



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

As a student at Estrella Mountain, you will experience a supportive and caring higher education environment centered on teaching and learning. From comprehensive academic and occupational programs, instruction from award-winning faculty to expansive student support services, everything we do is designed to meet your needs. Whatever you have come here to achieve, the most important measure of our success is the achievement of your individual educational and/or workforce goals.

Best wishes on your journey.



Ernest A. Lara, Ph.D.  
*President*



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# 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.



**ESTRELLA MOUNTAIN  
COMMUNITY COLLEGE**

— A Maricopa Community College

## Vision

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

## Core 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 MCCC Policies and Procedures or online at <http://www.maricopa.edu/chancellor/vision.php>.

# MCCCD General Information

## Academic Calendar

### FALL 2012

Priority Registration Begins .....	March 5
Open Registration Begins.....	March 19
Classes Begin.....	August 18
Labor Day Observed.....	September 3
Last Day for Withdrawal w/out Instr. Signature.....	+
Graduation Application Deadline .....	November 2
Veteran's Day Observed .....	November 12
Thanksgiving Break .....	November 22-25
Last Day Withdrawal Accepted.....	++
Final Exams .....	December 10-13
Mid-Year Recess Begins for Students .....	December 14
Winter Break (Campus Closed) .....	December 25-January 1

### SPRING 2013

Priority Registration Begins .....	October 8
Open Registration Begins.....	October 15
Classes Begin.....	January 12
M.L. King Birthday Observed.....	January 21
President's Day Observed.....	February 18
Last Day for Withdrawal w/out Instr. Signature.....	+
Graduation Application Deadline .....	April 5
Spring Break .....	March 11-17
Last Day Withdrawal Accepted.....	++
Final Exams .....	May 6-9
Commencement.....	May 10
Memorial Day Observed.....	May 27

### SUMMER 2013

Priority Registration Begins .....	March 4
Open Registration Begins.....	March 18
Summer Graduation Deadline.....	April 5
Memorial Day Observed .....	May 27
First 5-Week Day & 8-Week Evening Sessions Begin.....	May 28
First 5-Week Session Ends .....	June 27
Independence Day Observed .....	July 4
Second 5-Week Day Session Begins .....	July 1
8-Week Evening Sessions End .....	July 18
Second 5-Week Day Session Ends.....	August 1

+ See your student schedule in [my.maricopa.edu](http://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.

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## Maricopa Colleges

### Chandler-Gilbert Community College

2626 E Pecos Rd  
Chandler, AZ 85225  
480.732.7000

### Estrella Mountain Community College

3000 North Dysart Road  
Avondale, Arizona 85392-1010  
623.935.8000

### GateWay Community College

108 N 40th St  
Phoenix, Az 85034  
602.286.8000

### Glendale Community College

6000 W Olive Ave  
Glendale, AZ 85302  
623.845.3000

### Mesa Community College

1833 W Southern Ave  
Mesa, AZ 85202  
480.461.7000

### Paradise Valley Community College

18401 N 32nd St  
Phoenix, Az 85032  
602.787.6500

### Phoenix College

1202 W Thomas Rd  
Phoenix, AZ 85013  
602.285.7500

### Rio Salado College

2323 W. 14th Street  
Tempe, AZ 85281  
480.517.8000

### Scottsdale Community College

9000 E Chaparral  
Scottsdale, AZ 85256  
480.423.6000

### South Mountain Community College

7050 South 24th St  
Phoenix, AZ 85042  
602.243.8000

## Services, Resources and Programs



### Student Services

#### Komatke Hall B

#### [estrellamountain.edu/studentservices](http://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 for student convenience.

#### 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 Pre-Advisement Workshop (PAW) Session
- Meet with an academic advisor, and
- 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 the Student Success Department at 623.935.8824.

#### Enrollment Services | 623.935.8888

#### [estrellamountain.edu/students/admissions](http://estrellamountain.edu/students/admissions)

- Process Student Information Forms
- 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
- Issue Student ID
- Process tuition and fee payments
- Process refunds (when appropriate)
- Distribute payroll checks
- Provide check cashing services
- Provide information on student tuition payment plans

Detailed guidelines covering admissions, registration, tuition & fees are included in this catalog beginning on page 228 in the MCCCDC Policies and Procedures Section.

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](http://estrellamountain.edu/students/testing-services)

New students must take the placement test prior to enrolling in college classes. For more information, call the Testing Center at 623.935.8860. New students must take all three placement tests: English, Reading, and Math.

- Administer course placement testing - English, Reading, Mathematics, and English as a Second Language
- Administer GED Exam
- 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 MCCCDC Policies and Procedures.

#### Pre-Advisement Workshop (PAW) | 623.935.8860

All new college students are required to attend a Pre-Advisement Workshop (PAW) following testing and prior to meeting with an advisor. The PAW session introduces new students to my.maricopa, their college email, how to register/drop classes and the basics of college vocabulary and processes. PAW sessions are offered on a daily basis. Schedules are available in the Testing Center.

#### Advisement | 623.935.8597

#### [estrellamountain.edu/students/advisement](http://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:

- Interpret course placement test scores
- Assist students in creating an educational plan
- Assist students with selecting classes appropriate to program of study
- Unofficial evaluation of college transcripts
- Provide information on college and university transfer process
- Verification of graduation eligibility
- Transfer Student Ombudsman (TSO)

**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 MCCCDC Policies and Procedures.

#### New Student Orientation (NSO) | 623.935.8824

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.**

# Services, Resources and Programs

## **Career & Transfer Center | 623.935.8740**

**[estrellamountain.edu/students/career-services](http://estrellamountain.edu/students/career-services)**

The Career & Transfer Center offers services and 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
- Resumes, 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 & Transfer Center online at [estrellamountain.edu/students/career-services](http://estrellamountain.edu/students/career-services) to access information related to career development and to view the centers upcoming events and workshops. Listings of both part-time and full-time jobs can be accessed online at the Career & Transfer Center through the Maricopa Career Network, an online job search engine for MCCCDC students, at [maricopa.jobing.com](http://maricopa.jobing.com).

## **Counseling | 623.935.8909**

**[estrellamountain.edu/students/counseling](http://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 Center (DRC) | 623.935.8863 or 623.208.4035 VP**

**[estrellamountain.edu/students/disability-resources](http://estrellamountain.edu/students/disability-resources)**

Students with disabilities are encouraged to contact the DRC office at the beginning of the admissions process to discuss accommodation needs and to request for an alternative format of printed materials. Some accommodations may require 3-4 weeks notification (i.e., sign language interpreters). For concerns or grievances regarding ADA or Section 504, please contact the Vice President of Student Affairs at 623.935.8812 or 623.208.4035 VP.

## **Internship Search | 623.935.8220**

**[estrellamountain.edu/students/internships](http://estrellamountain.edu/students/internships)**

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

## **Financial Aid & Scholarship Services | 623.935.8888**

**[estrellamountain.edu/students/financial-aid](http://estrellamountain.edu/students/financial-aid)**

- Assist students with obtaining funding for their education including grants, loans, federal work-study and scholarships
- Assistance 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 MCCCDC Policies and Procedures.

## **Online Services**

**[My.maricopa.edu](http://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

## **Student Life | 623.935.8807**

**[estrellamountain.edu/students/student-life](http://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.

## **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](http://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 MCCCDC Policies and Procedures.



## **Early Outreach Programs**

### **Summer Programs | 623.935.8900**

Estrella Mountain Community College summer 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) Math Science Scholars Program | 623.935.8779**

The Maricopa ACE Scholars Program is a nationally recognized scholarship program that targets high school sophomores by assisting them in making a smooth transition from high school to community college and on to the university system. The ACE Scholars Program at Estrella Mountain Community College specifically targets high school students who are interested in Math, Science, Technology and Engineering. Students take classes in the summer, fall and spring semesters. Program is dependent upon continued external funding.

### **Jr. ACE Program | 623.935.8779**

The Junior ACE program consists of the Mars Program for students entering 6th grade; Biotechnology/CSI for students entering 7th grade; Physics/Rockets for students entering 8th grade; Lego Robotics for students entering 9th grade; and Math Academy for students entering 10th grade. During these programs, students are exposed to many hands-on activities that enhance their knowledge in science, math and engineering related topics. Program is dependent upon continued external funding.

### **High School Dual Enrollment | 623.935.8443**

**[estrellamountain.edu/k12/](http://estrellamountain.edu/k12/)**

Estrella Mountain Community College partners with 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. Scholarships are 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 | 623.935.8487**

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. Program is dependent upon continued external funding.

# Services, Resources and Programs

## 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 academic and social successes of student athletes. Men's and women's golf and cross country are available to full-time students.

### **Administration of Justice (AJS) Club**

#### **Advisors: Eddie Zuleger | 623.935.8310 and Jim Cervan | 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.

### **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)**

#### **Advisor: Dr. Beverly Poellnitz | 623.850.1207 and Kermit Brown | 62.535.2767**

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**

#### **Advisor: TBA | 62.935.8807**

EMCC Drama Club stimulates strong interest in the theatrical arts and promotes thespian activity on campus.

### **EMCC Fashion Club**

#### **Advisor: Beverly Garwood | 623.935.8833**

The EMCC Fashion Club offers fellowship among fashion enthusiasts and promotes unity among its members through activities and networking.

### **Entrepreneur Club**

#### **Advisor: Shawn Gear | 623.935.8139**

The Entrepreneur Club assists members to develop leadership skills, career opportunities, and interact with a variety of professionals in any business or related field.

### **Forensics Club**

#### **Advisors: Cheryl Hebert | 623.935.8470 and Roxan Barr | 623.935.8139**

The EMCC Forensics Club accepts all students interested in a variety of speech styles and it sponsors several activities on campus throughout the year. The club competes in local, regional, and national speech competitions, including: informative, impromptu, competitive, prose interpretation, and communication analysis.

### **Future Teachers Club**

#### **Advisor: Pete 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.

### **International Club**

#### **Advisor: TBA | 623.935.8807**

The mission of the International Club is to promote international awareness by encouraging intercultural exchange and involvement in working together as an international community while recognizing individual potential and maintaining a spirit of friendship and diversity.

### **Latin Dance**

#### **Advisor: Tristan Peigne | 623.935.8139**

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.

### **Movimiento Estudiantil Chicano de Aztlan (M.E.Ch.A)**

#### **Advisor: Jonathan Robles | 623.935.8502**

M.E.Ch.A. supports higher education for Chicano/Hispanic students while encouraging student involvement, on and off campus, in cultural and social issues affecting the Chicano/Hispanic community.



# Services, Resources and Programs

## **Men of Color (MOCA)**

**Advisors: Jason Martinez | 623.935.8906 and Eugene Holloway | 623.935.8685**

MOCA encourages retention and successful degree completion of minority male students. The organization provides fellowship among male students of color and promotes internal and external support for the members and the local community.

## **Native American Club**

**Advisor: TBA | 623.935.8807**

The Native American Club encourages awareness of Native American cultures while support students in all facets of their college experience. Intra and interpersonal relationships are strengthened through interaction with others of Native American heritage.

## **P.R.I.D.E.**

**Advisors: Sandy Zetlan | 623.935.8458**

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: TBA | 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.

## **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**

**Advisor: Holly Dison | 623.935.8028**

STEM Club provides a community for STEM enthusiasts to network with one another and fosters student achievement in the academic disciplines of Science, Technology, Engineering, Math, and Physics.

## **Veteran's Club**

**Advisor: Nancy McNeill | 623.935.8937**

The Veteran's Club assists in developing a collaborative social network among enlisted/veteran personnel, military spouses, and students interested in Veteran issues. In addition, the club supports local veterans and their families; promotes military awareness and appreciation; and it supports Veteran students in achieving success in their education endeavors.

## **Writing Circle**

**Advisor: John Buckley | 623.935.8955**

The Writing Circle offers a community where students can engage in thoughtful discussion, share original creative writing projects (short stories, narrative non-fiction, poetry, etc.), provide constructive criticism, and motivate one another through continued writing.

## Additional Student Resources

### Bookstore

**Komatke Hall | 623.935.8875**

**[efollett.com](http://efollett.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](http://www.efollett.com). Call the Bookstore directly for current hours of operation.

### Food Services

**Komatke Hall | 623.935.8948**

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 at 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.

### Food Services

**Mariposa Hall | 623.935-8731**

The Eco Café is located in Mariposa Hall in the northeast part of the campus. Featuring Starbucks coffee, Coke and Pepsi products, pastries, grab and go sandwiches, and salads. The Eco Cafe also offers a variety of snacks.

### Public Safety

#### Northwest Public Safety Building

Located on the north side of campus adjacent to parking lot 'H'. Many dedicated staff members work behind the scenes to insure that the physical surroundings are safe so that students are comfortable to pursue their education. Students may contact Public Safety via Estrella Mountain's web page: [estrellamountain.edu/security](http://estrellamountain.edu/security) or by calling:

**Emergencies: 623.935.8911**

**Non-emergency: 623.935.8915**

In the unlikely occurrence of an extreme safety emergency: 1) Go to one of the emergency (blue lighted) telephones on campus 2) Press the call button and it will automatically connect with the Safety & Security Office 3) State the nature of the emergency.

## Learning Support Services

### Information Commons

**Estrella Hall-First Floor | 623.935.8150**

**[estrellamountain.edu/students/information-commons](http://estrellamountain.edu/students/information-commons)**

The Information Commons offers an information-rich environment, which supports the entire campus community – students, faculty, staff, and community users. Students at Estrella Mountain have full access to this remarkable facility and the support services it provides to facilitate and enrich their college experience.

The Commons presently houses over 150-networked computers; offering access to local instructional and information resources and the internet.

Services and Resources offered:

- Assistance to students with logging into computers
- One-on-one assistance in the use of academic software
- One-on-one assistance with assignment completion and submission
- Access to computing resources including the internet and multimedia equipment

### Learning Enhancement & Writing Center

**Estrella Hall - First Floor | 623.935.8189**

**[estrellamountain.edu/students/learning-support](http://estrellamountain.edu/students/learning-support)**

The Learning Enhancement & Writing Center at Estrella Mountain provides supportive, collaborative, and knowledgeable academic assistance to students, faculty, and staff. The center provides one-on-one tutoring or group study sessions.

Drop-in and appointment-based tutoring is available for the following:

- Writing
- English
- Spanish
- English as a Second Language (ESL)
- Reading

Tutoring for the following subjects is available by appointment only:

- Accounting
- Economics
- Instructional Computing
- Foreign and Sign Language
- Psychology 230 & 240 - Psychology Statistics
- Business Statistics

## Library

**Estrella Hall | 623.935.8191**

**[estrellamountain.edu/library](http://estrellamountain.edu/library)**

The Estrella Mountain Library provides the resources and assistance students need to complete research papers and projects. A student ID card is the key to check out the Library's books, videos, and music; and to request materials from any of the other Maricopa County Community College Libraries. In addition to the items available in the Library, the Library website provides 24/7 access to thousands of electronic books and millions of magazine, journal, and newspaper articles.

During open Library hours, there is always a librarian available to help students. Even when the Library is closed, students can chat with a librarian 24/7 through the Ask-a-Librarian service.

## Math Lab

**Ocotillo Hall, Room 106 | 623.935.8638**

**[estrellamountain.edu/students/learning-support/math-lab](http://estrellamountain.edu/students/learning-support/math-lab)**

The Math Lab benefits students enrolled in math courses ranging from Basic Arithmetic (MAT082) to upper level courses. Students are able to complete homework, study, and review using the software MyMathlab and other support materials. The math lab is staffed by faculty and student tutors; and is designed to improve student-faculty engagement.

## NASA Center for Success in Math & Science

**Montezuma Hall, 1st Floor, Room 122 | 623.935.8221**

**[estrellamountain.edu/academics/nasacenter](http://estrellamountain.edu/academics/nasacenter)**

The NASA Center for Success in Math & Science serves as the cornerstone for student success in math and science. The mission is to create a continuous support structure for students to insure their success in math & science at EMCC and beyond.

The following services and resources are available:

- Drop in tutoring in Mathematics, Biology, Chemistry, Geology, and Physics
- Graphing calculators - Lease Program
- Access to science equipment such as anatomical models, molecular models, charts, microscopes, and textbooks for use in the NASA Center
- Quiet study rooms

## Academic Enrichment Programs

### Honors Program

**Montezuma Hall, Room 234 | 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 Maricopa District. Participation in the program presents students with growth potential 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 (from four different prefixes) 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 recently graduated from an accredited Maricopa County high school. To be eligible, students must verify that they rank in the top 15% of their graduating class or have been placed in ENG101 Honors, Intermediate Algebra or higher, and are exempt from CRE101 (Critical Reading) on the District approved placement test. They must begin their college studies in the academic year following high school graduation. Academic Achievement Awards Scholarships are available for continuing and transfer students who have accumulated a minimum of 12 credits in courses numbered 100-level or above and who have a cumulative grade point average of 3.25 or better. To retain Academic Achievement Award Scholarship eligibility, students must complete at least one Honors course each semester and maintain a cumulative grade point average of 3.25 or higher. Academic Achievement Award Scholars are also eligible for additional Honors Program scholarships and funding once they are enrolled in the Program.

# Services, Resources and Programs

## **Maricopa-ASU Pathways Program (MAPP)**

A MAPP is an associate degree to bachelor's degree transfer program. MAPPs are an excellent option for Maricopa students who have decided a major area of study; intend to transfer into a particular program at ASU and commit to specific terms for MAPP completion. Completing a MAPP with the specified requirements including GPA, guarantees admission to the ASU degree program for that particular MAPP. Some programs may necessitate additional admission requirements. Benefits for MAPP students include:

- Guaranteed admission to ASU degree programs when all MAPP requirements are met.
- Eligibility for the ASU Tuition Commitment which provides limits on tuition increases during enrollment at ASU.
- Specific scholarships available for meritorious students who complete an associate's degree.
- Access to Transfer Advising and other pre-enrollment services on-site at the Maricopa Community Colleges.
- Cost-effective pathway ensuring all courses transfer and apply to an ASU degree.

For more information please visit [maricopa.edu/alliance/](http://maricopa.edu/alliance/)

## **Phi Theta Kappa**

**Advisor: Marylyn Bradley | 623.935.8222**

Phi Theta Kappa, the International Honorary Society for Community Colleges, is committed to promoting scholarship, leadership, service, and fellowship among talented community college students. Beta Alpha Xi, the Estrella Mountain Chapter of Phi Theta Kappa, has achieved an outstanding Five Star Ranking since it began in 1995. Each semester, students who have completed twelve (12) credit hours in 100-level or higher courses with a 3.25 cumulative grade point average, receive an invitation to join the organization.

## **Psi Beta**

**Advisor: Christopher Coleman | 623.935.8952**

Psi Beta is the national honor society in psychology for community and junior colleges. The honor society promotes the early interest in psychology, enabling psychology students to take an active role in exploring all opportunities psychology offers. Psi Beta's mission is to support professional development of psychology students in two-year colleges through promotion and recognition of excellence in scholarship, leadership, research, and community service.

## **Service Learning**

**Michael Powell | 623.935.8139**

All students are encouraged to consider the community through Estrella Mountain's Service Learning Program. Students should check with their faculty to see if there is a Service Learning component in which they can participate to complete class requirements. After participating in Service Learning, students feel rewarded; gain satisfaction; feel responsible; and experience growth.

## **Undergraduate Research**

**Instruction | 623.935.8413**

Faculty welcome opportunities to have individual students join them in research projects, and they incorporate research activities within their course curriculum. EMCC is a member of the National Council for Undergraduate Research (CUR), which provides support to undergraduate institutions seeking to develop undergraduate research programs. The annual Estrella Mountain Student Conference engages students with faculty mentors in traditional research; as well as fieldwork across all disciplines. The Conference provides students the kind of rigorous, academic experiences similar to those found at four-year institutions.

## **Additional Campus Programs**

### **Custom Workforce Training**

Workforce Training at Estrella Mountain Community College provides cutting edge training for employers who wish to improve the skills of their workforce. EMCC's aim is to increase workforce performance and retention by identifying training solutions and applying those solutions to meet company specific needs.

EMCC's programs are built on a foundation of:

- Process Improvement
- Team Building
- Change Management
- Leadership

Within these categories, EMCC addresses a range of specific skill levels, from basic to advanced, depending on employer needs. After consulting with the employer and assessing needs, EMCC designs training that is pragmatic and focused on real time applications. Solutions go directly from the classroom to the workplace. Classes are available in person, on-line, and in a hybrid format to offer maximum flexibility.

In addition to Custom Training Programs, Estrella Mountain offers Business Training classes that provide pathways to certifications to help strengthen employee's performance, and increase employee productivity. Benefits include:

- Increased employee motivation
- Increased ability to adopt new technologies and methods
- Reduce liability through risk management awareness

Estrella Mountain Community College's commitment to Workforce Training is a foundation upon which community businesses can build a solid future, whether they employ Custom Training for their workforce or Business Training for individual employees. Please contact Custom Workforce Training for more information at 623.535.2700.

# Services, Resources and Programs

## **Community Education**

The Community Education Program at Estrella Mountain Community College provides flexible and convenient general interest non-credit courses, designed to upgrade skills for personal and professional development. Courses are offered in the following areas of interest: Arts and Crafts, Business and Occupations, Computers, Health and Fitness, Home in and Out, Personal Enrichment, and Kid's College. For specific information concerning any of the programs, please contact Registration at 623.935.8888.

## **Fitness Physical Education & Wellness Program**

As one of many learning support services at EMCC the Fitness & Wellness Program helps students and employees maximize their physical fitness and well-being. When a student is at their peak physically they are also at their peak mentally. They are set to learn. Consider the following:

- On campus PED credit classes
- Off campus PED credit and non-credit student fitness
- Experienced and credentialed fitness instructors
- Student wellness programs throughout each semester
- Intramurals and recreational opportunities
- Healthy eating programs
- Collegiate community support helping you to be your best

As a learning support service, the Fitness & Wellness Program helps students gain awareness of the pathways to improve physical wellness that strengthens every function of life. The pathways include wellness monitoring, nutrition training, and fitness mentoring. Either the learner can take a class, or take a journey to a new place where fitness supports wellness; along with wellness supporting learning and living a full life.

Fitness is fun, and fitness is the foundation for a full life. The Fitness & Wellness Program transforms potential into proficiency. Please contact us for more information at 623.935.8400.



## Developmental Education



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 Learning Support Services.

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	Language Skills: Speaking & Writing Standard English	3
+ENG081	Basic Writing Skills	3
+ENG091	Fundamentals of Writing	3

+ indicates that a course has prerequisites or corequisites.

### English as a Second Language

#### Basic Level:

+ESL001BA	Basic ESL I: Personal and Health Safety	2
+ESL001BB	Basic ESL I: Services and Employment	2

#### 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
+RDG010	Reading English as a Second Language I	3

#### Recommended Courses

+ESL013	Vocabulary for ESL I	1
+ESL014	Idiomatic English for ESL I	1
+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
+RDG020	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
+RDG030	Reading English as a Second Language III	3

#### Recommended Courses

*+RDG031	Advanced vocabulary ESL Speakers (non-native speakers)	3
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#### 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
+RDG040	Reading English as a Second Language IV	3

#### Recommended Courses

+ESL043	Basic Vocabulary for ESL IV	1
+ESL044	Vocabulary for ESL IV	1

#### Level V

+ESL050	Review Grammar for ESL	3
+ESL051	Pronunciation Improvement for ESL Speakers	3

#### Recommended Courses

+COM080	Conversation Circles Practice in Conversing in English (non-native speakers)	3
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+ indicates that a course has prerequisites or corequisites.

\* indicates that the course is taught in hybrid format.

### Reading

+RDG071	Basic Reading	3
+RDG081	Reading Improvement	3
+RDG091	College Reading Skills I	3
+RDG095	Intensive Foundations of College Reading	6
+RDG105	Speed Reading	2

+ indicates that a course has prerequisites and/or corequisites.

### Mathematics

MAT082	Basic Arithmetic	3
+MAT091	Introductory Algebra	4
+MAT092	Introductory Algebra	3

+ indicates that a course has prerequisites and/or student placement.



2012-2013

Searchable online schedule | [estrellamountain.edu/sch](http://estrellamountain.edu/sch)

# General Education



## 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 the 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 arts, the social and behavioral sciences, the natural sciences, as well as cultural diversity, global and/or historical awareness.

Recognizing the importance of breadth 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 a teaching and learning environment in which everyone experiences growth.

## Assessment of Student Abilities

**Co-Chairs: Erik Huntsinger 623.935.8137 and Pete Turner 623.935.8705**

[estrellamountain.edu/employees/committees/saac](http://estrellamountain.edu/employees/committees/saac)

At Estrella Mountain, successful learning is the primary concern. 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
- Numeracy (math skills)
- Science Literacy
- 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](http://estrellamountain.edu/employees/committees/saac/gen-ed-abilities).

## General Education Degrees and Certificates

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Courses, degrees and certificates offered by the Maricopa Colleges are subject to change. Students should consult a MCCCAD 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 [maricopa.edu/academic/ccta/curric/progem.php](http://maricopa.edu/academic/ccta/curric/progem.php)

# General Education

## 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.

<b>Associate in Arts (AA) 60-64 Credits</b>	<b>AGEC - A</b>	1. Core Areas 2. Awareness Areas	35 Credits	
	<b>MCCD Requirements General Electives</b>	(Communication, Reading) (Select courses to complete a minimum of 60 credits but no more than a total of 64 semester credits.)	0-6 Credits	
<b>Associate in Arts Elementary Education (AAEE) 60-63 Credits</b>	<b>AGEC-A</b>	1. Core Areas 2. Awareness Areas	35 Credits	
	<b>MCCD Requirements Elementary Education Requirements</b>	(Communication, Reading)	0-6 Credits	
	-Education Foundations -Elective for AZ Professional Teacher Standards	(18 Credits) (7 Credits)	25 Credits	
<b>Associate in Arts Fine Arts (AAFA) 60-64 Credits</b>	<b>AGEC - A</b>	1. Core Areas 2. Awareness Areas	35 Credits	
	<b>MCCD Requirements</b>	(Communication, Reading)	0-6 Credits	
	<b>Fine Arts Requirement- Art</b>		(28 Credits)	
	<b>Fine Arts Requirement- Dance</b>		(29 Credits)	
	<b>Fine Arts Requirement - Theatre</b>		(25-29 Credits)	
<b>Associate in Business (ABus)</b>	<b>Associate in Business General Requirements ABus-GR Pathway</b> 62-63 credits All Business Majors except CIS	AGEC B	1. Core Areas 2. Awareness Areas	35 Credits
		Common Lower Division Requirements General Electives	(Select courses to complete a minimum of 62 credits but no more than a total of 63 semester credits)	27 Credits
	<b>Associate in Business Special Requirements ABus-SR Pathway</b> 62-63 credits CIS Majors	AGEC B	1. Core Areas 2. Awareness Areas	35 Credits
		Common Lower Division Requirements General Electives	(Select courses to complete a minimum of 62 credits but no more than a total of 63 semester credits)	27 Credits
<b>Associate in Science (AS)</b>	<b>Associate in Science 60-64 Credits</b>	AGEC S MCCD Requirements General Electives	1. Core Areas 2. Awareness Areas (Communication, Reading) (Select courses to complete a minimum of 60 credits but no more than a total of 64 semester credits)	36-38 Credits 0-6 Credits

### Additional Programs for University Transfer

<b>Associate in General Science (AGS)</b>	<b>60 Credits</b>	General Education Core Areas	(16 Credits)
		General Education Distribution Areas Elective Courses	(28-29 Credits) (15-16 Credits)
<b>Associate in Applied Science (AAS)</b>	<b>60-64 Credits</b>	General Education Core Areas	(15 Credits)
		General Education Distribution Areas	(9-10 Credits)
		Required Courses	(Credits Vary)
		Restricted Electives	(Credits Vary)



## 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](http://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; A minimum of 60 semester credits in courses numbered 100 and above to be completed with a grade of "C" or better; 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 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 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 CEG (Course Equivalency Guide). The course evaluation and/or general education designation as listed in AZCAS is valid for the term in which the student is awarded credit on the transcript;

# General Education

- Require that a minimum of 12 semester credits of course work be taken at any of the MCCCDC 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.
- AGEC Requirements

The 35-38 semester credits required for each of the three AGECs follow. See the list entitled [MCCCDC Courses That Can Be Used to Satisfy MCCCDC AGEC A, AGEC B and/or AGEC S](#) for specific course information via the following website: [www.maricopa.edu/academic/ccta/](http://www.maricopa.edu/academic/ccta/)

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

	Credits
<b>A. Core Areas:</b>	<b>35</b>
1. First-Year Composition (FYC)	6
2. Literacy and Critical Inquiry [L] AGEC A & AGEC 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 (0-3)	0-3
3. Mathematical Studies [MA/CS] The Mathematics [MA] requirement differs for AGEC A, AGEC B, and AGEC S.	4-6

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;

- Mathematics [MA] (3 credits) AND (Requires a course in college mathematics (MAT142) or college algebra (MAT 150, MAT 151, MAT152) or pre calculus (MAT 187) or any other mathematics course designated with the MA general education value and for which college algebra is a pre-requisite.)
- Computer/Statistics/Quantitative Applications [CS] (3 credits)

## AGEC B requires;

- Mathematics [MA] (3 credits) AND (Requires a course in brief calculus (MAT212) or a higher level mathematics course (MAT216, MAT220, or MAT221 or any course for which these courses are prerequisites).
- Computer/Statistics/Quantitative Applications [CS] (3 credits) CIS105 Survey of Computer Information Systems

## AGEC S requires;

- Mathematics [MA] (4 credits) AND Requires a calculus course (MAT220 or MAT221) OR any mathematics course for which MAT220 or MAT221 are prerequisites OR if pursuing a degree at ASU in Life Sciences select MAT251 Calculus for Life Science.

4. Humanities and Fine Arts [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.

5. Social and 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 [SG] 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 the AZ Course Applicability System (AZCAS) 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 MCCC 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]

## 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 and Fine Arts 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

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. MAT251 is required if transferring to a Life Sciences degree at Arizona State University (ASU).

#### 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.

# General Education

## **Humanities and Fine Arts [HU]**

Courses must be completed with a grade of “C” or better in the Humanities and Fine Arts Core area. Students are encouraged to choose coursework from more than one discipline. The Humanities and Fine Arts Core area enables students to broaden and deepen their consideration of basic human values and their interpretation of the experiences of human beings.

The humanities are concerned with questions of human existence and the universality of human life, questions of meaning and the nature of thinking and knowing, and questions of moral, aesthetic, and other human values. The humanities investigate these questions in both the present and the past and make use of philosophy, foreign languages, linguistics and communications studies, religious studies, literature, and fine arts.

The fine arts constitute the artist’s creative deliberation about reality, meaning, knowledge, and values.

## **Social and Behavioral Sciences [SB]**

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

The Social and 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.

SQ = Natural Science-Quantitative

SG = Natural Science-General

## **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 pre-requisite 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, 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.

## **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.

## Associate in Arts (AA) Degree

### 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. MCCCDC General Education  
Arizona General Education Curriculum for Arts (AGEC-A) Additional MCCCDC 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 MCCCDC 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](http://www.aztransfer.com)

### Academic Policies that Govern the Associate in Arts Degree

- Completion of the Associate in Arts and the AGECA 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 AGECA 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 AGECA 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 AGECA.
- The General Education Requirements for AGECA 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 (AGECA Core Area, AGECA Awareness Area, MCCCDC Additional Requirements, or lower-division courses applicable to the major).
- Effective Fall 2000, the course evaluation and/or general education designation as listed in the Arizona Course Equivalency Guide (CEG) 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. 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 AGECA requirements must be listed in the Course Equivalency Guide within the Arizona Course Applicability System 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. See the list titled MCCCDC Courses That Can Be used to Satisfy MCCCDC AGECA, AGECA-B, and/or AGECA-S for specific course information via the following website: [www.maricopa.edu/academic/ccta/](http://www.maricopa.edu/academic/ccta/)
- Courses completed at one of the Maricopa Community Colleges to meet the General Electives requirement must be transferable to the university or universities to which the student plans to transfer, as elective credit or better. 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 AGECA or Associate in Arts Degree.
- Courses and their modular equivalents will satisfy AGECA and Associate in Arts requirements.

# General Education

- 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.
- e. Social and 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.

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 the AZ Course Applicability System (AZCAS) for information on equivalencies.

## Degree Requirements

The 60-64 semester credits required for the Associate in Arts follow. See the list titled MCCCDCourses That Can Be used to Satisfy MCCCDCourses AGEC-A, AGEC-B, and/or AGEC-S for specific course information via the following website: [www.maricopa.edu/academic/ccta/](http://www.maricopa.edu/academic/ccta/) This list identifies the courses in alpha-order by prefix as well as the Core Areas and Awareness Areas where the course will apply. For purposes of clarifying requirements in the Mathematics and Natural Sciences areas on the list and the AGEC requirements, an A, B, and/or S character may follow the [MA], [SQ], [SG] general education designations and refers to the specific AGEC.

### I. MCCCDCourses General Education

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

#### MCCCDCourses 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 (MAT142) or college algebra (MAT 150, MAT 151, MAT152) or pre calculus (MAT 187) 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 and Fine Arts [HU] 6  
Students are encouraged to choose course work from more than one discipline for a total of six semester credits.

### 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. MCCCDCourses 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 MCCCDCourses Additional Requirements because courses can satisfy a Core Area and MCCCDCourses 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 is 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 is 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/](http://www.aztransfer.com/)

Students must select MCCCDCourses that are transferable to the university or universities to which the student plans to transfer, as elective credit or better according to the Arizona CEG within the AZCAS. 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**

## Associate in Arts in Elementary Education (AAEE) Degree

### Description

The MCCCDC 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. MCCCDC General Education  
Arizona General Education Curriculum for Arts  
(AGEC-A) Additional MCCCDC 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 MCCCDC 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.



# General Education

- 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.
- Effective Fall 2000, the course evaluation and/or general education designation as listed in the Arizona Course Equivalency Guide (CEG) 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. Students do have the option to petition for general education evaluations and/or general education designations upon transfer.

