4. General feasibility of hosting the event as proposed.

Other Policies: This administrative regulation will be applied in conjunction and coordination with all other MCCCD policies and administrative regulations and College processes and procedures, including but not limited to regulations on facilities use, signage, sales of alcohol and/or food, and solicitation of donations.

Specific procedures on how to implement the Use of College Grounds regulation can be found in Appendix S-15.

2.4.10 Children on Campus
Children (younger than 18) may not attend any class unless they are officially registered for the class.

Children will not be allowed on campus unless participating in an authorized college program or under the supervision of an adult.

2.4.11 Crime Awareness and Campus Security Act
Federal legislation requires the college to maintain data on the types and number of crimes on college property as well as policies dealing with campus security. To obtain additional information on this subject, contact the college Safety and Security Department.

2.4.12 Workplace Violence Prevention
Purpose
It is the policy of the Maricopa County Community College District to promote a safe environment for its employees, students, contractors, and visitors. MCCCD is committed to working with its employees to maintain an environment free from violence, threats of violence, harassment, intimidation, and other disruptive behavior.

Policy
Violence, threats, harassment, intimidation, and other disruptive behavior in our facilities is prohibited and will not be tolerated. It is the responsibility of all employees, students, contractors, and visitors of 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.
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.

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.

2.4.13 Student Right to Know
Under the terms of the Student Right To Know Act, the college must maintain and report statistics on the number of students receiving athletically related student aid reported by race and sex, the graduation rate for athletes participating in specific sports reported by race and sex, the graduation rate for students in general, reported by race and sex and other similar statistics. To obtain copies of these reports, contact the Office of Admissions and Records.

STUDENT RIGHTS AND RESPONSIBILITIES

2.4.5 Copyright Act Compliance
Students are expected to comply with the provisions of the Copyright Act of 1976 pertaining to photocopying of printed materials, copying of computer software and videotaping. In order to assist students in complying with the Copyright Law, appropriate notices shall be placed on or near all equipment capable of duplicating copyrighted materials.
3.2 Copyright Regulation
1. It is the intent of the Governing Board of the Maricopa County Community College District to adhere to the provisions of the U.S. Copyright Law (Title 17, United States Code Section 101 et seq.). Though there continues to be controversy regarding interpretation of the Copyright Law, this policy represents a sincere effort by the Board to operate legally within the District.
2. The Governing Board directs the Chancellor or his designee(s) to develop and distribute to employees guidelines that (1) clearly discourage violation of the Copyright Law and (2) inform employees of their rights and responsibilities under the Copyright Law.
3. Each college president or provost and the Chancellor shall name an individual(s) at each district location who will assume the responsibilities of distributing copyright guidelines, act as a resource person regarding copyright matter and provide training programs on current copyright laws.
4. Employees are prohibited from copying materials not specifically allowed by the (1) copyright Law, (2) fair use guidelines, (3) Licenses or contractual agreements, or (4) other permission.
5. The Governing Board disapproves of unauthorized duplication in any form. Employees who willfully disregard this Board policy and/or the aforementioned copyright guidelines do so at their own risk and assume all liability for their actions.
6. In order to assist employees and students in complying with the Copyright Law, appropriate notices shall be placed on or near all equipment capable of duplicating copyrighted materials.

What Students Should Know About Copyright
What is copyright?
Copyright is a protection afforded under federal law for various types of creative works. A work is copyrightable if it is an original work of authorship fixed in a tangible medium of expression. Copyrightable works include literary, musical or dramatic works; motion pictures and other audiovisual works; choreographic works and pantomimes; sound recordings; and architectural works.

The owner of a copyright in a particular work has the exclusive right to copy, display, perform, distribute, and create a derivative version of the work. Generally, then, this means that you may not do things like duplicate, show or perform a copyrighted work unless it is expressly allowed under the Copyright Act or you have the prior permission of the copyright holder.

A copyright exists in a work at the time it becomes fixed in some tangible medium of expression. Neither registration of the copyright with the federal government nor a copyright notice on the work itself is required for copyright protection.

What is copyright infringement?
Generally, copyright infringement occurs when you copy, display, perform, distribute or create a derivative version of a copyrightable work either without the permission of the copyright holder or when such activity is not otherwise allowed under an exception provided by federal copyright law. The penalties for infringement include significant damages—potentially in excess of $100,000 for each work infringed as well as criminal penalties, which may include fines and even incarceration.

How does copyright law affect information I obtain off the Internet?
Copyright law covers works in both traditional and new media, including digital media. Copyrightable materials are often available on the Internet without any indication of their copyrighted status. As a rule of thumb, you should assume that everything you find on the Internet is copyrighted, unless otherwise labeled. Even popular activities,
such as file swapping or copying software or pictures from the Internet, may be copyright infringement and should be avoided.

The Digital Millennium Copyright Act, which Congress enacted in 2000, affords greater protection for copyright holders of digital works. Generally, then, even if a work appears solely in a digital form, it is likely subject to copyright law protections.

New technology has made many creative works widely available through the Internet. For example, the technology known as Peer to Peer (P2P) allows for the transmission of music, videos, movies, software, video games and other materials-most of which is subject to copyright protection.

Remember that a copyright exists in a work at the time it becomes fixed in some tangible medium of expression. That means that an image you have downloaded from the Internet, as well as a video or musical performance is almost certainly subject to copyright protection. When you download these works, transfer them to a disk or other medium, or send them to a friend, you are infringing on the rights of the copyright holder. Trafficking in such material without the permission of the copyright holder, then, violates copyright law. This includes unauthorized music file sharing over the Internet.

According to a statement recently issued by representatives of the motion picture, recording and songwriting industries, uploading and downloading copyrighted works over the Internet is theft: "It is no different from walking into the campus bookstore and in a clandestine manner walking out with a textbook without paying for it."

**Why is it important for a student to be aware of copyright law?**
Copyright infringement is expressly prohibited by the US Copyright Act. Anyone who infringes another’s copyright in a creative work is subject to liability, and could be required to pay large sums in damages.

In addition, as the law clearly prohibits copyright infringement, using any college resources-such as photocopiers, desktop and laptop computers, printers, central computing facilities, local-area or college-wide networks, Internet access, or electronic mail-for the purpose of infringing a copyright in any work may be grounds for student discipline. According to Maricopa Community College District administrative regulation, "students are expected to comply with the provisions of the Copyright Act of 1976 pertaining to photocopying of printed materials, copying of computer software and videotaping."

Moreover, under the Maricopa Community Colleges Computing Resource Standards, a student is prohibited from the "use of software, graphics, photographs, or any other tangible form of expression that would violate or infringe any copyright or similar legally-recognized protection of intellectual property rights." The Standards also prohibit "transmitting, storing, or receiving data, or otherwise using computing resources in a manner that would constitute a violation of state or federal law . . . ."

A student who violates these policies, then, can be disciplined at any of the Maricopa Community Colleges. This discipline could include suspension or even expulsion.

**Does copyright law allow me to download files from a college web site?**
Thanks to recent changes to copyright law, colleges and universities are allowed to transmit copyrighted images, recordings, and other materials over the Internet in connection with distance learning offerings. These changes allow for the performance of non-dramatic literary works or musical works, as well as the display of "reasonable and limited portions" of any work in an amount comparable to that typically displayed in a live classroom setting. Use of the works must, however, be "an integral part" of the distance-learning class session, and available solely to
students enrolled in the class. In addition, the transmission of the copyrighted works must be under the direction or actual supervision of an instructor.

Even though the college does not hold the copyright to these works, or even have the express permission of the copyright holder, they may be delivered over the Internet to students in distance learning classes.

The fact that the law authorizes such use of copyrighted materials, though, does not allow a student in these classes to freely download, copy, or re-transmit the works. They are intended solely for use by the institution in connection with distance instruction; any other use would likely constitute a violation of copyright law.

3.4 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.

4.4 Technology Resource Standards
Introduction

The Maricopa County Community College District (MCCCD) provides its students, employees, Governing Board members and the public with access to information resources and technologies. MCCCD recognizes that the free exchange of opinions and ideas is essential to academic freedom, and the advancement of educational, research, service, operational, and management purposes, is furthered by making these resources accessible.

Arizona constitutional and statutory mandates require that MCCCD resources, including technology, be used only for the public’s business, and not for private purposes. Those mandates apply to all MCCCD public officials—employees of every kind and the Governing Board. The aim of those laws is to safeguard the use of resources, including technology resources, acquired and maintained with public funds. Compliance with other laws—both federal and state—also dictates the need for standards for the use of MCCCD technology resources. In some cases, the Governing Board policies emphasize the importance of compliance with the law such as the requirement to adhere to copyright laws. Governing Board policies also establish MCCCD’s own standards, such as the directive that all persons within the MCCCD community be treated in a manner that is humane, fair and dignified.

This administrative regulations established standards for the use of MCCCD technology resources. They should be seen as supplementing, and not in lieu of, Governing Board policy, applicable law and other applicable administrative regulations such as Administrative Regulation 4.3 “Electronic Communications.”

General Responsibilities
Technology resources (including, but not limited to, desktop and laptop systems, printers, central computing facilities, MCCCD-wide or college-wide networks, local-area networks, telephones, facsimile machines, scanners, access to the Internet, electronic mail and similar electronic devices and information) of the 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).
MCCCD Policies and Procedures

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.

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.

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 transmitted through those resources. Any other review may be performed exclusively by persons expressly authorized for such purpose and only for cause. To the extent possible in the electronic environment and in a public
setting, a user’s privacy will be honored. Nevertheless, that privacy is subject to Arizona’s public records laws and other applicable state and federal laws, as well as policies of Maricopa’s Governing Board all of which may supersede a user’s interests in maintaining privacy in information contained in Maricopa’s technology resources.

**Incidental Computer and Technology Usage**

Limited incidental personal use of 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).

**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.

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.”

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.

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.

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.

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, belitting, 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.

2.4.7 Abuse-Free Environment
See also the Auxiliary Services section for Tobacco-Free Environment and the Appendices/Student Section Medical Marijuana Act of the Administrative Regulations.

1. Substance Abuse/Misuse Statement
Drug abuse and misuse has become a national issue and is receiving national attention, particularly in the academic community. The insidious effects of the abuse of these agents are also felt by all walks of life and economic levels. Therefore, as an education providing institution, we are responsible to provide knowledge and guidelines about prevention, control, and treatment of the abuse/misuse of alcohol, illegal and legal drug uses and misuses.
Annual Acknowledgements for students and employees are provided through the online messaging accounts.

Students who experiment with drugs, alcohol, and illegal substances or use them recreationally may develop a pattern of use that leads to abuse and addiction. Maricopa Community Colleges recognized drug and alcohol abuse as an illness and a major health problem as well as a potential safety and security issue.

Part of the educational mission of the Maricopa Community Colleges is to educate students about positive self-development, the benefits of a healthy lifestyle and the health risks associated with substance abuse. This mission closely aligns with the Drug-Free School and Communities Act of 1989, and other relevant substance abuse laws.

2. Student Program to Prevent Illicit Use of Drugs and Abuse of Alcohol
The Maricopa Community College District fully supports disciplinary action for misconduct and the enforcement of state laws governing the use of alcohol and the use, abuse, possession or distribution of controlled substances or illegal drugs.
A. Introduction and Purpose
The Federal Drug-Free Schools and Communities Act of 1989 (Public Law 101-226) requires federal contractors and grantees to certify that they will provide a drug-free school. As a recipient of federal grants, the District must adopt a program toward accomplishing this goal. While federal legislation has been the impetus for creation of the program, the administration and Governing Board recognize that substance abuse is a problem of national proportions that also affect students at the Maricopa Community Colleges.