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

- Courses completed at one of the Maricopa Community Colleges to meet AGEC-A requirements must be listed in the Course Equivalency Guide within the Arizona Course Applicability System 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. See the list titled MCCCDCourses That Can Be used to Satisfy MCCCDCourses AGEC-A, AGEC-B, and/or AGEC-S for specific course information via the following website: <http://www.maricopa.edu/academic/ccta/>
- Courses completed at one of the Maricopa Community Colleges to meet the General Electives requirement must be transferable to the university or universities to which the student plans to transfer, as elective credit or better. For appropriate course selection, student 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.

## Degree Requirements

### I. MCCCDCourses General Education Requirements Credits

#### MCCCDCourses AGEC - A

1. Core Areas	35-38
a. First-Year Composition (FYC) ENG101/102 OR ENG107/108	6
b. Mathematics Studies [MA] and Computer/Statistics/ Quantitative Applications [CS] 1) MAT142,[MA] College Mathematics, or higher (NOTE: MAT156, MAT157, MAT182 and MAT206 are excluded) AND 2) CIS105 [CS] Survey of Computer Information Systems, OR BPC110 [CS] Computer Usage and Applications	6
c. Literacy and Critical Inquiry [L] Select the following: COM225 Public Speaking	3
d. Humanities and Fine Arts [HU] 1) Select (3) semester credits from the following courses: ARH100 Introduction to Art ARH101 Prehistoric through Gothic Art ARH102 Renaissance through Contemporary Art AND 2) Select (3) semester credits from the following courses: EDU/ENH291 Children's Literature ENH110 Introduction to Literature ENH241 American Literature Before 1860 ENH242 American Literature After 1860 HUM250 or HUM251 Ideas and Values in the Humanities THE111 Introduction to Theatre DAH100 Introduction to Dance	6

# General Education

DAH201 World Dance Studies  
MHL140 Survey of Music History  
MHL143 Music in World Cultures

e. Social and Behavioral Sciences [SB] 6

1) Select 3 semester credits from the following courses:

HIS103 United States History to 1865  
POS110 American National Government  
AND

2) Select 3 semester credits from the following courses:

CFS205 Human Development  
ECH/CFS176 Child Development  
PSY101 Introduction to Psychology  
HIS104 United States History 1865 to Present  
GCU121 World Geography I: Eastern Hemisphere  
GCU122 World Geography II: Western Hemisphere  
ECN211 Macroeconomic Principles  
ECN212 Microeconomic Principles

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.

g. Awareness Areas 0

The MCCC Additional Requirements 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.

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## 2. MCCC 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 18

Complete the following courses to satisfy the Education Foundations requirements:

EDU220 Introduction to Serving English Language Learners

EDU221 Introduction to Education

EDU222 Introduction to the Exceptional Learner

EDU230 Cultural Diversity in Education

MAT156 Mathematics for Elementary Teachers I

MAT157 Mathematics for Elementary Teachers II

### B. Restricted Electives 7

A total of 7 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 7 credits from the following:

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

Any EDU prefixed course(s) (except EDU250)

Any MAT (courses numbered higher than 142 except MAT156 and MAT157)

Any Foreign Language course(s)

Any Natural Science course(s)

CFS/ECH176 Child Development

CFS205 Human Development

EED215 Early Learning: Health, Safety, Nutrition and Fitness

FON100 Introductory Nutrition

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—HIS 103, POS 110, POS 220, and POS 222

Arizona—POS 220 and POS 221

## Associate in Arts, Fine Arts (AAFA) - Art Degree

### 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) MCCCCD 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 MCCCCD 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](http://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 AGECE-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 AGECE 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 AGECE 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 AGECE.
- The General Education Requirements for AGECE-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 (AGECE-A Core Area, AGECE Awareness Area, MCCCCD Additional Requirements, or lower-division courses applicable to the major).
- Effective Fall 2000, the course evaluation and/or general education designation as listed in the Arizona Course Equivalency Guide (CEG) 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. 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 AGECE-A requirements must be listed in the Course Equivalency Guide within the Arizona Course Applicability System 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. See the list titled MCCCCD Courses That Can Be used to Satisfy MCCCCD AGECE-A, AGECE-B, and/or AGECE-S for specific course information via the following website: [www.maricopa.edu/academic/ccta/](http://www.maricopa.edu/academic/ccta/)
- Courses completed at one of the Maricopa Community Colleges to meet the General Electives requirement must be transferable to the university or universities to which the student plans to transfer, as elective credit or better. 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 AGECE-A or Associate in Arts, Fine - Arts Degree.

# General Education

- 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.

d. Humanities and Fine Arts [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 and 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 the AZ Course Applicability System (AZCAS) 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 U.S. [C]

AND

Historical Awareness [H]

OR

Global Awareness [G]

## 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 is 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.

## Degree Requirements

The 63 semester credits required for the Associate in Arts, Fine Arts - Art degree follow. See the list titled MCCCD Courses That Can Be used to Satisfy MCCCD AGEC-A, AGEC-B, and/or AGEC-S for specific course information via the following website: [www.maricopa.edu/academic/ccta/](http://www.maricopa.edu/academic/ccta/) This list identifies the courses in alpha-order by prefix as well as the Core Areas and Awareness Areas where the course will apply. For purposes of clarifying requirements in the Mathematics and Natural Sciences areas on the list and the AGEC requirements, an A, B, and/or S character may follow the [MA], [SQ], [SG] general education designations and refers to the specific AGEC.

### 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)

Select a course in college mathematics or college algebra or pre-calculus or any other mathematics course for which college algebra is a prerequisite.

AND

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

# General Education

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 is 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 (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:	Credits
ADA/ART112 - Two-Dimensional Design	3
ADA/ART115 - Three-Dimensional Design	3
ARH102 - Renaissance Through Contemporary Art	3
ART111 - Drawing I	3
ART113 - Color	3
ART255AB - The Portfolio	1

### Restricted Electives: Credits: 12

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

ART116 Life Drawing I	3
ART122 Drawing and Composition II	3
ART131 Photography I	3
ART151 Sculpture I	3
ART161 Ceramics I	3
ART165 Watercolor Painting I	3
ART167 Painting I	3

**Associate in Arts, Fine Arts – Art Total Credits: 63**

## Associate in Arts, Fine Arts (AAFA) - Dance Degree

### Description

The Maricopa County Community College District Associate in Arts, Fine Arts - Dance degree requires a minimum of 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) MCCCDC 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 MCCCDC 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](http://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 AGECE-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 64 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 AGECE 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 AGECE 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 AGECE.
- The General Education Requirements for AGECE-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 (AGECE-A Core Area, AGECE Awareness Area, MCCCDC Additional Requirements, or lower-division courses applicable to the major).
- Effective Fall 2000, the course evaluation and/or general education designation as listed in the Arizona Course Equivalency Guide (CEG) 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. 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 AGECE-A requirements must be listed in the Course Equivalency Guide within the Arizona Course Applicability System 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. See the list titled [MCCCDC Courses That Can Be used to Satisfy MCCCDC AGECE-A, AGECE-B, and/or AGECE-S](#) for specific course information via the following website: [www.maricopa.edu/academic/ccta/](http://www.maricopa.edu/academic/ccta/)
- Courses completed at one of the Maricopa Community Colleges to meet the General Electives requirement must be transferable to the university or universities to which the student plans to transfer, as elective credit or better. 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 AGECE-A or Associate in Arts, Fine Arts-Dance Degree.

# General Education

- 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

## Degree Requirements

The 64 semester credits required for the Associate in Arts, Fine Arts - Dance degree follow. See the list titled MCCCDCourses That Can Be used to Satisfy MCCCDCourses AGEC-A, AGEC-B, and/or AGEC-S for specific course information via the following website: [www.maricopa.edu/academic/ccta/](http://www.maricopa.edu/academic/ccta/) This list identifies the courses in alpha-order by prefix as well as the Core Areas and Awareness Areas where the course will apply. For purposes of clarifying requirements in the Mathematics and Natural Sciences areas on the list and the AGEC requirements, an A, B, and/or S character may follow the [MA], [SQ], [SG] general education designations and refers to the specific AGEC.

### I. MCCCDCourses General Education

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

#### MCCCDCourses AGEC-A

##### 1. Core Areas: Credits: 35

- First-Year Composition (FYC): Credits: 6
- Literacy and Critical Inquiry [L]: Credits: 3
- 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].
  - Mathematics [MA] A (3 credits)  
Select a course in college mathematics or college algebra or pre-calculus or any other mathematics course for which college algebra is a prerequisite.  
AND
  - Computer/Statistics/Quantitative Applications [CS] (3 credits)

- Humanities and Fine Arts [HU]: Credits: 6  
Students are encouraged to choose course work from more than one discipline for a total of six semester credits. Select from the following options to complete three credits:
 

DAH100 Introduction to Dance	Credits 3
DAH201 World Dance Studies	3

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

- 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 the AZ Course Applicability System (AZCAS) for information on equivalencies.

Select from the following options to complete four credits:

	Credits
BIO160 Introduction to Human Anatomy and Physiology	4
BIO201 Human Anatomy and Physiology I	4

##### 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 U.S. [C]  
AND  
Historical Awareness [H]  
OR  
Global Awareness [G]

# General Education

## 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 is 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 is 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.

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: 29

A minimum of 29 credits are required to satisfy the Fine Arts Requirements – Dance.

### Part I:

### Credits 11

Select the following:	Credits
DAN150 Dance Performance I	1
DAN210 Dance Production I	3
DAN221 Rhythmic Theory for Dance I	2
DAN264 Choreography I	3
DAN280 Dance Practicum	2

### 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:

DAN120++ World Dance (any module)	1
DAN129 Musical Theatre Dance I	1
DAN130 Musical Theatre Dance II	1
DAN131 Ballet I	1
DAN132 Modern Dance I	1
DAN133 Modern Jazz Dance I	1
DAN134 Ballet II	1
DAN135 Modern Dance II	1
DAN136 Modern Jazz Dance II	1
DAN229 Musical Theatre Dance III	1
DAN230 Musical Theatre Dance IV	1
DAN231 Ballet III	1
DAN231AA Ballet III: Intensive	2
DAN232 Modern Dance III	1
DAN233 Modern Jazz Dance III	1
DAN234 Ballet IV	1
DAN234AA Ballet IV: Intensive	2
DAN235 Modern Dance IV	1
DAN236 Modern Jazz Dance IV	1
DAN237 Ballet Pointe I	1
DAN290 Dance Conservatory I (any module)	1-3
DAN291 Dance Conservatory II (any module)	1-3
DAN292 Dance Conservatory III (any module)	1-3

1-3

### Part III: Restricted Electives: Credits: 9

The remaining credits from DAH and DAN prefixed courses should be selected as prescribed by the dance advisor. Only three of the remaining credits may be selected from the following DAN prefixed courses:

Credits

DAH+++++Any DAH prefixed course EXCEPT DAH100 or DAH201 if selected to satisfy the AGEC A Humanities and Fine Arts Area.

DAN115+ Contemporary Dance Trends (any module)	1
DAN120++ World Dance (any module)	1
DAN125++ Social Dance (any module)	1
DAN129 Musical Theatre Dance I	1
DAN130 Musical Theatre Dance II	1
DAN133 Modern Jazz Dance I	1
DAN136 Modern Jazz Dance II	1
DAN140 Tap Dance I	1
DAN141 Dance Workshop	1
DAN145 Tap Dance II	1
DAN146 Tap Dance Ensemble	1
DAN150 Dance Performance I	1



# General Education

DAN164 Improvisation	1
DAN230 Musical Theatre Dance IV	1
DAN231 Ballet III	1
DAN231AA Ballet III: Intensive	2
DAN232 Modern Dance III	1
DAN233 Modern Jazz Dance III	1
DAN234 Ballet IV	1
DAN234AA Ballet IV: Intensive	2
DAN235 Modern Dance IV	1
DAN236 Modern Jazz Dance IV	1
DAN237 Ballet Pointe I	1
DAN290++ Dance Conservatory I (any module)	1-3
DAN291++ Dance Conservatory II (any module)	1-3
DAN292++ Dance Conservatory III (any module)	1-3
*DAN298++ Special Projects (any module)	1-3

*\* Selection of DAN298 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: 64**

## Associate in Arts, Fine Arts (AAFA) - Theater Degree

### 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) MCCCDC 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 MCCCDC 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](http://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
- 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, MCCCDC Additional Requirements, or lower-division courses applicable to the major)
- Effective Fall 2000, the course evaluation and/or general education designation as listed in the Arizona Course Equivalency Guide (CEG) 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. 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 the Arizona Course Applicability System 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. See the list titled MCCCDC Courses That Can Be used to Satisfy MCCCDC AGEC-A, AGEC-B, and/or AGEC-S for specific course information via the following website: [www.maricopa.edu/academic/ccta/](http://www.maricopa.edu/academic/ccta/)
- Courses completed at one of the Maricopa Community Colleges to meet the General Electives requirement must be transferable to the university or universities to which the student plans to transfer, as elective credit or better. 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.

# General Education

- 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.

## Degree Requirements

The 60-64 semester credits required for the Associate in Arts, Fine Arts-Theatre follow. See the list titled MCCCDCourses that can be used to Satisfy MCCCDCourses AGEC-A, AGEC-B, and/or AGEC-S for specific course information via the following website: [www.maricopa.edu/academic/ccta/](http://www.maricopa.edu/academic/ccta/) This list identifies the courses in alpha-order by prefix as well as the Core Areas and Awareness Areas where the course will apply. For purposes of clarifying requirements in the Mathematics and Natural Sciences areas on the list and the AGEC requirements, an A, B, and/or S character may follow the [MA], [SQ], [SG] general education designations and refers to the specific AGEC.

### I. MCCCDCourses General Education

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

#### MCCCDCourses 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)  
Select a course in college mathematics or college algebra or pre-calculus or any other mathematics course for which college algebra is a prerequisite.  
AND
- 2) Computer/Statistics/Quantitative Applications [CS] (3 credits)

d. Humanities and Fine Arts [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/THE205 Introduction to Cinema 3

e. Social and 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 the AZ Course Applicability System (AZCAS) 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 U.S. [C]  
AND  
Historical Awareness [H]  
OR  
Global Awareness [G]

MCCCDCourses Additional Requirements: Credits: 0-6

# General Education

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 MCCC Additional Requirements because courses can satisfy a Core Area and MCCC 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 is 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 is 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: 13**

- | Select the following:                    | Credits |
|--|---------|
| THE111 Introduction to Theatre           | 3       |
| THP112 Acting I                          | 3       |
| THP115 Theatre Makeup                    | 3       |
| THP201AA Theatre Production I OR         |         |
| THP201AB Theatre Production II           | 1       |
| THP213 Introduction to Technical Theatre | 3       |

**Restricted Electives: Credits: 12-16**

Students may choose from the following courses to specialize in Acting, Technical Theatre, Teacher Education, or Cinema. Students should consult with the theatre advisor for the restricted electives recommended for each specialization track.

Select from the following options to complete a minimum of 12 semester credits:

- |   | Credits |
|---|---------|
| HUM/THE206 Introduction to Television Arts          | 3       |
| HUM/THE210 Contemporary Cinema                      | 3       |
| THE118 Playwriting                                  | 3       |
| THP120AA Audition Techniques: Prepared Monologue    | 1       |
| THP120AB Audition Techniques: Cold Readings         | 1       |
| THP130 Stage Combat OR                              |         |
| THP131 Stage Movement                               | 3       |
| THP210 Acting: TV/Film                              | 3       |
| THP211 Creative Drama                               | 3       |
| THP212 Acting II                                    | 3       |
| THP214 Directing Techniques                         | 3       |
| THP216 Beginning Stage Lighting                     | 3       |
| THP217 Introduction to Design Scenography           | 3       |
| THP219 Introduction to Puppetry                     | 3       |
| THP267 Painting Techniques for Film, TV and Theatre | 3       |
| COM/THP271 Voice and Diction                        | 3       |

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

## Associate in Business (ABus GR), - General Requirements Degree

### 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. MCCCDC 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 MCCCDC 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 AGECE 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 AGECE 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 AGECE.
- Uses the following policies to help students complete the

required Core and Awareness Areas in AGECE 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 (AGECE B Core Area, AGECE B Awareness Area, and/or Common Lower Division Program Requirements)
  - 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 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.
  - 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 Arizona Course Applicability System (AZCAS). The course evaluation and/or general education designation as listed in AZCAS 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

## Degree Requirements

The 62-63 semester credits required for the Associate in Business General Requirements follow. See the list entitled MCCCDCourses That Can Be Used to Satisfy MCCCDC AGEC A, AGEC B and/or AGEC S for specific course information via the following website: [www.maricopa.edu/academic/ccta/](http://www.maricopa.edu/academic/ccta/)

- Click on the page labeled Curriculum
- Select Matrix of Courses that Can be Used to Satisfy MCCCDC AGEC A, B, and/or S.

The list identifies the courses in alpha-order by prefix as well as the different Core Areas and Awareness Areas where the course will apply. When selecting Mathematical Studies and Natural Sciences options, select from the appropriate AGEC A, B, or S list.

### I. MCCCDC General Education

#### MCCCDC AGEC B

##### 1. Core Areas:

	<b>Credits</b>
<b>1. Core Areas:</b>	<b>35</b>
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 and Fine Arts [HU] 6  
Students are encouraged to choose course work from more than one discipline for a total of six semester credits.

e. Social and 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.

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 the AZ Course Applicability System (AZCAS) 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 U.S. [C]
- AND
- Historical Awareness [H]
- OR
- Global Awareness [G]

## II. Common Lower Division Program Requirements: 27

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: 6

- \* ACC111 Accounting Principles I AND ACC230 Uses of Accounting Information I AND ACC240 Uses of Accounting Information II
- OR
- \*\* ACC211 Financial Accounting AND ACC212 Managerial Accounting

\*\*MCCCDC ACC111 and ACC112 together are equivalent to ACC211.

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

### Quantitative Methods 3

- 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

## **Business Electives:**

**6**

Select from the following options:

CIS114DE Excel Spreadsheet

CIS133DA Internet/Web Development Level I

CIS159 [CS] Visual Basic Programming I

CIS162AD C#: Level I

GBS151 Introduction to Business

GBS233 [L] Business Communication

\*\*GBS 220 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

SBU200 Society of 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. For appropriate course selection, students should consult an advisor.

All courses used to satisfy electives must be transferable to the university or universities to which the students plans to transfer, as elective credit or better. For appropriate course selection, students should consult with an advisor.

## **ABus GR Degree Total Credits:**

**62-63**

## **Associate in Business (ABus SR), - Special Requirements Degree**

### **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. MCCCDC 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/](http://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 MCCCDC 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 [39]

# General Education

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, AGECE B Awareness Area, and/or Common Lower Division Program Requirements)
- 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 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 MCCC and the institutions to which MCCC 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 AZCAS 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

## Degree Requirements

The 62-63 semester credits required for the Associate in Business Special Requirements follow. See the list titled MCCC Courses That Can Be Used to Satisfy MCCC AGECE A, AGECE B and/or AGECE S for specific course information via the following

website: [www.maricopa.edu/academic/ccta/](http://www.maricopa.edu/academic/ccta/)

- Click on page labeled Curriculum
- Select Matrix of Courses that Can be Used to Satisfy MCCC AGECE A, B and/or S.

The list identifies the courses in alpha-order by prefix as well as the different Core Areas and Awareness Areas where the course will apply. When selecting Mathematical Studies and Natural Sciences options, select from the appropriate AGECE A, B, or S list.

## I. MCCC General Education

## Credits

### MCCC AGECE 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)<br>MAT212, Brief Calculus, or a higher level mathematics course<br>AND   |   |
| 2) Computer/Statistics/Quantitative Applications [CS]<br>CIS105 [CS] Survey of Computer Information Systems  |   |
| d. Humanities and Fine Arts [HU]   | 6 |
| Students are encouraged to choose course work from more than one discipline for a total of six semester credits.   |   |
| e. Social and 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 the AZ Course Applicability System (AZCAS) for information on equivalencies.



# General Education

## 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 U.S. [C]  
AND  
Historical Awareness [H]  
OR  
Global Awareness [G]

## 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:** **6**

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

### **Programming I:** **3**

CIS162AD C#: Level I

### **Programming II:** **3**

CIS250 Management Information Systems  
GBS205 Legal, Ethical, and Regulatory Issues in  
Business 3  
GBS221 [CS] Business Statistics 3  
ECN211 [SB] Macroeconomic Principles 3  
ECN212 [SB] Microeconomic Principles 3

### **Quantitative Methods** **3**

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

## 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. For appropriate course selection, students should consult an advisor.

All courses used to satisfy electives must be transferable to the university or universities to which the student plans to transfer, as elective credit or better. For appropriate course selection, students should consult with an advisor.

**ABus SR Total Credits:**

**62-63**

## 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;

### 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)

MAT Mathematics 102/120/121/122/122AA/ 122AB/122AC/126/140/141/142/150/151/ 151AA/151AB/151AC/151AD/152/156/ 172/182/187/206/212/213/220/221/ 230/231/240/241/261/262/276/277 equivalent course  
Satisfactory completion of a higher level Mathematics course.

#### Computer Usage (1 credit)

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

ACC Accounting 115

ADA Advertising Arts 169/170/170AA/170AB/173/ 173AA/173AB/173AC/175/175AA/175AB/177/ 177AA/177AB/any 180 modules/183/183AA/ 183AB/183AC/283/283AA/283AB/283AC/ 289/289AA/289AB/289AC

AJS Administration of Justice Studies 205

AMS Automated Manufacturing System 150

ARC Architecture 243/244/245

ART Art 100/169/170/170AA/170AB/173/173AA/ 173AB/173AC/175/175AA/175AB/177/177AA/ 177AB/179/179AA/179AB/any 180 module/ 183/183AA/183AB/183AC/283/283AA/283AB/ 283AC/289/289AA/289AB/289AC

BIO Biology 294

BPC Business-Personal Computers Any BPC Course(s)

CFS Child/Family Studies 180

CIS Computer Information Systems Any CIS Course(s) (except 162, 162aa, 162ac, 163AA, 169, 183AA, 259, 262)

CSC Computer Science Any CSC Course(s) (except 200, 200AA, 200AB, 210, 210AA, 210AB, 283)

CTR Court Reporting 101/102

# General Education

DFT	Drafting Technology 103/any 105 module/ 150/251/any 251 module/any 254 module/256AA
ECH	Early Childhood Education 238
EEE	Electrical Engineering 120
ELE	Electronic 131/181/241/243/245/281
ELT	Electronic Technology 131/241/243
ENG	English 100AE
ENV	Environmental Sciences 119
FON	Food & Nutrition 100/100AA/100AC/100AD
GBS	General Business 221
GPH	Physical Geography 220
HRM	Hotel Restaurant Management 126
JAS	Justice & Government Agencies Admin 225
JRN	Journalism 133
LAS	Paralegal Studies 229
MAT	Mathematics 206
MET	Manufacturing Technology 264
MTC	Music Theory/Composition 180/191
NET	Networking Technology 181/181AA
OAS	Office Automation Systems 111AA/111AB/113/ 119/130DK/135DK/235DK
PSY	Psychology 230
RTR	Realtime Reporting 101/102
SBS	Small Business 211
SMT	Semiconductor Manufacturing Technology 150
SWU	Social Work 225
TVL	Travel Agent Technology 203
VPT	Video Production Technology 106

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

### Humanities and Fine Arts (9 credits)

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

AIS	American Indian Studies 213
AJS	Administration of Justice Studies 123
ARH	Art Humanities Any ARH Course(s)
ASB	Anthropology 211/214/220/222/223/253
CCS	Chicana and Chicano Studies 101
CNS	Construction 101
COM	Communication 241
DAH	Dance Humanities 100/201/250
EDU	Education 291**/292/294
ENG	English 200/213/218
ENH	English Humanities Any ENH Course(s)
FRE	French 265
HCR	Health Care Related 210
HIS	History 101/102/103/108/111/113/114/243/253/ 254/275
HUM	Humanities Any HUM course(s) (EXCEPT 108, 120, 203, 207, 225)
INT	Interior Design 120/225
LAT	Latin 201/202
MHL	Music: History/Literature

140/143/145/146/153/155/242	PHI	Philosophy Any PHI Course(s)
	REL	Religious Studies Any REL Course(s) (EXCEPT 213, 271)
	SLC	Studies in Language & Culture 201
	SPA	Spanish 241/242/265/266
	SPH	Spanish Humanities 245
	SSH	Sustainability/Social Science and Humanities 111
	STO	Storytelling 292/294
	THE	Theater 111/205/206/210
	THP	Theater/Performance/Production 241
	WST	Women's Studies 209/284/285/290

### Social and Behavioral Sciences (9 credits)

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

AFR	African American Studies 202
AIS	American Indian Studies 101/140/141/160/170
AJS	Administration of Justice Studies 101/119/200/ 225/258/259/270
ASB	Anthropology 102/202/211/222/223/226/252
ASM	Anthropology 104/275
CFS	Child/Family Studies 157/159/176/205/253/259
COM	Communication 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
ENG	English 213
EMT	Emergency Medical Technology 258
FOR	Forensic Science 275
FSC	Fire Science Technology 258
FUS	Future Studies 101
GCU	Cultural Geography 102/121/122/141
HES	Health Science 100
HIS	History any HIS Course(s) (EXCEPT 111, 135, 170, 203, 251, 252)
IBS	International Business 109
MCO	Mass Communications 120
POS	Political Science Any POS course(s)
PSY	Psychology 101/123/132/156/157/215/218/225/ 235/ 240/241/243/245/250/258/260/266/ 270/277/280/292
REC	Recreation 120
SBU	Society and Business 200
SLC	Studies in Language & Culture 201
SOC	Sociology Any SOC course(s) (EXCEPT 143, 157, 215, 245, 253, 265, 270)
SWU	Social Work 102/171/258/292
WED	Wellness Education 110
WST	Women's Studies 100/110/160/161
YAQ	Yaqui Indian History and Culture 100



# General Education

## **Natural Sciences (7-8 credits)**

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

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

## **Literacy and Critical Inquiry (3 credits)**

AIS	American Indian Studies 213
BIO	Biology 294
COM	Communication 222/225/241
CUL	Culinary Arts 223
CRE	Critical Reading 101
ENG	English 111/200/215/216/217/218
ENH	English Humanities 254/255
GBS	General Business 233
GPH	Physical Geography 211
HUM	Humanities 225/250/251
IFS	Information Studies 101
JRN	Journalism 201/234
MCO	Mass Communications 220
PHI	Philosophy 103/106/218
POS	Political Science 115
PSY	Psychology 290AB/290AC
REL	Religious Studies 203/205
THE	Theater 220
THP	Theater Performance/Production 241

## **Elective Courses (15-16 credits)**

May select courses from prefixes already chosen for General Education Distribution requirements in order to develop depth in one or more subject areas

## Associate in Science (AS) Degree

### 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) MCCCDC 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 MCCCDC 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](http://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 AGECS 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 AGECS 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 AGECS.

- The General Education Requirements for AGECS 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 AGECS 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 AGECS.
- General Education Courses can satisfy multiple areas within the degree simultaneously (AGECS Core Area, AGECS Awareness Area, MCCCDC Additional Requirements, or lower-division courses applicable to the major).
- Effective fall 2000, the course evaluation and/or general education designation as listed in the Arizona Course Equivalency Guide (CEG) 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. 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 AGECS requirements must be listed in the Course Equivalency Guide within the Arizona Course Applicability System 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. See the list titled MCCCDC Courses That Can Be used to Satisfy MCCCDC AGECS-A, AGECS-B, and/or AGECS S for specific course information via the following website: [www.maricopa.edu/academic/ccta/](http://www.maricopa.edu/academic/ccta/)
- Courses completed at one of the Maricopa Community Colleges to meet the General Electives requirement. All courses used to satisfy electives must be transferable to the university or universities to which the student plans to transfer, as elective credit or better. For appropriate course selection, students should consult with an advisor.

# General Education

- 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.

## Degree Requirements

The 60-64 semester credits required for the Associate in Science follow. See the list titled MCCCDCourses That Can Be used to Satisfy MCCCDCourses AGEC-A, AGEC-B, and/or AGEC S for specific course information via the following website: [www.maricopa.edu/academic/ccta/](http://www.maricopa.edu/academic/ccta/) This list identifies the courses in alpha-order by prefix as well as the Core Areas and Awareness Areas where the course will apply. For purposes of clarifying requirements in the Mathematics and Natural Sciences areas on the list and the AGEC requirements, an A, B, and/or S character may follow the [MA], [SQ], [SG] general education designations and refers to the specific AGEC.

### I. MCCCDCourses General Education

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

#### MCCCDCourses 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 and Behavioral Sciences) OR L (Literacy and Critical Inquiry) and HU (Humanities and Fine Arts) 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,  
OR  
If pursuing a degree at ASU in Life Sciences select  
MAT251 Calculus for Life Science.

- d. Humanities and Fine Arts [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 and 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.

- 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.