The Maricopa Community Colleges are committed to maintaining learning environments that enhance the full benefits of a student’s educational experience. The Maricopa County Community College District will make every effort to provide students with optimal conditions for learning that are free of the problems associated with the unauthorized use and abuse of alcohol and drugs.
B. Standards of Conduct
In the student handbooks of the Maricopa Community Colleges under codes of conduct, the following are examples of behavior that is prohibited by law and/or college rules and policies:
   i. Drinking or possession of alcoholic beverages on the college campus.
   ii. Misuse of narcotics or drugs.
C. Sanctions for Violation of Standards of Conduct
Disciplinary actions include, but are not limited to:

i. Warning,

ii. Loss of privileges, 

iii. Suspension, or

iv. Expulsion.

D. Legal Sanctions

Local, state, and federal law prohibit the unlawful possession, use or distribution of illicit drugs and alcohol. Conviction for violating these laws can lead to imprisonment, fines, probation, and/or assigned community service. Persons convicted of a drug-and/or alcohol related offense will be ineligible to receive federally funded or subsidized grants, loans, scholarships, or employment.

Any employee is subject to disciplinary action, up to and including employment termination, for any of the following: reporting to work under the influence of alcohol and/or illegal drugs or narcotics; the use, sale, dispensing, or possession of alcohol and/or illegal drugs or narcotics on 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.

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.

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 district-owned property that the Chancellor either sponsors or approves. The only District employees authorized to request the Chancellor’s approval are the College Presidents and the Vice Chancellors. Additionally, the law strictly limits the service of wine or beer by the District on District-owned property, and those restrictions are specified in Paragraph E. Unless approved by the Chancellor in compliance with the law and this regulation, alcoholic beverages may not be served on District-owned property.

D. **Event Form Required.** A College President or Vice Chancellor who wishes to obtain the Chancellor’s approval for the service of wine or beer at a District-sponsored event on District-owned property shall forward a completed written request to the Chancellor no later than 30 days before the event. The request form is available at: [AS-6 Notice of Intent to Serve Beer and Wine Form](#). On signing the form, the Chancellor will provide a copy of it to the requestor and to the 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. Invites 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 Time-Frames).

J. Residential Housing. Lawful occupants of residential housing under the jurisdiction of the Governing Board, if over the age of 21 years and not otherwise lawfully barred from such practice, may possess and consume alcoholic beverages in the privacy of their respective leased housing facility. Guests of such occupants over the age of 21 years shall have the same privilege. No alcohol is permitted in public areas (nor common areas of a dormitory) at any time.

K. Personal Responsibility. The personal or individual purchase of alcoholic beverages by individuals attending District-approved functions held in places serving alcoholic beverages is a personal and individual responsibility. Administrative discretion shall be exercised in the approval of the location of such activities, as such decision pertains to the nature of the group involved.

L. Miscellaneous Usage Issues. Any issues that are not specifically addressed within this regulation require the review and determination by the Chancellor or Executive Vice Chancellor and Provost on matters related to culinary programs, academic or student affairs.

5. Other Health Concerns

General Guidelines Concerning AIDS

Neither a diagnosis of AIDS nor a positive HIV antibody test will be part of the initial admission decision for those applying to attend any of the Maricopa Community Colleges. The Maricopa Community Colleges will not require screening of students for antibody to HIV. Students with AIDS or a positive HIV antibody test will not be restricted from access to student unions, theaters, cafeterias, snack bars, gymnasiums, swimming pools, recreational facilities, restrooms, or other common areas, as there is not current medical justification for doing so.

Where academically and logistically feasible, students who have medical conditions, including AIDS, may seek accommodation in order to remain enrolled. Medical documentation will be needed to support requests for accommodation through the Office of Disabled Resources and Services or the Office of Vice President of Student Affairs.
The Maricopa Community Colleges acknowledge the importance of privacy considerations with regard to persons with AIDS. The number of people who are aware of the existence and/or identity of students who have AIDS or a positive HIV antibody test should be kept to a minimum. When a student confides in an faculty member, knowledge of the condition should be transmitted to the appropriate vice president or designee who will make the determination if the information should be further disseminated. It should be remembered that mere exposure to the person in a classroom does not constitute a need to know the diagnosis. It is, therefore, unnecessary to document in a student's file the fact that he or she has AIDS unless the information is to be used for accommodation reasons. Sharing confidential information without consent may create legal liability.

Students are encouraged to contact the Office of Disabled Resources and Services and/or the vice president of student affairs or designee for the types of services available in the district or community on matters regarding AIDS or the HIV virus.

**4.12 Smoke-Free/Tobacco-Free Environment**

The Maricopa County Community College District is dedicated to providing a healthy, comfortable, and educationally productive environment for students, employees, and visitors. In order to promote a healthy learning and work environment, the Chancellor has directed that the Maricopa County Community College District serve as a total smoke free and tobacco free environment, effective July 1, 2012. Smoking (including the use of “e-cigs”) and all uses of tobacco shall be prohibited from all District owned and leased property and facilities, including but not limited to parking lots, rooftops, courtyards, plazas, entrance and exit ways, vehicles, sidewalks, common areas, grounds, athletic facilities, and libraries.

Support signage prohibiting the use of smoking instruments and tobacco shall be placed throughout all college and District locations.

Continued violations by an employee or student shall be handled through the respective conduct procedures established for employees and students.

**Appendix S-16: Statement on the Arizona Medical Marijuana Act (Proposition 203)**

In 2010, Arizona voters approved the Arizona Medical Marijuana Act (Propositions 203), a state law permitting individuals to possess and use limited quantities of marijuana for medical purposes. Because of its obligations under federal law, however, the Maricopa Community Colleges will continue to prohibit marijuana possession and use on campus for any purpose.

Under the Drug Free Workplace Act of 1988, and the Drug Free Schools and Communities Act of 1989, “...no institution of higher education shall be eligible to receive funds or any other form of financial assistance under any federal program, including participation in any federally funded or guaranteed student loan program, unless it has adopted and has implemented a program to prevent the use of illicit drugs and abuse of alcohol by students and employees.” Another federal law, the Controlled Substances Act, prohibits the possession, use, production, and distribution of marijuana for any and all uses, including medicinal use. This law is not affected by the passage of the Arizona Medical Marijuana Act. Because Maricopa Community Colleges could lose its eligibility for federal funds if it fails to prohibit marijuana, it is exempt from the requirements of the Arizona Medical Marijuana Act. Therefore, Maricopa Community Colleges will continue to enforce its current policies prohibiting the unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance on its property or as part of any of its activities.
Employees and students who violate Maricopa Community Colleges policy prohibiting the use or possession of illegal drugs on campus will continue to be subject to disciplinary action, up to and including expulsion from school and termination of employment.

2.8 Students with Disabilities
2.8.1 Eligibility for Accommodations & Required Disability Documentation

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.

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.

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)).

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.**

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.

**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

**Specific Eligibility Requirements**

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.
   v. A recommendation for accommodation(s).

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-IV, including all five axes.
   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.

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-IV diagnosis, including all five axes
   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.

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.
2. 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-IV diagnosis, including all five axes
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.

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

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

2.8.2 Eligibility of Students Taking Reduced Course Loads
Although any student may register for fewer than twelve credit hours, a student with a disability may request a reduced academic load as a reasonable and appropriate accommodation. A college Disability Resource Services (DRS) professional may certify that a student who is afforded a reduced academic load as an accommodation for a disability shall nevertheless be deemed a full-time student. Such certification shall be solely to enable the student to seek eligibility for health insurance benefits and to seek eligibility to comply with mandates of the National Junior College Athletic Association. The college DRS professional will certify that a student may be deemed a full-time student as provided under this regulation only on a semester-by-semester basis.

The appropriate college offices will receive documentation of the DRS professional's certification from the professional or the student. An incoming student may apply for such certification upon acceptance to the college. Requests for certification must be made prior to the beginning of each semester. Every attempt will be made to accommodate these requests.
The following criteria also apply:

1. Students taking a reduced course load must register for at least 6 credit hours (based on DRS approval) during the regular fall and spring semesters. It is recommended that students register for at least three (3) credit hours during the summer to offset the impact of academic eligibility.

2. Students taking a reduced course load must maintain satisfactory academic progress standards as defined by the College catalog.

3. The reduced credit load may result in an adjusted financial aid package. There may be additional ramifications including, but not limited to, extra time to complete college, insurance coverage, Vocational Rehabilitation funding, etc.

4. Eligibility for Federal Stafford Loans may be reduced according to the total number of credit hours taken in the full academic year. A student, taking a reduced course load, must be at least half time in a semester (6 credits) in order to receive a Stafford Loan.

5. The amount of Federal Financial Aid (Title IV) awarded is based on the actual number of credit hours taken.

6. Requirements for continuation of funding through Vocational Rehabilitation may differ. The student must contact his/her VR counselor to determine how a reduced course load will impact their funding.

7. The National Junior College Athletic Association (NJCAA) has published standards in regard to the designation of Certified Disabled Student-Athlete in Article V Section J of the NJCAA bylaws. This procedure addresses the NJCAA criteria for reduced course loads.

Application Process

1. Applications for reduced course loads must be submitted to the Disability & Services professional with supporting documentation. Requests must be made prior to the beginning of each semester.

2. Supporting documentation must include a diagnostic evaluation from an appropriate professional. The documentation must meet the guidelines set forth by the Maricopa Community College District’s Documentation Policy in order to evaluate the current impact of the disability in regards to the request. Students are required to complete an application form for this status every semester, but do not need to resubmit their documentation. Continuation of this status is not automatic. Each case will be re-evaluated at the end of the semester to determine if this accommodation is still appropriate.

3. Students requesting a reduced course load should consult with their academic advisor regarding the consequences of this status for making progress toward graduation requirements and eligibility for various academic distinctions and designations.

4. Students registered in occupational and/or academic programs that have specific block formats will not be considered for reduced course loads.

5. Students who are approved for a reduced course load will be required to sign the Reduced Course Load Approval Form (see Appendix S-10), which includes a statement acknowledging that he or she has reviewed the consequences that go with reduced load status and accepts them.
6. When a reduced course load status is granted by the Disability Resources & Services professional, a copy of the Reduced Course Load Approval Form will be sent to the appropriate individuals.

2.3.11 Academic Misconduct

1. Definitions

A. Academic Misconduct - includes any conduct associated with the classroom, laboratory, or clinical learning process that is inconsistent with the published course competencies/objectives and/or academic standards for the course, program, department, or institution. Examples of academic misconduct include, but are not limited to: (a) cheating and plagiarism (including any assistance or collusion in such activities, or requests or offers to do so); (b) excessive absences; (c) use of abusive or profane language; and (d) disruptive behavior.

B. Cheating is any form of dishonesty in an academic exercise. It includes, but is not limited to, (a) use of any unauthorized assistance in taking quizzes, tests, examinations, or any other form of assessment whether or not the items are graded; (b) dependence upon the aid of sources beyond those authorized by the faculty member in writing papers, preparing reports, solving problems, or carrying out other assignments; (c) the acquisition, without permission, of tests or other academic material belonging to or administered by the college or a member of the college faculty or staff; 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.

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.

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.
4. **Appeal of Sanctions for Academic Misconduct**

Students can appeal academic consequences by following the instructional grievance procedure (AR 2.3.5; Appendix S-6). Students may appeal disciplinary sanctions as provided in AR 2.5.2. If the student appeals through both processes, the instructional grievance process will be suspended until a final decision is reached in the student discipline procedure. In all cases in which financial aid has been adversely affected by academic consequences or disciplinary sanctions that are the subject of ongoing hearing or appeal proceedings, the student may appeal the financial aid determination on the grounds that a final decision has not been made. In such an event, a final decision on financial aid will not be made until after the final decision on consequences and/or sanctions.