# General Education

## 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 U.S. [C]  
AND  
Historical Awareness [H]  
OR  
Global Awareness [G]

## 3. MCCC 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 MCCC 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)

### 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](http://www.aztransfer.com)

Students must select MCCC courses that are transferable to the university or universities to which the student plans to transfer, as elective credit or better according to the Arizona CEG within the AZCAS. 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**

## Associate of Applied Science (AAS) Degree, General Education Requirements

### 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. The exception is the Nursing program. For those shared programs with less than six credit hours, the total hours for the program must be completed at the college awarding the certificate. The 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;

- 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 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 102/103AA&103AB/120/121/122/122AA/122AB/122AC/126/140/141/142/150/151/151AA/151AB/151AC/151AD/152/156//172/182/187/206/212/213/220/221/230/231/240/241/261/262/276/277 equivalent course/ Satisfactory completion of a higher level mathematics course

### GENERAL EDUCATION DISTRIBUTION AREAS

#### (9-10 credits)

#### Humanities and Fine Arts (2-3 credits)

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

AIS American Indian Studies 213  
 AJS Administration of Justice Studies 123  
 ARH Art Humanities Any ARH Course(s)  
 ASB Anthropology 211/214/220/222/223/253  
 CCS Chicana and Chicano Studies 101  
 CNS Construction 101  
 COM Communication 241  
 DAH Dance Humanities 100/201/250  
 EDU Education 291\*\*/292/294  
 ENG English 200/213/218



# General Education

ENH	English Humanities Any ENH Course(s)
FRE	French 265
HCR	Health Care Related 210
HIS	History 101/102/103/108/111/113/114/243/253/254/ 275
HUM	Humanities Any HUM course(s) (EXCEPT 120, 203, 207, 225)
INT	Interior Design 120/225
LAT	Latin 201/202
MHL	Music: History/Literature 140/143/145/146/153/155/242
PHI	Philosophy Any PHI Course(s)
REL	Religious Studies Any REL Course(s) (EXCEPT 271)
SLC	Studies in Language & Culture 201
SPA	Spanish 241/242/265/266
SPH	Spanish Humanities 245
STO	Storytelling 292/294
THE	Theater 111/205/206/210
THP	Theater/Performance/Production 241
WST	Women's Studies 209/284/285/290

## Social and Behavioral Sciences (3 credits)

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

AIS	American Indian Studies 101/140/141/160/170
AFR	African American Studies 202
AJS	Administration of Justice Studies 101/200/ 225/258/259/270
ASB	Anthropology 102/202/211/222/223/226/252
ASM	Anthropology 104/275
CFS	Child/Family Studies 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 102/121/122/141/221
HES	Health Science 100
HIS	History Any HIS course(s) (EXCEPT 111,135,170, 203, 251, 252)
IBS	International Business 109
MCO	Mass Communications 120
POS	Political Science Any POS course(s)
PSY	Psychology 101/123/125/132/156/215/218/ 225/235/240/241/243/245/250/258/260/266/ 270/277/280/292
REC	Recreation 120
SBU	Society and Business 200
SLC	Studies in Language & Culture 201

SOC	Sociology Any SOC course(s) (EXCEPT 143, 157,215, 245, 253, 265, 270)
SWU	Social Work 102/171/258/292
WED	Wellness Education 110
WST	Women's Studies 100/110/160/161
YAQ	Yaqui Indian History and Culture 100

## Natural Sciences (4 credits)

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

AGS	Agricultural Science 164
ASB	Anthropology (Soc/Behv Science) 231
ASM	Anthropology (Science/Math) 104/265
AST	Astronomy 101/102/111/112/113/114
BIO	Biology 100/101/102/105/107/108/109/149AN/ 145/156/160/181/182/201/202/205/241/245
CHM	Chemistry 107&107LL/130&130LL/130AA/150AA/ 150&151LL/151&151LL/151AA/152&152LL/152AA/ 154&154LL/230&230LL
ENV	Environmental Science 101
FON	Food and Nutrition 241&241LL
FOR	Forensic Science 105/106
GLG	Geology Any GLG course(s) (EXCEPT 105)
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

## Academic Certificate (AC)

### **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 and Fine Arts, Social and 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;
- is for the most part college specific

# Academic Certificate

## 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)

Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR
STO282AA Volunteerism for Education: A Service Learning Experience	1				
EDU/HUM/STO292 The Art of Storytelling	3				
EDU/ENH/STO294 Multicultural Folktales	3				

### II. REQUIRED COURSES (9 CREDITS) PLEASE CHOOSE A TRACK FROM BELOW TO COMPLETE THE REQUIRED COURSES IN CONSULTATION WITH AN ADVISOR

TRACK:	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR

### REQUIRED COURSES: STUDENTS MUST SELECT ONE OF THE FOLLOWING TRACKS

#### TRACK 1: PERFORMANCE EMPHASIS (9 CREDITS)

STO297 Creating and Telling Personal Stories	3
<b>Students should select a total of 6 credits in consultation with an advisor from the following:</b>	
COM/THP241 Performance of Literature	3
COM263 Elements of Intercultural Communication	3
DAH201 World Dance Perspectives	3
HUM250 Ideas & Values in the Humanities	3
HUM120 Cultural Viewpoints in the Arts	3
STO286 Using Storytelling in a Variety of Settings	3
STO288 Telling Sacred Stories from Around the World	3

#### TRACK 2: DIGITAL EMPHASIS (9 CREDITS)

ART/ADA173 Computer Art	3
<b>Students should select a total of 6 credits in consultation with an advisor from the following:</b>	
ART131 Photography I	3
ADA/ART177 Computer-Photographic Imaging	3
ART298AC Special Projects	3
HUM250 Ideas & Values in the Humanities	3
HUM120 Cultural Viewpoints in the Arts	3
STO286 Using Storytelling in a Variety of Settings	3
STO288 Telling Sacred Stories from Around the World	3
STO297 Creating and Telling Personal Stories	3

# Academic Certificate

## Advanced Interdisciplinary Storytelling (AC-6218)

**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)

Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR
STO293 The Art of Storytelling II	3				

### II. REQUIRED COURSES (12 CREDITS) PLEASE CHOOSE A TRACK FROM PAGE 2 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 (12 CREDITS)

ARH145 History of American Indian Art	3
ARH201 Art of Asia	3
ARH217 Mexican Art History	3
ART111 Drawing I	3
CCS/ENG212 The Mexican American Novel	3
COM243 Interpreters Theatre	3
ENG210 Creative Writing	3
ENG217 Personal and Exploratory Writing	3
ENG117 Rap Literature: The Oral Tradition	3
ENH205 Asian American Literature	3
ENG259 American Indian Literature	3
HUM/WST209 Women and Films	3
MHL143 Music in World Cultures	3
MHL147 Music of African American Cultures	3
MUP225 Class Guitar I	2
STO289AA Using Storytelling in Educational Settings	1
STO289AB Using Storytelling in Business Settings	1
STO289AC Using Storytelling in Healing Settings	1
THP112 Acting 1	3

# Academic Certificate

## Advanced Interdisciplinary Storytelling (AC-6218) continued...

TRACK 2: DIGITAL EMPHASIS (12 CREDITS)	
ENG217 Personal and Exploratory Writing, or HUM107 Humanities Through the Arts	3
<b>Students should select a total of 6 credits in consultation with an advisor from the following:</b>	
ADA/ART112 Two-Dimensional Design	3
ARH120AA Understanding Art: Black Art	2
ARH145 History of American Indian Art	3
ARH201 Art of Asia	3
ARH217 Mexican Art History	3
HUM/WST209 Women and Films	3
MHL143 Music in World Culture	3
MHL147 Music of African American Culture	3
STO289AA Using Storytelling in Educational Settings	1
STO289AB Using Storytelling in Business Settings	1
STO289AC Using Storytelling in Healing Settings	1
<b>Students should select a total of 3 credits in consultation with an advisor from the following:</b>	
ART111 Drawing I	3
ENG210 Creative Writing	3
MHL156 Music in Latin American and the Caribbean	3
MHL140 Survey of Music History	3
MHL145 American Jazz & Popular Music	3
MHL155 Survey of American Music	3
MUP225 Class Guitar I	3

## Creative Writing (AC-6224)

**Description:** The Academic Certificate (AC) in Creative Writing 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)					
Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR
CRW150 Introduction to Creative Writing, or CRW155 Bilingual Creative Writing <i>ENG210 may be substituted for CRW150 with permission of Program Director</i>	3				
CRW200 Readings for Writers ( <i>must be repeated for a total of 2 credits</i> )	2				
CRW201 Portfolio	1				
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					
Series 1 Course #1:	3				
Series 1 Course #2:	3				
Series 2: Students must complete two (2) of the following courses for a total of six (6) credits: CRW202, CRW203, CRW204, CRW220, CRW260, CRW, 261, CRW270, CRW271, CRW272, CRW273, CRW274, CRW275, CRW281, CRW290, CRW291					
Series 2 Course #1:	3				
Series 2 Course #2:	3				
Series 2 Course #3:	3				
II. RESTRICTED ELECTIVES (3 CREDITS) STUDENTS SHOULD SELECT FROM THE FOLLOWING COURSE IN CONSULTATION WITH AN DEPARTMENT ADVISOR.					
COM243, CRW+++, ENG217, ENG219, ENG235, ENG236, ENG/THE260, ENH+++, HUM/THE210, THE220, COM/THP241					

# Academic Certificate

## Chicana and Chicano Studies (AC-6230)

**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)					
Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR
CCS101 Chicana and Chicana Studies	3				
HIS109 Mexican American History and Culture	3				
SPH245 Hispanic Heritage in the Southwest	3				
II. RESTRICTED ELECTIVES (3-4 CREDITS) STUDENTS SHOULD SELECT FROM THE FOLLOWING COURSE IN CONSULTATION WITH AN DEPARTMENT ADVISOR.					
ENH112, HIS145, HUM213, SPA101, SPA102, SPA103, SPA104, SPA201, SPA202, SPA203, SPA204					

## 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					
Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR
ENG101 First Year Composition, OR ENG107 First Year Composition for ESL	3				
II. REQUIRED COURSES (7 CREDITS)					
Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR
PHI216 Environmental Ethics	3				
BIO105 Environmental Biology, OR GLG110 Geological Disasters and the Environment, AND GLG111 Geological Disasters and the Environment Lab	4				
III. RESTRICTED ELECTIVES (9 CREDITS)					
Students will choose 2 different courses from the following list					
ECN263 Economics of Nature Resources, Population and the Environment	3				
ENH206 Nature and Environmental Literature	3				
ENH260 Literature of the Southwest	3				
HUM201 Humanities: Universal Themes	3				
REC150AB Outdoor Adventure Skills	3				
SBU200 Society and Business	3				
Students will choose 1 course from the following list					
HIS110 World History to 1500	3				
HIS111 World History 1500 to Present	3				
HUM250 Ideas and Values in the Humanities	3				
PHI104 World Philosophy	3				
POS120 World Politics	3				
PSY132 Psychology and Culture	3				
SOC101 Introduction to Sociology	3				

## General Graduation Requirements

All students are required to complete the degree and/or certificate requirements as approved by the MCCCCD 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 MCCCCD college /center.
8. have paid required degree or certificate application fee.

See fee schedule for charges.

See Graduation with Honors for information on honors designation

### Certificates/Degrees

The Maricopa Community Colleges offer Certificates of Completion as well as Associate Degrees, 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 MCCCCD 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.

# Graduation Requirements

## Licensure Disclaimer

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

## MCCCD General Education Statement

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

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

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

productively

- Work cooperatively and respectfully with others to serve their communities

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

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

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

Effective Fall 2000 the course evaluation and/or general education designation as listed in the Arizona 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.



# Graduation Requirements

## Catalog Under Which a Student Graduates

Students maintaining continuous enrollment at any public Arizona community college or university may graduate according to the requirements of the catalog in effect at the time of initial enrollment or according to the requirements of any single catalog in effect during subsequent terms of continuous enrollment. Students may maintain continuous enrollment whether attending a single public community college or university in Arizona or transferring among public institutions in Arizona while pursuing their degrees.

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

### EXAMPLE A:

Admitted & Earned Course Credit at a Public Community College or University	Fall '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)

\*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	College or University (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.



# Training and Career Programs



## Occupational Programs

*Associate in Applied Science (AAS) Degrees*

Accounting .....	59
Administration of Justice.....	61
Automation Technology.....	63
Banking and Finance.....	65
Computer Applications Technology.....	68
Culinary Studies.....	71
Emergency Response and Operations .....	74
Engineering Technology.....	76
Fire Science Technology.....	77
Hospitality/Hotel Management .....	82
Linux Networking Administration.....	84
Microsoft Networking Technology .....	90
Networking Technology: Cisco.....	94
Nursing .....	98
Organizational Management.....	100
Power Plant Technology .....	101
Programming and System Analysis .....	104
Radiation Protection Technology .....	105
Retail Management .....	108
Speech Language Pathology Assistant .....	110
Strength, Nutrition & Personal Training .....	112
Teacher Assisting.....	113

## Occupational Certificates

*Certificate of Completion (CCL)*

Accounting .....	60
Administration of Justice.....	62
Automation Technology: Level I .....	62
Baking and Pastry.....	64
Banking and Finance.....	66
Basic Culinary Studies.....	67
Building Inspection .....	67
Computer Applications Technology.....	69
Computer Hardware and Desktop Support .....	70
Culinary Studies.....	72
Customer Service Management .....	72
Data Entry Clerk.....	73
Desktop Publishing .....	73
Driver Operator .....	74
Evidence Technology .....	77
Fire Officer Leadership.....	78
Fire Science.....	78
Firefighter Operations .....	79
Foundations of Student Services.....	79
General Office Secretary .....	80
Gifted Education.....	80

Hospitality/Hotel Management .....	81
Linux Associate.....	83
Linux Networking Administration.....	86
Linux Professional .....	88
Microsoft Desktop Support Technology.....	89
Microsoft Server Administration.....	92
Microsoft Certified Information Technology Professional (MCITP) Administrator .....	92
Networking Administration: Cisco .....	93
Networking Technology: Cisco.....	96
Nurse Assisting.....	97
Organizational Leadership.....	99
Practical Nursing.....	98
Programming and System Analysis .....	105
Public Works Leadership.....	105
Radiation Protection Technology .....	106
Receptionist .....	107
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Small Business Management .....	109
Speech Language Pathology Assistant .....	111
Web Design .....	114
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## SouthWest Skill Center Certificate Programs

Distribution Logistics Technician.....	117
Emergency Medical Technician.....	118
Industrial Electronics Technician .....	119
Medical Assistant.....	120
Medical Billing and Coding.....	122
Nurse Assistant.....	125
Phlebotomy .....	124
Practical Nurse.....	126
Spanish Medical Interpreter .....	123

## 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.

*Degrees and Certificates Offered by the Estrella Mountain Community College are viewable at [maricopa.edu/academic/ccta/curric/progem.php](http://maricopa.edu/academic/ccta/curric/progem.php)*

# Certificate & Degree Programs

## Accounting - Associate of 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.

<b>+ PROGRAM PREREQUISITES: CRE101 OR EQUIVALENT BY ASSESSMENT</b>						
<b>I. GENERAL EDUCATION CORE REQUIREMENTS (22-24 CREDITS)</b>						
Must earn "C" or higher in all courses required within the program	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR	
ENG101 or ENG107	3					
ENG102 or ENG108	3					
Oral Communication*	3					
CRE101 (Met by program prerequisite)	0					
MAT120, or MAT121, or MAT122	3-5					
Natural Science*	4					
Humanities/Fine Arts*	2-3					
ECN211, or ECN212, or SBU200	3					
<b>II. REQUIRED COURSES (23 CREDITS)</b>						
ACC105 Payroll, Sales and Property Taxes	3					
ACC115 Computerized Accounting	2					
ACC121 Income Tax Preparation, or ACC221 Tax Accounting	3					
BPC/CIS114DE Excel Spreadsheet	3					
CIS105 Survey of Computer Information Systems	3					
GBS151 Introduction to Business	3					
GBS205 Legal, Ethical and Regulatory Issues in Business	3					
GBS233 Business Communication	3					
<b>III. REQUIRED COURSES (6-9 CREDITS) PLEASE CHOOSE 6-9 CREDITS FROM THE REQUIRED COURSE OPTIONS BELOW</b>						
<b>IV. RESTRICTED ELECTIVES (9 CREDITS) STUDENTS SHOULD SELECT FROM THE FOLLOWING COURSES IN CONSULTATION WITH A DEPARTMENT ADVISOR.</b> (CANNOT BE SHARED WITH REQUIRED COURSES): ANY ACC COURSE, BPC/CIS117DM, GBS131, GBS207, GBS220						
<b>REQUIRED COURSE OPTIONS (6-9 CREDITS) CHOOSE 1 GROUP OF COURSES FROM BELOW</b>						
ACC111 Accounting Principles I, and ACC230 Uses of Accounting Information I, and ACC240 Uses of Accounting Information II						9
ACC230 Uses of Accounting Information I, and ACC240 Uses of Accounting Information II, and ACC250 Introductory Accounting Lab						7
ACC111 Accounting Principles I, and ACC112 Accounting Principles II, and ACC212 Managerial Accounting						9
ACC211 Financial Accounting, and ACC212 Managerial Accounting						6

**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 page 48 for approved AAS courses).*

# Certificate & Degree Programs

## Accounting - Certificate of Completion (5565)

**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.

<b>I. REQUIRED COURSES (23-26 CREDITS)</b>					
Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR
ACC105 Payroll, Sales and Property Taxes	3				
ACC115 Computerized Accounting	2				
BPC/CIS114DE Excel Spreadsheet	3				
CIS105 Survey of Computer Information Systems	3				
GBS151 Introduction to Business	3				
GBS205 Legal, Ethical and Regulatory Issues in Business	3				
<b>II. REQUIRED COURSES (6-9 CREDITS) PLEASE CHOOSE 6-9 CREDITS FROM THE REQUIRED COURSE OPTIONS BELOW</b>					

<b>REQUIRED COURSE OPTIONS (6-9 CREDITS) CHOOSE 1 GROUP OF COURSES FROM BELOW</b>	
ACC111 Accounting Principles I, and ACC230 Uses of Accounting Information I, and ACC240 Uses of Accounting Information II	9
ACC230 Uses of Accounting Information I, and ACC240 Uses of Accounting Information II, and ACC250 Introductory Accounting Lab	7
ACC111 Accounting Principles I, and ACC112 Accounting Principles II, and ACC212 Managerial Accounting	9
ACC211 Financial Accounting, and ACC212 Managerial Accounting	6

**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 page 48 for approved AAS courses).*



## Administration of Justice - Associate of 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, AJS275, AJS107, and AJS205 through the “credit by evaluation” process. Students without prior experiences in the field of law enforcement should consult with the program director.

<b>I. GENERAL EDUCATION CORE REQUIREMENTS (25 CREDITS)</b>						
Must earn “C” or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR	
First-Year Composition*	3					
First-Year Composition*	3					
Oral Communication*	3					
Critical Reading*	3					
Mathematics*	3					
Natural Science*	4					
Humanities/Fine Arts*	3					
Social/Behavior Science*	3					
<b>II. REQUIRED COURSES (33 CREDITS)</b>						
AJS101 Introduction to Criminal Justice	3					
AJS109 Substantive Criminal Law	3					
AJS123 Ethics and the Administration of Justice, or PAD101 Survey of Public Administration	3					
AJS131 Police Management Techniques I	3					
AJS132 Police Management Techniques II	3					
AJS211 Police Planning	3					
AJS225 Criminology	3					
ASJ249 Community Policing	3					
AJS260 Procedural Criminal Law	3					
AJS270 Community Relations	3					
AJS275 Criminal Investigations I	3					
<b>III. RESTRICTED ELECTIVES (6 CREDITS) STUDENTS SHOULD SELECT FROM THE FOLLOWING COURSES IN CONSULTATION WITH A DEPARTMENT ADVISOR.</b>						
AJS110, AJS124, AJS133, AJS200, AJS201, AJS205, AJS210, AJS212, AJS220, AJS230, AJS107						
	3					
	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](http://estrellamountain.edu/academics/programs).**

*\*Courses must meet AAS General Education Requirements (refer to page 48 for approved AAS courses).*

# Certificate & Degree Programs

## Administration of Justice - Certificate of Completion (5137)

**Description:** The Administration of Justice curriculum 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.

I. REQUIRED COURSES (33 CREDITS)					
Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR
AJS101 Introduction to Criminal Justice	3				
AJS109 Substantive Criminal Law	3				
AJS123 Ethics and the Administration of Justice or PAD101 Survey of Public Administration	3				
AJS131 Police Management Techniques I	3				
AJS132 Police Management Techniques II	3				
AJS211 Police Planning	3				
AJS225 Criminology	3				
AJS249 Community Policing	3				
AJS260 Procedural Criminal Law	3				
AJS270 Community Relations	3				
AJS275 Criminal Investigations I	3				

## Automation Technology Level I - Certificate of Completion (5000)

**Description:** The Certificate of Completion (CCL) in Automation Technology Level I program introduces the student to automated systems used by companies to produce a variety of products. The emphasis is on the student awareness of the many issues a company must deal with when employing automation and the issues related to control of the equipment.

+ ADMISSION CRITERIA: MATH ASSESSMENT SCORE ON DISTRICT PLACEMENT EXAM PLACING STUDENTS INTO MAT090 OR HIGHER, OR PERMISSION OF DEPARTMENT					
I. REQUIRED COURSES (17 CREDITS)					
Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR
ATP101 Introduction to Automated Systems and Robotics	2				
ATP105 Engineering Documentation	2				
ATP110 Basic Manufacturing Processes	2				
CIS105 Survey of Computer Information Systems	3				
FAC/GTC/MIT/OSH106 Industrial Safety	2				
COM100 Introduction to Human Communication	3				
ENG101 First Year Composition	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](http://estrellamountain.edu/academics/programs).**

*\*Courses must meet AAS General Education Requirements (refer to page 48 for approved AAS courses).*



## Automation Technology - Associate of Applied Science (3000)

**Description:** The Associate in Applied Science (AAS) in Automation Technology prepares students to work with a variety of automated electro-mechanical, product assembly, process control, and product distribution systems that use programmable controls and other methodologies to accomplish system management. These systems utilize, but are not limited to, robotic, mechanical, hydraulic, pneumatic, electronic, optical, and thermal devices. The Automation Technician will gain the skills through this program to define, integrate, install, program, and maintain complex control systems.

+ ADMISSION CRITERIA: MATH ASSESSMENT SCORE ON DISTRICT PLACEMENT EXAM PLACING STUDENTS INTO MAT090 OR HIGHER, OR PERMISSION OF DEPARTMENT					
<b>I. GENERAL EDUCATION CORE REQUIREMENTS (25-27 CREDITS)</b>					
Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR
ENG101	3				
ENG111 (ENG102 acceptable only if ENG111 is not available)	3				
COM110	3				
CRE101 or equivalent by assessment	3				
MAT120, MAT121, or MAT122	3-5				
Natural Science*	4				
Humanities/Fine Arts*	3				
SOC101	3				
<b>II. REQUIRED COURSES (30 CREDITS)</b>					
ATP101 Introduction to Automated Systems and Robotics	2				
ATP105 Engineering Documentation	2				
ATP110 Basic Manufacturing Processes	2				
ATP130 DC Circuit Analysis	2				
ATP135 AC Circuit Analysis	2				
ATP150 Fluid Power I-Hydraulics, Pneumatics, and Vacuum Concepts	2				
ATP175 Introduction to Motors and Motor Controls	2				
ATP180 PLC I-Introduction to Ladder Logic	2				
ATP200 Sensors and Measurement	2				
ATP215 Digital and Analog Circuits	2				
ATP222 Servo Systems	2				
ATP290 Lean Techniques and Six Sigma	2				
CIS105 Survey of Computer Information Systems	3				
FAC/GTC/MIT/OSH106 Industrial Safety	2				
<b>III. RESTRICTED ELECTIVES (9-11 CREDITS) STUDENTS SHOULD SELECT ONE TRACK, AND TAKE THE REQUIRED ELECTIVES THEREIN.</b>					
<b>TRACK 1 - Process Control Systems and Programming (9 credits)</b>					
ATP160 PLC II-HMI Interfaces and Function Block Programming					2
ATP245 Introduction to Solid Modeling - Solidworks					3
ATP251 Fluid Power II-Automation Applications					2
ATP260 Automation System Integration I					2
<b>TRACK 2 - Electromechanical and Hybrid Systems (11 credits)</b>					
ATP235 CNC Programming					2
ATP245 Introduction to Solid Modeling - Solidworks					3
ATP251 Fluid Power II-Automation Applications					2
ATP260 Automation System Integration I					2
ATP265 Automation System Integration II					2

**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 page 48 for approved AAS courses).*

# 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.

+ **ADMISSION CRITERIA:** Formal application and interview with Program Director and Student must meet with One Stop Student Specialist for Culinary Studies

+ **PROGRAM PREREQUISITES:** ENG091, RDG091, AND MAT090, 091, OR 092

### I. REQUIRED COURSES (23 CREDITS)

Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR
CUL113 Commercial Baking Techniques	3				
CUL127 Commercial Baking: Classical Desserts	3				
HRM244 Quality Sanitation Management	3				
CUL137 Specialty Breads and Breakfast Pastry	3				
CUL217 Commercial Wedding Cake Production	3				
CUL219 Professional Pastry Techniques	3				
CUL119 Baking Theory and Retail Operations	3				
HRM126 Food Service Cost Systems	2				

**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 page 48 for approved AAS courses).*



# Certificate & Degree Programs

## Banking and Finance - Associate of Applied Science (3091)

**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 Associate in Applied Science (AAS) in Banking and Finance career program has been developed in cooperation with the Central Arizona Chapter of the American Institute of Banking and the Institute of Financial Education to prepare qualified men and women for entry or advancement in the banking profession. A Certificate of Completion (CCL) is also available.

+ PROGRAM PREREQUISITES: CRE101 OR EQUIVALENT BY ASSESSMENT						
I. GENERAL EDUCATION CORE REQUIREMENTS (23-24 CREDITS)						
Must earn "C" or higher in each course in the Required Courses and Restricted Electives areas	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR	
ENG101 or ENG107	3					
ENG102 or ENG108	3					
COM100 or COM230	3					
CRE101 (Met by program prerequisite)	0					
MAT150 or MAT151	4-5					
Natural Science*	4					
Humanities/Fine Arts*	2-3					
ECN211 or ECN212 or SBU200	3					
II. REQUIRED COURSES (36 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	9					
CIS105 Survey of Computer Information Systems	3					
GBS103 Principles of Banking	3					
GBS131 Business Calculations	3					
GBS151 Introduction to Business	3					
GBS205 Legal, Ethical, and Regulatory Issues in Business	3					
GBS206 Business Law (UCC)	3					
GBS233 Business Communication	3					
GBS261 Investments I	3					
GBS294 Consumer Credit	3					
III. RESTRICTED ELECTIVES (6 CREDITS) STUDENTS SHOULD SELECT FROM THE FOLLOWING COURSES IN CONSULTATION WITH A DEPARTMENT ADVISOR.						
ACC270AC, GBS270AC, CIS114DE, CIS117DM, GBS114, MKT267, OR MKT271						
	3					
	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](http://estrellamountain.edu/academics/programs).**

\*Courses must meet AAS General Education Requirements (refer to page 48 for approved AAS courses).



## 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.

+ PROGRAM PREREQUISITES: ENG101 OR EQUIVALENT COURSE					
I. REQUIRED COURSES (33-36 CREDITS)					
Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR
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	6-9				
CIS105 Survey of Computer Information Systems	3				
GBS103 Principles of Banking	3				
GBS131 Business Calculations	3				
GBS151 Introduction to Business	3				
GBS205 Legal, Ethical, and Regulatory Issues in Business	3				
GBS206 Business Law (UCC)	3				
GBS233 Business Communication	3				
GBS261 Investments I	3				
GBS294 Consumer Credit	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](http://estrellamountain.edu/academics/programs).**

*\*Courses must meet AAS General Education Requirements (refer to page 48 for approved AAS courses).*

# Certificate & Degree Programs

## Basic Culinary Studies - Certificate of Completion (5155)

**Description:** The Basic Culinary Studies Certificate of Completion (CCL) 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.

+ **PROGRAM NOTE:** Students with transfer credits should contact the Culinary Studies Department at 623.935.8862.

**ADMISSION CRITERIA:** Formal application and interview with Program Director and Student must meet with One Stop Student Specialist for Culinary Studies

+ **PROGRAM PREREQUISITES:** ENG091, RDG091, AND MAT090, 091, OR 092

### I. REQUIRED COURSES (16 CREDITS)

Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR
HRM140 Food Production Concepts	3				
CUL107 Garde Manger	3				
CUL117 Catering - Planning and Production	1				
CUL105 Principles and Skills for Professional Cooking	3				
CUL113 Commercial Baking Techniques	3				
HRM244 Quality Sanitation Management	3				

## Building Inspection - Certificate of Completion (5554)

**Description:** The Certificate of Completion (CCL) in Building Inspection prepares the student for a career in public/governmental agencies as an inspector in various areas of the building inspection field. The student gains the knowledge and develops skills necessary to perform as a building inspector in general building code compliance inspection or in specific areas of code compliance, such as mechanical, electrical, plumbing, etc.

### I. REQUIRED COURSES (21 CREDITS)

Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR
BLT121 Electrical Codes	3				
BLT127 Plumbing Codes	3				
BLT128 Mechanical Codes	3				
BLT262 Introduction International Residential Code (IRC)	3				
BLT263 Building Codes	3				
CNS175 Working Drawing Analysis: Blueprint Reading	3				
CNS282AC Volunteerism for Construction, or CNS290AC Construction Internship, or CNS296WC Cooperative Education, or CNS298AC Special Projects	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](http://estrellamountain.edu/academics/programs).**

*\*Courses must meet AAS General Education Requirements (refer to page 48 for approved AAS courses).*

# Certificate & Degree Programs

## Computer Applications Technology - Associate of 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.

<b>I. GENERAL EDUCATION CORE REQUIREMENTS (25 CREDITS)</b>					
Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR
ENG101	3				
ENG111 (ENG102 acceptable if ENG111 is not available)	3				
COM100 or COM110 or COM225 or COM230	3				
Critical Reading*	3				
MAT102	3				
Natural Science*	4				
Humanities/Fine Arts*	3				
ECN212	3				
<b>II. REQUIRED COURSES (30 CREDITS) BPC/CIS120++ COURSES CANNOT BE USED TO SATISFY BOTH "REQUIRED COURSES" AND RESTRICTED ELECTIVES" AREAS.</b>					
BPC/CIS114++ Electronic Spreadsheet (Any Module)	3				
BPC/CIS117++ Database Management (Any Module)	3				
BPC/CIS118++ Desktop Presentation Software (Any Module)	3				
BPC/CIS120++ Microcomputer Graphics (Any Module)	3				
BPC/CIS121AE Windows Operating System: Level I	1				
BPC/CIS133AA Internet/Web Development Level I-A, and BPC/CIS133BA Internet/Web Development Level II-B, and BPC/CIS133CA Internet/Web Development Level III-C, or BPC/CIS133DA Internet/Web Development Level I	3				
BPC/OAS135++ Word Processing Software (Any Module)	2				
BPC138++ Desktop Publishing (Any Module)	3				
CIS105 Survey of Computer Information Systems	3				
CIS190 Introduction to Local Area Networks	3				
OAS120 Financial Record Keeping	3				
<b>III. RESTRICTED ELECTIVES (9 CREDITS) STUDENTS SHOULD SELECT FROM THE FOLLOWING COURSES IN CONSULTATION WITH A DEPARTMENT ADVISOR.</b>					
BPC/CIS120DB, BPC/CIS120DC, BPC/CIS120DF, BPC170, CIS/MMT140, CIS150, CIS159, CIS233DA, OAS101AA or OAS102, TQM/CSM101, CIS250					

**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 page 48 for approved AAS courses).



## 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.

<b>I. REQUIRED COURSES (20 CREDITS)</b>					
	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR
Must earn "C" or higher in all courses within the program					
BPC/CIS114++ Electronic Spreadsheet (Any Module)	3				
BPC/CIS117++ Database Management (Any Module)	3				
BPC/CIS133AA Internet/Web Development Level I-A, and BPC/CIS133AB Internet/Web Development Level II-B, and BPC/CIS133AC Internet/Web Development Level III-C, or BPC/CIS133DA Internet/Web Development Level I	3				
BPC/OAS135++ Word Processing Software (Any Module)	2				
BPC138++ Desktop Publishing (Any Module)	3				
CIS105 Survey of Computer Information Systems	3				
OAS120 Financial Record Keeping	3				
<b>II. RESTRICTED ELECTIVES (6 CREDITS) STUDENTS SHOULD SELECT FROM THE FOLLOWING COURSES IN CONSULTATION WITH A DEPARTMENT ADVISOR.</b>					
BPC/CIS118 (any Module), BPC/CIS120DB, CIS120DC, BPC/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](http://estrellamountain.edu/academics/programs).**

*\*Courses must meet AAS General Education Requirements (refer to page 48 for approved AAS courses).*

# Certificate & Degree Programs

## 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 (22-25 CREDITS)**

Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR
BPC110 Computer Usage and Applications, or CIS105 Survey of Computer Information Systems	3				
CIS121AH Microsoft PowerShell/Command Line Operations, or CIS126DL Linux Operating System	3				
BPC170 Computer Maintenance I: A+ Essentials Prep	3				
BPC270 Computer Maintenance II: A+ Technician Prep	3				
CIS102DA Customer User Support	3				
CIS190 Introduction to Local Area Networks, or CNT140 Cisco Networking Basics, or MST140 Microsoft Networking Essentials	3-4				
MST150++ Microsoft Windows (any suffixed course)	3				
<b>II. RESTRICTED ELECTIVES (1-3 CREDITS) STUDENTS SHOULD SELECT FROM THE FOLLOWING COURSES IN CONSULTATION WITH A DEPARTMENT ADVISOR.</b>					
CIS290AA Internship (1), or CIS290AB Internship (2), or CIS290AC Internship (3)	1-3				
MST141 Enterprise Desktop Support Technician	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](http://estrellamountain.edu/academics/programs).**

*\*Courses must meet AAS General Education Requirements (refer to page 48 for approved AAS courses).*

# Certificate & Degree Programs

## Culinary Studies - Associate of 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 basic nutrition concepts and menu planning.

+ **PROGRAM NOTE:** Students with transfer credits should contact the Culinary Studies Department at 623.935.8862.

+ **ADMISSION CRITERIA:** Formal application and interview with Program Director and Student must meet with One Stop Student Specialist for Culinary Studies

+ **PROGRAM PREREQUISITES:** ENG091, AND RDG091, AND MAT090, OR 091, OR 092

### I. GENERAL EDUCATION CORE REQUIREMENTS (24-25 CREDITS)

Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR
ENG101 or ENG107	3				
ENG102 or ENG108	3				
Oral Communication*	3				
Critical Reading*	3				
MAT142 College Mathematics	3				
Natural Science*	4				
Humanities/Fine Arts*	2-3				
ECN211 or PSY101 or SOC101	3				

### II. REQUIRED COURSES (36 CREDITS)

FON100 Introductory Nutrition	3				
HRM126 Food Cost Systems	2				
HRM140 Food Production Concepts	3				
CUL113 Commercial Baking Techniques	3				
FON144 Gourmet Foods	3				
CUL107 Garde Manager	3				
CUL203 American Regional Cuisine	3				
CUL201 International Cuisines	3				
CUL117 Catering – Planning and Production	1				
CUL105 Principles and Skills for Professional Cooking	3				
CUL127 Commercial Baking: Classical Desserts	3				
HRM244 Quality Sanitation Management	3				
HRM275 Restaurant Management	3				

### III. RESTRICTED ELECTIVES (3 CREDITS) STUDENTS SHOULD SELECT FROM THE FOLLOWING COURSES IN CONSULTATION WITH A DEPARTMENT ADVISOR.

CUL109/HRM102, HRM110, CIS105, MGT101, TQM101	3				
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**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 page 48 for approved AAS courses).

# Certificate & Degree Programs

## Culinary Studies - Certificate of Completion (5151)

**Description:** The Culinary Studies Certificate of Completion 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 basic nutrition concepts and menu planning.

<b>+ PROGRAM PREREQUISITES: ENG101 OR 107</b>					
<b>+ PROGRAM PREREQUISITES: MAT090, 091, 092, OR 102</b>					
<b>I. REQUIRED COURSES (30 CREDITS)</b>					
FON100 Introductory Nutrition	3				
HRM126 Food Cost Systems	2				
HRM140 Food Production Concepts	3				
CUL113 Commercial Baking Techniques	3				
FON144 Gourmet Foods	3				
CUL107 Garde Manger	3				
CUL203 American Regional Cuisine	3				
CUL117 Catering - Planning and Production	1				
CUL105 Principles and Skills for Professional Cooking	3				
CUL127 Commercial Baking: Classical Desserts	3				
HRM244 Quality Sanitation Management	3				
<b>II. RESTRICTED ELECTIVES (3 CREDITS) STUDENTS SHOULD SELECT FROM THE FOLLOWING COURSES IN CONSULTATION WITH A DEPARTMENT ADVISOR.</b>					
HRM110, CIS105, MGT101, TQM101	3				

## Customer Service Management - Certificate of Completion (5849)

**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.

<b>I. REQUIRED COURSES (9 CREDITS)</b>					
Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR
CSM101/TQM101 Quality Customer Service	3				
CSM202 Principles of Process Improvement	3				
CSM203 Teamwork Dynamics	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](http://estrellamountain.edu/academics/programs).**

*\*Courses must meet AAS General Education Requirements (refer to page 48 for approved AAS courses).*





## Data Entry Clerk - Certificate of Completion (5233)

**Description:** This program prepares the student for employment as a beginning data entry clerk in a business office environment. Microcomputer skill development includes keyboarding, 10-key, and data entry. Techniques for effective office communication and professional success are a part of the program.

I. REQUIRED COURSES (11 CREDITS)					
Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR
BPC/OAS111AA Computer Keyboarding I , or OAS101AA Computer Typing I: Keyboard Mastery (1)	1				
OAS101AB Computer Typing I: Letters, Tables & Reports	1				
OAS103AA Computer Typing: Skill Building I	1				
OAS103AB Computer Typing: Skill Building II	1				
OAS108 Business English	3				
OAS118 10-Key By Touch	1				
OCS122 Office Orientation and Essential Skills, or OCS100 Basic Office Skills, and OCS102 Office Career Preparation, and OCS104 Office Communications	3				

## Desktop Publishing - Certificate of Completion (5066)

**Description:** The Certification 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.

I. REQUIRED COURSES (17 CREDITS)					
Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR
CIS105 Survey of Computer Information Systems	3				
BPC/CIS120DB Computer Graphics: Adobe Illustrator	3				
BPC/CIS120DF Computer Graphics: Adobe Photoshop	3				
BPC138DA Desktop Design and Publishing / Adobe InDesign	3				
CIS108 Electronic Portfolio Development	1				
SBS217 Starting/Managing a Home Business	1				
II. RESTRICTED ELECTIVES (3 CREDITS) STUDENTS SHOULD SELECT FROM THE FOLLOWING COURSES IN CONSULTATION WITH A DEPARTMENT ADVISOR.					
ENG111 Technical and Professional Writing, or BPC118DB Desktop Presentation: PowerPoint	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](http://estrellamountain.edu/academics/programs).**

*\*Courses must meet AAS General Education Requirements (refer to page 48 for approved AAS courses).*

# Certificate & Degree Programs

## Driver Operator - Certificate of Completion (5418)

**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.**

### I. REQUIRED COURSES (8 CREDITS)

Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR
FSC111 Emergency Vehicle Operator	2				
FSC117 Fire Apparatus	3				
FSC118 Fire Hydraulics	3				

## Emergency Response and Operations - Associate of 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.

**+ ADMISSION CRITERIA:** Students pursuing Track I, Fire Operations, OR Track II, Advanced Emergency Medical Technology-Paramedic, may be required to complete a program entrance exam as appropriate OR Permission of Program Director.

### I. PROGRAM PREREQUISITES (0-9 CREDITS)

EMT/HLR101 Cardiopulmonary Resuscitation/Basic Cardiac Life Support, or Current validation in Basic Life Support (BLS) Health Care Provider/Professional Rescuer, or Permission of Program Director	0-5				
Track I: Fire Operations and Track II: Paramedicine					
EMT/FSC104 Basic Emergency Medical Technology, or Arizona State EMT Certification or equivalent, or Arizona State Paramedic Certification of equivalent, or Permission of Program Director	0-9				

### I. GENERAL EDUCATION CORE REQUIREMENTS (22-25 CREDITS)

Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR
First-Year Composition*	3				
First-Year Composition*	3				
Oral Communication*	3				
Critical Reading*	0-3				
Mathematics*	3				
Natural Science*	4				
Humanities/Fine Arts*	3				
Social/Behavior Science*	3				

### II. REQUIRED COURSES (18-45.5 CREDITS) PLEASE CHOOSE A TRACK FROM BELOW TO COMPLETE THE REQUIRED COURSES

TRACK:					

**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 page 48 for approved AAS courses).

# Certificate & Degree Programs

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

### III. RESTRICTED ELECTIVES (14-20.5 CREDITS) STUDENTS SHOULD SELECT FROM THE FOLLOWING COURSES IN CONSULTATION WITH A DEPARTMENT ADVISOR.

Any AJS, DPR, EMT, FSC, LET courses. Cannot be shared with Required Courses.


### REQUIRED COURSES: STUDENTS MUST SELECT ONE OF THE FOLLOWING FOUR TRACKS

#### TRACK I: FIRE OPERATIONS (18 CREDITS REQUIRED)

Program Prerequisite: EMT/FSC104 or Permission of Program Director	
FSC102 Fire Department Operations	11
FSC105 Hazardous Materials/First Responder	3
FSC130 Fitness for Firefighters/CPAT	1
FSC134 Fitness and Conditioning/Firefighters	3

#### TRACK II: PARAMEDICINE (43.5-45.5 CREDITS REQUIRED)

EMT235 Emergency Cardiac Care	3
EMT236 Pharmacology in an Emergency Setting	3
EMT240 Advanced Cardiac Life Support	2
EMT242 Pediatric Advanced Life Support, 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	12.5
EMT272AB Advanced Emergency Medical Technology	12.5
EMT272LL Advanced Emergency Medical Technology Practicum	7.5

#### 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

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

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

#### TRACK V: FIRE INVESTIGATION (24 CREDITS REQUIRED)

FSC105 Hazardous Materials/First Responder	3
FSC108 Fundamentals of Fire Prevention	3
FSC119 Introduction Fire Service Ethics	3
FSC208 Firefighter Safety and Building Construction	3
FSC209 Fire Investigation I	3
FSC210 Fire Investigation II	3
FSC211 Fire Investigation III	3
FSC212 Fire Investigation IV	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](http://estrellamountain.edu/academics/programs).**

*\*Courses must meet AAS General Education Requirements (refer to page 48 for approved AAS courses).*

# Certificate & Degree Programs

## Engineering Technology - Associate of 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: MAT122 AND, MAT187, OR MAT151, OR MAT182**

### I. GENERAL EDUCATION CORE REQUIREMENTS (15-18 CREDITS)

Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR
ENG101 or ENG107	3				
ENG102 or ENG108	3				
Oral Communication*	3				
CRE101 or CRE111 or equivalent	0-3				
Met by any Mathematics course in Required Courses	0				
Met by PHY115 or PHY121 in Required Courses	0				
Humanities/Fine Arts*	2-3				
Social and Behavioral Sciences*	3				

### II. REQUIRED COURSES (38-46 CREDITS) *THE PREREQUISITES FOR CAD145 HAVE BEEN WAIVED FOR STUDENTS WHO HAVE DECLARED THE AAS/3228 IN ENGINEERING IN THEIR MAJOR.*

ECE102 Engineering Analysis Tools and Techniques, or ECE102AA Engineering Analysis Tools and Techniques	2				
ECE103 Engineering Problem Solving and Design, or ECE103AB Engineering Problem Solving and Design	2				
CSC/EEE120 Digital Design Fundamentals, or CAD145 Survey of CAD, or ECE216 Computer-Aided Engineering, and ECE216LL Computer-Aided Engineering Lab	3-4				
MAT220 Calculus with Analytic Geometry I, or MAT221 Calculus with Analytic Geometry I,	4-5				
MAT230 Calculus with Analytic Geometry II, or MAT231 Calculus with Analytic Geometry II	4-5				
MAT240 Calculus with Analytic Geometry III, or MAT241 Calculus with Analytic Geometry III	4-5				
MAT276 Modern Differential Equations, or MAT277 Modern Differential Equations	3-4				
EEE202 Circuits and Devices	5				
CSC100 Introduction to Computer Science (C++), or CSC100AA Introduction to Computer Science (C++), or CSC100AB Introduction to Computer Science (C++) for non majors, or CSC110 Introduction to Computer Science (Java), or CSC110AB Introduction to Computer Science (Java)	3-4				
PHY115 University Physics I, or PHY121 University Physics I: Mechanics	4-5				
PHY116 University Physics II, or PHY131 University Physics II: Electricity and Magnetism	4-5				

### III. RESTRICTED ELECTIVES (10-12 CREDITS) *STUDENTS SHOULD SELECT FROM THE FOLLOWING COURSES IN CONSULTATION WITH A DEPARTMENT ADVISOR.*

BIO181, CHM151&CHM151LL, CHM152&CHM152LL, CHM235&CHM235LL, CHM236 or CHM238, CSC205AB, ECE111, ECE211, ECE212, ECE214, ECE215, CSC/EEE230, GLG101, MAT225, MAT227, PHY241	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](http://estrellamountain.edu/academics/programs).**

*\*Courses must meet AAS General Education Requirements (refer to page 48 for approved AAS courses).*

# Certificate & Degree Programs

## 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 (25 CREDITS)						
Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR	
AJS123 Ethics and the Administration of Justice	3					
AJS201 Rules of Evidence	3					
AJS275 Criminal Investigation I	3					
AJS213 Evidence Technology/Fingerprints	3					
AJS215 Criminalistics: Physical Evidence	3					
AJS216 Criminalistics: Biological Evidence	3					
AJS241 Police Photography	3					
AJS242 Crime Scene Processing	3					
AJS290BN Courtroom Testimony Seminar	1					

## Fire Science Technology - Associate of Applied Science (3056)

**Description:** The Fire Science Technology Certificate of Completion and Associate in Applied Science (AAS) are 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 fire hazard and prevention. The Degree and Certificate can be used by professional firefighters for promotions and salary advancement within the Fire Services. The unique feature of the Degree and Certificate is that the instructors will be professional firefighters and/or licensed Emergency Medical Training Personnel.

I. GENERAL EDUCATION CORE REQUIREMENTS (25-27 CREDITS)						
Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR	
ENG101 or ENG107	3					
ENG102 or ENG111	3					
COM100 or COM110 or COM225 or COM230	3					
CRE101 or CRE111 or equivalent by assessment	3					
MAT102 or MAT120 or MAT122	3-5					
Natural Science* (Recommend: BIO100, CHM130/LL, PHY101)	4					
Humanities/Fine Arts*	3					
Social/Behavior Science*	3					
II. REQUIRED COURSES (40 CREDITS)						
FSC102 Fire Department Operations 1	11					
FSC105 Hazardous Materials First Responder	3					
FSC108 Fundamentals of Fire Prevention	3					
FSC118 Fire Hydraulics	3					
FSC111 Emergency Vehicle Driver Operator	2					
FSC202 Supervisory Training for Firefighters	3					
FSC117 Fire Apparatus	3					
FSC204 Firefighting Tactics and Strategy	3					
FSC205 Command Strategies for Major Emergencies	3					
FSC208 Firefighter Safety and Building Construction	3					
FSC214 Human Resource Management for Fire Service	3					
III. RESTRICTED ELECTIVES (4 CREDITS) STUDENTS SHOULD SELECT FROM THE FOLLOWING COURSES IN CONSULTATION WITH A DEPARTMENT ADVISOR.						
Any approved FSC course. Cannot be shared with Required 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](http://estrellamountain.edu/academics/programs).**

\*Courses must meet AAS General Education Requirements (refer to page 48 for approved AAS courses).

# Certificate & Degree Programs

## Fire Officer Leadership - Certificate of Completion (5420)

**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.

**+ PROGRAM PREREQUISITES: FORMAL APPLICATION AND ACCEPTANCE INTO THE FIRE OFFICER LEADERSHIP PROGRAM OR PERMISSION OF PROGRAM DIRECTOR**

### I. REQUIRED COURSES (15 CREDITS)

Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR
FSC202 Supervisory Training for Firefighters	3				
FSC204 Firefighting Tactics and Strategy	3				
FSC205 Command Strategies for Major Emergencies	3				
FSC208 Firefighter Safety and Building Construction	3				
FSC214 Human Resources Management in Fire Science	3				

## 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.

**+ PROGRAM PREREQUISITES: EMT/FSC104 BASIC EMERGENCY MEDICAL TECHNOLOGY**

### I. REQUIRED COURSES (24 CREDITS)

Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR
FSC105 Hazardous Materials First Responder	3				
FSC108 Fundamentals of Fire Prevention	3				
FSC113 Introduction to Fire Suppression	3				
FSC117 Fire Apparatus	3				
FSC119 Introduction Fire Service Ethics	3				
AJS/DPR/FSC147 Emergency Preparedness, or AJS/DPR/FSC148 Fundamentals of Emergency Management	3				
FSC208 Firefighter Safety and Building Construction	3				
FSC215 Customer Service in the Public Sector	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](http://estrellamountain.edu/academics/programs).**

*\*Courses must meet AAS General Education Requirements (refer to page 48 for approved AAS courses).*

# Certificate & Degree Programs

## Firefighter Operations - Certificate of Completion (5557)

**Description:** The Certificate of Completion (CCL) in Firefighter Operations provides the opportunity for individuals seeking employment in various firefighting settings to acquire the minimum standard firefighting skills needed in the field.

<b>+ PROGRAM PREREQUISITES (3-13 CREDITS)</b>					
Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR
EMT/FSC104 Basic Emergency Medical Technology, or permission of program director	0-9				
FSC105 Hazardous Materials/First Responder	3				
FSC130 Fitness for Firefighters/CPAT or permission of program director	1				
<b>I. REQUIRED COURSES (14 CREDITS)</b>					
Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR
FSC102 Fire Department Operations	11				
FSC134 Fitness and Conditioning for Firefighters	3				

## Foundations of Student Services - Certificate of Completion (5661)

**Description:** The Certificate of Completion (CCL) in Foundations of Student Services provides professional preparation and enhances the professional development of student services employees.

<b>I. REQUIRED COURSES (12 CREDITS)</b>					
Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR
EDU250 Teaching and Learning in the Community College	3				
EDS250 Introduction to Student Services	3				
EDS251 Foundations of Developmental Advising	3				
EDS252 Foundations of Student Affairs Management	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](http://estrellamountain.edu/academics/programs).**

*\*Courses must meet AAS General Education Requirements (refer to page 48 for approved AAS courses).*



## General Office Secretary - Certificate of Completion (5238)

**Description:** This program prepares the student for employment as a general office secretary in a business office environment. Skill development includes keyboarding and microcomputer application skills, filing, electronic and traditional mailing methods, and telephone system skills. Techniques for effective office communication and finding and keeping the perfect employee are part of the program.

I. REQUIRED COURSES (17 CREDITS)					
Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR
BPC106AH Microsoft Outlook: Level I	.5				
BPC106BH Microsoft Outlook: Level II	.5				
BPC128 Introduction to Desktop Publishing	1				
BPC/CIS114AE Excel: Level I	1				
BPC/CIS117AM Database Management: Access: Level 1	1				
BPC/CIS118AB PowerPoint: Level 1	1				
BPC/CIS121AE Windows Operating System: Level I	1				
BPC/CIS133AA Internet/Web Development Level I: Module A	1				
BPC/OAS135DK Word: Level I	2				
OAS101AA Computer Typing I: Keyboard Mastery	1				
OAS101AB Computer Typing I: Letters, Tables and Reports	1				
OAS116 Speedwriting for Note Taking	1				
OAS118 10-Key by Touch	1				
OAS120 Financial Recordkeeping	3				
OCS100 Basic Office Skills	1				

## Gifted Education (CCL-5711)

**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)					
Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR
EPD225 Foundations of Gifted Education and Identification of Gifted Learner	3				
EPD226 Social and Emotional Needs of Gifted and Talented Students	3				
EPD227 Methods and Models for Differentiating Curriculum for Gifted Students	3				
EPD228 Creativity and Critical Thinking Skills in Gifted Education	3				
EPD229 Gifted Education Practicum I	3				
EPD230 Gifted Education Practicum II	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](http://estrellamountain.edu/academics/programs).**

*\*Courses must meet AAS General Education Requirements (refer to page 48 for approved AAS courses).*



# Certificate & Degree Programs

## Hospitality/Hotel Management - Certificate of Completion (5965)

**Description:** The Hospitality/Hotel Management program is designed to train graduates for management careers in the hotel industry. The hospitality industry is among the fastest growing in the United States, offering numerous career opportunities. This program also transfers to four-year colleges and universities.

The Culinary Arts program, designed to train students who wish to become professional chefs and cooks, is a one-year certificate program with the option of an AAS degree. A formal dining room is operated by the program and provides practical work experience for students. Entrance into the Culinary Arts Program is by application only.

<b>I. REQUIRED COURSES (32 CREDITS)</b>					
Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR
CIS105 Survey of Computer Information Systems	3				
HRM110 Introduction to Hospitality and Tourism Management	3				
HRM120 Hotel Facility Management	3				
HRM126 Food Service Cost Systems	2				
HRM130 Guest Services Management	3				
HRM140 Food Production Concepts	3				
HRM244 Quality Sanitation Management	3				
HRM270 Hospitality Marketing	3				
HRM275 Restaurant Management	3				
HRM280 Hotel and Restaurant Law	3				
MGT101 Techniques of Supervision	3				
<b>II. RESTRICTED ELECTIVES (6 CREDITS) STUDENTS SHOULD SELECT FROM THE FOLLOWING COURSES IN CONSULTATION WITH A DEPARTMENT ADVISOR.</b>					
ACC111, HRM260, CMS101/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](http://estrellamountain.edu/academics/programs).**

*\*Courses must meet AAS General Education Requirements (refer to page 48 for approved AAS courses).*

# Certificate & Degree Programs

## Hospitality/Hotel Management - Associate of Applied Science (3814)

**Description:** The Hospitality/Hotel Management program is designed to train graduates for management careers in the hotel industry. The hospitality industry is among the fastest growing in the United States, offering numerous career opportunities. This program also transfers to four-year colleges and universities.

<b>I. GENERAL EDUCATION CORE REQUIREMENTS (25-27 CREDITS)</b>					
Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR
ENG101	3				
ENG102	3				
COM100 or COM100AA, AB, AC, or COM110 or COM225, or COM230	3				
CRE101 or equivalent by assessment	3				
Mathematics*	5				
Natural Science*	4				
Humanities/Fine Arts*	3				
ECN211 or PSY101 or SOC101	3				
<b>II. REQUIRED COURSES (32 CREDITS)</b>					
CIS105 Survey of Computer Information Systems	3				
HRM110 Introduction to Hospitality and Tourism Management	3				
HRM120 Hotel Facility Management	3				
HRM126 Food Service Cost Systems	2				
HRM130 Guest Services Management	3				
HRM140 Food Production Concepts	3				
HRM244 Quality Sanitation Management	3				
HRM270 Hospitality Marketing	3				
HRM275 Restaurant Management	3				
HRM280 Hotel and Restaurant Law	3				
MGT101 Techniques of Supervision	3				
<b>III. RESTRICTED ELECTIVES (7 CREDITS) STUDENTS SHOULD SELECT FROM THE FOLLOWING COURSES IN CONSULTATION WITH A DEPARTMENT ADVISOR.</b>					
ACC111, HRM260, HRM296WA, HRM298AA, 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](http://estrellamountain.edu/academics/programs).**

*\*Courses must meet AAS General Education Requirements (refer to page 48 for approved AAS courses).*

# Certificate & Degree Programs

## 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.

<b>I. REQUIRED COURSES (12 CREDITS)</b>					
Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR
CIS126DL Linux Operating System	3				
CIS238DL Linux System Administration	3				
CIS240DL Linux Network Administration	3				
CIS271DL Linux Security	3				
<b>II. RESTRICTED ELECTIVES (12 CREDITS) PLEASE CHOOSE FROM THE LIST OF RESTRICTED ELECTIVES BELOW.</b>					

<b>RESTRICTED ELECTIVES (12 CREDITS REQUIRED) STUDENTS SHOULD SELECT FROM THE FOLLOWING COURSES IN CONSULTATION WITH A DEPARTMENT ADVISOR.</b>	
BPC170 Computer Maintenance I: A+ Essentials Prep	3
BPC270 Computer Maintenance II: A+ Technican Prep	3
CIS105 Survey of Computer Information Systems	3
CIS121AH Microsoft PowerShell/Command Line Operations	3
CIS197 WMware ESXI Server Enterprise	4
CIS226AL Internet/Intranet Server Administration-Linux	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 CNT140 Cisco Networking Basics (4), or MST140 Microsoft Networking Essentials (3)	3-4
CNT150AA Cisco Routing Protocols and Concepts	4
MST150++ Microsoft Windows Professional (Any Module)	3
MST155 Implementing Windows Network Environment, or MST155DA Windows Server Network Infrastructure Configuration	3-4

**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 page 48 for approved AAS courses).*



## Linux Networking Administration - Associate of Applied Science (3013)

**Description:** The Associate in Applied Science (AAS) in Linux Networking Administration 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.

<b>I. GENERAL EDUCATION CORE REQUIREMENTS (25 CREDITS)</b>					
Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR
ENG101	3				
ENG102	3				
Communication*	3				
CRE101 or equivalent by assessment	3				
MAT102 or higher	3				
Natural Science*	4				
Humanities/Fine Arts*	3				
Social/Behavior Science*	3				
<b>II. REQUIRED COURSES (24-25 CREDITS)</b>					
BPC170 Computer Maintenance I: A+ Essentials Prep	3				
CIS126DL Linux Operating System	3				
CIS238DL Linux System Administration	3				
CIS239DL Linux Shell Scripting	3				
CIS240DL Linux Network Administration	3				
CIS271DL Linux Security	3				
CIS190 Introduction to Local Area Networks (3), or CNT140 Cisco Networking Basics (4), or MST140 Microsoft Networking Essentials (3)	3-4				
MST150++ Microsoft Windows Professional (Any Module)	3				
<b>III. RESTRICTED ELECTIVES (12 CREDITS) PLEASE CHOOSE FROM THE LIST OF RESTRICTED ELECTIVES ON PAGE 2.</b>					

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 page 48 for approved AAS courses).

# Certificate & Degree Programs

## Linux Networking Administration - Associate of Applied Science (3013) continued

<b>RESTRICTED ELECTIVES (12 CREDITS REQUIRED)</b> <i>STUDENTS SHOULD SELECT FROM THE FOLLOWING COURSES IN CONSULTATION WITH A DEPARTMENT ADVISOR.</i>	
BPC110 Computer Usage and Applications, or CIS105 Survey of Computer Information Systems	3
BPC270 Microcomputer Maintenance II: A+ Technician Prep	3
BPC273 Advanced Server Computer Maintenance: Server+Prep	3
CIS121AH Microsoft PowerShell/Command Line Operations	3
CIS197 VMware ESXI Server Enterprise	4
CIS226AL Internet/Intranet Server Administration-Linux	3
CIS241DL Apache Web Server Administration (Linux/Unix)	3
CIS250 Management of Information Systems	3
CIS270 Essentials of Network and Information Security	3
CIS274DL Linux Enterprise Network Security	3
CIS275DL Linux Capstone	3
CIS296WC Cooperative Education	3
CIS290++ Computer Information Systems Internship	1-3
CIS298AC Special Projects	3
CIS190 Introduction to Local Area Networks, or CNT140 Cisco Networking Basics (4), or MST140 Microsoft Networking Essentials (3)	3-4
CNT150AA Cisco Routing Protocols and Concepts	4
CNT160AA Cisco Local Area Networking (LAN) Switching and Wireless	4
CNT170AA Cisco Accessing the Wide-Area Network (WAN)	4
MST150++ Microsoft Windows Professional (Any Module)	3
MST155 Implementing Windows Network Environment, or MST155DA Windows Server Network Infrastructure Configuration	3-4
MST157 Implementing Windows Directory Services, or MST157DA Active Directory Windows Server Configuration	3-4
MST158DA Windows Server Administration	4

**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 page 48 for approved AAS courses).*

# Certificate & Degree Programs

## 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 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.

<b>I. REQUIRED COURSES (24-25 CREDITS)</b>					
Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR
BPC170 Computer Maintenance I: A+ Prep	3				
CIS126DL Linux Operating System	3				
CIS238DL Linux System Administration	3				
CIS239DL Linux Shell Scripting	3				
CIS240DL Linux Network Administration	3				
CIS271DL Linux Security	3				
CIS190 Introduction to Local Area Networks (3), or CNT140 Cisco Networking Basics (4), or MST140 Microsoft Networking Essentials (3)	3-4				
MST150++ Microsoft Windows Professional (Any Module)	3				
<b>III. RESTRICTED ELECTIVES (12 CREDITS) PLEASE CHOOSE FROM THE LIST OF RESTRICTED ELECTIVES BELOW.</b>					

**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 page 48 for approved AAS courses).*



## Linux Networking Administration - Certificate of Completion (5225) continued

<b>RESTRICTED ELECTIVES (12 CREDITS REQUIRED) STUDENTS SHOULD SELECT FROM THE FOLLOWING COURSES IN CONSULTATION WITH A DEPARTMENT ADVISOR.</b>	
<b>RESTRICTED ELECTIVES (12 CREDITS REQUIRED) STUDENTS SHOULD SELECT FROM THE FOLLOWING COURSES IN CONSULTATION WITH A DEPARTMENT ADVISOR.</b>	
BPC110 Computer Usage and Applications, or CIS105 Survey of Computer Information Systems	3
BPC270 Microcomputer Maintenance II: A+ Technician Prep	3
BPC273 Advanced Server Computer Maintenance: Server+Prep	3
CIS121AH Microsoft PowerShell/Command Line Operations	3
CIS197 VMware ESXI Server Enterprise	4
CIS226AL Internet/Intranet Server Administration-Linux	3
CIS241DL Apache Web Server Administration (Linux/Unix)	3
CIS250 Management of Information Systems	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
CIS296WC Cooperative Education	3
CIS290++ Computer Information Systems Internship	1-3
CIS298AC Special Projects	3
CIS190 Introduction to Local Area Networks, or CNT140 Cisco Networking Basics (4), or MST140 Microsoft Networking Essentials (3)	3-4
CNT150AA Cisco Routing Protocols and Concepts	4
CNT160AA Cisco Local Area Networking (LAN) Switching and Wireless	4
CNT170AA Cisco Accessing the Wide-Area Network (WAN)	4
MST150++ Microsoft Windows Professional (Any Module)	3
MST155 Implementing Windows Network Environment, or MST155DA Windows Server Network Infrastructure Configuration	3-4
MST157 Implementing Windows Directory Services, or MST157DA Active Directory Windows Server Configuration	3-4
MST158DA Windows Server Administration	4

**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 page 48 for approved AAS courses).*

# Certificate & Degree Programs

## Linux Professional - Certificate of Completion (5204)

**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.

<b>I. REQUIRED COURSES (6 CREDITS)</b>					
	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR
Must earn "C" or higher in all courses within the program					
CIS126DL Linux Operating System	3				
CIS238DL Linux System Administration	3				
<b>II. RESTRICTED ELECTIVES (6 CREDITS) PLEASE CHOOSE FROM THE LIST OF RESTRICTED ELECTIVES BELOW.</b>					

<b>RESTRICTED ELECTIVES (12 CREDITS REQUIRED) STUDENTS SHOULD SELECT FROM THE FOLLOWING COURSES IN CONSULTATION WITH A DEPARTMENT ADVISOR.</b>	
BPC170 Computer Maintenance I: A+ Essentials Prep	3
BPC270 Computer Maintenance II: A+ Technician Prep	3
CIS105 Survey of Computer Information Systems	3
CIS197 VMware ESXI Server Enterprise	4
CIS190 Introduction to Local Area Networks	3
CIS121AH Microsoft PowerShell/Command Line Operations	3
CIS226AL Internet/Intranet Server Administration-Linux	3
CIS239DL Linux Shell Scripting	3
CIS240DL Linux Network Administration	3
CIS241DL Apache Web Server Administration (Linux/Unix)	3
CIS270 Essentials of Network and Information Security	3
CIS271DL Linux Security	3
CIS190 Introduction to Local Area Networks, or CNT140 Cisco Networking Basics (4), or MST140 Microsoft Networking Essentials (3)	3-4
CNT150AA Cisco Routing Protocols and Concepts	4
MST150++ Microsoft Windows (any suffixed course)	3
CIS280 Current Topics in Computing	3
CIS290++ Computer Information Systems Internship (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](http://estrellamountain.edu/academics/programs).**

*\*Courses must meet AAS General Education Requirements (refer to page 48 for approved AAS courses).*



# Certificate & Degree Programs

## Microsoft Desktop Support Technology - Certificate of Completion (5473)

**Description:** The Certificate of Completion (CCL) in Microsoft Desktop Support Technology is designed to provide training to work in an entry-level computer maintenance and help-desk position. Students will develop the skills to successfully 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: BPC/CIS121AB or CIS121AH or STUDENTS WITH EXPERIENCE IN THE INFORMATION TECHNOLOGY FIELD MAY MEET THESE PROGRAM PREREQUISITES WITH THE PERMISSION OF THE INSTRUCTOR**

### I. REQUIRED COURSES (16-17 CREDITS)

Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR
CIS102 Interpersonal and Customer Service Skills for IT Professionals	1				
BPC110 Computer Usage and Applications, or CIS105 Survey of Computer Information Systems	3				
BPC170 Computer Maintenance I: A+ Prep	3				
CIS190 Introduction to Local Area Networks (3), or CNT140AA Cisco Networking Fundamentals (4), or MST140 Microsoft Networking Essentials (3)	3-4				
MST141 Supporting Microsoft Windows Client Operating Systems	3				
MST150SV Microsoft Windows 7 Configuration	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](http://estrellamountain.edu/academics/programs).**

*\*Courses must meet AAS General Education Requirements (refer to page 48 for approved AAS courses).*



# Certificate & Degree Programs



## Microsoft Networking Technology - Associate of 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, interoperating with various operating systems, and working as a system administrator.

+ PROGRAM PREREQUISITES: CIS105 OR PERMISSION OF DEPARTMENT OR DIVISION					
I. GENERAL EDUCATION CORE REQUIREMENTS (25 CREDITS)					
Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR
ENG101 or ENG107	3				
ENG102 or ENG108	3				
Oral Communication*	3				
CRE101 or equivalent by assessment	3				
Mathematics*	3				
Natural Science*	4				
Humanities/Fine Arts*	2-3				
Social/Behavior Science*	3				
II. REQUIRED COURSES (24-27 CREDITS)					
CIS121AB Microsoft Command Line Operations, or CSC221AB Microsoft Power Shell	1				
BPC170 Computer Maintenance I: A+ Prep	3				
CIS102 Interpersonal and Customer Service Skills for IT Professionals	1				
CIS126DA UNIX Operating System (3), or CIS126AA UNIX Operating System: Level I (1), and CIS126BA UNIX Operating System: Level II (1), and CIS126CA UNIX Operating System: Level III (1), or CIS126DL Linux Operating System (3), or CIS126AL Linux Operating System I (1), and CIS126BL Linux Operating System II (1), and CIS126CL Linux Operating System III (1)	3				
CIS190 Introduction to Local Area Networks (3), or CNT140 Cisco Networking Basics (4), or MST140 Microsoft Networking Essentials (3)	3-4				
MST150++ Any Course Module	3				
MST155++ Any Course Module	3-4				
MST157++ Any Course Module	3-4				
MST158++ Any Course Module	4				
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](http://estrellamountain.edu/academics/programs).**

\*Courses must meet AAS General Education Requirements (refer to page 48 for approved AAS courses).

# Certificate & Degree Programs

## Microsoft Networking Technology - Associate of Applied Science (3778) continued

### RESTRICTED ELECTIVES (14-15 CREDITS REQUIRED)

*STUDENTS SHOULD SELECT FROM THE FOLLOWING COURSES IN CONSULTATION WITH A DEPARTMENT ADVISOR. COURSES CANNOT BE SHARED WITH REQUIRED COURSES.*

BPC171 Recycling Used Computer Technology (may be repeated)	3
BPC270 Computer Maintenance II: A+ Technician Prep	3
CIS238++ Any Course Module	3
CIS239++ Any Course Module except CIS239DC	3
CIS240++ Any Course Module	3
CIS270 Essentials of Network and Information Security	3
CIS15+++ Any Course Module	3
CIS16+++ Any Course Module	3
CIS280++ Any Course Module	3
<i>NOTE: Students may select no more than four (4) credits combined from CIS282AA-AC, CIS290AA-AC and CIS296WA-WD courses.</i>	
CIS282++ Volunteerism for Computer Information Systems: A Service Learning Experience (Any Module), or CIS290++ Computer Information Systems Internship (Any Module), or CIS296++ Cooperative Education (Any Module)	1-4
CNT+++++ Any Course Module	4
ITS+++++ Any Course Module	3-4
MST141 Enterprise Desktop Support Technician	3
MST150++ Any MST150 course	3
MST152++ Any MST152 course	4
MST157++ Any MST157 course	3-4
MST244 Microsoft SQL Server Administration	3
MST259 Designing Windows Network Security	3
MST298A++ Special Projects (Any Module)	1-3
CWE198++ Career Work Experience (Any Module)	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](http://estrellamountain.edu/academics/programs).**

*\*Courses must meet AAS General Education Requirements (refer to page 48 for approved AAS courses).*

# 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)

Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR
CIS121AB Microsoft Command Line Operations, or CIS221AB Microsoft Power Shell	1				
BPC170 Computer Maintenance I: A+ Prep	3				
CIS190 Introduction to Local Area Networks (3), or CNT140 Cisco Networking Basics (4), or MST140 Microsoft Networking Essentials (4)	3-4				
MST150++ Any MST150 course	3				
MST155++ Any MST155 course	3-4				
MST157++ Any MST157 course	3-4				
MST158++ Any MST159 course	4				

## 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. The curriculum ideally is taught by Microsoft Certified Professionals. 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)

Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR
CIS121AB MS-DOS Operating System, or CIS221AB Microsoft Powershell	1				
BPC170 Computer Maintenance I: A+ Prep	3				
BPC270 Computer Maintenance II: A+ Technician Prep	3				
CIS190 Introduction to Local Area Networks (3), or CNT140 Cisco Networking Basics (4), or MST140 Microsoft Networking Essentials (4)	3-4				
MST150++ Any MST150 course	3				
MST155++ Any MST155 course	3-4				
MST157++ Any MST157 course	3-4				
MST158++ Any MST158 course	4				
MST244 Microsoft SQL Server Administration	3				
MST259 Designing Windows Network Security	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](http://estrellamountain.edu/academics/programs).**

*\*Courses must meet AAS General Education Requirements (refer to page 48 for approved AAS courses).*

# Certificate & Degree Programs

## Networking Administration: Cisco - Certificate of Completion (5969)

**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.

Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR
Track 1: Exploration or Track 2: Discovery -	14-18				

### REQUIRED COURSES TRACK 1 & TRACK 2 COURSE REQUIREMENTS

#### TRACK 1: EXPLORATION (14-18 CREDITS REQUIRED)

CNT140 Cisco Networking Basics (4), or CNT140AA Cisco Networking Fundamentals (4), or CNT138 CCNA Discovery-Networking for Home and Small Businesses (3), and CNT148 CCNA Discovery-Working at a Small-to-Medium Business or Internet Service Provider (3)	4-6
CNT150 Cisco Networking Router Technologies (4), or CNT150AA Cisco Routing Protocols and Concepts (4)	4
CNT160 Cisco Switching Basics and Intermediate Routing (3), or CNT160AA Cisco Local Area Networking (LAN) Switching and wireless (4)	3-4
CNT170 Cisco Wide Area Networks (WAN) Technologies (3), or CNT170AA Cisco Accessing the Wide-Area Network (WAN) (4)	3-4
<b>TRACK 2: DISCOVERY (14 CREDITS REQUIRED)</b>	
CNT138 CCNA Discovery – Networking for 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

**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 page 48 for approved AAS courses).*

# Certificate & Degree Programs

## Networking Technology: Cisco - Associate of 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 hardware 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**

### I. GENERAL EDUCATION CORE REQUIREMENTS (25 CREDITS)

Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR
ENG101 or ENG107	3				
ENG102 or ENG108 or ENG111	3				
Oral Communication*	3				
CRE101 or Equivalent by assessment	0-3				
Mathematics*	3				
Natural Science*	4				
Humanities/Fine Arts*	3				
Social/Behavior Science*	3				

### 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 (Any Module)	3				

### III. REQUIRED COURSES FROM TRACK 1 OR TRACK 2 (14-18 CREDITS) PLEASE CHOOSE A TRACK FROM PAGE 2 TO COMPLETE THE REQUIRED COURSES

TRACK 1: EXPLORATION OR TRACK 2: DISCOVERY -	14-18				

### III. RESTRICTED ELECTIVES (15 CREDITS) PLEASE CHOOSE FROM THE LIST OF RESTRICTED ELECTIVES ON PAGE 2. COURSES CANNOT BE SHARED WITH ANY REQUIRED COURSES.