Amended through direct approval from the Chancellor and Executive Vice Chancellor & Provost on August 7, 2013

**DISCIPLINARY STANDARDS**

2.5.1 **Disciplinary Standards**

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

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.
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.

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.

**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.

**Article III: Prohibited Conduct**

1. **Jurisdiction of the College**

   The Student Conduct Code shall apply to conduct that occurs on college or District premises, or at college- or 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.

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.

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.
MCCCD Policies and 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.

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.

Article IV: Student Conduct Code Procedures
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.
MCCCD Policies and Procedures

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.

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.

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.

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.

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 determine whether 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.

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.

i. 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.

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.

2.5.3 Student Records

1. Definitions
For the purposes of this policy, the Maricopa County Community College District has used the following definition of terms.

A. "College" includes all colleges, educational centers, skill centers and District office.

B. "Educational Records" are any record (in handwriting, print, tapes, film, or other media) maintained by the college or an agent of the college which is directly related to a student, except:

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. Alumni records which contain information about a student after he or she is no longer an attendant of the community college and the records do not relate to the person as a student.

2. Records Request
Official verification of educational records is issued by the Admissions and Records Office/Office of Student Enrollment Services.

3. Fees
If a copy(ies) of a portion or all of the records in a student’s file is requested, the custodian of the records may charge a fee for copies made. However, the willingness or ability to pay the fee will not effectively prevent students from exercising their right to inspect and review (under supervision of a college employee) their records. A fee will not be charged to search for or to retrieve records. Standard fees for printing and duplication services will apply.

4. Annual Notification (SEE ALSO FERPA EXPLANATION)
Students will be notified of their further rights annually by publication in the college catalog and/or the student handbook:
Individuals requesting admission or enrollment at any of the Maricopa 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 we offer.

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. (An “Eligible Student” Under FERPA is a student who is 18 years of age or older who attends a postsecondary institution). These rights include:

A. The right to inspect and review the student’s education records within 45 days after the day the college receives a request for access.

Students should submit to the college admissions and records department written requests that identify the record(s) they wish to inspect. 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.

B. The right to request the amendment of the student’s education records that the student believes is inaccurate, or misleading.

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.

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.

CONDITIONS OF DISCLOSURE WITHOUT CONSENT
FERPA permits the disclosure of personally identifiable information (PII) from students’ education records, without consent of the student, if the disclosure meets certain conditions found in §99.31 of the FERPA regulations. Except for disclosures to school officials, disclosures related to some judicial orders or lawfully issued subpoenas, disclosures of directory information, and disclosures to the student, §99.32 of FERPA Regulations requires the institution to record the disclosure. Eligible students have a right to inspect and review the record of disclosures. A postsecondary institution may disclose PII from the education records without obtaining prior written consent of the student:

1. To other school officials, including instructors, 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 responsibilities. This includes contractors, attorneys, auditors, collection agents, consultants, volunteers, or
other parties to whom the college has outsourced institutional services or functions, provided that the conditions listed in §99.31(A)(1)(I)(B)(1) – (A)(1)(I)(B)(2) are met. (§99.31(A)(1))

2. To officials of another school where the student seeks to or intends to enroll, or where the student is already enrolled if the disclosure is for purposes related to the student’s enrollment or transfer, subject to the requirements of §99.34. (§99.31(A)(2))

3. To authorized representatives of the US Comptroller General, the US Attorney General, and the US Secretary of Education, or State and Local Educational Authorities, such as a state postsecondary authority that is responsible for supervising the college’s state supported education programs. Disclosures under this provision may be made, subject to the requirements of §99.35, in connection with an audit or evaluation of federal- or state-supported education programs, or for the enforcement of or compliance with federal legal requirements that relate to those programs. These entities may make further disclosures of PII to outside entities that are designated by them as their authorized representatives to conduct any audit, evaluation, or enforcement, or compliance activity on their behalf (§§99.31(A)(3) and 99.35)

4. In connection with financial aid for which the student has applied or which the student has received, if the information is necessary to determine eligibility for the aid, determine the amount of the aid, determine the conditions of the aid, or enforce the terms and conditions of the aid. (§99.31(A)(4))

5. To organizations conducting studies for, or on behalf of, the college, in order to: (A) Develop, Validate, or Administer Predictive Tests; (B) Administer student aid programs; or (C) Improve instruction (§99.31(A)(6))

6. To accrediting organizations to carry out their accrediting functions. (§99.31(A)(7))

7. To parents of an eligible student if the student is a dependent for IRS tax purposes. (§99.31(A)(8))

8. To comply with a judicial order or lawfully issued subpoena. (§99.31(A)(9))

9. To appropriate officials in connection with a health or safety emergency, subject to §99.36. (§99.31(A)(10))

10. Information the college has designated as “Directory Information” under §99.37. (§99.31(A)(11))

11. To a victim of an alleged perpetrator of a crime of violence or a non-forcible sex offense, subject to the requirements of §99.39. The disclosure may only include the final results of the disciplinary proceeding with respect to that alleged crime or offense, regardless of the finding. (§99.31(A)(13))

12. To the general public, the final results of a disciplinary proceeding, subject to the requirements of §99.39, if the school determines the student is an alleged perpetrator of a crime of violence or non-forcible sex offense and the student has committed a violation of the college’s rules or 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: www.maricopa.edu/publicstewardship/governance/adminregs/appendices/S-8.php

**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
5. **Student Directory**

A Maricopa 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 Office of Admissions and Records.

At any Maricopa community college, directory information is defined as a student's name, address, telephone number, major field of study, participation in officially recognized activities and sports, weight and height of members of athletic teams, degrees and awards received, dates of attendance, part-time or full-time status, most recent previous educational agency or institution attended by the student, college within the Maricopa Community Colleges where the student has been enrolled, photograph of student, and electronic mail address.

6. **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.

**Appendix S-17: FERPA Appeal Process**

**FERPA APPEAL PROCESS**

In instances where the college decides not to amend an education record as requested by the student, the college will notify the student of the decision and advise him/her of the right to an appeal hearing according to the following process:

- The student must have first presented the issue in writing to the college's Admissions/Enrollment Office or designee identifying the records that he/she wishes to have amended and provided any supporting documentation. Note: With the exception of clerical errors, requests that are expressly related to grade disputes are not subject to this process and must be vetted through the Instructional Grievance Process.

- If the request to change the record was deemed unsubstantiated by the college designee and the institution was able to demonstrate that the record was accurate, the student will be informed of the right to a formal appeal hearing.

- Students must request a formal hearing within 10 business days from the date they are informed of the right to an appeal hearing.

- The request for a formal hearing must be in writing and delivered to the [Dean of Admissions/Enrollment Services, Vice President of Student Affairs] or designee.

- The college official who receives the formal hearing request will either review the case personally or designate a hearing committee if the issue involves a matter not clearly established by current policy or administrative regulation.

- A written decision will be delivered to all parties summarizing the evidence and stating the reason(s) for the decision. If the decision is in favor of the student, the education record will be amended. If the decision is
for the record to remain the same, the student may place a statement commenting on or disagreeing with the decision in the education record.

**STUDENT HANDBOOK**

2.5.4 Student Employment

1. District Student Employees
   
   A. Introduction
   
   Students may be employed by the college as student help. District regulations require that students be hired in essential jobs and that they be properly trained and supervised.
   
   B. Philosophy and Workload for Student Employees
   
   i. It shall be the philosophy of Maricopa Community College District that a student may work to augment college and living expenses, however, the scholastic endeavor should be foremost. Sufficient time should be allotted for classroom attendance, homework, out-of-class study and participation in activities.
   
   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.
   
   C. Student Employee Benefits
   
   As student employees, there are no entitlements to employee benefits; i.e., vacation, retirement, sick leave, health and life, or disability insurance. Students will, however, be covered under Worker's Compensation Insurance.
   
   D. Student Employment Records
   
   Student employee records will be maintained at the Financial Aid office, the office of the fiscal agent or the Career/Placement Office and will be reviewed periodically by the Vice President of Students Affairs.
   
   E. Student Compensation
   
   The hourly rate of pay for student employees shall coincide with the policies of the District Salary Schedule.
   
   F. Employee Contracts and Forms (See Appendix FM-3)
   
   Employee Grievance Procedure
   
   G. Part-time student employees working for one of the Maricopa Community Colleges may wish to file a grievance relating to certain working conditions or violation of student employment regulation. Please refer to the Non-Instructional Complaint Resolution Process (AR 2.3.12)

2. Student Security Guards

   A. Introduction and Philosophy
   
   Students may be employed by the college as student help. If student guards do not come from the ranks of Administration of Justice classes, they must undergo appropriate training to qualify them as student guards. This training program is outlined in the regulation.
   
   B. Workload of Student Security Guards
MCCCD Policies and Procedures

i. Student security guards shall be enrolled for a minimum of three (3) semester hours.

ii. Student security guards shall be limited to 20 hours per week when the workweek starts at 7:00 a.m. on Monday and concludes at 11:00 p.m. on Friday. Additional hours may be worked if guards are assigned special duty at games or activities held on campus during the weekend, or if guards are assigned a shift on Saturday and Sunday, between 7:00 a.m. and 11:00 p.m.

C. Students not in Administration of Justice Program

i. Use of student other than those in Administration of Justice Program:
   1. Selection of the student must be personally approved by the vice president of students affairs and chief of security.
   2. Selection of a student should not extend beyond one semester without the approval of the vice president of students affairs.
   3. Selected student must undergo a special training program directed by the chief of security and approved by the vice president of student affairs.

ii. Recommended program for students other than those in Administration of Justice programs: Students employed by campus security who are not majors in the Administration of Justice program should be given at least twenty (20) hours of training with pay before being allowed to function independently as a campus security guard. This training should include, but not be limited to instruction in:
   1. Wearing of the uniform, general appearance, and demeanor
   2. The use of the various security report forms and how to properly complete them to provide requested information; General report writing methods
   3. Public relations methods used on the campus
   4. Crime prevention methods used on the campus; Patrol methods used in buildings and grounds.
   5. Basic techniques for interviewing students, faculty and visitors relative to the incidents
   6. Laws and regulations governing the actions of campus security personnel concerning rendering of assistance to students, faculty and visitors on the campus
   7. Basic first aid

D. Student Security Guards Employee Benefits

As student employees there are not entitlements to employee benefits; i.e., vacation retirement, sick leave, health and life, or disability insurance. Students will, however, be covered under Worker's Compensation Insurance.

E. Student Employment Records

The student security guard's employment records will be maintained at the office of the chief of security and reviewed periodically by the vice president of student affairs.

2.5.5 Student Governance

Student governing bodies derive their authority from the Maricopa County Community College District Governing Board that exists in accordance with Arizona Revised Statutes. The administration of the District is vested in the Chancellor who delegates responsibility for each college to the college president who serves in a management and policy implementation capacity having the ultimate responsibility for all activities of the college. The president shall designate the administrator(s) (i.e., directors of student leadership) at each college who will be charged with the responsibility for working with the college student governing body(ies) in the development of college student activities and programs.

A representative form of student governance may exist at each college/center as well as district wide to provide an effective means of communication among students, faculty, staff and administration and to provide student input in college and District matters. Eligibility requirements are to be met and spelled out in detail in each student governance constitution. These constitutions shall establish the minimum requirements for the elective/appointive officers. All student government constitutions shall be submitted to the Governing Board General Counsel to ensure
MCCCD Policies and Procedures

compliance with federal and state laws, and the Maricopa Community Colleges Governing Board Administrative Regulations. Since Rio Salado Community College is a countywide non-campus college, the president shall ensure that opportunities exist for student involvement.

College student constitutions should be reviewed annually by student governance. The appropriate vice president or designee of each college shall be responsible for submitting any changes to the president of the college for transmittal to the Governing Board General Counsel.