### REQUIRED COURSES TRACK 1 & TRACK 2 COURSE REQUIREMENTS

#### TRACK 1: EXPLORATION (14-18 CREDITS REQUIRED)

CNT140 Cisco Networking Basics (4), or CNT140AA Cisco Networking Fundamentals (4), or CNT138 CCNA Discovery-Networking for Home and Small Businesses (3), and CNT148 CCNA Discovery-Working at a Small-to-Medium Business or Internet Service Provider (3)	4-6
CNT150 Cisco Networking Router Technologies (4), or CNT150AA Cisco Routing Protocols and Concepts (4)	4
CNT160 Cisco Switching Basics and Intermediate Routing (3), or CNT160AA Cisco Local Area Networking (LAN) Switching and wireless (4)	3-4
CNT170 Cisco Wide Area Networks (WAN) Technologies (3), or CNT170AA Cisco Accessing the Wide-Area Network (WAN) (4)	3-4

#### TRACK 2: DISCOVERY (14 CREDITS REQUIRED)

CNT138 CCNA Discovery – Networking for 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

**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 page 48 for approved AAS courses).

# Certificate & Degree Programs

## Networking Technology: Cisco - Associate of Applied Science (3816) continued

RESTRICTED ELECTIVES (15 CREDITS REQUIRED) COURSES CANNOT BE SHARED WITH ANY REQUIRED COURSES	
BPC110 Computer Usage and Applications (3), or CIS105 Survey of Computer Information Systems (3)	3
CIS126 UNIX/Linux Operating System (Any Module) (3), or MST150 Microsoft Windows Professional (Any Module) (3)	3
CIS190 Introduction to Local Area Networks (3), or MST140 Microsoft Networking Essentials (3)	3
CIS270 Essentials of Network and Information Security	3
CIS296WA Cooperative Education (1), or CIS296WB Cooperative Education (2), or CIS296WC Cooperative Education (3), or CIS296WD Cooperative Education (4)	1-4
CIS298AA Special Projects (1), or CIS298AB Special Projects (2), or CIS298AC Special Projects (3)	1-3
BPC/CIS121AB MS-DOS Operating System I	1
CIS102 Interpersonal and Customer Service Skills for IT Professionals	1
CIS110 Home Entertainment and Computer Networking	3
ELT100 Survey of Electronics	3
BPC/CIS224 Project Management Microsoft Project for Windows	3
CNT145 Voice and Data Cabling	4
CNT175 Cisco Certified Network Associate Security	4
CNT181 Cisco Securing IOS Networks	4
CNT182 Cisco Secure PIX Firewall Configuration	3
CNT183 Cisco Secure Virtual Private Network Configuration	3
CNT185 Cisco Network Security	4
CNT186 Cisco Certified Network Associate Wireless	4
CNT187 Cisco SAFE implementation	3
CNT190 Cisco Network Design	3
CNT2++ Any 200 level course with a CNT Prefix	1-4
BPC270 Microcomputer Maintenance II	3
BPC273 Advanced Service Computer Maintenance: Server+ Prep	3
CIS127DL Linux Utilities	3
CIS238DL Linux System Administration	3
CIS239DL Linux Shell Scripting	3
CIS240DL Linux Network Administration	3
CIS241DL Apache Web Server Administration (Linux/Unix)	3
CIS271DL Linux Security	3
CIS274DL Linux Enterprise Network Security	3
MST152++ Microsoft Windows Server	3
MST155 Implementing Windows Network Infrastructure	3
MST157 Implementing Windows Directory Services	3
MST232 Managing a Windows Network Environment	3
CIS250 Management of Information Systems	3
CIS280 Current Topics in Computing	3
CIS290AA Computer Information Systems Internship (1), or CIS290AB Computer Information Systems Internship (2), or CIS290AC Computer Information Systems Internship (3)	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](http://estrellamountain.edu/academics/programs).**

*\*Courses must meet AAS General Education Requirements (refer to page 48 for approved AAS courses).*

# Certificate & Degree Programs

## 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)					
Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR
BPC170 Computer Maintenance I: A+ Prep	3				
CIS126 UNIX/Linux Operating System (any Module), or MST150 Microsoft Windows Professional (Any Module)	3				
III. REQUIRED COURSES FROM TRACK 1 OR TRACK 2 (14-18 CREDITS) PLEASE CHOOSE A TRACK FROM PAGE 2 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)	
CNT140 Cisco Networking Basics (4), or CNT140AA Cisco Networking Fundamentals (4), or CNT138 CCNA Discovery-Networking for Home and Small Businesses (3), and CNT148 CCNA Discovery-Working at a Small-to-Medium Business or Internet Service Provider (3)	4-6
CNT150 Cisco Networking Router Technologies (4), or CNT150AA Cisco Routing Protocols and Concepts (4)	4
CNT160 Cisco Switching Basics and Intermediate Routing (3), or CNT160AA Cisco Local Area Networking (LAN) Switching and wireless (4)	3-4
CNT170 Cisco Wide Area Networks (WAN) Technologies (3), or CNT170AA Cisco Accessing the Wide-Area Network (WAN) (4)	3-4
TRACK 2: DISCOVERY (14 CREDITS REQUIRED)	
CNT138 CCNA Discovery – Networking for 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

**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 page 48 for approved AAS courses).*





## Nurse Assisting - Certificate of Completion (5963)

**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 CPD 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.**

### I. REQUIRED COURSES (6 CREDITS)

Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR
NUR158 Nurse Assisting	6				

## Practical Nursing - Certificate of Completion (5957)

**Description:** The Practical Nursing Certificate of Completion (CCL) Program is available at eight of the Maricopa Community Colleges. Clinical experiences are provided in a variety of healthcare settings. The Practical Nursing Program provides eligibility for students to apply for the national exam for the practical nurse license. Licensing requirements are the exclusive responsibility of the Arizona State Board of Nursing.

The Practical Nursing Certificate of Completion (CCL) Program is approved by the Arizona State Board of Nursing

**+ ADMISSION CRITERIA: HIGH SCHOOL DIPLOMA OR GED, FORMAL APPLICATION AND ADMISSION TO THE PROGRAM IS REQUIRED. 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 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	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR
BIO156 Introductory Biology for Allied Health, or BIO181 General Biology (Majors) I, or one year high school biology	0-4				
BIO201 Human Anatomy and Physiology I	4				
CHM130 Fundamental Chemistry, and CHM130LL Fundamental Chemistry Laboratory, or one year high school chemistry	0-4				
MAT120, or MAT121, or MAT122 Intermediate Algebra	3-5				
PSY101 Introduction to Psychology, or PSY240 Developmental Psychology	3				

### II. REQUIRED COURSES (21 CREDITS)

Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR
NUR151 Nursing Theory and Science I	10				
NUR171 Nursing Theory and Science II	8				
NUR191 Practical Nursing Transition Course	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](http://estrellamountain.edu/academics/programs).**

*\*Courses must meet AAS General Education Requirements (refer to page 48 for approved AAS courses).*



## Nursing - Associate of Applied Science (3812)

**Description:** The Associate in Applied Science (AAS) Nursing Program is available at nine of the Maricopa Community Colleges. Clinical experiences are provided in a variety of healthcare settings. The Nursing Program provides eligibility for students 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 National League for Nursing Accrediting Commission (NLNAC), 61 Broadway 33<sup>rd</sup> Floor, New York, New York 10006, 212.363.5555, ext 153.

<b>+ PROGRAM NOTES:</b> The Nursing Program's Core Values of Caring, Holism, Nursing Role Development, Critical Thinking, Safe Practice, and Information Management and Technology are integrated into the student learning outcomes/program competencies.					
<b>+ ADMISSION CRITERIA:</b> High School Diploma/GED, Formal Application and Admission is Required, <b>and</b> a Passing score on a nursing program admission test is required to complete an application. More information on Admission Criteria on Page 2.					
<b>+ PROGRAM PREREQUISITES (10-20 CREDITS)</b> <i>The credit hour range is subject to change depending on the student's education experience.</i>					
Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR
BIO156 Introductory Biology for Allied Health, or BIO181 General Biology (Majors) I, or One year of high school biology	0-4				
BIO201 Human Anatomy and Physiology I	4				
CHM130 and CHM130LL Fundamental Chemistry and Lab	4				
MAT120 or MAT121 or MAT122 Intermediate Algebra, or Satisfactory completion of higher level mathematics course	3-5				
PSY101 Introduction to Psychology, or PSY240 Developmental Psychology	3				
<b>I. GENERAL EDUCATION CORE REQUIREMENTS (16-19 CREDITS)</b>					
ENG101 or ENG107	3				
ENG102 or ENG108	3				
Oral Communication – Waived	0				
CRE101 or equivalent by assessment	3				
Mathematics met by program prerequisites	0				
BIO202	4				
BIO205	4				
Humanities/Fine Arts*	2				
Social/Behavioral Science met by program prerequisites	0				
<b>II. REQUIRED COURSES (35 CREDITS)</b>					
NUR151 Nursing Theory and Science I	10				
NUR171 Nursing Theory and Science II	8				
NUR251 Nursing Theory and Science III	8				
NUR271 Nursing Theory and Science IV	7				
NUR291 Nursing Clinical Capstone	2				

**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 page 48 for approved AAS courses).*

# Certificate & Degree Programs

## Organizational Leadership - Certificate of Completion (5731)

**Description:** The Certificate of Completion (CCL) in Organizational Leadership provides students with 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. This program also emphasizes procedures for effective allocation of time, money, materials, space, and personnel.

I. GENERAL EDUCATION CORE REQUIREMENTS (17-18 CREDITS)					
Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR
BPC110 Computer Usage and Application, or CIS105 Survey of Computer Information Systems	3				
GBS110 Human Relations in Business and Industry, or MGT251 Human Relations in Business	3				
GBS151 Introduction to Business	3				
GBS233 Business Communication	3				
MGT175 Business Organization and Management (3), or TQM240 Project Management in Quality Organizations (2)	2-3				
MGT101 Techniques of Supervision, or MGT229 Management and Leadership	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](http://estrellamountain.edu/academics/programs).**

*\*Courses must meet AAS General Education Requirements (refer to page 48 for approved AAS courses).*

# Certificate & Degree Programs

## Organizational Management - Associate of Applied Science (3727)

**Description:** The Associate in Applied Science (AAS) in Organizational Management 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.

+ PROGRAM PREREQUISITES: IF REQUIRED					
I. GENERAL EDUCATION CORE REQUIREMENTS (22-27 CREDITS)					
Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR
ENG101 or ENG107	3				
ENG102 or ENG108	3				
Oral Communication*	3				
CRE101 or Equivalent by assessment	0-3				
Mathematics*	3-5				
Natural Science*	4				
Humanities/Fine Arts*	3				
Social/Behavior Science*	3				
II. REQUIRED COURSES (17-18 CREDITS) COMPLETION OF CERTIFICATE OF COMPLETION IN ORGANIZATIONAL LEADERSHIP (5731)					
BPC110 Computer Usage and Application, or CIS105 Survey of Computer Information Systems	3				
GBS110 Human Relations in Business and Industry, or MGT251 Human Relations in Business	3				
GBS151 Introduction to Business	3				
GBS233 Business Communication	3				
MGT175 Business Organization and Management (3), or TQM240 Project Management in Quality Organizations (2)	2-3				
MGT101 Techniques of Supervision, or MGT229 Management and Leadership	3				
III. RESTRICTED ELECTIVES (19-25 CREDITS) STUDENTS MUST CHOOSE 19-25 INDUSTRY/JOB SPECIFIC COURSE CREDITS FROM ANY MCCCC OCCUPATIONAL 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.					

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 page 48 for approved AAS courses).

# Certificate & Degree Programs

## Power Plant Technology - Associate of Applied Science (3003)

**Description:** The Associate in Applied Science in Power Plant Technology is designed to provide power plant staff/apprentices with trade-related classroom training as required by the US Department of Labor, Bureau of Apprenticeship and Training, and the State of Arizona, Apprenticeship Division. This program consists of a core curriculum that is common to all power plant apprenticeships. The apprentice selects a track of study - mechanical, electrical, instrumentation, heating ventilation and air conditioning, welding or machining - to complete specialized craft-related training.

PROGRAM PREREQUISITES (0-15 CREDITS)					
Students pursuing Track VI: Power Plant Technology: Machining may be required to take the following program prerequisites:					
GTC/MET107 Technical Mathematics	0-3				
MET109 Machine Trades Print Reading	0-3				
MET111 Geometric Dimensioning and Tolerancing-Tech Level	0-3				
MET113 Applied Geometric Dimensioning and Tolerancing	0-3				
MET231 Manufacturing Processes and Materials	0-3				
I. GENERAL EDUCATION CORE REQUIREMENTS (19-26 CREDITS)					
Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR
ENG101	3				
ENG102 or ENG111	3				
Communication*	3				
CRE101 or CRE111 or equivalent by assessment	0-3				
Mathematics met by GTC/MET108 in Required Courses if GTC/ MET108 option chosen, or MAT103AA Mathematics for Industrial Applications I, and MAT103AB Mathematics for Industrial Applications II	0-4				
PHS110	4				
Humanities/Fine Arts*	3				
Social/Behavior Science*	3				
II. REQUIRED COURSES (19-26 CREDITS)					
BPC110 Computer Usage and Applications, or CIS105 Survey of Computer Information Systems	3				
GTC/FAC/MIT/OSH106 Industrial Safety	2				
GTC/MET107 Technical Mathematics I, or ELT101 Mathematics for Electronics I	3				
GTC/MET108 Technical Mathematics II, or ELT102 Mathematics for Electronics II	3				
GTC216 Properties of Materials	3				
PPT101 Hand and Power Tools	1				
PPT103 Print Reading and Plant Drawings	1				
PPT118 Conduct of Maintenance	1				
PPT200 Industry Events	1				
PPT202 Plant Systems and Components I	2				
PPT203 Plant Systems and Components II	2				
PPT204 Measuring and Test Equipment	1				
III. RESTRICTED ELECTIVES (17-18 CREDITS) STUDENTS WILL SELECT ONE OF THE FOLLOWING TRACKS IN CONSULTATION WITH A DEPARTMENT ADVISOR.					
Track:					

**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 page 48 for approved AAS courses).



## Power Plant Technology - Associate of Applied Science (3003) continued

**Restricted Electives: Credits: 17-18**

Students will select one of the following tracks and complete 17-18 craft-related credits from the list of restricted elective courses indicated in each specialty track below. Students, who complete General Education Area with the 19 minimum credits, must complete 18 credits in Restricted Electives area to get the minimum 60 credits required for an AAS.

### Track I: Power Plan Technology: Mechanical

PPT102	Introduction to Electricity	3
PPT104	Properties of Materials	1
PPT105	Air Compressor Principles	1
PPT106	Diesel Engine Systems	1
PPT107	Lubrication	1
PPT108	Turbines	1
PPT109	Pipefitting Auxiliaries I	2
PPT110	Valves Maintenance I	2
PPT112	Principles of Machining	3
PPT113	Pumps I	2
PPT114	Drive and Gear Components	1
PPT115	Hydraulics and Pneumatics	2
PPT116	Introduction to Welding and Metal Fabrication	3
HEO/PPT117	Forklift Operations	1
PPT119	Instrument Air Compressor Maintenance	2
PPT205	Rigging	2
PPT206	Bearings	1
PPT207	Heat Exchangers	1
PPT208	Thermal Insulation	0.5
+ PPT209	Pipefitting Auxiliaries II	2
+ PPT210	Valve Maintenance II	3
PPT211	Couplings	0.5
PPT212	Control Valves and Actuators	1
PPT213	Pumps II	3
PPT214	Machine Alignment	3
PPT215	Relief and Safety Valves	1
PPT217	Refueling Overview	1
PPT218	Lathe Operations	2
PPT219	Milling Machine Operations	2

### Track II: Power Plant Technology: Electrical

ELC119	Concepts of Electricity and Electronics	3
ELC120	Solid State Fundamentals	3
ELC210	AC Machinery and DC Machinery	3
ELC217	Motor Controls	3
+ ELC218	Variable Frequency Drives	3
ELT101	Mathematics for Electronics I	3
+ ELT102	Mathematics for Electronics II	3
+ ELT113	Basic Electronics	4

**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 page 48 for approved AAS courses).*

# Certificate & Degree Programs

## Power Plant Technology - Associate of Applied Science (3003) continued

### Track III: Power Plan Technology: Instrumentation

	ELT101	Mathematics for Electronics I	3
+	ELT102	Mathematics for Electronics II	3
	ELT113	Basic Electronics	4
+	ELT131	Digital and Logic Circuits	4
+	ELT195	Solid State Electronics	4
+	ELT251	Electronic Instrumentation	3
+	NET183AA	Operating Systems/PC	2
	PPT102	Introduction to Electricity	3
	PPT115	Hydraulics and Pneumatics	2

### Track IV: Power Plant Technology: Heating, Ventilation and Air Conditioning

+	FAC/HVA101	Refrigeration Applications and Components I	3
+	FAC/HVA101LL	Refrigeration Applications and Components I Lab	1
+	ELC/FAC/HVA105	Electricity for Industry	3
+	ELC/FAC/HVA105LL	Electricity for Industry Lab	1
+	ELC/FAC/HVA115	Motors, Controls and Wiring Diagrams	3
+	ELC/FAC/HVA115LL	Motors, Controls and Wiring Diagrams Lab	1
+	FAC/HVA210	Facilities Air Conditioning Systems	3
+	FAC/HVA210LL	Facilities Air Conditioning Systems Lab	1
+	HVA112	Heating and Air Conditioning	3
+	HVA112LL	Heating and Air Conditioning Lab	1
	HVA143	Load Calculation and Duct Design	3
+	HVA234	HVAC and Refrigeration Installation	3
+	HVA234LL	HVAC and Refrigeration Installation Lab	1

### Track V: Power Plant Technology: Welding

	WLD101	Welding I	3
	WLD106	Arc Welding	5
+	WLD201	Welding II	3
+	WLD206	Advanced Welding – Heliarc and Wire Feed	5
+	WLD208	Advanced Arc Welding – Certification	5

### Track VI: Power Plant Technology: Machining

+	MET102	Machine Processes, Theory and Application	5
	MET110	Survey of Manufacturing Materials	1
+	MET112	Inspection Techniques	3
	MET114	Machine Trades Print Reading	1
+	MET115	Geometric Dimensioning and Tolerancing – Technologist Level	2
	MET140	Computer-Aided Drafting for Manufacturing	3
+	MET203	Machine Tools	5
+	GTC/MET206	CNC Programming	3
	GTC236	CAD/CAM Computer Numerical Control (CNC) Programming	3
+	MET260	Tooling and Fixturing	3
+	MET264	Manufacturing Process Planning	3

### Track VII: Radiation Protection Technology

+	RPT103	Radiation Fundamentals	3
+	RPT113	Radiation Monitoring	3
+	RPT223	Radiation Dosimetry	3
+	RPT233	Radioactive Materials Handling	3
+	RPT243	Radiological Safety and Response	3
+	RPT253	Radiation Protection	3
+	RPT290	Radiation Protection Internship	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](http://estrellamountain.edu/academics/programs).**

*\*Courses must meet AAS General Education Requirements (refer to page 48 for approved AAS courses).*

# Certificate & Degree Programs

## Programming and System Analysis - Associate of 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.

+ PROGRAM PREREQUISITES: CRE101 OR EQUIVALENT BY ASSESSMENT						
I. GENERAL EDUCATION CORE REQUIREMENTS (22-24 CREDITS)						
Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR	
ENG101 or ENG107	3					
ENG102 or ENG108	3					
Oral Communication*	3					
CRE101 met by program prerequisite	0					
MAT150 or MAT151 or MAT152 College Algebra/Functions	3-5					
Natural Science*	4					
Humanities/Fine Arts*	3					
ECN211 or ECN212 or SBU200	3					
II. REQUIRED COURSES (36-37 CREDITS) STUDENTS SHOULD SELECT COURSES IN CONSULTATION WITH A DEPARTMENT ADVISOR.						
GBS233 Business Communication	3					
ACC111 Accounting Principles I	3					
CIS105 Survey of Computer Information Systems	3					
BPC/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					
BPC/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					
	3					
III. RESTRICTED ELECTIVES (6 CREDITS) STUDENTS SHOULD SELECT FROM THE FOLLOWING COURSES IN CONSULTATION WITH A DEPARTMENT ADVISOR.						
CIS251, CIS259, CIS262, CIS262AB, CIS262AC, 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](http://estrellamountain.edu/academics/programs).**

\*Courses must meet AAS General Education Requirements (refer to page 48 for approved AAS courses).



# 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)					
Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR
CIS105 Survey of Computer Information Systems	3				
BPC/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				
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	3				
CIS225 Business Systems Analysis and Design, or CIS225AB Object-Oriented Analysis and Design, or CIS250 Management of Information Systems	3				
BPC/CIS217AM Advanced Microsoft Access: Database Management, or CIS119DO Introduction to Oracle: SQL, or CIS276DA My SQL Database	3				
II. RESTRICTED ELECTIVES (3 CREDITS) <i>STUDENTS SHOULD SELECT FROM THE FOLLOWING COURSES IN CONSULTATION WITH A DEPARTMENT ADVISOR.</i>					
CIS251, CIS259, CIS262 (any module), CIS263AA					

## Public Works Leadership - Certificate of Completion (5657)

**Description:** The Certificate of Completion (CCL) in Public Works Leadership provides professional development for public works employees. The student develops supervision techniques including the functions of planning, organizing, staffing, motivating and controlling, as well as day-to-day strategic operations of public works management.

I. REQUIRED COURSES (7-9 CREDITS)					
Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR
BLT110 Techniques of Publics Works Supervision	3				
BLT210 Advanced Topics in Public Works Management	3				
BLT298AA Special Projects (1), or BLT298AB Special Projects (2), or BLT298AC Special Projects (3)	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](http://estrellamountain.edu/academics/programs).**

*\*Courses must meet AAS General Education Requirements (refer to page 48 for approved AAS courses).*



## Radiation Protection Technology - Associate of Applied Science (3153)

**Description:** The Associate in Applied Science (AAS) in Radiation Protection Technology program prepares individuals, under the supervision of health physicists, occupational safety and health specialists, and public health officials, to monitor and control radiation exposure and implement preventive measures in health care, work environments, and natural environments. The courses include instruction in radiation physics, environmental radioactivity, radiological instrumentation, electronics of radiation detection equipment, radioactive waste management and control, safety and handling procedures of radioactive materials. Course work also includes decontamination procedures, radioactivity testing and analysis, and communications skills.

**+ PROGRAM PREREQUISITES: CRE101 OR EQUIVALENT**

**I. GENERAL EDUCATION CORE REQUIREMENTS (28 CREDITS)**

Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR
ENG101	3				
ENG111	3				
Oral Communication*	3				
CRE101 (Met by program prerequisite)	0				
MAT220 Calculus with Analytic Geometry	5				
CHM130 and CHM130LL	4				
PHY121	4				
Humanities/Fine Arts*	2-3				
Social/Behavior Science*	3				

**II. REQUIRED COURSES (36 CREDITS)**

RPT103 Radiation Fundamentals	3				
RPT113 Radiation Monitoring	3				
RPT223 Radiation Dosimetry	3				
RPT233 Radioactive Materials Handling	3				
RPT243 Radiological Safety and Response	3				
RPT253 Radiation Protection	3				
RPT290 Radiation Protection Internship	5				
AAA/CPD150 Strategies for College Success	3				
ELC/FAC/HVA105 Electricity for Industry	3				
ELC/FAC/HVA105LL Electricity for Industry Lab	1				
CIS105 Survey of Computer Information Systems	3				
ELT100 Survey of Electronics	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](http://estrellamountain.edu/academics/programs).**

*\*Courses must meet AAS General Education Requirements (refer to page 48 for approved AAS courses).*



## Radiation Protection Technology - Certificate of Completion (5565)

**Description:** The Certificate of Completion (CCL) in Radiation Protection Technology program prepares individuals, under the supervision of health physicists, occupational safety and health specialists, and public health officials, to monitor and control radiation exposure and implement preventive measures in health care, work environments, and natural environments. The courses include instruction in radiation physics, environmental radioactivity, radiological instrumentation, electronics of radiation detection equipment, radioactive waste management and control, safety and handling procedures of radioactive materials. Course work also includes decontamination procedures, radioactivity testing and analysis, and communications skills.

**+ PROGRAM PREREQUISITES: MAT092 OR EQUIVALENT OR PERMISSION OF INSTRUCTOR**

### I. REQUIRED COURSES (23 CREDITS)

Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR
RPT103 Radiation Fundamentals	3				
RPT113 Radiation Monitoring	3				
RPT223 Radiation Dosimetry	3				
RPT233 Radioactive Materials Handling	3				
RPT243 Radiological Safety and Response	3				
RPT253 Radiation Protection	3				
RPT290 Radiation Protection Internship	5				

## Receptionist - Certificate of Completion (5237)

**Description:** This program prepares the student for employment as a receptionist in a business office environment. Skill development includes microcomputer keyboarding and filing; word processing; electronic and traditional mailing methods; and telephone system skills. Techniques for effective office communication and making appropriate office ethical choices are also part of the program.

**+ PROGRAM PREREQUISITES: CERTIFICATE OF COMPLETION IN DATA ENTRY CLERK (5233) , OR**

**IN LIEU OF THE DATA ENTRY CERTIFICATE, STUDENTS MAY MEET THIS PROGRAM PREREQUISITE BY DEMONSTRATING KNOWLEDGE AND SKILLS EQUIVALENT TO THE FOLLOWING COURSES THROUGH ASSESSMENT:**

BPC/OAS111AA Computer Keyboarding I, or OAS101AA Computer Typing I: Keyboarding Mastery	1				
OAS101AB Computer Typing I: Letters, Tables and Reports	1				
OAS103AA Computer Typing: Skill Building I	1				
OAS103AB Computer Typing: Skills Building II	1				
OAS118 10-Key by Touch	1				
OAS108 Business English	3				
OCS122 Office Orientation and Essential Skills, or OCS100 Basic Office Skills, and OCS102 Office Career Preparation, and OCS104 Office Communications	3				

### I. REQUIRED COURSES (9 CREDITS)

Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR
BPC106AH Microsoft Outlook: Level I	.5				
BPC106BH Microsoft Outlook: Level II	.5				
BPC/OAS113 Micro-Alphabetic Indexing	1				
BPC/CIS114AE Excel: Level I	1				
BPC/OAS135DK Word: Level I	2				
GBS131 Business Calculations	3				
OAS101AC Computer Typing I: Production and Manuscript	1				

**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 page 48 for approved AAS courses).*



## Retail Management - Associate of Applied Science (3048)

**Description:** The Retail Management degree is designed to prepare individuals working in the retail management, food industry, and related fields, for the mid-level management position challenges of the future. The curriculum encompasses business essentials and also emphasizes the skill sets needed for effective management and communication in the work environment. Instruction will provide the background and knowledge necessary for students to develop the judgment skills they must exercise as business managers.

<b>I. GENERAL EDUCATION CORE REQUIREMENTS (25 CREDITS)</b>					
Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR
ENG101 or ENG107	3				
ENG102 or ENG108 or ENG111	3				
COM230	3				
CRE101 or equivalent by assessment	3				
MAT102	3				
Natural Science*	4				
Humanities/Fine Arts*	3				
SBU200	3				
<b>II. REQUIRED COURSES (39 CREDITS)</b>					
ACC111 Accounting Principles I	3				
ACC230 Uses of Accounting Information I	3				
ACC240 Uses of Accounting Information II	3				
BPC110 Computer Usage and Applications, or CIS105 Survey of Computer Information Systems	3				
COM110 Interpersonal Communication, or IND133 Speaking in Business	3				
GBS110 Human Relations in Business and Industry, or MGT251 Human Relations in Business	3				
GBS131 Business Calculations, or GBS161 Mathematics of Business	3				
GBS205 Legal, Ethical, and Regulatory Issues in Business	3				
GBS233 Business Communication	3				
MGT101 Techniques of Supervision, or MGT229 Management and Leadership	3				
MGT179 Utilizing the Human Resources Department, or MGT276 Personnel/Human Resources Management	3				
MKT268 Merchandising, or MKT271 Principles of Marketing	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](http://estrellamountain.edu/academics/programs).**

*\*Courses must meet AAS General Education Requirements (refer to page 48 for approved AAS courses).*



## Retail Management - Certificate of Completion (5286)

**Description:** The Retail Management Certificate of Completion is designed to prepare individuals working in the food industry, and related fields, for the management challenges of the future. 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 (30 CREDITS)						
Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR	
ACC111 Accounting Principles I	3					
BPC110 Computer Usage and Applications, or CIS105 Survey of Computer Information Systems	3					
ENG101 First-Year Composition, or ENG107 First-Year Composition for ESL	3					
GBS110 Human Relations in Business and Industry, or MGT251 Human Relations in Business	3					
GBS131 Business Calculations, or MAT102 Mathematical Concepts and Applications	3					
GBS233 Business Communication	3					
COM110 Interpersonal Communication, or IND133 Speaking in Business	3					
MGT101 Techniques of Supervision, or MGT229 Management and Leadership I	3					
MGT179 Utilizing the Human Resources Department, or MGT276 Personnel/Human Resources Management	3					
MKT268 Merchandising, or MKT271 Principles of Marketing	3					

## Small Business Management - Certificate of Completion (5153)

**Description:** This program is designed to meet the needs of individuals who wish to own and/or manage a small business. It is a flexible program composed of one and two-credit courses, which can be offered on non-traditional schedules and can be completed rapidly. These factors increase the opportunity for more members of the small business community to take advantage of these courses. This certificate offers a planned content core. Students earn a Certificate of Completion upon program completion.

I. REQUIRED COURSES (9 CREDITS)						
Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR	
SBS200 Small Business Operations	2					
SBS202 Small Business Bookkeeping and Tax Preparation	1					
SBS203 Financing and Cash Management for a Small Business	1					
SBS204 Small Business Marketing and Advertising	2					
SBS214 Small Business Customer Relations	1					
SBS220 Internet Marketing for Small Business	2					

**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 page 48 for approved AAS courses).*



## Speech Language Pathology Assistant - Associate of 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 Statute 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.

<b>I. GENERAL EDUCATION CORE REQUIREMENTS (25-27 CREDITS)</b>					
Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR
ENG101	3				
ENG102	3				
COM110	3				
CRE101 or equivalent by assessment	3				
Mathematics*	3-5				
BIO100 or BIO156	4				
Humanities/Fine Arts*	3				
PSY101	3				
<b>II. REQUIRED COURSES (32 CREDITS)</b>					
SLP104 Speech, Language, Hearing Development	3				
SLP205 Introduction to Communication Disorders	3				
SLP210 Speech and Hearing Anatomy and Physiology	3				
SLP212 Language Disorders and Rehabilitation	3				
SLP214 Speech Disorders and Rehabilitation	3				
SLP215 Speech and Hearing Disorders and Rehabilitation	3				
SLP217 Clinical Ethics and Documentation	3				
SLP218 Behavior Management	2				
SLP235AA Speech-Language Pathology Practicum, and SLP235AB Speech-Language Pathology Practicum, or SLP235AC Speech-Language Pathology Practicum	3				
SLP240 Assistive Technology and Augmentative Communication	3				
SLP242 Low Incidence Disabilities	3				
<b>III. RESTRICTED ELECTIVES (6-8 CREDITS) STUDENTS SHOULD SELECT FROM THE FOLLOWING COURSES IN CONSULTATION WITH A DEPARTMENT ADVISOR.</b>					
COM263, ENG213, PSY230, PSY240, SLP298 (Any Course), SOC101, SOC210, or Any Foreign language sequence (i.e. SPA101 and SPA102) ARB, CHI, FRE, GER, GRK, HEB, ITA, JPN, POR, LAT, NAV, PIM, RUS, SPA					

**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 page 48 for approved AAS courses).



## 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.

<b>I. REQUIRED COURSES (35 CREDITS)</b>					
Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR
ENG101 First-Year Composition	3				
SLP104 Speech, Language, Hearing Development	3				
SLP205 Introduction to Communication Disorders	3				
SLP210 Speech and Hearing Anatomy and Physiology	3				
SLP212 Language Disorders and Rehabilitation	3				
SLP214 Speech Disorders and Rehabilitation	3				
SLP215 Speech and Hearing Disorders and Rehabilitation	3				
SLP217 Clinical Ethics and Documentation	3				
SLP218 Behavior Management	2				
SLP235AA Speech-Language Pathology Practicum, and SLP235AB Speech-Language Pathology Practicum, or SLP235AC Speech-Language Pathology Practicum	3				
SLP240 Assistive Technology and Augmentative Communication	3				
SLP242 Low Incidence Disabilities	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](http://estrellamountain.edu/academics/programs).**

*\*Courses must meet AAS General Education Requirements (refer to page 48 for approved AAS courses).*



# Certificate & Degree Programs



## Strength, Nutrition, and Personal Training - Associate of Applied Science (3059)

**Description:** The Strength, Nutrition, and Personal Training Associate in Applied Science (AAS) prepares students with the knowledge and experience required to be eligible for the American College of Sports Medicine (ACSM) Health and Fitness Instructor Certification, ACSM personal trainer certification, the National Strength and Conditioning Association (NSCA) personal trainer certification, and the American Council on Exercise (ACE) personal trainer certification. This degree will provide students with a stronger educational background making them more marketable in the field of fitness and nutrition. This degree will also meet the needs of individuals with existing degrees in such fields as Exercise Physiology, Nutrition, Athletic Training and other health related disciplines. Registered dietitians, clinical exercise physiologists, personal trainers, exercise specialists, strength and conditioning specialists, coaches, athletes and others interested in acquiring knowledge in exercise, nutrition and health are also eligible for this program.