1. Officers/Members
   All reference in this document to positions will designate whether the position is an officer position or a member position.

   Each student governance constitution shall define which of its elected positions (maximum of 5) within its structure shall be designated as officers. The persons filling those positions shall be referred to, in this document, as officers. Persons filling all other positions, elected or appointed, shall be referred to as members (excluding non-voting committee members).

   All positions filled by election shall be considered as elected positions, even though the person filling the position may have been appointed to fill an unexpired term of another individual.

2. Designation
   Colleges with two (2) student governments shall designate the governments as "day" or "evening." Colleges with one (1) government shall be considered day students, for the purposes of this document.

3. Eligibility for Office
   All student governance constitutions shall prescribe that all persons elected or appointed as officers shall be enrolled in and maintain a minimum of six (6) credit hours for day student governments, three (3) credit hours for evening student governments. Officers shall have and maintain a minimum cumulative grade point average of 2.50 and be in good standing (not on probation) according to the written district policy. Convicted felons shall be ineligible for office (ARS § 13-904). The constitution may, however, set more rigid requirements, if so desired by college student governance.

4. Tenure of Position
   Tenure in any student governance position shall be determined by the respective student governance constitutions. In no case shall any student be allowed to serve in any combination of officer/member positions beyond a total of ten (10) semesters. Tenure in any combination of officer positions shall be limited to four (4) semesters.

5. Removal from Office
   Provisions shall be made in all student governance constitutions for removal for cause of individuals from elected or appointed student governance positions.

6. Remuneration Limitations
   A. Student body officers may receive financial support and/or a letter grade in a leadership class during their terms of office as authorized in their respective student governance constitutions. Student body officers (maximum 5) may receive up to twenty (20) hours per week in financial support and/or up to six (6) credit hours in leadership classes per semester. Remuneration shall be for services rendered and not for merely holding the office.
   B. For qualifying students, Federal Work Study (FWS) funds may be used in accordance with Federal guidelines.
   C. The allowance for awarding honorariums or scholarships for executive student officers is a maximum of $200.00.
   D. Compensation may be received for both honorariums/scholarships and college employment in the same semester.
7. **Amending Student Constitutions**
   College student constitutions should be reviewed annually by student governance. The appropriate vice president or designee of each college shall be responsible for submitting any constitutional changes to the President of the college for transmittal to the Governing Board General Counsel.

8. **Student Governance Advisors**
   College organization advisors will be provided for in each student governance constitutions. Such advisors shall be full-time or part-time employees of the Maricopa Community Colleges.

   Recommendations for appointment of an advisor may be submitted to the appropriate vice president or college president. Recommendations for dismissal of an advisor with just cause may be submitted to the appropriate vice president or college president.

9. **Legal/Fiscal/Financial Matters**
   Authority and responsibility beyond the scope specifically covered in student policies, or interpretation of such matters within laws, board policies, etc. shall rest with the offices of General Counsel and Chancellor, respectively.

10. **Final Authority**
    In the event of a complete breakdown of the governance body, the college president will serve as the final authority.

**Student Clubs and Organizations**
In addition to student governing bodies, student clubs and organizations may be formed that fall under the operational direction of the Office of Student Life and Leadership and the administrative direction of the Vice President of Student Affairs at each college. Student clubs and organizations are generally interest-based in nature (such as for a particular program, discipline, or college activity) and are considered to be an important part of the total college experience. Each college shall outline the requirements necessary to establish the formation of an interest-based student club and organization (i.e., mission/purpose, size, structure, advisors). Club advisors shall be employees of the Maricopa County Community College District.

In most instances, student clubs and organizations shall be open to all students who are enrolled in credit courses at a Maricopa Community College. Pursuant to ARS §15-1863, religious or political student organizations may determine that the organization’s internal affairs, selecting the organization’s leaders and members, defining the organization’s doctrines, and resolving the organization’s disputes are part of the organization’s religious or political mission and that only persons committed to that mission should conduct such activities. For religious and political organizations, state statute recognizes the role that viewpoint serves in the mission and purpose of the organization’s operations. Thus, such groups may elect to select members based upon organizational doctrine. The 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.

*****INSERT INTO PROGRAM SECTION OF THE CATALOG AS ALLIED HEALTH*****

**Appendix S-13: The Maricopa Community Colleges Allied Health or Nursing Program**
In collaboration and partnership with the health care community and its response to the dynamic changes occurring in the health care arena and health care practice, the Maricopa Community Colleges integrated the curriculum of all allied health and nursing programs. All allied health or nursing program pathways and educational offerings
emphasize the achievement of relevant competencies and provide value to the individual, the employer, and the community. As a result, graduates of the various allied health or nursing program pathways will meet the community’s demand for a flexible, multi-skilled health care workforce that meets employer and consumer needs. Refer to individual college catalogs for specific health care program pathways.

For further information, https://asa.maricopa.edu/departments/healthcare-education-at-the-maricopa-community/ is a comprehensive information source.

**Allied Health or Nursing Assumption of Risk/Release of Liability**
Most of the allied health or nursing program pathways include a program of study in a clinical training environment that may contain exposures to risks inherent in patient-oriented educational experiences (such as but not limited to bodily injury or communicable and infectious diseases). Students enrolling in clinical educational courses will be asked to sign a statement assuming all risks inherent in their coursework.

**Use of Confidential Information**
Students enrolled in allied health or nursing program pathways will have learning experiences in a health care setting where they will have access to confidential information. Prior to beginning any clinical studies, the students will be asked to sign an agreement to adhere to the requirements of those clinical sites and applicable law, including the Health Insurance Portability and Accountability Act of 1996 (HIPAA).

**Allied Health or Nursing Program College Attendance**
As the allied health or nursing programs are integrated across the Maricopa Community Colleges, college of attendance requirements for the completion of the healthcare program pathways can be met through the completion of coursework taken at all Maricopa Community Colleges and Skills Centers.

**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 on or after September 1, 2011. 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 (http://www.azleg.gov/FormatDocument.asp?inDoc=/ars/41/01758-07.htm&Title=41&DocType=ARS). 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 I 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 Number Verification
3. Residency History
4. Arizona Statewide Criminal offense Databases
5. Nationwide Criminal offense Databases
7. Homeland Security Watch Lists

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 regardless of how long ago the conviction was
5. Any arrest warrant issued by any state
6. Any misdemeanor conviction for the following regardless of how long ago the conviction was:
   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
8. Any misdemeanor relating to a controlled substance conviction in last 7 years
9. Any other misdemeanor conviction within last 3 years with the exception-any misdemeanor traffic misdemeanor
   [NOTE that a DUI is NOT considered a traffic misdemeanor.]

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.

**Students Accepted in a Program before September 1, 2011**

Students who are accepted in a program before September 1, 2011 will generally need to meet the requirements of each program that existed before that date. It is not MCCCD’s intent to apply the standards effective on September 1, 2011 to students accepted in a program before that date. However, note that MCCCD always reserves the right to
change the requirements for these programs, even after a student is accepted. Students should be aware of this right.

Duty to Report Changes; Removal
Students have an obligation to immediately report to the director of their program any change in the information that they supplied on forms submitted to initiate background checks relating to the allied health or nursing program. That includes information provided to the Arizona Department of Public Safety and MCCCD’s supplemental background check vendor, as well as that related to the background check required by a clinical agency. Failure to do so will result in removal from the program. Additionally, any change in background check status that would affect the student’s clearance under either MCCCD’s or a clinical agency’s standards will result in removal from a program.

Additional Clinical Agency Background Check
Some clinical agencies require that students assigned to their sites submit to a criminal background check covering other offenses, as well as to a drug screening. Students are required to pay for the additional agency clinical background check. A clinical agency that requires this additional background check may refuse to place a student due to information the clinical agency obtains in its background check even though that student possess a valid Level I Fingerprint Clearance Card and has obtained a “pass” status on the MCCCD supplemental background check.

Some conditions that have resulted in students being denied placement at clinical agencies include pending criminal charges, outstanding warrants, unfinished terms of a sentence (such as unpaid fines), pattern of repeated types of arrests/convictions, and failure to disclose all past arrests/convictions when asked to do so on any background check application.

Inability to Place
MCCCD has no obligation to make repeated attempts to place a student when the reason for MCCCD’s inability to place the student is due to background check issues. Since clinical agency assignments are mandatory requirements for completion of a program, a student’s inability to complete required clinical experience due to his or her background check issues will result in removal from the program.

Changes to Admission or Background Check Requirements
MCCCD may change its program admission requirements or background check requirements without notice at any time.

No Guarantee of Receipt of Licensure/Certificate
Many of the nursing and allied health programs prepare graduates for application for State or National certificates or licenses. In some professions, such licensure and certification is required prior to employment or practice in the profession. Graduation from a nursing and allied health program does not guarantee the receipt of a license or certificate to practice in the field of study.

*****END OF ALLIED HEALTH SECTION*****

4.18 Consensual Relationships
1. General
The existing Governing Board Policy on Hiring of Relatives prohibits employees from being involved in any employment or key decision that involves a relative. This would include work performance, job assignments, or pay related matters. In that such relationships can create a conflict with the interests of the Maricopa Community Colleges, and the increased potential for nepotism and favoritism, the same principles also apply in
the case of consensual amorous, romantic and/or sexual relationships that occur between employees or between employees and students.

In the work and academic environment, such a relationship that might be appropriate in other circumstances is inappropriate if one of the individuals in the relationship has a professional responsibility toward, or is in a position of authority with respect to, the other, such as in the context of supervision, instruction, coaching, counseling or advisement. An element of power is present in such a context and it is incumbent upon those with authority not to abuse that power. In addition, consensual relationships may yield to third parties the appearance that unfair bias or favoritism towards the student or supervisee is taking place.

A. Definitions

i. Consensual relationships are defined as romantic, amorous and/or sexual relationships between consenting employees or between employees and adult (18 years or older) college students currently enrolled at one of the community colleges.

ii. An employee is any individual who is employed by the Maricopa County Community College District (MCCCD). An employee includes an individual who is subject to an established employee job group policy manual, whether regular, full-time board approved, at-will, part-time, and/or temporary. An employee also includes a contract worker (special services employment, request for personnel services) working or serving as an agent or designee on behalf of the MCCCD.

iii. A student is considered to be any person currently enrolled in a credit or non-credit class at one of the colleges or centers within the Maricopa County Community College District.

iv. A vendor is someone who sells or can sell products or services to the Maricopa County Community College District.

v. A recent consensual relationship is considered to be one that has taken place within the past 24 months.

B. Prohibited Conduct

i. An employee shall not maintain, engage in or be involved in a consensual relationship with another employee who is subject to that individual’s supervision or with a student that is currently enrolled in the individual’s class, or a student whom the individual otherwise instructs, coaches, counsels or advises, or with a vendor if the employee manages that contract or otherwise exerts influence over the contract.

ii. The Governing Board recognizes that the personal life of its employees is not a concern of the institution, and therefore, this regulation does not seek to prohibit romantic relationships that exist between parties where the context of power-authority between employees or between employees and students is not present; and provided that the relationship does not affect the employee’s effectiveness in fulfilling his or her professional obligation. For these instances, appropriate measures should still be taken in order to avoid conflicts of interest from occurring. For relationships that may exist prior to the time that either a student or employee is placed in a situation of instruction or supervision that is considered to be a conflict of interest, the employee(s) involved shall disclose and take immediate measures to avoid the conflict or appearance of conflict.

2. Procedures for Disclosure

Employees should first avoid allowing an inappropriate consensual, amorous or sexual relationship to develop with a supervisee or student.