<b>I. GENERAL EDUCATION CORE REQUIREMENTS (25-27 CREDITS)</b>						
Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR	
ENG101 or ENG107	3					
ENG102 or ENG108	3					
COM100 or COM110	3					
CRE101	3					
MAT120 or MAT121 or MAT122 or any approved general education course in the Mathematics Area except MAT102	3-5					
BIO160	4					
Humanities/Fine Arts*	3					
HES100 or PSY101	3					
<b>II. REQUIRED COURSES (37-40 CREDITS)</b>						
EXS101 Introduction to Exercise Science, Kinesiology, and Physical Education	3					
EXS112 Professional Applications of Fitness Principles	3					
EXS125 Exercise Science	3					
EXS130 Strength Fitness-Physiological Principles and Training Techniques	3					
EXS132 Cardiovascular Fitness: Physiological Principles and Training Techniques	3					
EXS138 Starting Your Own Personal Training Business	1					
EXS145 Guidelines for Exercise Testing and Prescription	2					
EXS214 Instructional Competency: Flexibility and Mind-Body Exercises	2					
EXS216 Instructional Competency: Muscular Strength and Conditioning	2					
EXS218 Instructional Competency: Cardiorespiratory Exercise and Activities	2					
EXS239 Practical Applications of Personal Training Skills and Techniques Internship, or EXS239AA Practical Applications of Personal Training Skills and Techniques Internship, and EXS239AB Practical Applications of Personal Training Skills and Techniques Internship	3					
FON100 Introductory Nutrition, or FON241 Principles of Human Nutrition	3					
FON210 Sports Nutrition and Supplements for Physical Activities	3					
FON247 Weight Management Theory	3					
HES154 First Aid/Cardiopulmonary Resuscitation, or BLS Health Care Provider and First Aid Certification	0-3					

**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](http://estrellamountain.edu/academics/programs).**

*\*Courses must meet AAS General Education Requirements (refer to page 48 for approved AAS courses).*





## Teacher Assisting - Associate of 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.

<b>I. GENERAL EDUCATION CORE REQUIREMENTS (24-27 CREDITS)</b>						
Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR	
ENG101 or ENG107	3					
ENG102 or ENG108	3					
COM100 or COM110 or COM225 or COM230	3					
CRE101	3					
MAT102 or MAT120 or MAT122	3-5					
Natural Science*	4					
Humanities/Fine Arts*	2-3					
Social/Behavior Science*	3					
<b>II. REQUIRED COURSES (6 CREDITS)</b>						
EDU236 Introduction to Relationships in a Classroom Setting	3					
EDU221 Introduction to Education	3					
<b>III. RESTRICTED ELECTIVES (9 CREDITS) STUDENTS SHOULD SELECT FROM THE FOLLOWING COURSES IN CONSULTATION WITH A DEPARTMENT ADVISOR.</b>						
EDU222, EDU230, EDU291 or ENH291, EDU282AA or EDU282AB or EDU282AC or EDU296WA or EDU296WB or EDU296WC, ENG213, POS220						
<b>IV. FREE ELECTIVES (25 CREDITS)</b>						

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 page 48 for approved AAS courses).



## 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.

<b>I. REQUIRED COURSES (18 CREDITS)</b>					
Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR
CIS120DC Computer Graphics: Macromedia Flash	3				
BPC/CID120DF Computer Graphics: Adobe Photoshop, or BPC/CIS120AF Computer Graphics: Adobe Photoshop Level I, and BPC/CIS120BF Computer Graphics: Adobe Photoshop Level II, and BPC/CIS120CF Computer Graphics: Adobe Photoshop Level III	3				
BPC/CIS133DA Internet/Web Development Level I	3				
CIS166++ Any Module	3				
CIS233DA Internet/Web Development Level II	3				
CIS235 e-Commerce	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](http://estrellamountain.edu/academics/programs).**

*\*Courses must meet AAS General Education Requirements (refer to page 48 for approved AAS courses).*



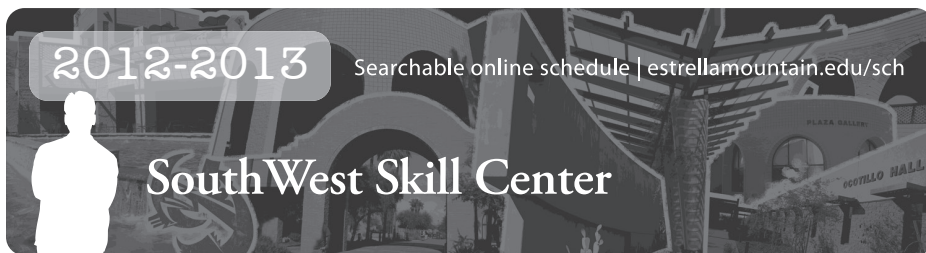
## Web Developer - Certificate of Completion (5051)

**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)					
Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	ADVISOR
CIS105 Survey of Computer Information Systems	3				
BPC/CIS117DM Microsoft Access: Database Management	3				
BPC/CIS120DC Computer Graphics: Macromedia Flash	3				
BPC/CIS120DF Computer Graphics: Adobe Photoshop (3), or					
BPC/CIS120AF Computer Graphics: Adobe Photoshop: Level I (1), and BPC/CIS120BF Computer Graphics: Adobe Photoshop: Level II (1), and BPC/CIS120CF Computer Graphics: Adobe Photoshop: Level III (1)	3				
CIS126AA UNIX Operating System: Level I	1				
BPC/CIS133DA Internet/Web Development Level I	3				
CIS166++ Any Module	3				
CIS233DA Internet/Web Development Level II	3				
CIS234 XML Application Development	3				
CIS235 e-Commerce	3				
CIS298AB Special Projects, or CIS290AB Computer Information Systems Internship, or CIS296WB Cooperative Education	2				

**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 page 48 for approved AAS courses).*



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 entry level job opportunities.

Programs include a variety of Allied Health Field programs such as: Emergency Medical Technology, Medical Assistant, Medical Billing & Coding, Spanish Medical Interpreter, Nurse Assistant, Phlebotomy, and Practical Nurse. Additional programs include: Distribution Logistics Technician and Industrial Electronics Technology. Age requirements for admission vary by program and are subject to change.

Tuition is \$5.00 per clock hour for Distribution Logistics, Industrial Electronics Technology and Allied Health Programs, and \$6.00 per clock hour for the Nursing Programs. 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, 2012 through June 30, 2013, and are subject to change per Governing Board approval.

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**Get Started Today!**  
 Advisor 623.935.8961 or 623.935.8037  
[estrellamountain.edu/swsc](http://estrellamountain.edu/swsc)

## **Distribution Logistics Technician Program**

The SouthWest Skill Center's Distribution Logistics Technician training program will provide you with skills necessary to succeed and progress in today's high performance distribution environment. A Distribution Technician is responsible for receiving, storing and distribution of materials, equipment and products.

### **Length of Program**

**Approximately 14 weeks / 160 clock hours**

### **Program requirements include:**

- 18 years old by end of week 8
- High School diploma or GED
- Assessment Test
- Completed admission packet

### **Distribution Logistics Technician Curriculum**

#### **DLT101 - Orientation to CDP Program**

This course provides an overview and outcomes of the entire program, attendance, grading policies and campus resources.

#### **DLT103 - Introduction to CDP Program**

This course provides an overview of warehousing and distribution and the CDP program.

#### **DLT105 - Introduction to Business Principles**

This course is presented in the form of an activity in which participants establish and run a business making them aware of the principles of operating a business.

#### **DLT107 - General Plant Safety**

This course stresses the importance of awareness and responsibility of employees working in a warehousing environment.

#### **DLT109 - Learning for Success**

This course focuses on the importance of learning as a necessary skill to succeed in today's workplace.

#### **DLT111 - Managing Change In the Workplace**

Employees are asked to learn new ways of doing things, use new tools and change their work habits. Change in the workplace is seldom something that you have control over. However, how you handle change is in your control.

#### **DLT113 - Self Management and Personal Wellness**

This course emphasizes the importance of managing three important areas of one's life; Personal Wellness, Time Management and Stress Management.

#### **DLT115 - Positive Work Ethic**

This course focuses on behaviors in the workplace and how an employee's behaviors or actions affect the employee, co-workers, and company and customers.

#### **DLT117 - The Art of Effective Communication**

This course provides basic skills and techniques for communicating more effectively in the workplace.

#### **DLT119 - Working Together**

This course focuses on the ability to work with others as individuals in teams, thus enhancing one's value to the organization and ability to contribute to a positive work experience.

#### **DLT121 - Positive Image**

This course stresses the importance of personal image and how it affects one's personal and professional life.

#### **DLT123 - Interview Skills**

This course identifies the steps involved in the job interviewing process and prepares participants for successful interviews.

#### **DLT125 - Warehousing & Distribution**

This course focuses on warehouse operations, inventory and inventory management, as well as, key warehousing jobs (receiving, put-away, picking, material handling, staging and shipping).

#### **DLT127 - Warehousing Productivity Measures**

This course discusses metrics commonly used by warehouses and distribution centers, what they measure, and how to calculate them.

#### **DLT129 - Methods of Inventory Management**

This course discusses the types of inventory control systems, including MRP, Just-In-Time philosophy and the Kanban Process.

#### **DLT131 - Protecting Materials and Merchandise**

This course discusses protection of product throughout the manufacturing process and special handling of product and materials.

#### **DLT133 - Palletizing**

This course focuses on methods of preparing products and materials for warehousing and transport.

#### **DLT135 - Handling Systems**

This course familiarizes trainees with different types of conveyors that are used on packaging line(s) in warehouses.

#### **DLT137 - Processing Hazardous Materials**

This course provides an understanding of requirements by federal, state, and local agencies placed on warehouse employees concerning hazardous materials.

## **DLT139 - Scanners & Data Entry**

This course familiarizes participants with scanners, scanning systems and bar coding. Practical exercises are conducted to reinforce understanding of the scanning and data entry process.

## **DLT141 - Warehousing Data Applications**

This course discusses warehouse management systems commonly used on maintaining accurate and efficient inventory.

## **DLT143 - Problem Solving**

This course introduces a six step problem solving process that includes identifying problems, and applying a systematic approach to problem solving. It also focuses on tools that can be used during the problem solving process.

## **DLT145 - Introduction to Industrial Controls**

This course provides a basic understanding of industrial control circuits used in a manufacturing environment.

## **DLT147 - Introduction to Computers & Automation**

This course examines how computers are being used in the workplace today and prepares participants to use computers in the workplace.

## **DLT149 - Math & Measurement**

This course reviews mathematical concepts and the importance of these concepts in a warehousing and distribution environment. Participants practice various types of mathematical computations that will enable them to perform their jobs more easily and make them more valuable employees.

## **DLT151 - Calculators**

This course teaches the use of a basic handheld calculator and provides practice in performing mathematical computations.

## **DLT153 - Powered Industrial Truck Operator**

This course provides the knowledge of methods and procedures necessary to safely operate a powered industrial truck in the workplace.

## **DLT155 - Warehousing Simulations**

This course provides a structure in which participants use information from the behavioral lessons such as interview, teamwork, and work ethics to develop solutions to problems representing both warehousing and personal performance issues.

## **Emergency Medical Technology (EMT) Program**

This program includes techniques of emergency care, stabilization, and immobilization of 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. The EMT program is the first step toward a fire fighter career. The techniques taught in the program are in accordance with national and state curriculum. Students will have the opportunity to participate in clinical rotations through a local emergency department.

### **Length of Program**

**Approximately 16 weeks / 160 clock hours**

### **Program requirements include:**

- A high school diploma or GED
- Assessment Test
- Completed admission packet

### **Emergency Medical Technician Curriculum**

#### **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 two eight-hour clinical rotations through a local emergency department scheduled during the semester 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 ninth grade level reading proficiency on the Nelson-Denney Examination or appropriate ESL 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.

## Industrial Electronics Technology Program

SouthWest Skill Center's Industrial Electronics Technology training program will provide you with skills necessary to succeed and progress in an industrial maintenance setting. The focus is on the troubleshooting and repair of electrical/electronic equipment found in manufacturing and other industrial facilities. This unique program offers many additional maintenance skills needed in an industrial environment including an in-depth understanding of hydraulics, pneumatics, print reading/plant drawings, material handling and technical math skills.

Skills mastered by Industrial Electronics Technology program completers will include equipment maintenance and repair, troubleshooting, critical thinking, and complex problem solving. Along with an introduction to computer software applications and industrial safety, students will learn hand and power tool use, oxyfuel welding, rigging, and piping systems. Learning studio settings, computer commons, lab environs, and an externship will all be utilized. Students will get hands on training to prepare them for careers in occupations critical to all types of industrial facility maintenance.

### Length of Program

**Approximately 23 weeks / 550 clock hours**

### Program requirements include:

- 18 years of age to enroll
- A high school diploma or GED
- Reading & Math Assessment Test
- Completed admission packet

## Industrial Electronics Technician Curriculum

### **SKBPC101AA - Introduction to Computers I**

Computer software applications for the personal computer, including electronic spreadsheet and word processing, keyboarding review, and a desktop environment. Prerequisites: None.

### **SKELC119 – Concepts of Electricity and Electronics**

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.

### **SKELT102 – Mathematics for Electronics II**

The study of simultaneous equations, quadratic equations, trigonometric relationships, periodic functions and logarithms as applied to AC(alternating current) circuit analysis. Application of the scientific calculator to technical problem solving in electronics. Prerequisites: ELT101 or equivalent.

### **SKELT113 – Basic Electronics**

Direct and alternating current electrical circuits. Theory and practical lab experience, using the appropriate test equipment and computer solutions. Ohm's Law, Kirchoff'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.

### **SKELT296WA - Cooperative Education**

Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. Prerequisites: Completion of at least twelve (12) college credits, minimum 2.6 grade point average, and be able to obtain a position related to student's academic or career goals (student's present job may qualify); or permission of instructor. Corequisites: Must be concurrently enrolled in at least one class which is related to student's major or career interest or with permission of the instructor.

### **SKGTC106 – Industrial Safety**

Safety, health management and accident prevention in industrial work environment. Role of Occupational Safety and Health Administration (OSHA) act, materials handling, electrical safety, machine safety, first response to fire and medical emergencies, safety signs and color codes, recognition of safety and health hazards accident prevention, and management's responsibilities. Prerequisites: None.

### **SKGTC107 – Technical Mathematics I**

Mathematical principles to include basic operations, significant digits, exponents, square roots and order of operations. Solve problems using arithmetic, signed numbers, percentages, fractions, exponents, and square root. Use of hand held calculator. Technology related problems. Prerequisites: None.

### **SKPPT101 – Hand and Power Tools**

Identification and use of hand and hand-held power tools used in a power plant. Tool construction and purpose. Maintenance of hand and power tools. Prerequisites: None.

### **SKPPT103 – Print Reading and Plant Drawings**

Introduction to print reading and plant drawings. Flow diagrams and symbols on drawings. Dimension, tolerance and clearance on drawings. Amendments to drawings. Specific types of drawings. Proper procedures when using plant drawings. Prerequisites: None.

### **SKPPT115 - Hydraulics and Pneumatics**

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.

## **SKPPT205 – Rigging**

Safe and proper operation of lifting equipment. Weight calculations. Identification and proper location of rigging equipment. Hand signals and industry standards. Safe rigging practices. Inspection and maintenance procedures. Operation of pendant cranes. Prerequisites: None.

## **SKTDR102 - Workplace Skills**

First impressions, relationship building, and team work. Diversity in the work place. Individual and group activities. Prerequisites: Registered apprentice status or permission of apprenticeship coordinator.

## **Medical Assistant Program**

Students learn clinical and administrative skills needed to work in a doctor's office. Medical Assistants are skilled professionals who can run a busy office and handle the medical tests performed in a doctor's office. As part of MCCD's Health Care Integrated Education System, the SouthWest Skill Center Medical Assistant courses cover the same content material as the MCCD college credit courses and are included in an articulation agreement, which make them transferable within the MCCD college district.

### **Length of Program**

**Approximately 9-13 months / 830 clock hours**

### **Program requirements include:**

- 17 1/2 years of age to enroll
- High School diploma or GED
- Assessment Test
- Completed admission packet

### **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.

#### **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.

#### **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, MAS129, 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 (in MBP also)**

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.

## **SKMAS230 – Emergencies in the Medical Office**

Emphasis on methods of identification and response to emergencies in a medical office. Prerequisites: Acceptance into the Medical Assisting program and permission of Program Director. Corequisites: HCC130 and MAS260, and permission of Program Director.

## **SKMAS240 – Applied EKG**

Entry-level training to professionally perform, process, and explain the electrocardiogram. Overview of cardiac anatomy, physiology, and conduction systems. Overview of commonly encountered drugs in cardiac medicine. Data collection, selection, processing, and presentation for the appropriate medical/clinical professional to review. Selected specific non-invasive cardiac testing procedures. Prerequisites: Acceptance into the Medical Assisting program, or permission of Program Director. Corequisites: HCC130 and MAS260, or 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 of 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. Course Note: 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, and 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.

### Length of Program

**Day Program: Approximately 9 months / 805 clock hours**

**Evening Program: Approx 13 months / 805 clock hours**

### Program requirements include:

- 17 1/2 years of age to enroll
- High School diploma or GED
- Assessment Test
- 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).

### **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.

### **SKOAS111AA - Computer Keyboarding I**

Mastery of essential microcomputer keyboarding skills. Emphasis on touch typing of alphabetic and numeric keys and symbols. Prerequisites: None

### **SKOAS118 - 10 Key by Touch**

Touch system of numeric keys on ten-key pads. Prerequisites: None

### **SKHIM105 - Health Record Documentation for Allied Health Professionals**

Introduction to 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.

### **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.

## **SKHIM185 - ICD Diagnostic Coding**

International Classification of Diseases (ICD) diagnostic code assignment. Use of appropriate guidelines and federal, state, and local compliance standards for diagnoses. Identification of health provider documentation that supports code assignment. Prerequisites: [HCC145 and (BIO160 or BIO201)], 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**

In-depth exposure of CPT (Current Procedural Terminology) coding, reimbursement trends, guidelines, and coding from source documents. Application of current evaluation and management documentation guidelines. Emphasis on surgical procedures. Appropriate assignment of CPT and HCPCS (Healthcare Common Procedural Coding System) Level II modifiers. Introduction to computerized encoders. Prerequisites: (HCC204 and HIM212), or permission of Program Director.

## **SKMAS130 - Orientation to the Physiology and Psychology of Body Systems (in MBP also)**

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.

## **BCR100 - Examination Review**

This course is a review class and prepares the student to take the AAPC certification exams to obtain certification for a medical coding career in an outpatient physician office. 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, 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).

## **Spanish Medical Interpreter Program**

The Spanish Medical Interpreter Program 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.

According to the National Council on Interpreting in Health Care, an interpreter renders a message orally into another language while abiding by a code of professional ethics (The Terminology of Health Care Interpreting: A Glossary of Terms, 2008). The U. S. Bureau of Labor Statistics projects a 22% increase in employment for translators / interpreters in the next eight years. (Occupational Outlook Handbook, 2010-11 edition).

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.
- Apply to transfer the program certificate as articulated credit within the Maricopa Community College District.
- Apply 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/](http://www.healthcareinterpretercertification.org/)).

Successful students are encouraged to apply upon concluding the Spanish Medical Interpreter Program.

### **Length of Program**

**Approximately 22 weeks / 170 clock hours**

### **Program requirements include:**

- 17 1/2 years of age to enroll
- High School diploma or GED
- Assessment Test
- Completed admission packet
- Spanish/English Placement Exam

## Spanish 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.

### **SIM120 - Spanish Medical Interpreter 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 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 student are eligible to take a national certification examination.

### **Length of Program**

**Approximately 14 weeks / 410 clock hours**

### **Program requirements include:**

- 17 1/2 years of age to enroll
- High School diploma or GED
- Assessment Test
- Completed admission packet

## 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 using word parts. Medical abbreviations and symbols and term spelling.

### **SKBPC005 - Brief Introduction to Computers**

Introductory course in fundamentals of computers, including hardware components, operating system characteristics, and basic software applications. Prerequisites: None

## **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.

## **Nursing Programs**

The SouthWest Skill Center offers their students two exit points for employment that begins with Nurse Assistant and the Practical Nurse Certificate Program. Additionally, completion of the Practical Nurse Program prepares the student for application and possible entry into the Associate Degree Registered Nurse Program after the completion of additional pre-requisites and entrance testing.

### **Nurse Assistant Program**

With the construction of large healthcare facilities in the West valley, coupled with an aging population at both the local and national level, trained healthcare professionals are more in demand than ever before. Careers in healthcare, including Certified Nurse Assistants (CNA) are often included on 'hot' job listing worldwide.

This program provides a holistic approach to education that combines classroom instruction with a skills-based laboratory, hands-on experience, and therapeutic interaction with patients at off-site clinical locations throughout the Phoenix area. The program prepares students to take the nurse assistant certification examination. Completion does not guarantee certification.

Certified Nurse Assistants typically start at \$9 to \$15 per hour, and are responsible for a variety of patient needs. CNA's can work in hospitals, nursing homes, home health, and hospice.

The Nurse Assistant Course of study and its competencies meet the requirements of the Arizona State Board of Nursing to educationally qualify the student to take the certification examination to become a certified nurse assistant. Completion of the NA Program does not guarantee certification. Skills lab and clinical experiences are conducted.

#### **Length of Program**

**Approximately 6 weeks / 150 clock hours**

#### **Program requirements include:**

- High School diploma or GED
- Assessment Test
- Completed admission packet

## Nurse Assistant Curriculum

### **SKNUR NA – Nursing Assistant**

Introduction to the role of the nursing assistant for clients across the wellness/illness continuum within the nurse assisting scope of practice. Includes basic problem solving processes specific to meeting the basic and holistic needs of clients, therapeutic communication skills essential for the nursing assistant, interventions to ensure the needs and safety of the client, specific types of diseases, conditions and alterations in behavior of the client, and principles of nutrition and fluid balance. Focus is on special needs of the elder client in the acute and long-term care settings, and basic emergency care skills and procedures. Provides opportunity for the development of clinical competency in the performance of selected nurse assisting skills and procedures through participation in the care of clients. Prerequisites: Satisfaction of all health and safety requirements and application requirements for SWSC Nursing Assistant Program.

## Practical Nurse Program

The Practical Nurse Program (PN) is a program which meets the requirement of the Arizona State Board of Nursing to prepare students to take the NCLEX-PN licensing examination to become a Licensed Practical Nurse.

### **Length of Program**

**Approximately 42 weeks / 1008 clock hours**

### **Program requirements include:**

- High School diploma or GED
- HESI A2 Assessment Test
- Completed admission packet

## Nursing Core Classes

Nursing Core Classes are non-transferable. The competencies for each course are derived from the Practical Nurse curriculum and were created to better prepare the student for the program.

### **Practical Nurse Curriculum:**

#### **SKPNC I – Core Essentials of Practical Nursing I**

This course is an introduction to medical terminology, structure and function, structural organization of the human body, and math used in health care. Utilized is a body systems approach to selected terms related to structures, functions, diseases, procedures, and diagnostic tests. Build, analyze, and define terms using basic word parts. Learn selected medical abbreviations and symbols and how to pronounce and spell terms. Gain knowledge of the structure and function of the body, which is the study of the anatomy and physiology. Including cells, tissues, integumentary system, skeletal system, muscular system, nervous system, endocrine system, circulatory system,

lymphatic system, respiratory system, digestive system, urinary system, sensory system, and reproductive system. Review of the basic math skills, addition, subtraction, multiplication, division, fractions, decimals, percentages, metric conversions, pharmacology abbreviations, and common equivalents. Co-requisites: SKPNCII

#### **SKPNCII – Core Essentials of Practical Nursing II**

Introduction to the role of the nursing assistant for clients across the wellness/illness continuum within the nurse assisting scope of practice. Includes basic problem solving processes specific to meeting the basic and holistic needs of clients, therapeutic communication skills essential for the nursing assistant, interventions to ensure the needs and safety of the client, specific types of diseases, conditions and alterations in behavior of the client, and principles of nutrition and fluid balance. Focus is on special needs of the elder client in the acute and long-term care settings, and basic emergency care skills and procedures. Provides opportunity for the development of clinical competency in the performance of selected nurse assisting skills and procedures through participation in the care of clients. Prerequisites: Satisfaction of all health and safety requirements for SWSC Nursing Programs.

Co requisites: Concurrent enrollment in SKPNC I

#### **SKPNI – Practical Nursing Science I**

Core values of the practical nursing program, nursing history, standards, and scope of practice of the practical nurse. Safe nursing care of clients with selected alterations in health; fundamental concepts of health promotion, disease/illness prevention. Nursing care based upon integration of pathophysiology, nutrition, communication and physical, biological, and psycho-social sciences. Uses information technology in performing and documenting client care.

Prerequisites: SKPNC 1 and SKPNC 2 or equivalent, at the discretion of the Program Manager/ Nursing Chair.

#### **SKPNCII – Practical Nursing Science II**

Holistic practical nursing concepts and theories related to care of childbearing, pediatric, adult, and geriatric clients. Role of the practical nurse collaborating with other members of the healthcare team. Concepts of health promotion and disease/illness prevention. Nursing care based upon integration of pathophysiology, nutrition, communication and physical, biological and psycho-social sciences. Information technology in performing and documenting client care. Emphasis on nursing care related to pediatric, child-bearing families, and adult clients with selected alterations in health; concepts of delegation, prioritization and management of care for the practical nurse based on the core values of the nursing program. Prerequisites: SKPNC I&II, or equivalent and SKPN I

## The Nursing Program is licensed and approved by the Arizona State Board of Nursing.

### Waiver of Licensure/Certification Guarantee:

Admission or graduation from the Practical Nurse Program does not guarantee obtaining a license or certificate to practice nursing. Licensure and certification requirements and the subsequent procedures are the exclusive right and responsibility of the Arizona State Board of Nursing. Students must satisfy the requirements of the Nurse Practice Act: Statutes, Rules and Regulations, independently of any college or school requirements for graduation.

Pursuant to A.R.S. § 32-1606(B)(17), an applicant for practical nurse license by examination is not eligible for licensure if the applicant has any felony convictions and has not received an absolute discharge from the sentences for all felony convictions. The absolute discharge must be received five or more years before submitting this application. If you cannot prove that the absolute discharge date is five or more years, the Board cannot process your application.

All Practical Nurse and Nurse Assistant applicants for certification and licensure will be fingerprinted to permit the Department of Public Safety to obtain state and federal criminal history information. If there is any question about eligibility for licensure or certification, contact the nursing education consultant at the Arizona State Board of Nursing (602-331-8111). All students must submit a copy of a level one fingerprint clearance, card with their application for the Maricopa Community College District Nursing Program and pass a supplemental background check from an MCCCCD authorized vendor that will conduct the background check.

### Health Declaration:

It is essential that Nursing students be able to perform a number of physical activities in the clinical portion of the program. At a minimum, students will be required to lift patients, stand for several hours at a time and perform bending activities. The clinical nursing experience also places students under considerable mental and emotional stress as they undertake responsibilities and duties impacting patients' lives. Students must be able to demonstrate rational and appropriate behavior under stressful conditions. Individuals should give careful consideration to the mental and physical demands of the program prior to making application.

### Health & Safety Requirements for the Nursing Program:

1. Students must submit a completed Health and Safety Documentation Checklist and supporting documentation and maintain current status throughout the program.
2. Students must submit a CPR card for Health Care Provider and maintain current status throughout the program.
3. Health Declaration Form signed by a licensed health care provider.
4. Negative urine drug screen.
5. Level One Fingerprint Clearance Card and "pass" on supplemental background check.

## The Nurse Assisting Pathway

The nurse assisting pathway is designed to prepare students to complete the Nurse Assistant Certification through the Arizona State Board of Nursing to practice in a health care agency as a Certified Nurse Assistant. Students may apply to the Nursing Program after completing the admission requirements.

## Practical Nurse Pathway

Following completion of the practical nurse level program of study, the student is eligible to apply for licensure as a practical nurse. Licensed Practical Nurses (L.P.N.) are employed in acute, long-term, and community-based health care agencies under the direction of a registered nurse or physician. Practical Nurses function within their legal scope of practice and use professional standards of care in illness and health promotion activities for clients and families across the life span.



The Community and Workforce Training Department serves the West Valley community with short-term, hands-on training that prepares students for current future job opportunities. In conjunction with our training partners, we are able to offer in-person programs for students wishing to pursue a career in the one of the following programs.

### Workforce Training Opportunities

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## Get Started Today!

Advisor 623.935.8961 or 623.935.8037

[estrellamountain.edu/community-education](http://estrellamountain.edu/community-education)



# Community and Workforce Training

## **BPI AC/Heat Pump Specialist Training**

WRKDEV 450-15500

This Everblue BPI Heating Specialist Certification course includes 5 days of classroom and field training as well as the BPI Heating Professional written and field exams. This course covers heating system science, load & system sizing, ventilation system design & installation, and system diagnostics.

Prerequisites: BPI Building Analyst certification

Credential: BPI AC/Heating Specialist

### **Length of Program**

**Approximately 35 Hours**

## **BPI Building Analyst & Envelope Shell**

WRKDEV 450-15052

This Everblue course is intended for individuals that want to become BPI Building Analysts in the residential building industry. Students will learn the fundamentals of energy and energy transfer, energy systems within a home, the "home as a system" concept, common construction errors that reduce comfort and efficiency, weatherization techniques, and how to conduct an energy audit. Students will analyze how systems and home attributes such as air leaks, insulation, barriers (air, thermal and moisture) and heating and cooling ducts affect occupant health, safety and comfort, energy efficiency and durability. Solutions and/or weatherization techniques will be proposed for each problem identified. The course will include classroom and field training using analysis tools including a blower door, manometer, carbon monoxide tester, natural gas detector and flue gas detector.

Prerequisites: None

Credential: BPI

### **Length of Program**

**Approximately 38 Hours**

## **Dental Assisting Program**

The 80 hour Dental Assisting Program prepares students for entry level positions in one of the fastest growing health care positions – Dental Assisting. The purpose of this course is to familiarize the student with all areas of pre-clinical dental assisting and provide training in the professional skills required to function as an assistant in the dental practice.

In addition to entry-level administrative jobs, this course is ideal for students interested in pursuing a future formal Dental Hygienist program. The program includes graded quizzes and exams.

- Describe dental specialties and the history of dentistry
- Identify the members of the dental staff and general job descriptions.

- Identify and name the parts of the jaw and areas of the mouth.
- Oral embryology and histology.
- Tooth charting, tooth surfaces and classification of restorations on a tooth.
- Identify a single crown restoration, bridge, implant, partial denture, and full denture.
- Overview of dentitions
- Periodontal disease and preventative dentistry
- Identify and name dental equipment and accessories/equipment in a treatment room.
- Oral pathology, microbiology, disease transmission and Infection Control
- Principles and techniques of Instrument processing and sterilization
- Chemical and waste management.
- Dental unit water lines.
- Dental hand pieces and accessories
- Moisture control
- Dental cements, impression materials and general dentistry
- Endodontics, periodontics and oral maxillofacial surgery

### **Length of Program**

**Approximately 12 Weeks**

### **Program requirements include:**

- Must be 18 years of age
- Must have a GED or High School Diploma

This program qualifies for the eCashier® Student Tuition Payment Plan.

## **Dialysis Technician Program**

This 60 hour Dialysis Technician Program provides students with the knowledge and skills needed to perform the duties required of Dialysis Technicians.

Under the supervision of physicians and registered nurses, Dialysis Technicians operate kidney dialysis machines, prepare dialyzer reprocessing, and delivery systems as well as maintain and repair equipment. Furthermore, technicians work with patients during dialysis procedures to monitor and record vital signs as well as administer local anesthetics and drugs as needed.

Dialysis Technicians must also assess patients for any complications that occur during the procedure and must be ready to take necessary emergency measures including administering oxygen or performing Basic Cardiopulmonary Resuscitation. Additionally, they may also be involved in the training of patients for at-home dialysis treatment and providing them with the emotional support they need for self-care.

# Community and Workforce Training

## **Length of Program**

**Approximately 10 weeks**

### **Program requirements include:**

- Must be 18 years of age
- Must have a GED or High School Diploma

This program qualifies for the eCashier® Student Tuition Payment Plan.

## **EKG Technician Program**

This comprehensive 50 hour EKG Technician Certification Program prepares students to function as EKG Technicians and to take the American Society of Phlebotomy Technician (ASPT) – Electrocardiograph (EKG) Technician exam in addition to other National Certification Exams. This course will include important practice and background information on anatomy of the heart and physiology, medical disease processes, medical terminology, medical ethics, legal aspects of patient contact, the Holter monitor, electrocardio- graphy and echocardiography.

Additionally, students will practice with equipment and perform hands-on labs including introduction to the function and proper use of the EKG machine, the normal anatomy of the chest wall for proper lead placement, 12-lead placement and other clinical practices. EKG Technicians also analyze printed readings of EKG tests, measuring various “cardiac intervals and complexes” and determining normal vs. abnormal EKG.

## **Length of Program**

**Approximately 8 weeks**

### **Program requirements include:**

- Must be 18 years of age
- Must have a GED or High School Diploma

This program qualifies for the eCashier® Student Tuition Payment Plan.

## **Electronic Health Record Management Program**

This 95 hour Electronic Health Record (EHR) Management program prepares students to understand and use electronic records in a medical practice. An electronic health record (EHR) includes computerized lifelong healthcare data from a variety of sources where every encounter an individual has with the healthcare system is documented and compiled for quick access.

Electronic Health Record professionals are educated in the implementation and management of electronic health information using common electronic data interchange systems such as HL7, CDISC, and DICOM. Students will learn through classroom and computer lab training the necessary components consistent with maintaining the medical, legal,

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accreditation and regulatory requirements of the electronic health record and database.

This program meets the necessary requirements of a leading national certification examination – please call for more details!

## **Length of Program**

**Approximately 16 weeks**

### **Program requirements include:**

- Must be 18 years of age
- Must have a GED or High School Diploma

This program qualifies for the eCashier® Student Tuition Payment Plan.

## **HERS Rater (RESNET) Certification**

WRKDEV 450-15054

RESNET is the Residential Energy Services Network, the American Building Performance rating System. RESNET makes national standards for building efficiency rating systems and certifies individuals as raters. RESNET certification is highly sought after in home construction and remains a strong area for job seekers. Jobs include energy auditors, weatherization professionals, contractors and laborers.

This five day course covers topics such as basic principles of building science, thermal resistance of insulation materials, blower door and duct leakage testing procedures, efficiencies of windows, heating, cooling, water heating, lighting systems as well as on-site inspection procedures. Class includes curriculum, field training experience and exam practice questions.

Prerequisites: None

Credential: RESNET Certified Rater

## **Length of Program**

**Approximately 35 Hours**

## Home Healthcare Aide Program

This 80 hour comprehensive program prepares students for a position as a Home Healthcare Aide. Emphasis is on giving personal care in a client's home, communications, working with ill persons, basic human needs, eldercare, nutrition, special diets, and home management. This program will prepare students to sit for the National Association for Home Care & Hospice ("NAHC") "Home Care Aide Certification" examination through the NAHC's Homecare University Program.

Students will be trained by a leader in the field on all aspects of home health care, such as:

- The structure of the health system
- The purpose and the need for home health care
- The role of the home health aide
- The client care plan and its purpose
- The home health aide scope of practice
- The professional relationship with the client
- Employer responsibilities
- Communication and cultural diversity
- Accurate verbal/written reporting and documentation
- Patient rights, confidentiality and HIPAA
- Infection control and standard precautions
- Safety and body mechanics
- Emergency care
- Law and ethics related to providing health care
- Physical, psychological, and social health in aging
- Physical and emotional needs of the elderly
- The human body and disease
- Human development and aging
- Physical and biological aspects of aging
- Dying, death, and hospice
- Transfers, ambulation and positioning
- Prevention of skin breakdown
- Personal care skills
- Core healthcare skills

### Length of Program

**Approximately 11 weeks**

### Program requirements include:

- Must be 18 years of age
- Must have a GED or High School Diploma

This program qualifies for the eCashier® Student Tuition Payment Plan.

## LEED Green Associate Training

WRKDEV 450-15542

The LEED Green Associate credential is for professionals who want to demonstrate green building expertise in non-technical fields of practice. This credential denotes basic knowledge of green design, construction, and operations. LEED Green Associate is the best introduction to green building that you will find - it is high level and comprehensive in nature, providing insights into a 100+ areas of green building. Developed by the U.S. Green Building Council (USGBC), LEED provides building owners and operators a concise framework for identifying and implementing practical and measurable green building design, construction, operations and maintenance solutions. LEED Green Associate is the premier standard for environmentally sustainable building and provides the foundational knowledge for those interested in green construction. Individuals obtaining this credential gain a competitive edge in today's job market, even with no prior experience in green construction. The certificate is highly transferable into any industry including construction, engineering, project management, property management, or general business.

Prerequisites: None

Credential: LEED Green Associate

### Length of Program

**Approximately 114 Hours**

## Lead Renovator Training

WRKDEV 450-15542

This EPA course provides training to contractors who work in housing with lead-based paint. Participants will learn the processes and steps to renovate, repair, and paint homes with lead based paint according to EPA's Renovation, Repair, and Painting Rule and HUD's Lead Safe Housing Rule

Prerequisites: None

Credential: Lead Renovator, Repair & Painting Certificate

### Length of Program

**Approximately 7 Hours**

## Solar PV Boot Camp

WRKDEV 450-15555

Solar PV Boot Camp training is a comprehensive program that introduces participants to the fundamentals of solar energy and photovoltaics. The instructor will combine lecture-based training with laboratory activities to introduce students to mechanical systems and processes, electricity design, and installation techniques. This five-day course includes bonus instruction in site survey and pre-planning, system configurations, mechanical and electrical integration, permitting and inspection, connecting to the utility grid, and the business and economics of solar.

### Length of Program

**Approximately 35 Hours**

## Sustainable Building Advisor

WRKDEV 450-15560

Take an in-depth look at the principles of sustainability. The SBAP presents principles and best practices that the LEED framework is based on. Course participants will learn how to apply these principles on the macro and micro levels, moving beyond the LEED point system to developing a systems approach to sustainability. Sustainability is a way of thinking. It is an approach to optimizing systems of people, material, energy, and information. The SBAP is designed to integrate these elements in a single curriculum that is recognized by the U.S. Green Building Council as a 400-level mastery course in this exciting and important field. Prerequisites: None

### Length of Program

**Approximately 400 Hours**

## Veterinary Assistant Program

Enjoy the rewards of working with animals! This 100 hour program provides instruction and training in the Veterinary Assistant field. This course includes but is not limited to the knowledge and skills necessary to participate in the care of animals as well as understanding the clerical/accounting duties necessary to maintain an efficient and competent front office.

This program provides and will enable students to obtain the necessary knowledge and skills to succeed in an entry-level position in the field of veterinary technology. Through classroom lectures and hands on labs, students who complete this program will be prepared to assist veterinarians and veterinary technicians in providing quality animal care including: obtaining and recording patient information; the review of preparing patients, instruments and equipment for surgery; how to collect samples and perform certain lab procedures; dressing wounds; assisting in diagnostic and medical procedures; communicating with animal owners; and feeding and caring for animals.

### Program Note:

Although this program includes comprehensive classroom lectures and hands on labs; this program does not include a national or state certification and it does not include a clinical rotation as part of its overall objectives.

### Length of Program

**Approximately 16 weeks**

### Program requirements include:

- Must be 18 years of age
- Must have a GED or High School Diploma

This program qualifies for the eCashier® Student Tuition Payment Plan.

# MCCCD Occupational Programs

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**

### ***Agribusiness Sales and Service***

#### ***Agricultural Production and Management***

Agribusiness	MC
(See Agribusiness Sales and Service and Horticulture sections for additional programs and related areas)	
Urban Horticulture	MC
(See Horticulture section for additional programs and related areas)	

#### ***Equine Training and Management***

Equine Science	SC
Veterinary Technology/Animal Health	MC

#### ***Horticulture***

Landscape Aide	MC
Landscape Specialist	MC
Workforce Development: Horticulture	RS
Workforce Development: Landscape Technology	RS

## **Architecture and Construction**

### ***Air Conditioning and Refrigeration***

Air Conditioning/Refrigeration/Facilities	GW
Residential and Light Commercial Air Conditioning	GW

### ***Apprenticeship Related Instruction***

Construction Trades: Bricklaying and Tilesetting	GW
Construction Trades: Construction Management	GW
Construction Trades: Carpentry	GW
Construction Trades: Millwrighting	GW
Construction Trades: Painting and Drywalling	GW
Construction Trades: Plastering and Cement Masonry	GW
Construction Trades: Sheet Metal	GW
Construction Trades: Electricity	GW
Construction Trades: Heat and Frost Insulation	GW
Heavy Equipment Operations	GW
Construction Trades: Ironworking	GW
Construction Trades: Mechanical Trades: Heating, Ventilating and Air Cond.	GW
Construction Trades: Mechanical Trades: Plumbing	GW
Construction Trades: Mechanical Trades: Pipefitting	GW
Construction Trades: Mechanical Trades: Sheet Metal	GW
Construction Trades: Concrete Form Builder	GW
Construction Trades: Millwright	GW
Construction Trades: Pipe Trades: Pipefitter-Refrigeration	GW
Construction Trades: Pipe Trades: Plumbing	GW
Construction Trades: Pipe Trades: Steamfitting	GW
Power Plant Technology	GW, EM
Construction Trades: Roofing	GW
Construction Trades: Sheet Metal	GW

# MCCCD Occupational Programs

## **Building and Construction**

Architecture	MC
Architectural CADD Level III	MC
Architectural Detailing CADD Level III	MC
Architectural CAD Technology	PC
Architectural Technology	SC
Building Inspection	EM, MC
Building Safety and Construction Technology	PC
Building Safety Technology	SC
Construction Trades: Carpentry	GW
Civil Engineering Technology	PC
Construction	MC
Construction Drafting CADD Level III	MC
Construction Trades: Heavy Equipment Operations	GW
Construction Management	PC
Plan Review	MC
Pre-Contractor Licensing	MC
Residential Drafting CADD Level II	MC
Survey and Civil Drafting - CADD Level II	
Workforce Development: Carpentry Level I	RS
Workforce Development: Carpentry Level II	RS
Workforce Development: Furniture Construction/Refinishing Level I	RS
Workforce Development: Furniture Construction/Refinishing Level II	RS

## **Art, A/V Technology, and Communication**

### **Home Economics**

Adolescent Development	GC, RS
Adolescent Studies	PC
Adult Development and Aging	GC, RS
Advanced Interior Design	PC
Alteration Specialist	MC
Apparel Construction	PC
Costume Design and Production	MC
Costuming	PC
Family Development	PC
Family Life Education	GC, MC, SC, RS
Family Support	PC
Fashion Design	PC
Fashion Design Level I	PC
Fashion Design Level II	PC
Fashion Illustration	PC
Interior Merchandising	GC, MC, PC
Interior Design	MC, PC, SC
Interior Design: Advanced	MC
Interior Design: Professional Level	SC
Kitchen and Bath Design	PC
Parent Education	GC, MC, RS, SC
Pattern Design Level I	PC
Pattern Design Level II	PC

### **Merchandising**

Fashion Merchandising	PC
Fashion Merchandising & Design	MC
Image Consultant	MC

# MCCCD Occupational Programs

## **Music**

Audio Production Technologies	GC, MC, PC, PV, SC
Dance Technology	SC
Music Business	CG, GC, MC, PC, PV, SC, SM
Beginning Piano Pedagogy	MC
Intermediate Piano Pedagogy	MC

## **Commercial Art/Advertising Art**

Computer Graphic Design	PC
<i>(See Media Technology section for additional programs and related areas)</i>	
Animation and Web Publishing Design	GC
Graphic Design: Visual Communication	SC
Journalism	GC, PC, PV, SC, MC
Workforce Development: Graphic Arts Level I	RS
Workforce Development: Graphic Arts Level II	RS

## **Aerospace and Aviation**

### **Aviation and Aeronautics**

Aircraft Maintenance Technology	CG
Aircraft Maintenance Technology (Part 147)	CG
Airframe Maintenance (Part 147)	CG
Airway Science Technology, Flight Emphasis	CG
Flight Technology	CG
Powerplant Maintenance (Part 147)	CG

## **Bioscience**

Biomedical Research Technology	CG, GW, SM
Biotechnology	MC
Biotechnology and Molecular Biosciences	GC

## **Business, Management, and Administration**

### **Accounting**

Accounting	GC, PC, PV, RS, SC, SM, CG, GW
Accounting – Specialized Para-Professional	PV
Bookkeeping	SC
Microcomputer Accounting	PV
<i>(See Business Administration for additional programs and related areas)</i>	
Software Quality Assurance	MC
Accounting Paraprofessional	GC

### **Business Administration**

Business	MC, SC
Business (Fastrack)	SC
General Business	CG, GC, MC, PC, RS, SCC, SMC
<i>(See Management and Finance section for additional programs and related areas)</i>	
Import/Export Trade	PV
International Business	PV
International Trade	MCC

### **Management**

Business Management	SM
General Business Specialized	PVC
Human Resources Management	PC
Management	PC, MC, SC
Management I	PC
Management II	PC

# MCCCD Occupational Programs

Middle Management	GC, PV
Military Leadership	RS
Project Management	MC
Public Relations	GC
(See Middle Management section for additional programs and related areas)	
Retail Management	CG, GC, GW, EM, MC, PC, PV, RS, SC, SM
Retail Management and Marketing	SC
Retail Sales Manager	MC
Small Business	MC
Small Business Entrepreneurship	GC, SM
Small Business Management	EM, SC
Small Business Start-Up	CG, GC, MC, PC, PV, RS, SM
Supervision and Management I	SM
Supervision and Management II	SM
Supervision	GC

## **Middle Management**

Public Relations	MC
(See Management section for additional programs and related areas)	

## **Office Occupations**

Administrative Office Coordinator	GC
Computer Applications	PC
Data Entry Clerk	EM
General Office Secretary	EM, GC
Administrative Office Professional	PV
Paralegal Studies	PC
Realtime Reporting Scoping	GW
Receptionist	EM
Management of Clinical Information Technology	GW
Management of Clinical Information Technology: Health	GW
Management of Clinical Information Technology: Practice	GW
Management of Clinical Information Technology: Implementation Management	
Information Technology Implementation Support	GW
Technology Support Analyst	MC

## **Total Quality Management**

Automobile Insurance: Customer Service	RS
Automobile Policy: Customer Service	RS
Broadband Telecommunications: Account Services	RS
Broadband Telecommunications	RS
Broadband Telecommunications: Field Operations	RS
Credit Counseling: Customer Service	RS
Customer Service Management	EM
Human Services-Assistance: Customer Service	RS
Human Services-Specialist: Customer Service	RS
Insurance-Customer Service	RS
Motor Vehicle: Customer Service	RS
Organizational Leadership	CG, EM, GW, MC, PV, RS
Organizational Management	CG, EM, GW, MC, PV, RS
Pharmacy: Customer Service	SM
Quality Customer Service	RS
Travel Agency: Customer Service	RS
Broadband Telecommunications: Technical Support Services	RS
Utilities Customer Service	RS



# MCCCD Occupational Programs

## Education and Training

### **Early Childhood Education**

Child and Family Organizations Management and Administration	GC, MC, RS
Child Development Associate (CDA) Preparation	GC, PVC
Curriculum for Young Children	PC
Early Care and Education	MC
Early Care Specialist	MC
Early Childhood Education and Administration	PC
Early Childhood Classroom Management	PC
Early Childhood Development	SM, RS
Early Childhood Development: Montessori	SM
Early Childhood Education	PV, GC, RS
Early Childhood Administration and Management	GC, MCC, RSC, SM
Infant and Toddlers Development	SC, RS
Early Learning and Development	GC, MC, RS, SC
Family Child Care Management	RS, SC

### **Workforce Development**

Workforce Development and Community Re-Entry	RS
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### **Education**

Bilingual Endorsement	MC, PC
ESL Endorsement	MC, PC
Gifted Education	EM
Reading Specialist Endorsement	MC
Teacher Assisting	EM, GW
Foundations of Student Services	EM

### **Library Media Technology**

Library Information Technology	MC
Library Information Technology: Advanced	MC
Library Information Technology: Basic	MC
Library Information Technology: Practitioners	MC
Library Information Technology: School Library Media Center	MC

## Environmental Technology

### **Environmental Technology**

Environmental Science Technology	GW
Geospatial Technologies	MC
Occupational Safety and Health Technology	GW
Radiation Protection Technology	EM
Safety, Health and Environmental Studies	PV
Wastewater Treatment	GW
Water Technologies	GW
Water Resources Technologies: Hydrologic Studies	GW
Water Treatment	GW

## Finance

### **Finance**

Banking and Finance	PC, EM
Bank Account Management: Customer Service	RS
Certified Residential Appraiser	MC
Home Inspection	MC
Licensed Real Estate Appraiser	MC
Real Estate	GC, MC, PC
Real Estate: Prelicense	PC

# MCCCD Occupational Programs

Residential Appraisal Trainee

MC

## Government and Public Administration

Public Administration

RS

Tribal Development

SC

## Health Science

### **Allied Health**

Advanced Behavioral Health Sciences

GC, SM

Basic Behavioral Health

GC, SM

Clinical Research Associate

GW

Community Health Worker

SM

Developmental Disabilities Specialist

GC, CG

Diagnostic Medical Sonography

GW

Electroneurodiagnostics

GW

Health Information: Long Term Care Settings

PC

Health Information Technology

PC

Health Services Management

GW

Health Unit Coordinating

GW

Histologic Technology

PC

Hospital Central Service Technology

GW

Laboratory Assisting

PC

Computed Tomography

GW

Magnetic Resonance Imaging

GW

Medical Assisting

PC

Medical Billing and Coding: Physician-Based

PC

Medical Front Office

PC

Medical Laboratory Sciences

PC

Medical Radiography

GW

Medical Transcription

GW

Perioperative Nursing

GW

Phlebotomy

PC

Physical Therapist Assisting

GW

Radiation Therapy

GW

Recovery Support

SM

Respiratory Care

GW

Speech Language Pathology Assistant

EM

Surgical Technology

GW

### **Emergency Medical Technology**

Advanced Emergency Medical Technology (Paramedic)

GC, PC, PV, SC

Basic Emergency Medical Technology

GC, MC, PC, PV, SC

Community Emergency Response Team (CERT): Level I

PC

Emergency Communications and Deployment

PC

Intermediate Emergency Medical Technology

MC, PC

Paramedicine

MC

### **Dental**

Community Dental Health Coordination

RS

Dental Assisting

PC

Dental Hygiene

PC, RS, MC

Dental Office Management

PC

Dental Assisting Technology

RS

# MCCCD Occupational Programs

## **Nursing**

Fast Track Practical Nursing  
Nursing  
Nurse Assisting  
Practical Nursing  
Nursing Refresher

GW  
CG, EM, GC, GW, MC, PC, PV, SC  
CG, GC, GW, MC, PC, PV, SC, RS, EM  
CG, GC, GW, MC, PC, PV, SC, RS, EM  
GW, MC

## **Hospitality and Tourism**

### **Food and Nutrition**

Advanced Professional Culinary Arts  
Baking and Pastry  
Basic Culinary Studies  
Commercial Food Preparation  
Culinary Arts  
Culinary Studies  
Culinary Fundamentals  
*(See Hospitality section for additional programs and related areas)*  
Dietetic Technology  
Food Service Administration  
Professional Food and Beverage Service  
Sustainable Food Systems

SC  
EM  
EM  
PC  
SC  
EM, PC, MC  
SC  
  
CG, PV  
PC  
PC  
PC, RS, MC

### **Hospitality**

Airline Operations  
Airline Operations: Ground Operations  
Airline Operations: Initial Flight Attendant  
Airline Operations: Passenger Services  
Airline Operations: Reservations  
Hospitality and Tourism/Golf Management  
Hospitality and Tourism/Hotel Management  
Hospitality and Tourism/Restaurant Management  
Hospitality and Tourism/Spa and Wellness Center Management  
Hospitality/Hotel Management  
Hospitality and Tourism/Tourism Development and Management

RS  
RS  
RS  
RS  
RS  
SC  
SC  
SC  
SC  
EM  
SC

## **Human Services**

### **Parks, Recreation, Leisure and Fitness Studies**

Recreation Management

MC, PC, SC

### **Health and Physical Education/Fitness**

Group Fitness Instructor  
Personal Trainer  
Personal Training Specialist  
Strength, Nutrition and Personal Training  
Teaching, Healing, Meditation & Stress Management  
Therapeutic Massage  
Yoga Instruction

GC, MC  
GC, MC  
CG, EM, GC, MC, PV, SC, SM  
CG, GC, MC, PV, SC, SM  
PV  
CG, PC  
SC

### **Family and Consumer Science**

Nutrition for Fitness and Wellness

GC, MC

# MCCCD Occupational Programs

## **Social Sciences**

Addictions and Substance Use Disorders Level I	RS
Addictions and Substance Use Disorders Level II	RS
Deaf Studies	PC
Interpreter Preparation	PC
Professional Addictions Counseling	RS

## **Social Services**

Gerontology	RS
Gerontology: Aging Services Management	RS
Gerontology: Eldercare	RS
Gerontology: Foundations	RS
Gerontology: Generalist	RS
Gerontology: Program Development	RS

## **Mortuary Science**

Mortuary Science	MC
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## **Information Technology**

### **Computer Science**

Advanced Computer Usage and Applications	RS
Advanced Web Designer	MC
Computer Applications Technology	EM
Computer Applications: Microsoft Office Specialist/Advanced	MC
Computer Applications: Microsoft Office Specialist/Basic	MC
Computer Hardware and Desktop Support	CG, EM, MC, SC
Computer Hardware and Network Support	SC
Computer Information Systems	GC, MC, PC, PV, SC, SM, GC, GW
Computer Networking Technology	PV
Computer Systems Maintenance	PV
Computer Technology	RS
Computer Usage and Applications	RS
Database Development	SC
Desktop Publishing	EM
Engineering Technology	GC, CG, EM
Game Technology	GW, MC
Geographic Information Systems	MC
Information Assurance	MC
Information Security	EM, GC, GW
Information Security Administration	EM, GC, GW
Information Security Technology	EM, GC, GW
Information Security Wireless Networks	EM, GC, GW
Information Technology	CG
Information Technology Support	SM
Information Technology: Programming and Systems Analysis	SM
Information Technology: Web and Graphic Design	SM
Information Technology: Cisco Networking Professional	SM
Information Technology: Computer Applications Specialist	SM
Information Technology: Network Server	SM
Information Technology: Network Security	SM
Information Technology Support	SM
Linux Associate	CG, EM, GC, MC
Linux Networking Administration	EM, GC, MC
Linux Professional	CG, EM, GC, MC, PV
Microcomputer Applications	GC

*(See Office Occupations section for additional programs and related areas)*

# MCCCD Occupational Programs

Microcomputer Applications: Office Specialist/Core Level (See Office Occupations section for additional programs and related areas)	CG
Microcomputer Applications: Office Specialist/Expert Level (See Office Occupations section for additional programs and related areas)	CG
Microcomputer Business Applications (See Office Occupations section for additional programs and related areas)	CG, GC
Microsoft Database Administration	CG
Microsoft Desktop Support Technology	EM, GC, MC, PV
Microsoft Networking Technology	EM, GC, GW, PV
Microsoft Product Specialist	CG, EM, GC, GW, PV, SC
Microsoft Applications Development	MC, PV
Microsoft Systems Administration	EM, GC, PV
Microsoft Systems Engineer	EM, GC, GW, PV
Multimedia and Business Technology	MC
Network Administration	SC
Network Administration: CISCO Network Associate	MC
Network Administration: CISCO Network Professional	MC
Network Administration: Microsoft Windows NT	MC
Network Administration: Microsoft Windows	MC
Network Administration: Novell	MC
Network Administration: UNIX-Solaris	MC
Network Security	MC
Networking	RS
Networking Administration: Cisco	CG, EM, GC, GW, SM
Networking System Administration	MC
Networking Technology: Cisco	CG, EM, GC, GW
Oracle Database Administration	EM
Oracle Database Operations	CG
Personal Computer Applications	SC
Programming	RS
Programming and System Analysis	CG, EM, GC, MC, PC, PV, SC, SM
Software Development	SC
Web Design	GC, PV
Web Design	SC
Web Design	RS
Web Designer	MC
Advanced Web Developer	MC
Web Developer	GC, GW, MC, PC, PV, EM
Web Development	SC
Web Server Administrator	MC
Web Technology	MC
<b>Media Technology</b>	
Animation	GC
Broadcast Production	SC
Comic and Sequential Art	PC
Digital Arts	MC
Digital Photography	PC
Digital Arts: Digital Illustration	MC
Digital Arts: Digital Photography	MC
Digital Arts: Graphic Design	MC
Digital Arts: Web Design	MC
Editing	SC
eLearning Design Specialist	RS
Film Analysis and Criticism	SC

# MCCCD Occupational Programs

Film Production	SC
Game Technology	MC, GW
Graphic Design	RS
Media Arts: Computer Art/Illustration	CG, PC, PV
Media Arts: Desktop Publishing	PC
Media Arts: Digital Animation	PC
Media Arts: Digital Imaging	CG, PC
Media Arts: Web Design	PC
Motion Picture/Television Production	SC
Multimedia	GC
Multimedia Technology	MC
Screenwriting	SC
Technical Theatre	PC, MC, SC, PVC
Video Production Technology	GC
Web Publishing Design: Foundation	GC
Web Publishing Design: Design and Authoring	GC

## Manufacturing

### ***Drafting Technology***

CAD Technology	GC
Basic CAD	GC
CAD/CAM/CNC I	MC
CAD/CAM/CNC II	MC
CAD Application	GC
Commercial Drafting CADD Level II	MC
Computer Aided Design and Drafting CADD Level I	MC
Computer Aided Drafting	MC
CAD-BIM Technology	PC
Electro/Mechanical Drafting	MC
Electromechanical Manufacturing Technology	MC
Industrial Design Technology	GW
Industrial Design Technology: Design Specialist: SolidWorks	GW
Machining I	MC
Machining II	MC
Machining and Product Development Technology	MC
Manufacturing Engineering Technology	MC
Manufacturing Management	MC
Production Technology	MC
Manufacturing Productivity: CNC CAD/CAM Programming	GW
Production Technology: CNC Technology	GW
Manufacturing Productivity: Conventional Machines Level I	GW
Manufacturing Productivity: Conventional Machines Level II	GW
Manufacturing Productivity: Engineering Graphics	GW
Manufacturing Productivity: Process Improvement	GW
Manufacturing Productivity: Team Leadership	GW
Production Technology: Quality Assurance	GW
Manufacturing Welding	MC
Mechanical Drafting	MC
Micro Circuit Mask Design	MC
Microcomputer Servicing	GC
Public Works Leadership	EM
Truck Trailer Driving	GC

### ***Electronics/Electrical Technology***

Automation Technology	GW, EM, MC
Automation Technology Level I	GW, EM, MC

# MCCCD Occupational Programs

Automation Technology Level II	GW
Automation Technology Level III	GW
Computer and Networking Technology	GC
Electric Utility Technology	CG
Electric Utility Design Technology	CG
Electrical Technology	GW
Electromechanical Automation Technology	MC
Electronics Engineering Technology	MC
Electronics Manufacturing Technology	GC
Electronics Technology	MC
Industrial Education	MC
Meter Technology	CG
Network Maintenance	GC
Telecommunications Technology	SM
Workforce Development: Electrical Level I	RS
Workforce Development: Electrical Level II	RS

## **Engineering**

Civil Engineering Technology	PC
Surveying Technology	PC

## **Welding Technology**

Welding	MC
(See Manufacturing section for additional programs and related areas)	

## **Marketing, Sales, and Service**

### **Marketing**

Marketing	MC, PC, SC
Marketing I	PC
Marketing II	PC
Salesmanship	MC

## **Law, Public Safety, Corrections, and Security**

### **Emergency Medical Technology**

Advanced Emergency Medical Technology (Paramedic)	GC, PC, PV, SC
Basic Emergency Medical Technology	GC, MC, PC, PV, SC
Community Emergency Response Team (CERT): Level I	PC
Emergency Communications and Deployment	PC
Intermediate Emergency Medical Technology	MC, PC
(See Allied Health section for additional programs and related areas)	
Paramedicine	MC
Secondary Basic Emergency Medical Technology	PC

### **Administration of Justice**

Administration of Justice	EM, GC, PC, PV
Administration of Justice-Comprehensive	PC
Administration of Justice-Fundamentals	PC
Administration of Justice Studies	CG, MC, SC
Advanced Corrections	RS
Basic Corrections	RS
Corrections	RS
Crime and Accident Scene Photography	PC, SC
Crime and Intelligence Analysis	CG
Crime Scene Investigation	SC, PC
Crime Scene Technology	SC
Cyber Forensics Technician	MC

# MCCCD Occupational Programs

Detention Services	RS
Evidence Technology	PC
Evidence Technology	EM
Fingerprint Classification and Identification	PC, SC
Forensic Investigation	MC
Forensic Science	CG
Forensic Technology	PC
Forensic Science: Crime Lab	SC
Global Citizenship	MC
Homeland Security	CG
Information Assurance	MC
Information Security Forensics	EM, GC, GW
Judicial Studies	MC
Justice and Government Agency Administration Level I	MC
Justice and Government Agency Administration Level II	MC
Justice and Government Agency Administration	MC
Justice Studies	CG, MC, SC
Law Enforcement Field Training	RS
Law Enforcement Investigator	GC
Law Enforcement Technology	RS
Law Enforcement	SC
Law Enforcement Training Academy	GC, CG
Legal Studies	MC
Paralegal	RS
Police Academy Preparation Level I	SC
Police Science	MC, SC
Police Supervision	GC
Public Safety Technology	RS
Victimology	MC
<b>Fire Science</b>	
Basic Firefighter	MC, PV, EM
Driver Operator	MC
Emergency Management	GC, MC, PV, SM
Emergency Response and Operations	CGCC, EM, GC, MC, PC, PV, RSC, SC
Fire Academy	GC, SC
Fire Officer I	MC
Fire Science	CG, GC, PC, PV, RS
Fire Science Technology	GC, MC, SC, PV, EM
Firefighter Operations	GC, MC, PC, PV, SC, CGCC, EMCC
Hazardous Materials Response	PC

## Science, Technology, Engineering and Mathematics

AGEC-S

## Transportation, Distribution, and Logistics

### Automotive Technology

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
Automotive Engine Performance Diagnosis & Air Conditioning	GC



# MCCCD Occupational Programs

Automotive Performance Technology	MC
Automotive Suspension, Steering and Brakes	GW
Automotive Technology	GC, GW
Brakes, Alignment, Suspension and Steering	MC
Engine Performance and Diagnosis	GW, MC
Transmissions and Power Trains	MC
Workforce Development: Automotive Technology Level I	RS
Workforce Development: Automotive Technology Level II	RS

## 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

# MCCCD Occupational Programs

## Maricopa Skill Center - Areas/ Programs/Certificates

The Maricopa Skill Center (MSC), a division of GateWay Community College, offers entry-level courses and programs for hands-on job training at 1245 E. Buckeye Road, Phoenix. The more than 200 courses and 60 non-credit programs at Maricopa Skill Center certificates are open-entry /open-exit, and self-paced. Several of our programs hold credit articulation agreements with ASU and Gateway Community College and most programs culminate in leading industry certifications.

### Accounting

Accounting Associate Certificate Program  
Accounting Clerk Certificate Program  
Accounts Payable Clerk Certificate Program  
Accounts Receivable / Payable Clerk Certificate Program  
Payroll Clerk Certificate Program

### Administrative Assistant

Administrative Assistant Certificate Program  
Administrative Clerk Certificate Program

### Computer Aided Drafting

AutoCAD Draftsmen 2-D Technician Certificate Program  
AutoCAD Draftsmen 2-D, 3-D, & Solids Technician Certificate Program

### Computer Repair & Networking

Computer Support Specialist Certificate Program

### Cosmetology

Aesthetician Certificate Program  
Cosmetologist Certificate Program  
Nail Technician Certificate Program

### Customer Service

Call Center Operator Certificate Program  
Customer Service Specialist Certificate Program

### Information Processor & Data Entry

Data Entry Operator Certificate Program  
Information Processor Specialist Certificate Program  
Legal Administrative Assistant

### Printing

Digital Press Operator Certificate Program  
Offset Press Operator Certificate Program

### Soldering

IPC Certified Soldering

### Travel & Tourism

Reservations & Hospitality Representative Certificate Program  
Travel & Tourism Specialist Certificate Program

### Medical Assistant

Medical Administrative Assistant Certificate Program  
Medical Assistant Front & Back Office Certificate Program  
Medical Biller/Coder Certificate Program

### Nursing

Practical Nursing Certificate Program

### Auto Body

Auto Body Basic Metal Repair & Refinishing Certificate Program  
Auto Body Basic Metal Repair Certificate Program  
Auto Body Basic Refinishing Certificate Program

### Automation Technology

Automation Technology Certificate Program

### Construction Trades

Construction Trades with Introduction to HVAC Certificate Program  
Construction Trades Worker I Certificate Program  
Construction Trades Worker II Certificate Program  
Maintenance Carpentry Worker Certificate Program  
Maintenance Electrician Worker Certificate Program  
Maintenance Electrician Worker with Introduction to HVAC Certificate Program  
Maintenance Plumbing Worker Certificate Program

### Culinary Arts

Baker Certificate Program  
Cook Certificate Program

### Industrial Spray Painter

Industrial Spray Painter Certificate Program

### Machine Trades

CNC Machinist Certificate Program  
Machinist's Assistant Certificate Program  
Manual Machinist Certificate Program

### Meat Cutter

Apprentice Meat Cutter Certificate Program  
Meat & Deli Counterperson Certificate Program  
Meat Department Helper Certificate Program  
Meat Room Cleanup Certificate Program  
Portion Control Cutter Certificate Program  
Self-service Meat Wrapper Certificate Program

## **Welding**

Arc Welder Certificate Program  
Combination Welder - 2 Process Certificate Program  
Combination Welder - 3 Process Certificate Program  
Combination Welder - 3 Process with Intro to Pipe Welding Certificate Program  
Combination Welder - 4 Process Certificate Program  
Flux Core Welder Certificate Program  
MIG Welder Certificate Program  
TIG Welder/TIG Fingertip Welder Certificate Program

## **Accounting**

Small Business Accounting Course Bundle

## **Online/Hybrid Delivery Programs**

Automation Technology Certificate Program

## **SouthWest Skill Center - Areas/Programs/Certificates**

The SouthWest Skill Center at Estrella Mountain Community College, located at 3000 North Dysart Road, Avondale, offers entry-level courses and programs for hands-on job training.

Our Programs are listed below and reference any certificate issued by that program:

### **Distribution Logistics Technician Program**

Distribution Logistics Technician

### **Emergency Medical Technology Program**

Emergency Medical Technology

### **Medical Assistant Program (Certificate Programs)**

Medical Assistant Front/Back Office  
Medical Billing & Coding  
Phlebotomy  
Spanish Medical Interpreter

### **Nursing Programs (Certificate Programs)**

Nurse Assistant  
Practical Nurse

# MCCCD Allied Health or Nursing Program

## 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, <http://healthcare.maricopa.edu> 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
6. State of Arizona and National Sexual Offender Registries
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

# MCCCD Allied Health or Nursing Program

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.