A. Where the employee is already in or has had a recent consensual relationship with a supervisee, the following procedures shall be followed:

i. Immediate disclosure by the employee of the relationship to their supervisor and to the appropriate Vice President or Vice Chancellor in order to ensure that any conflicts of interest have been adequately addressed.
ii. The respective administrator responsible for the department or division shall place the subordinate under alternate supervision when a supervisor under his/her direction has or has had a recent consensual relationship with the employee.

iii. The supervisor shall recuse himself or herself from any discussions or involvement with decisions related to evaluations, promotion, hiring, determination of salary, or continuation of contract or employment.

iv. The respective Vice President or Vice Chancellor shall prepare and retain a report that specifies the appropriate alternate arrangements that have been made to eliminate the conflict of interest. The EEO/AA Office shall be provided a copy of the report along with the employees involved in the relationship.

B. Where the employee is already in or has had a recent consensual relationship with a student prior to enrollment in his or her class, the following procedures shall be followed:

i. The faculty member shall counsel and advise the student not to enroll in his or her course.

ii. The Consensual Relationships Policy will be made available to students via the student handbook and other appropriate communications vehicles.

iii. If it is not possible for a student to enroll in another course, section, or course and section at another college due to a requirement for completion of a degree or certificate and no other academic option is available, disclosure of the relationship will be made to the appropriate Department Chair, Dean and Vice President of Academic Affairs or Vice President for Student Affairs as appropriate for review. The Vice President will refer the matter to the Vice Chancellor for Academic and Student Affairs for consideration. The Chancellor or his/her designee may allow a student to enroll in the class only upon a showing by the student that the enrollment is necessary to avoid an extreme hardship, and upon a showing by the college President or designee that the academic integrity of the student’s enrollment in the class will nevertheless be maintained.

3. Persons who are married, or were married, are included within the definition of persons that have or who have had a consensual amorous relationship. Disclosure in this instance may be made via the Maricopa Disclosure process at https://administration.maricopa.edu/acknowledgement-and-disclosure.

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.

NEW LANGUAGE ADOPTED BY DIRECT CHANCELLOR APPROVAL

2.8.3 Technology Accessibility

The Maricopa Community College District is committed to ensuring equal access to information, programs, services and activities through its technologies, Web pages, and resources both in the academic and work environments. This regulation establishes that Electronic and Information Technology (EIT) that are used to conduct the business of the Maricopa Community Colleges shall adhere to established accessibility standards and guidelines.

ADOPTED by Direct Chancellor Approval, April 1, 2015
MCCCD GOVERNING BOARD

Tracy Livingston, M.Ed., President
Years of Service 2014-2018

Johanna Haver, B.A., M.A., Secretary
Years of Service 2015-2018

John Heep
Years of Service 2015-2016

Doyle Burke, B.A., M.A., M.Div
Years of Service 2010-2016

Alfredo Gutierrez, Ph.D.
Years of Service 2014-2016

Jean McGrath
Years of Service 2015-2018

Dana Saar, B.A., M.Ed.
Years of Service 2011-2016

MCCCD ADMINISTRATION

Maria Harper-Marinick, Ph.D.
Chancellor

Paul Dale
Interim Executive Vice Chancellor and Provost

LaCoya Shelton-Johnson
Vice Chancellor of Human Resources

Catherine Shultz
President and CEO of Maricopa Community Colleges Foundation

Edward Kelty
Vice Chancellor of Information Technology Services

Debra Thompson, M.P.A.
Vice Chancellor of Business Services

EMCC ADMINISTRATION

Senior Management

Lara, Ernest
President
A.A., Glendale Community College; B.A., M.A., M.C., Ph.D., Arizona State University
ernie.lara@estrellamountain.edu

Rivera, Reynaldo
Vice President of Learning
B.S., University of Texas at Austin; Ed.D, Arizona State University
rey.rivera@estrellamountain.edu

Cardenas-Adame, Patricia
Vice President of Student Affairs
B.S., Texas A&M Kingston; M.A., Emmanuel College; Ph.D., Capella University.
patricia.cardenas-adame@estrellamountain.edu

Tavakoli, Sue
Vice President of Administrative Services
B.A.,; M.Ed., Northern Arizona University
sue.tavakoli@estrellamountain.edu

Deans and Directors

Amparo, Francisco
Director, Enrollment Services
A.A., Mesa Community College; B.A., Arizona State University; M.Ed., Northern Arizona University
frank.amparo@estrellamountain.edu

Campbell, Ralph
Director, Recruitment, Marketing and Public Relations
A.A., Al Collins Graphic Design School; B.S., M.B.A., University of Phoenix
ralph.campbell@estrellamountain.edu

Castillo, Magdalena
Director, College SWSC Fiscal Budget Services
B.S., Arizona State University; M.B.A., University of Phoenix
magdalena.castillo@estrellamountain.edu

Dulgar, Laura
Dean, Student Affairs
B.A. Elmira College; M.A., University of Nevada, Reno
laura.dulgar@estrellamountain.edu
Farrar, William  
**Faculty Director, Center for Teaching and Learning**  
B.A., Rutgers University; M.S., Ph.D., University of California Santa Cruz  
william.farrar@estrellamountain.edu

Fry, Laura  
**Dean, Academic Affairs (Short-term)**  
B.S., M.Ed., M.A, Northern Arizona University  
laura.fry@estrellamountain.edu

Galligan, Chad  
**Director, Information Technology**  
B.S., University of Phoenix; M.B.A., College of Management and Technology  
chad.galligan@estrellamountain.edu

Jackson, Herschel  
**Director, Student Life and Leadership/Athletics**  
B.S., Southwest State University; M.S., South Dakota State University  
herschel.jackson@estrellamountain.edu

Johnson, Leda  
**Director, College SWSC Fiscal Budget Services**  
B.A., Grand Canyon University; M.Ed., Northern Arizona University  
leda.johnson@estrellamountain.edu

Johnson-Maxwell, Tanisha (Short-term)  
**Dean, Student Affairs-Retention**  
B.A., Arizona State University; M.A., University of Missouri; Ph.D., Arizona State University  
tj.maxwell@estrellamountain.edu

Iudicello, Kathleen  
**Dean, Academic Affairs**  
B.A., M.A, Arizona State University; Ph.D., George Washington University  
kathleen.iudicello@estrellamountain.edu

Naughton, Randy  
**Director, College Facilities Planning & Development**  
randy.naughton@estrellamountain.edu

Robles, Jonathan  
**Director, Corporate Foundations Relations and Development Operations**  
B.S., M.P.H., University of Phoenix  
jonathan.robles@estrellamountain.edu

Scott, Linda  
**Director, Career/Educational Planning Services**  
B.A., M.A., Eastern New Mexico University; M. Ed., Arizona State University  
linda.scott@estrellamountain.edu

Shepard, Austin  
**Director, Academic Enrichment (Dual Enrollment)**  
B.A., M.Ed., Northern Arizona University  
austin.shepard@estrellamountain.edu

Short, Rosanna  
**Director, Financial Aid**  
B.A., University of Kentucky; M.A., Grand Canyon University  
rosanna.short@estrellamountain.edu

Summers, Charles  
**Public Safety Commander**  
A.A.S., Rio Salado College; A.A., Waldorf College; B.S., Iowa State University; M.S., University of Southern Mississippi  
charles.summers@estrellamountain.edu

Weber, Heather  
**Dean, Occupational Education**  
B.A., University of West Florida; M.B.A., University of Phoenix; Ed.D, Northern Arizona University  
heather.weber@estrellamountain.edu

Willekens, René Guerra  
**Dean, Research, Planning and Effectiveness**  
B.S., M.B.A., Arizona State University; Ed.D, Northern Arizona University  
rene.willekens@estrellamountain.edu

**Division Chairpersons**

Buentello, Analicia C.  
**Division Chair, Arts and Composition**  
B.A., University of Texas; M.A., Texas A & M International Univ.  
analicia.buentello@estrellamountain.edu

Burch, Andrew  
**Division Chair, Mathematics, Physics and Engineering**  
B.A., Michigan State University; M.A., Bowling Green State University  
andy.burch@estrellamountain.edu

Griffiths, Steven  
**Division Chair, Occupational Education**  
A.A.S., White Mountains Community College; B.A.S., Arizona State University; M.Ed., Northern Arizona University  
steven.griffiths@estrellamountain.edu

Landeros, Pablo  
**Division Chair, Behavioral Sciences and Cultural Studies**  
B.A., M.A., Ph.D., University of California, Santa Barbara  
pablo.landeros@estrellamountain.edu
Maas, Sandra  
Division Chair, Nursing and Allied Health  
A.S.N., Saddleback Community College; B.S.N., M.S.N., University of Phoenix
sandra.maas@estrellamountain.edu

Martinez, Jason  
Division Chair, Counseling  
A.A., Phoenix College; B.A., M.C.; Arizona State University
jason.martinez@estrellamountain.edu

Meyer, Terry  
Division Chair, Information Resources  
B.A., Grand Valley State University; M.L.S., Rosary College; M.S.I.S., Roosevelt University
terry.meyer@estrellamountain.edu

Stonebrink, Diane  
Division Chair, Modern Languages  
B.A., Lewis and Clark College; M.A., University of Hawaii
diane.stonebrink@estrellamountain.edu

EMCC FACULTY

Abrams, Carlotta  
English  
B.A., Wesleyan University; M.F.A., Arizona State University; Ph.D., University of S. Mississippi
carlotta.abrams@estrellamountain.edu

Amabisca, Anastasia  
English  
B.S., Grambling State University; M.S., Arizona State University; Ph.D., University of California
anastasia.amabisca@estrellamountain.edu

Baranowski, Rebecca  
Mathematics  
B.S., Northern Arizona University; M.A., University of Arizona
rebecca.baranowski@estrellamountain.edu

Benjamin, Linda  
Nursing  
B.S.N., University of Phoenix; M.S.N., Walden University, Minneapolis
linda.benjamin@estrellamountain.edu

Blomstrand, Erin  
English  
A.A., Diablo Valley College; B.A., California State University, Hayward; M.A., Mills College
erin.blomstrand@estrellamountain.edu

Boettcher, Steve  
Mathematics  
B.S., Harvey Mudd College; M.A., University of California, Los Angeles; Ed.D., Nova Southeastern University
steve.boettcher@estrellamountain.edu

Boring, Michael  
Philosophy  
B.A., M.A., San Diego State University; Ph.D., Fordham University
michael.boring@estrellamountain.edu

Breaux, Michelle  
Mathematics  
B.S., Stanford University; M.S., Claremont Graduate University
michelle.Breaux@estrellamountain.edu

Brooks-Dillion, Romanie  
Clinical Nursing  
A.A., Highland Park Community College; B.S., University of Phoenix; M.S.N., Walden University
romanie.brooks-dillion@estrellamountain.edu

Carr, Chantele (Short Term)  
Communication  
B.A., University of Arizona; M.Ed., Northern Arizona University
chantele.carr@estrellamountain.edu

Cerven, James  
Administration of Justice  
B.S., John Jay College of Criminal Justice; M.A., Arizona State University
james.cerven@estrellamountain.edu

Chang, Weiru  
Biology  
B.S., University of Illinois; Ph.D., University of Minnesota
weiru.chang@estrellamountain.edu

Chapman, Amber  
Nursing  
B.S.N, M.S.N., Grand Canyon University

Chavez, Ernest  
Mathematics  
B.Ed., Arizona State University; M.Ed., Northern Arizona University
ernest.chavez@estrellamountain.edu
Cochran, Catherine  
**Counseling**  
B.S., Arizona State University; M.Ed., Northern Arizona University  
catherine.cochran@estrellamountain.edu

Coleman, Christopher  
**Psychology**  
A.G.S., Mesa Community College; B.A., San Diego State University; Ph.D., State University of New York  
christopher.coleman@estrellamountain.edu

Davis-Ragland, Clarissa  
**Occupational Education**  
B.S., Arizona State University; M.B.A., Grand Canyon University  
clarissa.davis-ragland@estrellamountain.edu

Desbien, Dwain  
**Physics**  
B.A., Grinnell College; M.S., University of Kansas; Ph.D., Arizona State University  
dwain.desbien@estrellamountain.edu

Dison, Holly  
**Mathematics**  
B.S., University of New Mexico; M.S., University of Washington  
holly.dison@estrellamountain.edu

Eckert, Eric  
**Instructional Computing**  
B.S., Northern Arizona University; M.S., Arizona State University  
eric.eckert@estrellamountain.edu

Farabee, Michael J.  
**Biology**  
B.S., M.S., Arizona State University; Ph.D., University of Oklahoma  
mj.farabee@estrellamountain.edu

Fike, Jimmy  
**Art**  
B.A., Auburn University; M.F.A., Cranbrook Academy of Art  
jimmy.fike@estrellamountain.edu

Forgione, William  
**Nursing**  
B.S., M.S.N., Wayne State University  
william.forgione@estrellamountain.edu

Frasure, John  
**History**  
B.S., Liberty University; M.A., Texas Wesleyan University  
john.frasure@estrellamountain.edu

Freeman, Rodney  
**English**  
B.A., M.A., Samford University  
rod.freeman@estrellamountain.edu

Garland, Denise  
**Chemistry**  
B.A., M.A., Ph.D., City University of New York, Queens College  
denise.garland@estrellamountain.edu

Gipson-Thurman, Cheryl  
**Administration of Justice**  
B.S., Arizona State University; M.Ed., Northern Arizona University  
cheryl.thurman@estrellamountain.edu

Graber, Kimberly  
**Counseling**  
B.A., B.S., Arizona State University; M.A., University of Denver  
kimberly.graber@estrellamountain.edu

Graham, Teri M.  
**Mathematics**  
B.A., Cameron University; M.A., Arizona State University  
teri.graham@estrellamountain.edu

Hebert, Cheryl  
**Communication**  
B.S., M.A., Arizona State University  
cheryl.hebert@estrellamountain.edu

Heinrich, James  
**Instructional Computing**  
M.Ed, Wichita State University  
james.heinrich@estrellamountain.edu

Heinz, Larry  
**Computer Information Systems**  
larry.heinzi@estrellamountain.edu

Hill, Amy  
**Speech Language Pathology**  
B.A., M.A., University of Northern Colorado  
amy.hill@estrellamountain.edu

Hill, Jon  
**Culinary Arts**  
A.S., University of Hawaii; B.S., University of Phoenix; M.Ed., Grand Canyon University  
jon.hill@estrellamountain.edu

Holmes, Rachel  
**Education**  
B.A.E., Arizona State University; M. Ed., Northern Arizona University  
rachel.holmes@estrellamountain.edu
Horvath, Ryan (Short-term)
Art
B.F.A., Bradley University; M.F.A., Southern Illinois University

Huntsinger, Erik
Economics
B.S., M.S., Arizona State University, Ed.D.
erik.huntsinger@estrellamountain.edu

Jimenez-Hernandez, Norma
Psychology
B.A., Concordia University; M.Ed., Harvard University; M.A., University of California; Ed.D., Harvard University
norma.hernandez@estrellamountain.edu

Kilduff, Gary
Counseling
B.S., Grand Canyon University; M.A.; Northern Arizona University
gary.kilduff@estrellamountain.edu

Lihs, Fiona
Chemistry
B.S., University of Glasgow, Scotland; M.S., Ph.D., Arizona State University
fiona.lihs@estrellamountain.edu

Lockhart, Sarah
Mathematics
B.S., M.Ed., M.A., Northern Arizona University
sarah.lockhart@estrellamountain.edu

Loucy, Kelly Lynn
English
B.A., University of Richmond; M.A., Arizona State University
kelly.loucy@estrellamountain.edu

Maihofer, Frederick
Business
A.A.S., Glendale Community College; B.S., M.B.A., Arizona State University West; M.Ed., Northern Arizona University
frederick.maihofer@estrellamountain.edu

Malmo, Susan
English
B.A., Wellesley College; M.A., Central Missouri State University; J.D., Washington University
susan.malmo@estrellamountain.edu

Manuelito, Shannon
Biology
B.S., New Mexico State University; M.S., New Mexico State University; Ed.D., Arizona State University
shannon.manuelito@estrellamountain.edu

McAlee, Janaea
Dance
B.A., Sonoma State University; M.A., Vermont College of Norwich University
janaea.mcalee@estrellamountain.edu

McClure, Angela
Physics
B.S., Northern Arizona University; M.S., University of Phoenix; M.S., Arizona State University
angela.mcclure@estrellamountain.edu

McMichael, Timothy
Computer Information Systems
B.A., Colorado State University; M.Ed., Arizona State University
timothy.mcmichael@estrellamountain.edu

Medford, Jeremy
Manufacturing Technology
B.S., Thomas Edison State College
jeremy.medford@estrellamountain.edu

Melessa, Steven Paul
Manufacturing Technology
B.S., Excelsior College
paul.melessa@estrellamountain.edu

Merrill Jr., Thad (Short-term)
Biology
B.A., Arizona State University
thad.merrill.jr@estrellamountain.edu

Miller, Jeffrey
Biology
B.S., University of Wisconsin; Ph.D., Duke University
jeffrey.miller@estrellamountain.edu

Miller, Polly
E-Learning
B.A., Rhode Island College; M. Ed., Arizona State University, Ph.D., Northcentral University
polly.miller@estrellamountain.edu

Muns, Heather
Reading
B.S.Ed., Northern Arizona University; M.S.Ed., Grand Canyon University
heather.muns@estrellamountain.edu

Navarette-Lynch, Dori (Short-term)
Counseling
B.A., M.Ed., Arizona State University; Ph.D, Madison University
dori.navarette-lynch@estrellamountain.edu
Nichols, Jim  
*Computer Information Systems*
B.S.Ed., Northern Arizona University  
jim.nichols@estrellamountain.edu

Ong, Sylvia  
*Business*
B.S., M.B.A., Arizona State University; M.S., Western International University; Ed.D., Nova Southeastern University  
sylvia.ong@estrellamountain.edu

Parmiter, Catherine  
*Biology*
PhD., Arizona State University

Peist, Steven  
*Reading*
B.A., State University of New York; M.A., Queens College  
steven.peist@estrellamountain.edu

Pesta, Lawrence R.  
*Modern Languages*
A.A., Mount San Antonio College; B.A., California State University, Fullerton; M.A., San Francisco State University  
larry.pesta@estrellamountain.edu

Pirehpour-Andrews, Alexander  
*English*
A.A., Glendale Community College; B.A., Arizona State University West; M.A., Arizona State University East  
alexander.andrews@estrellamountain.edu

Price, Nikol  
*Information Resources*
A.A., Mohave Community College; B.A., University of Nevada; M.A., University of Arizona  
nikol.price@estrellamountain.edu

Rauch, Rebecca  
*Nursing*
B.S.N., M.S.N., Grand Canyon University  
rebecca.rauch@estrellamountain.edu

Raymond, Neil (Short-term)  
*Biology*
D.C., University of Western States  
rebecca.rauch@estrellamountain.edu

Rivera, Luvia  
*Mathematics*
B.A., University of Texas at Austin; M.S., Purdue University  
luvia.rivera@estrellamountain.edu

Rivera, Natalie  
*Mathematics*
B.A., M.S., Arizona State University  
natalie.rivera@estrellamountain.edu

Rodriguez, Elisabeth  
*Library*
B.I.S., Arizona State University; M.L.I.S., Ph.D, University of Pittsburgh  
elisabeth.rodriguez@estrellamountain.edu

Rodriguez, Rene  
*Manufacturing Technology*
B.S., University of Puerto Rico  
rene.rodriguez@estrellamountain.edu

Rosales, Maria Cecilia  
*Spanish*
B.S., Instituto Tecnologico y Estudios Superiores de Monterrey; M.A., New Mexico State University; Ph.D., Arizona State University  
maria/rosales@estrellamountain.edu

Rubio, Pedro  
*Engineering*
B.S., Arizona State University; M.A., Northern Arizona University  
pedro.rubio@estrellamountain.edu

Shannon, Jennifer  
*Mathematics*
B.S., M.S., Northern Arizona University  
jennifer.damron@estrellamountain.edu

Shively, Karen  
*English*
B.A., Northern Kentucky University; M.A., University of Akron  
karen.shively@estrellamountain.edu

Smith, Rachel  
*Biology*
B.S., University of East Anglis; Ph.D., University of Leeds, UK  
rachel.smith@estrellamountain.edu

Steele, Bronwen  
*Biology*
B.S., M.S., University of Arizona; Ed.D., Arizona State University  
bronwen.steele@estrellamountain.edu

Swindle, Patricia  
*Cisco Networking Technology*
B.S., Park College; M.A.Ed., University of Phoenix  
patty.swindle@estrellamountain.edu
Tsoudis, Olga  
**Sociology**  
B.S., Cornell University; M.S., Ph.D., University of Arizona  
olga.tsoudis@estrellamountain.edu

Turner, Peter  
**Education**  
B.A., Arizona State University; M.S., Nova Southwestern University; Ph.D., Northcentral University  
pete.turner@estrellamountain.edu

Turner, Roselyn  
**Communication**  
B.A., New Mexico State University; M.S., Nova University; Ph.D., Capella University  
roselyn.turner@estrellamountain.edu

Van Puymbroeck, Christina  
**Psychology**  
B.S., Mary Washington College; Ph.D., Arizona State University  
christina.vanpuymbroeck@estrellamountain.edu

Wager, Erica (Short-Term)  
**Psychology**  
B.S., M.A., The University of Arizona  
erica.wagerr@estrellamountain.edu

Weaver, David (Short-Term)  
**Physics**  
B.S., East Texas State University; M.S., East Texas State University  
david.weaver@estrellamountain.edu

Wong, Jennifer  
**Library**  
B.S., M.A., University of Arizona  
jennifer.wong@estrellamountain.edu

Zagar, Christopher  
**Library**  
A.A., Glendale Community College; B.S., Charter Oak State College; M.A., University of Arizona  
chris.zagar@estrellamountain.edu

Zetlan, Sonya  
**Biology**  
B.S., Syracuse University; Ph.D., University of Wisconsin  
sandy.zetlan@estrellamountain.edu

**EMCC Emeritus Faculty**

Anderson, Deborah  
B.A., Hiram College; M.L.S., University of Arizona

Bailey, Conrad  
B.A., Tufts University; M.A.Ed., University of Massachusetts, Amherst; M.A., Arizona State University

Tippett, Bryan K.  
B.S., Gannon University; M.S., Duquesne University; Ed.D., University of Sarasota

Williams, Pearl  
B.A., Alcorn State University; M.A., Arizona State University

Zuleger, Eddie  
A.A., Glendale Community College; B.A., Golden Gate University; M.S., Arizona State University
Add/Drop Period
A period of time before classes begin when schedule changes are made. A penalty may be charged for changes made after the start of classes.

Admission
Acceptance into a college after the student has filed a completed Student Information Form with the Admissions and Records Office and has been admitted according to admissions criteria. Students who have been admitted are eligible to register for courses.

Advisor
A counselor, faculty, or other designated staff member who has received training to provide students with academic information and will direct them to the appropriate classes to achieve their goals and enhance their success.

AGEC
A 35-semester-credit general education program of study that fulfills lower-division general education requirements for students planning to transfer to any Arizona public community college or university and transfers as a block without loss of credit.

Assessment
Placement or Assessment of Skills for Successful Entry and Transfer (ASSET) evaluates students’ present testing skills in English, reading and math so students may choose courses that match their skills. Assessment is based upon scores received from the ASSET course placement tests. Scores are used as a guide for proper course placement.

Associate Degree
Degree awarded by community colleges after a student completes a specified number of course requirements and credit hours, generally a minimum of 60 semester credits. Either an Associate in Arts (AA); Associate in Business (ABus); or Associate in Science (AS); designed primarily for transfer to complete a baccalaureate degree; and an Associate in Applied Science (AAS), designed primarily to enhance workplace skills and knowledge, or an Associate in General Studies (AGS), designed to fulfill students’ goals of higher education.

Associate in Transfer Partnership (ATP)
The Associate in Transfer Partnership (ATP) is designed for students transferring to public and private colleges and universities. This degree is specifically developed for students who have an identified major and have selected the baccalaureate degree granting institution to which they intend to transfer.

Audit
An option for class registration in which the student pays to attend class, but does not want to receive credit. Students sometimes choose to audit courses in which they do not wish to complete required assignments.

Bachelor's Degree
A degree awarded by a four-year college or university. Generally requires completion of 120 semester credits. Also referred to as a baccalaureate degree (e.g., BA or BS).

College Orientation
A session during which new students are introduced to academic programs, facilities, and services provided by a college.

Commencement
Also known as graduation. A ceremony during which colleges award certificates of completion and degrees to graduating students.

Continuous Enrollment
The process of registering and completing courses during consecutive semesters, which may include summer sessions. Determines catalog year for graduation.

Corequisite
Specified conditions, requirements, or courses that must be completed at the same time as another course.

Counselor
A professionally trained staff member who helps students with educational, career, or personal concerns.

Course
A specific subject studied within a limited period of time, such as a semester; and taught by a faculty member. Also called course offering or class.

Course Fee
A charge for services, supplies, and/or materials for a course in addition to tuition and registration fees for the course.

Course Number
A three-digit code that identifies a specific course and indicates its level and sequence (e.g., 101 in ENG 101).

Course Prefix
A three-letter code that identifies the subject area of a course (e.g., ENG in ENG101 indicating a course in English).

Course Title
The name of a specific course that indicates subject and content (e.g., Freshman English, title for English 101).

Credit Hour
The numerical unit of college credits earned for the satisfactory completion of a specific course; also referred to as semester hours or units (e.g., 3 credit hours).

Cross-Referenced Courses
Two or more disciplines connected to the course. All course elements are identical except for the prefix. Some variation may occur at number level if a number is not available for use.

Curriculum
A planned sequence of courses aimed at an academic or occupational goal; also referred to as a program of study.

Customer
One that purchases and/or consumes a product or service; defining and meeting customer needs drives the development of any successful product or service.

Division
A group of faculty who teach classes in related subjects, such as communication, English, and social science in the Liberal Arts Division.

Electives
Non-required courses that students may select to complete their program of study.

Extracurricular Activities
Also known as co-curricular. Activities, clubs, or organizations students may participate in above and beyond their academic courses.

Faculty
Instructors.

Final Exams
Tests or exercises given at the end of a term that are often comprehensive; may include all material covered during the semester. The schedule of final exam dates and times for each term is included in the Schedule of Classes.

Fiscal Office
Also known as the Cashier’s Office. Students may pay tuition and fees, course fees, and other encumbrances owed the college at the Fiscal Office.

Grade Point
The numerical value of grade multiplied by the credit hours for a course (A=4 points; B=3 points; C=2 points; D=1 point). If, for example, a student earns an A in English 101 (3 credit hours), then the student earns 12 points: A=4 points x 3 (credit hours) = 12 points.
Grade Point Average
Generally called GPA, grade point average is determined by dividing the total number of grade points earned by the total number of credit hours attempted. For example, 45 grade points divided by 15 credit hours earned = 3.0 GPA.

Load
Also called academic load. The total number of credit hours taken in a term. Twelve credit hours is considered a full-time load.

Lower Division
Normally freshman- and sophomore-level (100 and 200) courses offered by a college. Community colleges offer ONLY lower division courses. Four-year institutions offer lower division courses and upper division courses, which are junior-level and senior-level (300 and 400) courses.

Major
An area of concentrated study often for a specific degree or occupation, such as English, nursing, or engineering.

Official Absence
Absence from class approved by the Dean of Student Services for students who are participants in an official college activity. Students must present approved absence documentation to their instructors before the official absence and make arrangements to complete the work they will miss.

Pass/Fail
An option for class registration in which students choose to receive a grade of Pass or Fail in lieu of a letter grade (A, B, C, D, F). Students can earn credits towards graduation by passing these courses but the grades will not count in their GPAs. It is best to check with an advisor to make sure that Pass/Fail grades will transfer to another college or university.

Period
Time spent in class and/or lab each week. One period is equivalent to 50 minutes per week for a one-credit course that meets during a 16-week semester.

Placement Test
See assessment.

Prerequisite
Specified conditions, requirements, or classes that must be completed before enrolling in a class. For example, ENG102 has a prerequisite of ENG101.

Probation
A warning that a student is not in good academic standing. May be accompanied by restricted credit hour enrollment.

Rcess
Holidays and the periods of time between academic semesters when classes are not in session.

Registration
Actual enrollment of a student into specific courses after the student has been admitted to the college and has received academic advisement.

Required Course
A course that a student must complete to meet certain goals or to complete a certain curriculum.

Requisites (Pre/Corequisites)
Prerequisites define requirements which must be completed prior to enrollment in a course. Corequisites define requirements that must be met concurrently with a course.

Schedule of Classes
A college publication that lists all courses offered during a semester, including: dates and times of class meetings, names of instructors, buildings and rooms, credit hours, and other important registration information.

Scholastic Suspension
The inability to enroll in the college for one semester. For not maintaining the minimum required GPA for two consecutive semesters.

Section Number
A four-digit code used to identify each class section of each course offered. Each class has a different section number. Section numbers are listed in the Schedule of Classes.

Semester
Traditionally half an academic year, 16 weeks in length. Fall semester begins in August and spring semester begins in January.

Service Learning
Combines community service with classroom instruction, focuses on critical thinking, value clarification and social responsibility. The key components of Service Learning are linkage to course competencies or objectives, a relevant experience and a meaningful contribution to the community.

Service Strategy
A distinctive formula for delivering service and providing a clearly states customer benefit that is valuable to the customer and established an effective competitive position.

Subject Codes
See Course Prefix and Course Number.

Syllabus
One or more pages of course requirements that instructors give to students on the first day of class. The syllabus may include detailed information about a course, such as an instructor’s grading system, attendance policies, and testing and assignment dates.
### Index

<table>
<thead>
<tr>
<th>Academic Advising Policy</th>
<th>282</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advisement Services</td>
<td>5</td>
</tr>
<tr>
<td>Academic Probation</td>
<td>299</td>
</tr>
<tr>
<td>Academic Calendar</td>
<td>4</td>
</tr>
<tr>
<td>Academic Certificates</td>
<td>78</td>
</tr>
<tr>
<td>Academic Degrees</td>
<td>17</td>
</tr>
<tr>
<td>Academic Success Center</td>
<td>12</td>
</tr>
<tr>
<td>Accounting</td>
<td>90, 91</td>
</tr>
<tr>
<td>Accreditation</td>
<td>2</td>
</tr>
<tr>
<td>Achieving College Education (ACE)</td>
<td>7</td>
</tr>
<tr>
<td>Administration of Justice</td>
<td>92, 93</td>
</tr>
<tr>
<td>Advanced Interdisciplinary Storytelling</td>
<td>79</td>
</tr>
<tr>
<td>Administration</td>
<td>369</td>
</tr>
<tr>
<td>Admissions/Registration/Enrollment</td>
<td>5, 261</td>
</tr>
<tr>
<td>Admission Classifications</td>
<td>257</td>
</tr>
<tr>
<td>Affirmative Action Statements</td>
<td>257</td>
</tr>
<tr>
<td>Allied Health and Nursing Programs</td>
<td>157</td>
</tr>
<tr>
<td>Arizona General Education Curriculum (AGEC)</td>
<td>19</td>
</tr>
<tr>
<td>Articulation Agreements</td>
<td>280</td>
</tr>
<tr>
<td>Assessment of Student Abilities</td>
<td>17</td>
</tr>
<tr>
<td>Associate in Applied Science (AAS)</td>
<td>75</td>
</tr>
<tr>
<td>Associate in Arts (AA)</td>
<td>27</td>
</tr>
<tr>
<td>Associate in Arts, Fine Arts (AAFA) - Dance</td>
<td>44</td>
</tr>
<tr>
<td>Associate in Arts, Fine Arts (AAFA) - Art</td>
<td>39</td>
</tr>
<tr>
<td>Associate in Arts, Fine Arts (AAFA) - Theatre</td>
<td>51</td>
</tr>
<tr>
<td>Associate in Business (ABUS-GR)</td>
<td>56</td>
</tr>
<tr>
<td>Associate in Business (ABUS-SR)</td>
<td>61</td>
</tr>
<tr>
<td>Associate in General Studies (AGS)</td>
<td>67</td>
</tr>
<tr>
<td>Associate in Arts, Elementary Ed (AAEE)</td>
<td>32</td>
</tr>
<tr>
<td>Associate in Science (AS)</td>
<td>70</td>
</tr>
<tr>
<td>Athletics</td>
<td>9</td>
</tr>
<tr>
<td>Attendance Policy</td>
<td>296</td>
</tr>
<tr>
<td>Baking and Pastry</td>
<td>94</td>
</tr>
<tr>
<td>Banking and Finance</td>
<td>95</td>
</tr>
<tr>
<td>Bookstore</td>
<td>12</td>
</tr>
<tr>
<td>Building Names</td>
<td>378</td>
</tr>
<tr>
<td>Campus Map</td>
<td>378</td>
</tr>
<tr>
<td>Career &amp; Transfer Center</td>
<td>6</td>
</tr>
<tr>
<td>Cashiers</td>
<td>6</td>
</tr>
<tr>
<td>Catalog Under Which a Student Graduates</td>
<td>86</td>
</tr>
<tr>
<td>Chicano and Chicana Studies</td>
<td>80</td>
</tr>
<tr>
<td>Child Development Associate (CDA) Preparation</td>
<td>96</td>
</tr>
<tr>
<td>Cisco Networking</td>
<td>129, 130, 132</td>
</tr>
<tr>
<td>Clubs</td>
<td>9</td>
</tr>
<tr>
<td>College Environment</td>
<td>307</td>
</tr>
<tr>
<td>College Level Equivalency Examinations</td>
<td>272</td>
</tr>
<tr>
<td>Community Education</td>
<td>14</td>
</tr>
<tr>
<td>Computer Commons</td>
<td>13</td>
</tr>
<tr>
<td>Computer Applications Technology</td>
<td>97, 98</td>
</tr>
<tr>
<td>Computer Hardware &amp; Desktop Support</td>
<td>99</td>
</tr>
<tr>
<td>Copyright Act Compliance</td>
<td>327</td>
</tr>
<tr>
<td>Course Descriptions</td>
<td>173</td>
</tr>
<tr>
<td>Course Placement</td>
<td>282</td>
</tr>
<tr>
<td>Counseling Services</td>
<td>6</td>
</tr>
<tr>
<td>Creative Writing</td>
<td>80</td>
</tr>
<tr>
<td>Credit by Evaluation</td>
<td>272</td>
</tr>
<tr>
<td>Credit for Prior Learning</td>
<td>271</td>
</tr>
<tr>
<td>Crime Awareness and Campus Security Act</td>
<td>326</td>
</tr>
<tr>
<td>Criteria for Determining Residency</td>
<td>265</td>
</tr>
<tr>
<td>Culinary Studies</td>
<td>100, 101</td>
</tr>
<tr>
<td>Customer Service Management</td>
<td>101</td>
</tr>
<tr>
<td>Early Childhood Education</td>
<td>103</td>
</tr>
<tr>
<td>Emergency Response and Operations</td>
<td>105</td>
</tr>
<tr>
<td>Engineering Technology</td>
<td>107</td>
</tr>
<tr>
<td>Deans and Directors</td>
<td>369</td>
</tr>
<tr>
<td>Desktop Publishing</td>
<td>102</td>
</tr>
<tr>
<td>Developmental Education</td>
<td>16</td>
</tr>
<tr>
<td>Disability Resources &amp; Services</td>
<td>6</td>
</tr>
<tr>
<td>Disciplinary Standards</td>
<td>348</td>
</tr>
<tr>
<td>Distance Education</td>
<td>15</td>
</tr>
<tr>
<td>Division Chairpersons</td>
<td>370</td>
</tr>
<tr>
<td>Driver Operator</td>
<td>102</td>
</tr>
<tr>
<td>Electrical Systems Technology</td>
<td>104</td>
</tr>
<tr>
<td>EMCC Faculty</td>
<td>371</td>
</tr>
<tr>
<td>EMCC Emeritus Faculty</td>
<td>375</td>
</tr>
<tr>
<td>EMCC General Education Statement</td>
<td>17</td>
</tr>
<tr>
<td>EMCC Mission, Purposes, Vision, Core Values</td>
<td>3</td>
</tr>
<tr>
<td>Emergency Response &amp; Operations</td>
<td>105</td>
</tr>
<tr>
<td>Emissions Compliance Control</td>
<td>323</td>
</tr>
<tr>
<td>Engineering Technology</td>
<td>107</td>
</tr>
<tr>
<td>Education Technology</td>
<td>108</td>
</tr>
<tr>
<td>Externships</td>
<td>15</td>
</tr>
<tr>
<td>Financial Aid Services</td>
<td>6</td>
</tr>
<tr>
<td>Fire Investigation</td>
<td>109</td>
</tr>
<tr>
<td>Fire Officer Leadership</td>
<td>109</td>
</tr>
<tr>
<td>Fire Science</td>
<td>110</td>
</tr>
<tr>
<td>Firefighter Operations</td>
<td>110</td>
</tr>
<tr>
<td>Fitness &amp; Wellness</td>
<td>14</td>
</tr>
<tr>
<td>Food Services</td>
<td>12</td>
</tr>
<tr>
<td>General Education Degrees &amp; Certificates</td>
<td>17</td>
</tr>
<tr>
<td>General Guidelines Concerning AIDS</td>
<td>339</td>
</tr>
<tr>
<td>Gifted Education</td>
<td>111</td>
</tr>
<tr>
<td>Glossary of College Terms</td>
<td>376</td>
</tr>
<tr>
<td>Grading</td>
<td>297</td>
</tr>
<tr>
<td>Graduation Requirements</td>
<td>83, 303</td>
</tr>
<tr>
<td>Handbook Information</td>
<td>360</td>
</tr>
<tr>
<td>Hazing Prevention Regulation</td>
<td>334</td>
</tr>
<tr>
<td>High School Dual Enrollment</td>
<td>7</td>
</tr>
<tr>
<td>Honors Program</td>
<td>13</td>
</tr>
<tr>
<td>Hoop of Learning</td>
<td>8</td>
</tr>
<tr>
<td>Important Deadlines for Students</td>
<td>298</td>
</tr>
<tr>
<td>Industrial Manufacturing &amp; Emerging Technologies</td>
<td>112</td>
</tr>
<tr>
<td>Interdisciplinary Storytelling</td>
<td>81</td>
</tr>
<tr>
<td>Information Technology: Web and Graphic Design</td>
<td>113, 114</td>
</tr>
<tr>
<td>Instructional Grievance Process</td>
<td>299</td>
</tr>
<tr>
<td>Interior Merchandising</td>
<td>114</td>
</tr>
<tr>
<td>Internships</td>
<td>15</td>
</tr>
<tr>
<td>Internship Search</td>
<td>6</td>
</tr>
<tr>
<td>IT and Power Systems Security</td>
<td>115</td>
</tr>
<tr>
<td>IT Security Associate</td>
<td>116</td>
</tr>
<tr>
<td>Library</td>
<td>13</td>
</tr>
<tr>
<td>Linux Associate</td>
<td>117</td>
</tr>
<tr>
<td>Linux Networking Administration</td>
<td>118, 120</td>
</tr>
<tr>
<td>Linux Professional</td>
<td>122</td>
</tr>
<tr>
<td>Map</td>
<td>378</td>
</tr>
<tr>
<td>Maricopa ASU Pathways Program (MAPP)</td>
<td>14</td>
</tr>
<tr>
<td>Medical Assistant</td>
<td>151</td>
</tr>
<tr>
<td>Medical Billing and Coding</td>
<td>153</td>
</tr>
<tr>
<td>MCCC Colleges</td>
<td>4</td>
</tr>
<tr>
<td>MCCC General Education Statement</td>
<td>17, 84</td>
</tr>
<tr>
<td>MCCC Governing Board / Administration</td>
<td>369</td>
</tr>
<tr>
<td>MCCC Occupational Programs</td>
<td>159</td>
</tr>
<tr>
<td>MCCC Policies and Procedures</td>
<td>256</td>
</tr>
<tr>
<td>MCCC Vision, Mission, Values</td>
<td>259</td>
</tr>
<tr>
<td>Mechanical Systems Technology</td>
<td>123</td>
</tr>
<tr>
<td>Mechantronics Level I</td>
<td>123</td>
</tr>
<tr>
<td>Microsoft Desktop Support</td>
<td>124</td>
</tr>
<tr>
<td>Microsoft Networking Technology</td>
<td>125</td>
</tr>
<tr>
<td>Microsoft Server Administration</td>
<td>127</td>
</tr>
<tr>
<td>Microsoft Technical Specialist</td>
<td>127</td>
</tr>
<tr>
<td>Microsoft Certified Information Technology Professional (MCITP) Administrator</td>
<td>124</td>
</tr>
<tr>
<td>Mobile Apps Programming</td>
<td>128</td>
</tr>
<tr>
<td>My.maricopa.edu</td>
<td>7</td>
</tr>
<tr>
<td>Networking Administration: CISCO</td>
<td>129</td>
</tr>
<tr>
<td>Networking Technology: CISCO</td>
<td>130, 132</td>
</tr>
<tr>
<td>New Student Orientation (NSO)</td>
<td>6</td>
</tr>
<tr>
<td>Nurse Assisting</td>
<td>133</td>
</tr>
<tr>
<td>Nursing</td>
<td>134</td>
</tr>
<tr>
<td>Organizational Management</td>
<td>135</td>
</tr>
<tr>
<td>Organizational Leadership</td>
<td>135</td>
</tr>
<tr>
<td>Outstanding Debts</td>
<td>286</td>
</tr>
<tr>
<td>Parking</td>
<td>12</td>
</tr>
<tr>
<td>Phi Theta Kappa</td>
<td>14</td>
</tr>
<tr>
<td>Phlebotomy Technician</td>
<td>156</td>
</tr>
<tr>
<td>Power Plant Technology</td>
<td>136</td>
</tr>
<tr>
<td>Power System Technology</td>
<td>140</td>
</tr>
<tr>
<td>Practical Nursing</td>
<td>141</td>
</tr>
<tr>
<td>Priority Advisement Workshop (PAW)</td>
<td>5</td>
</tr>
<tr>
<td>Programming</td>
<td>143</td>
</tr>
<tr>
<td>Programming and System Analysis</td>
<td>142, 143</td>
</tr>
<tr>
<td>Program Disclosures</td>
<td>88</td>
</tr>
<tr>
<td>Programs</td>
<td>88</td>
</tr>
<tr>
<td>Psi Beta</td>
<td>14</td>
</tr>
<tr>
<td>Public Expression, Guidelines</td>
<td>7</td>
</tr>
<tr>
<td>Public Safety</td>
<td>12</td>
</tr>
<tr>
<td>Registration</td>
<td>283</td>
</tr>
<tr>
<td>Retail Management</td>
<td>144</td>
</tr>
<tr>
<td>Residency Guidelines</td>
<td>285</td>
</tr>
<tr>
<td>Refund Policy</td>
<td>287</td>
</tr>
<tr>
<td>Schedule Changes</td>
<td>296</td>
</tr>
<tr>
<td>Scholarship Services</td>
<td>7</td>
</tr>
<tr>
<td>Scholarly Standards</td>
<td>288</td>
</tr>
<tr>
<td>Service Learning Instruction</td>
<td>14</td>
</tr>
<tr>
<td>Servicemen’s Opportunity College</td>
<td>281</td>
</tr>
<tr>
<td>Sexual Harassment Policy</td>
<td>307</td>
</tr>
<tr>
<td>Shared Unique Number (SUN)</td>
<td>174</td>
</tr>
<tr>
<td>Small Business Management</td>
<td>144</td>
</tr>
<tr>
<td>Smoke-Free Environment</td>
<td>340</td>
</tr>
<tr>
<td>SouthWest Skill Center Programs</td>
<td>149</td>
</tr>
<tr>
<td>Spanish Medical Interpreter</td>
<td>155</td>
</tr>
<tr>
<td>Speech Language Pathology Assistant</td>
<td>145, 146</td>
</tr>
<tr>
<td>Student Course Placement Process</td>
<td>282</td>
</tr>
<tr>
<td>Student Financial Assistance</td>
<td>288</td>
</tr>
<tr>
<td>Student Handbook</td>
<td>360</td>
</tr>
<tr>
<td>Student Life</td>
<td>7</td>
</tr>
<tr>
<td>Student Insurance/Accident and Health</td>
<td>7</td>
</tr>
<tr>
<td>Student Rights and Responsibilities</td>
<td>289</td>
</tr>
<tr>
<td>Summer Programs</td>
<td>7</td>
</tr>
<tr>
<td>Sustainability and Ecological Literacy</td>
<td>82</td>
</tr>
<tr>
<td>Tobacco-Free Environment</td>
<td>340</td>
</tr>
<tr>
<td>Teacher Assisting</td>
<td>147</td>
</tr>
<tr>
<td>Testing Services</td>
<td>5, 282</td>
</tr>
<tr>
<td>Training and Career Programs</td>
<td>88</td>
</tr>
<tr>
<td>Transcripts for Transfer</td>
<td>307</td>
</tr>
<tr>
<td>Tuition and Fees</td>
<td>284</td>
</tr>
<tr>
<td>Tutoring</td>
<td>12</td>
</tr>
<tr>
<td>Undergraduate Research</td>
<td>14</td>
</tr>
<tr>
<td>University Transfer and Pathways Chart</td>
<td>18</td>
</tr>
<tr>
<td>Veterans Services</td>
<td>7</td>
</tr>
<tr>
<td>Web Design</td>
<td>148</td>
</tr>
<tr>
<td>Web Developer</td>
<td>148</td>
</tr>
<tr>
<td>Withdrawal Procedures</td>
<td>287</td>
</tr>
</tbody>
</table>

[Estrella Mountain Community College | 2016-2017 Catalog] [379]
CLASSES IN AVONDALE • BUCKEYE • ONLINE
3000 North Dysart Road • Avondale, Arizona 85392 • 623-935-8000

Estrella Mountain Community College is a Maricopa Community College accredited by the Higher Learning Commission of the North Central Association of Colleges and Schools. Financial aid, veterans and veterans’ dependent benefits available for qualified programs and applicants. The Maricopa Community Colleges are EEO/AA Institutions.

estrellamountain.edu