# Course Descriptions

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## SUN System Statewide Transfer Tool

The Shared Unique Number (SUN) System is a college course numbering system designed to help Arizona students plan their education and ensure successful transfer of course credits. Enrolling in SUN courses is an easy way to plan your university transfer and save time and money while pursuing your education.

SUN courses have a unique three-letter prefix and four-digit course number that represents direct course equivalency at all Arizona public community colleges and universities. Each institution retains its original course numbers but uses the SUN to indicate commonality.

Additional information about the SUN System can be found at [www.azsunsystem.com](http://www.azsunsystem.com)

All courses listed in this catalog are not offered every semester. Check in the Class Schedule for current course offerings or Search For Classes using the online schedule at [www.estrellamountain.edu](http://www.estrellamountain.edu).

# 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.

### ACC211

#### **SUN#** ACC2201

#### Financial Accounting

3 Credits. 3 Periods.

Introduction to theory and practice in the preparation and interpretation of general purpose financial statements. Prerequisites: None.

### ACC212

#### **SUN#** ACC2202

#### 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).

### 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.

### ACC250

#### Introductory Accounting Lab

1 Credit. 3 Periods.

Procedural details of accounting for the accumulation of information and generation of reports for internal and external users. Prerequisites: None.

### ACC270AC

#### Accounting Internship

3 Credits. 3 Periods.

Accounting work experience in a business or industry. Eighty hours of designated work per credit totaling 240 hours per semester. Maximum of 3 credits allowed. Prerequisites: Departmental approval.

## Advancing Academic Achievement

### AAA115

#### Creating College Success

1 Credit. 1 Period.

Strategies to create success in college. Methods for selecting and developing effective academic strategies, increasing self-awareness and developing self-management strategies. Elements of college resources and relationships with others explored in support of students' educational experience. Prerequisites: None. Cross-References: 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

### ADA115

#### Three-Dimensional Design

See description under cross-reference course ART115

### 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 AFOTC. 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, officership, 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.

## AES294

### Air Force Physical Fitness

1 Credits. 3 Period.

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. Course Note: AES294 may be repeated for credit.

## African-American Studies

## 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.

## Administration of Justice

## 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.

## 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 selections procedures, 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

## AJS139

### 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.

## AJS146

### 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.

## AJS147

### 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.

## AJS148

### 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.

## AJS149

### 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.

## AJS200

### Current Issues in Criminal Justice

3 Credits. 3 Periods.

Examines current issues, techniques and trends in the Criminal Justice System. Prerequisites: None.

## AJS201

### 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 AJS curriculum. Prerequisites: None.

## AJS205

### 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.

## AJS210

### 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 AJS curriculum. Prerequisites: None.

## AJS211

### Police Planning

3 Credits. 3 Periods.

An analysis of the process of planning, and a descriptive study of logical and systematic approaches to strategic, short-range, operational, organizational and tactical planning within a law enforcement organization. Prerequisites: None.

## AJS212

### Juvenile Justice Procedures

3 Credits. 3 Periods.

Examines the history and development of juvenile justice theories, procedures, and institutions. Prerequisites: None.

## AJS213

### Evidence Technology/Fingerprints

3 Credits. 3 Periods.

Fingerprint identification, interpretation, and classification. The fundamentals of fingerprinting and the problems in developing latent prints, preservation of evidence and the chain of evidence. Prerequisites: None.

## AJS215

### Criminalistic: Physical Evidence

3 Credits. 3 Periods.

The scientific analysis and examination of physical evidence with emphasis on scientific investigation, recognition, collection, and preservation of evidence. Topics include fingerprints, shoe prints, tool marks, firearms identification, paint chips and arson. Prerequisites: None.

## AJS216

### Criminalistics: Biological Evidence

3 Credits. 3 Periods.

The scientific analysis and examination of biological evidence with emphasis on collection and preservation of evidence. Topics discussed include blood, drugs, blood alcohol, hairs and fibers, and topics of special interest in criminalistics. Prerequisites: None.

## AJS220

### 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.

## AJS225

### 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 AJS curriculum. Prerequisites: None.

## 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.

# Course Descriptions

## 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.

Focuses on victimology and techniques of crises intervention; and the importance of multicultural perspective. Includes coverage of sexual assault, family violence, child abuse, post-traumatic stress disorder, substance abuse, coping skills, stress management, and community resources. 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.

## American Indian Studies

## AIS101

### Survey of American Indian Issues

3 Credits. 3 Periods.

Introduction to critical issues related to Native Americans. Examines political, economic, and social 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.

## AIS298AA

### 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.

## Anthropology

## ASB102

### Introduction to Cultural and Social Anthropology

3 Credits. 3 Periods.

Principles of cultural and social anthropology, with illustrative materials from a variety of cultures. The nature of culture; social, political, and economic systems; religion, aesthetics and language. 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.

# Course Descriptions

## 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.

## 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

## ART111

### SUN# ART1111

#### 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

### SUN# ART1115

#### 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.

## 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.

## 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

# Course Descriptions

## 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. Prerequisites or Corequisites: ART100 or permission of instructor. Cross-References: ADA177

## 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.

## 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.

## 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.

## 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.

## 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

### **SUN#** ART1101

### Prehistoric through Gothic Art

3 Credits. 3 Periods

History of art from prehistoric through medieval period. Prerequisites: None.

## ARH102

### **SUN#** ART1102

### 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.

## ARH120AA

### Understanding Art: Black Art

2 Credits. 2 Periods.

Overview of African and Afro-American art. Emphasis on the meaning of previous African art forms and the study of Black American artists. Visual aids, lectures, discussions, and simple art-making experiences designed for non-art majors. 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. Prerequisites or Corequisites: AST111.

# Course Descriptions

## 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. Course Notes: AST294AA may be repeated for credit.

## Automation Technology

## ATP101

### Introduction to Automated Systems and Robotics

2 Credits. 2 Periods.

An introduction to mechanization, distribution systems, Automated Storage and Retrieval Systems (ASRS), and the role of the manufacturing technician. Includes general manufacturing techniques, industry standards, and statistical process control. Prerequisites: None.

## ATP105

### Engineering Documentation

2 Credits. 2 Periods.

Analysis and interpretation of engineering documentation, common to manufacturing processes. Prerequisites: None.

## ATP110

### Basic Manufacturing Processes

2 Credits. 2 Periods.

Introduction to the traditional manufacturing processes used to cut, shape, process, and assemble materials into the tools and equipment used to support industry and consumer needs. Processes explored include machining, casting, welding, heat treating, coatings, and assembly. Prerequisites: None

## ATP130

### DC Circuit Analysis

2 Credits. 2 Periods.

Direct current (DC) electric circuits. Ohm's law, Kirchoff's laws, series, parallel and series-parallel circuits, network theorems, fundamentals of magnetism in electric circuits. Prerequisites: None.

## ATP135

### AC Circuit Analysis

2 Credits. 2 Periods.

Alternating Current (AC) circuits containing resistance and reactance. Detailed coverage of AC circuit parameters, including theorems, impedance matching, and resonance. Prerequisites: None.

## ATP150

### Fluid Power 1 – Hydraulics, Pneumatics, and Vacuum Concepts

2 Credits. 3 Periods.

Fundamental fluid power and vacuum for industry. Pneumatic, hydraulic, and vacuum system technologies with emphasis on assembly, integration, and measurement. Prerequisites: None.

## ATP160

### Programmable Logic Controllers 1 - Introduction to Ladder Logic

2 Credits. 3 Periods.

Integration of Human Machine Interfaces (HMI) to Programmable Logic Controllers (PLC's). Memory usage and types of HMI systems. Prerequisites: None.

## ATP175

### Introduction to Motors and Motor Controls

2 Credits. 3 Periods.

Introduction to direct current and alternating current (AC) motors, types of direct current and alternation motors. Prerequisites: None.

## ATP180

### Programmable Logic Controllers 2 - Human-Machine Interfaces and Function Block Programming

2 Credits. 3 Periods.

Principles and applications of Programmable Logic Controls (PLC's). Control strategies, and ladder logic. Basic automation functions and operations to include programming, troubleshooting and maintenance. Application of PLC programming, operations and troubleshooting skills. Prerequisites: ATP130 and ATP135.

## ATP200

### Programmable Logic Controllers 2 - Human-Machine Interfaces and Function Block Programming

2 Credits. 3 Periods.

Principles and applications of Programmable Logic Controls (PLC's). Control strategies, and ladder logic. Basic automation functions

and operations to include programming, troubleshooting and maintenance. Application of PLC programming, operations and troubleshooting skills. Prerequisites: ATP130 and ATP135.

## ATP215

### Digital and Analog Circuits

2 Credits. 3 Periods.

Introduction to the characteristics and design of basic analog and digital circuits and their application to controlling complex systems. Prerequisites: ATP130 and ATP135, or permission of Instructor.

## ATP222

### Servo Systems

2 Credits. 3 Periods.

Introduction to the industrial applications of Servo Systems specifically in automated systems. Instruction includes concepts, applications, and maintenance of servos and the control systems for servo installations. Prerequisites: ATP175 or permission of Instructor

## ATP235

### Automation Using CNC Programming

2 Credits. 3 Periods.

Computer Numerical Control (CNC) Programming of Word Address Language (G&M Code) for CNC Machine tools. Two and three-axis CNC Programming for CNC controlled machines. CNC tool-path program structure and CNC machine tool-path simulation using CNC tool path simulator. Tooling, Speeds, Feeds and material removal as related to CNC machine tools and CNC controlled machines. Prerequisites: ATP110 or permission of Instructor.

## ATP245

### Introduction to Solid Modeling - Solidworks 1

3 Credits. 4 Periods.

Concepts of engineering documentation to solid model mechanical design. Feature-based parametric modeling techniques for technical communication. Creation of solid models and technical documents of mechanical parts and assemblies per the American Society of Mechanical Engineers (ASME) Y14 standards. Prerequisites: ATP105 or permission of Instructor.

# Course Descriptions

## ATP251

### Fluid Power 2 - Automation Applications

2 Credits. 3 Periods.

Application of the basic Fluid Power principles of Hydraulics, Pneumatics, and Vacuum to the control of automated systems used to produce products through the application of discrete and hybrid electromechanical systems. Prerequisites: ATP150 or permission of Instructor.

## ATP260

### Industrial Automation System Integration 1

2 Credits. 3 Periods.

Overview of the evaluation and planning activities needed to establish a functioning automated manufacturing application. Prerequisites: ATP175 and ATP180, or permission of Instructor.

## ATP265

### Industrial Automation System Integration 2

2 Credits. 3 Periods.

A coordinating course regarding the implementation of the planning, construction, and industrial control systems needed for the development of a functional automated system. Prerequisites: ATP260 or permission of Instructor.

## ATP290

### Lean and Six Sigma Techniques

3 Credits. 3 Periods.

Survey and application course regarding the utilization of Lean and six sigma techniques to enhance manufacturing processes. Prerequisites: None.

## 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.

## 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.

## 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: Grade of "C" or better in RDG091 or eligibility for CRE101 as indicated by appropriate reading placement test score. One year high school chemistry or one semester of college-level chemistry 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.

## BIO181

### **SUN#** 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: Grade of "C" or better in RDG091 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.

## BIO182

### **SUN#** 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. Course Note: Field trips may be required.

## BIO201

### **SUN#** BIO2201

#### 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: (BIO156 or BIO181 with a grade of "C" or better) or (one year high school biology course with a grade of "C" or better). (CHM130 or higher numbered CHM prefixed course) or (one year of high school chemistry) suggested but not required.

## BIO202

### **SUN#** BIO2202

#### 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.

# Course Descriptions

## BIO205

### **SUN#** BIO2205

#### Microbiology

LEC 4 Credits. 3 Periods.

LAB 0 Credits. 3 Periods.

Study of microorganisms and their relationship to health, ecology, and related fields. Prerequisites: (BIO156 or BIO181 with a grade of "C" or better or one year of High School biology with a grade of "C" or better) and (a grade of "C" or better in RDG091 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.

## Building Safety & Construction Technology

## BLT110

### Techniques of Public Works Supervision

3 Credits 3 Periods.

Overview of the foundations of supervision and how to get things done within an organization through other people in the public works environment. The functions of planning, organizing, staffing, motivating and controlling presented. Prerequisites: None.

## BLT121

### Electrical Codes

3 Credits 3 Periods.

Principles of safe electrical installations and proper inspection procedures. Topics include conduit installation, transformer service, raceways, control circuits, grounding and bonding, hazardous occupancies and the National Electrical Code. Prerequisites: None.

## BLT127

### Plumbing Codes

3 Credits 3 Periods.

Code requirements and construction practices. Topics include underground and above ground plumbing, venting and finish plumbing. Prerequisites: None.

## BLT128

### Mechanical Codes

3 Credits 3 Periods.

Code requirements and construction practices. Topics include duct work, conductors and fuel supply, insulation, and controls. Prerequisites: None

## BLT210

### Advanced Topics in Public Works Management

3 Credits 3 Periods.

Overview of strategic processes a public works manager oversees during normal day-to-day operations. Included are people skills, public relations, legal issues, government interactions, finance and budgeting, and strategic planning. Prerequisites: BLT110 or permission of instructor.

## BLT262

### Introduction International Residential Code (IRC)

3 Credits 3 Periods.

Covers International Residential Code for various trades, including building, mechanical, plumbing and electric, for one and two family residential construction. Preparation for voluntary certification (IRC building inspection). Prerequisites: None.

## BLT263

### Building Codes

3 Credits 3 Periods.

Designed specifically to acquaint students with safety principles of building construction under the Uniform Building Code, including structural requirements for wood, masonry and concrete, fire resistance of building construction, fire resistant materials, and ratings and occupancy requirements. Prerequisites: None.

## BLT298AA

### 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.

## BLT298AB

### Special Projects

LAB 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.

## BLT298AC

### 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.

## Business-Personal Computers

## 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



# Course Descriptions

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

## **BPC113**

### **Micro-Alphabetic Indexing**

See description under cross-reference course OAS113

## **BPC128**

### **Introduction to Desktop Publishing**

1 Credit. 2 Periods.

Presents basic concepts of commercially prepared software used to do desktop publishing. Incorporates a combination of narrative and pictorial/graphic creation and presentation, including set up, text entry, graphic generation, text and graphic merging, and other computer-based functions. Prerequisites: None.

## **BPC170**

### **Computer Maintenance I: A+ Prep**

3 Credits. 4 Periods.

Technical aspects of the microcomputer, including system setup (hardware and software) and basic troubleshooting. Emphasis on basic troubleshooting, use of tools, hardware components and hardware/software interfacing. 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**

### **Microcomputer Maintenance II**

3 Credits. 4 Periods.

Advanced technical aspects of maintaining and servicing computers. Emphasis placed on installation, periodic maintenance, diagnosis, and/or problem resolution. Helps prepare students for the CompTIA A+ technician examinations including Information Technology (IT) field technician, remote support technician and bench technician. 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 troubleshooting. 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**

### **SUN# 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, or (MAT103AA and MAT103AB), or satisfactory score on math placement exam.

## **CHM130LL**

### **SUN# CHM1130**

### **Fundamental Chemistry**

### **Laboratory**

1 Credit. 3 Periods.

Laboratory experience in support of CHM130. Prerequisites or 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: Grade of "C" or better in CHM090, or MAT090, or MAT091, or MAT092, or MAT093, or MAT102, or (MAT103AA and MAT103AB), or satisfactory score on math placement exam. Course Notes: Student may receive credit for only one of the following: CHM130 and CHM130LL, or CHM130AA.

# Course Descriptions

## 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 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.

## CHM151

### SUN# CHM1151 General Chemistry I

3 Credits. 3 Periods.

Detailed study of principles of chemistry for science majors and students in pre-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. Prerequisites or Corequisites: CHM150 or CHM151.

## CHM151AA

### 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.

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## 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. 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. Prerequisites or Corequisites: CHM152.

## CHM152AA

### General Chemistry II

LEC 4 Credits. 3 Periods.

LAB 0 Credits 3 Periods.

A study of the chemical properties of the major groups of elements, equilibrium theory, thermodynamics, electrochemistry, and other selected topics. Prerequisites: (CHM150 or CHM151, and CHM151LL) or (CHM150AA or CHM151AA). Completion of (CHM150 or CHM151, and CHM151LL) or (CHM150AA or CHM151AA) within the last two years recommended. Course Notes: Student may receive credit for only one of the following: CHM152 and CHM152LL, or CHM152AA.

## 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: CHM152 and CHM152LL, or CHM154 and CHM154LL. Completion of (CHM152 and CHM152LL) or (CHM154 and CHM154LL) 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: CHM152LL, or CHM154LL, or

equivalent. Prerequisites or Corequisites: CHM235.

## 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 Credits. 4 Periods.

Laboratory experience in support of CHM236. Prerequisites: CHM235LL or equivalent. Prerequisites or Corequisites: CHM236.

## CHM238

### 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. Prerequisites or Corequisites: CHM238

## Chicana and Chicano Studies

## 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.

# Course Descriptions

## CCS212

### The Mexican American Novel

See description under cross-reference course ENH212

## Child/Family Studies

### CFS176

#### 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

### 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.

## Chinese

### CHI101

#### **SUN#** CHI1101

#### Elementary Chinese (Mandarin) I

5 Credits. 6 Periods.

Introduction to the basic grammar, pronunciation and vocabulary of the Mandarin Chinese language. Includes the study of Chinese culture, practice of listening, speaking, reading, and writing skills. Prerequisites: None.

### CHI115

#### Beginning Chinese Conversation I

3 Credits. 3 Periods.

Introduction to Chinese sound system, basic grammar, and vocabulary necessary to develop speaking ability in Mandarin Chinese. Designed for students seeking speaking and listening ability with little emphasis on writing and reading Chinese characters. Prerequisites: None.

## Cisco Networking Technology

### CNT138

#### CCNA Discovery - Networking for Home and Small Businesses

3 Credits. 5 Periods.

Introduces skills for entry-level home network installer jobs including personal computer (PC) installation, Internet connectivity, wireless connectivity, file and print sharing, and the installation of peripherals. Provides introduction to networking and the Internet using tools and hardware from home and small business environments.

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.

### CNT140AA

#### Cisco Networking Fundamental

4 Credits. 6 Periods.

Introduction to the computer networking field. Covers network terminology and protocols, communication fundamentals in Data networks and the Internet. Includes study of the Open Systems Interconnection (OSI) model, using a top down approach, cabling and cabling tools, basic Cisco router, configuration, Ethernet technologies, Internet Protocol (IP) addressing, and overview of Internet Protocol version 6 (IPv6), basic configuring and testing of the network, and network standards. Preparation for the Cisco Certified Network Associate (CCNA) 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 Protocols and Concepts

4 Credits. 6 Periods.

Knowledge of skills to install, configure, customize, maintain and troubleshoot Cisco routers utilizing Advanced Internet Protocol (IP) addressing techniques, Variable Length Subnet Masking (VLSM), distance vectored and Link State dynamic routing protocols, Routing Internet Protocol version 1 (RIPv1) and version 2 (RIPv2), Enhanced Interior Gateway Routing Protocol (EIGRP), Single-area Open Shortest Path First (OSPF), and understanding the structure and behavior of routing tables. Preparation for Cisco certification examination. Prerequisites: CNT140AA or permission of Instructor.

### 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.

# Course Descriptions

## 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

### Cisco Local Area Networking (LAN) Switching and Wireless

4 Credits. 6 Periods.

Comprehensive, theoretical, and practical approach to learning the technologies and protocols needed to design and implement a converged switched network. Learn about the hierarchical network design model and how to select devices for each layer. Configure a switch for basic functionality and implement Virtual Local Area Networks (VLAN), VLAN Trunking Protocol (VTP), and Inter-VLAN routing in a converged network. Implementation of Spanning Tree Protocol (STP) in a converged network and a Wireless LAN (WLAN) in a small to medium network. Comprehensive hands-on labs. Preparation for Cisco certification examination. Prerequisites: CNT140AA 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 Accessing the Wide-Area Network (WAN)

4 Credits. 6 Periods.

Wide-Area Network (WAN) technologies and network services required by converged applications in Enterprise Networks. Cisco Enterprise Composite model (ECM) to introduce integrated network services and selection of appropriate devices and technologies to meet ECM requirements. Implement and configure common data link protocols and apply WAN security concepts, principles of traffic management, access control and addressing services. Detect, troubleshoot, and correct common enterprise network implementation issues. Includes comprehensive hands-on labs. Preparation for Cisco certification examination. Prerequisites: (CNT140AA, CNT150AA, and 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 MCNS (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.

## Communication

## COM100

### SUN# COM1100

### 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.

# Course Descriptions

## 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.

## 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.

The study, analysis, and preparation for performance of prose, poetry, and dramatic literature. Preparation of material for public audiences. Prerequisites: ENG101 or ENG107. Cross-References: THP241.

## COM243

### Interpreters Theatre

3 Credits. 4 Periods.

Study, analysis, rehearsal, and performance of various types of literature. 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.

## 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.

## 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.

# Course Descriptions

## 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 Department or Division. 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.

## 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 Credits. 4 Periods.

Examines skills, tools and strategies necessary for becoming a computer help-desk or end-user support professional. Prerequisites: None.

## CIS105

### CIS1120

### Survey of Computer Information Systems

3 Credits. 4 Periods.

Overview of computer technology, concepts, terminology, and the role of computers in business and society. Discussion of social and ethical issues related to computers. Use of word processing, spreadsheet, database,

and presentation software. Includes uses of application software and the Internet for efficient and effective problem solving. Exploration of relevant emerging technologies. Prerequisites: None.

## CIS108

### Electronic Portfolio Development

1 Credits. 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 Credits. 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.

## 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 Credit. 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.

## CIS117AM

### Database Management: Microsoft Access: Level I

1 Credit. 2 Periods.

Introduction to the basic elements of a current version of the Microsoft Access database management program, for casual and beginning users. Prerequisites: None.

## CIS117DK

### DB2: Database Management

3 Credits. 4 Periods.

Introduction to the basic elements, exploration of additional components and common database management problems related to the DB2 program. 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.

# Course Descriptions

## CIS120BF

### Computer Graphics: Adobe Photoshop: Level II

1 Credit. 1 Periods.

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.

## CIS121AE

### Windows Operating System: Level I

1 Credit. 2 Periods.

Specific topics include Windows basics, navigating and customizing the desktop, maintaining hardware and software, improving performance, configurations, securing your computer, taskbar, organizing, searching and managing folders and files, installing and uninstalling applications, Internet Explorer fine tuning, security, and searching, including advanced search techniques, keyboard shortcuts, and current topics. Prerequisites: None.

## CIS121AH

### Microsoft PowerShell/Command Line Operations

3 Credits. 4 Periods.

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.

## CIS121AI

### Mac Operating System

1 Credit. 2 Periods.

Specific topics include getting started with Mac OS; working with disks, folders, and files; installing and using applications; setting system preferences; printing, faxing, and scanning; getting and living online; using iLife; sharing a Mac with other users; creating a home network; and maintaining the Mac. Prerequisites: None.

## CIS126AA

### Unix Operating System: Level I

1 Credits. 2 Periods.

Use of the UNIX operating system: system components, built-in commands, files and directories, editors, and UNIX Shell and command lines. Prerequisites: None.

## CIS126AL

### Linux Operating System I

1 Credits. 2 Periods.

Introduction to the Linux Operating system. Develop knowledge and skills required to install, configure a Linux-based workstation including basic network functions. Prerequisites: None.

## CIS126BA

### Unix Operating System: Level I

1 Credits. 1 Period.

Installation, configuration, and maintenance of the UNIX operating system Prerequisites: CIS126AA.

## CIS126BL

### Unix Operating System: Level II

1 Credits. 1 Periods.

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.

## CIS126CA

### Unix Operating System: Level III

1 Credits. 1 Periods.

Create login scripts and batch files, and maintain system communications. Prerequisites: CIS126BA.

## CIS126CL

### Linux Operating System III

1 Credits. 1 Periods.

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.

# Course Descriptions

## **CIS126DA**

### **UNIX Operating System**

3 Credits. 4 Periods.

Use of a UNIX operating system including system components, built-in commands, files, and directories, editors, and UNIX shell and command lines. Installation, configuration, and maintenance of a UNIX operating system. Create scripts and batch files, and maintain system communications. Prerequisites: None.

## **CIS126DL**

### **Linux Operating System**

3 Credits. 4 Periods.

Introduction to the Linux Operating system. Develop knowledge and skills required to install, configure and troubleshoot a Linux-based workstation including basic network functions. Learn basic command line and Graphical User Interface (GUI) desktop environment utilities and applications. Fundamental abilities to achieve the entry-level industry certification covered. Prerequisites: None.

## **CIS127DL**

### **Linux Utilities**

3 Credits. 4 Periods.

Introduces Linux Command Line Utilities. Develops entry level knowledge and skills required for basic Linux system administration. Includes basic command line environment utilities and applications. Provides fundamental skills needed to pursue advanced Linux concepts. Prerequisites: CIS126DA, or CIS126DL, or permission of instructor.

## **CIS133AA**

### **Internet/Web Development Level I-A**

1 Credit. 2 Periods.

Overview of the Internet and its resources. Hands-on experience with various Internet communication tools. Prerequisites: None.

## **CIS133BA**

### **Internet/Web Development: Level I - B**

1 Credit. 1 Period.

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.

## **CIS133CA**

### **Internet/Web Development: Level I - C**

1 Credit. 1 Period.

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.

## **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 developments 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.

## **CIS162AC**

### **Visual C++: Level I**

3 Credits. 4 Periods.

Introduction to Visual 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.



# Course Descriptions

## **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 iPhone 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.

## **CIS166**

### **Web Scripting/Programming**

3 Credits. 4 Periods.

Software development for Websites, 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.

## **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 VMware ESXI server in the enterprise. Covers many aspects of virtualization for VMware ESXI server administration. Develop knowledge and skills required to install, configure and troubleshoot a VMware ESXI Server including basic network functions. Learn basic command line and Management User Interface (MUI) using VMware vSphere Client. Prerequisites: (CIS126DL or MST150(any module)) and (CIS190 or MST140 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.

# Course Descriptions

## **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.

## **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.

## **CIS233DA**

### **Internet/Web Development Level II**

3 Credits. 4 Periods.

Design and create pages on the World Wide Web with a variety of markup languages, programming languages, scripts, and multimedia. Hands-on experience authoring and preparing sophisticated web documents. Exploration of best practices/issues for web design and publishing and careers in web development and e-commerce. Prerequisites: BPC/CIS133CA or BPC/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 covered. 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.

## **CIS238DL**

### **Linux System Administration**

3 Credits. 4 Periods.

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

## **CIS239DL**

### **Linux Shell Scripting**

3 Credits. 4 Periods.

Linux Shell Scripting syntax and methods including the automation of system tasks as well as interpreted user-level programming. Course includes the Linux Borne Again Shell (BASH) as well as a variety of industry competitors. Prerequisites: CIS238DL or permission of instructor.

# Course Descriptions

## **CIS240**

### **Local Area Network Planning and Design**

3 Credits. 3 Periods.

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.

## **CIS240DL**

### **Linux Network Administration**

3 Credits. 4 Periods.

In depth networking based on Linux servers and the Transmission Control Protocol/Internet Protocol (TCP/IP) protocol suite. Integrating Linux servers and workstations into a network environment with multi-platform network operating systems including a variety of open-standard and proprietary protocols. Preparation for industry certifications such as the SAIR/GNU LCP and LCA certificates, CompTIA's Linux+, RHCT, RHCE, and LPIC. Prerequisites: CIS126AL, CIS126BL and CIS126CL; or CIS126DL or instructor approval.

## **CIS241DL**

### **Apache Web Server Administration (Linux/Unix)**

3 Credits. 4 Periods.

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.

## **CIS250**

### **Management Information Systems**

3 Credits. 4 Periods.

The study of business information systems and its management, communication, e-business strategies, emerging technologies, database concepts, and project management. Overview of systems analysis and design. Learn about the competitive and strategic uses of information systems and how they are transforming organizations and their management. Prerequisites: CIS105.

## **CIS251**

### **Computer Game Development -Level II**

3 Credits. 4 Periods.

Advanced object-oriented game development, advanced game design, and advanced game theory. Use of game development software tools to demonstrate advanced concepts for modeling real-time simulations and creating computer games using object oriented development tools. In depth coverage of game programming (scripting) techniques, and decision logic using object oriented techniques. Prerequisites: CIS151 or permission of instructor.

## **CIS259**

### **Visual Basic Programming II**

3 Credits. 4 Periods.

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.

## **CIS262**

### **C Programming II**

3 Credits. 4 Periods.

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.

## **CIS262AB**

### **C++: Level II**

3 Credits. 4 Periods.

Advanced level C++ programming with emphasis on arrays, data management, dynamic memory allocation, object-oriented programming concepts, input/output operations, libraries, and debugging techniques. Includes overview of other advanced applications of C++. Prerequisites: CIS162AB or permission of Instructor.

## **CIS262AC**

### **Visual C++: Level II**

3 Credits. 4 Periods.

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: CIS162AC, or permission of instructor

## **CIS263AA**

### **Java Programming: Level II**

3 Credits. 4 Periods.

Intermediate Java programming. Includes features needed to construct object-oriented programming, multithreading, multimedia, files, streams and data structure. Prerequisites: CIS163AA or permission of the instructor.

## **CIS270**

### **Essentials of Network and Information Security**

3 Credits. 4 Periods.

Threats to security of information systems; responsibilities and basic tools for information security, including communication security, infrastructure security, organizational security and basic cryptography. Introduction to the language of network security and hardware, software and firmware components of an information security system for local, metropolitan, enterprise, and wide area networks. Helps prepare participants for the CompTia Security+ exam and the GIAC Security Essentials Certificate (GSEC). Prerequisites: CNT150, or (MST150 or MST150 any module), or permission of instructor.

## **CIS271DL**

### **Linux Security**

3 Credits. 4 Periods.

Implementing in-depth security methods and techniques in a Linux-based network environment. Utilize programs, utilities and configuration techniques to provide user-level, file system, and network security. Gain knowledge in a variety of security cracking techniques and how to guard against them. In all aspects of security, the standard of practicing professional ethics seriously emphasized. Preparation for industry certifications such as the SAIR/GNU LCP and LCA certificates, CompTIA's Linux+, RHCT, RHCE, and LPIC. Prerequisites: CIS240DL or Permission of Instructor.

## **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.

# Course Descriptions

## **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.

## **CIS280**

### **Current Topics in Computing**

3 Credit. 4 Periods.

Critical inquiry of current topics in computing. Application of industry trends to solve problems and/or investigate issues. Prerequisites: None.

## **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.

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## **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.

## **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.

## **CIS298AA**

### **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 are made available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: Permission of Program of Director or instructor.

## **CIS298AB**

### **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.

# Course Descriptions

## CIS298AC

### Special Projects

3 Credits. 3 Periods.  
Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: Permission of Program Director or instructor.

## Computer Science

### 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.

### CSC100AA

#### 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, [Estrella Mountain Community College | 2012-2013 Catalog]

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.

### CSC110AB

#### 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.

### 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

#### 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.

### 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.

## CSC230

### Computer Organization and Assembly Language

4 Credits. 5 Periods.  
Assembly language programming including input/output (I/O) programming and exception/interrupt handling. Register-level computer organization, I/O interfaces, assemblers, and linkers. Processor organization and design, data path, control, pipelining, and input/output. Memory organization with cache and virtual memory. Prerequisites: [(CSC100 or CSC110) and CSC/EEE120], or permission of instructor. Cross-References: EEE230

## Construction

### CNS175

#### Working Drawing Analysis: Blueprint Reading

3 Credit. 3 Period.  
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 Credit. 15 Period.  
Construction internship office/field experience with private / public agencies or citizen volunteer groups. Prerequisites: CNS282, or permission of department. Course Note: May not repeat specific assignment for more than (3) credit hours. Standard grading available according to procedures outlined in college catalog.

# Course Descriptions

## **CSN296WC**

### **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.

## **CNS298AC**

### **Special Projects**

3 Credits. 3 Periods.

Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: Permission of Program Director or Instructor.

## **Counseling & Personal Development**

## **CPD100**

### **Orientation for Student Development**

1 Credit. 1 Period.

Offered to orient new students to college life. Emphasis on assessing students' academic potential, facilitating curricular advisement and registration procedures, learning academic survival skills, and becoming aware of all services available to students on campus and in the community. Prerequisites: None.

## **CPD104**

### **Career and Personal Development**

3 Credits. 3 Periods.

An overview of the process of career/life planning through self-awareness and understanding. Focus on specific skill development such as dealing with change, decision making, goal setting and understanding lifestyles. Provides opportunity to evaluate interests, skills and values. Emphasis on the development of a comprehensive career search process which

includes current occupational information, specific tools for researching the job market and acquiring employment. Prerequisites: None.

## **CPD150**

### **Strategies for College Success**

3 Credits. 3 Periods.

Focus on increasing student success through the 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-References: 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.

## **CRW155**

### **Bilingual Creative Writing**

3 Credits. 3 Periods.

Introduction to bilingual creative writing. Examines the elements of writing bilingual literature, including authorial voice and aesthetic, and the role of culture, ethnicity, and dialect. Writing, analysis, evaluation, and revision of creative writing generated from a bilingual/bicultural perspective. 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;

# Course Descriptions

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, 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 workshoping. 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 workshoping. 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.

## **CRW275**

### **Writing the Mystery Story**

3 Credits. 3 Periods.

Introduces the student to the elements and techniques of writing the mystery story; reinforces terminology and concepts for successful participation in writing workshops; facilitates writing practice, evaluation, and revision in the writing of the mystery story; offers individual guidance on the student's development as a writer. Prerequisites: CRW150, or permission of instructor.

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## CRW281

### Topics in Writing: Non-Fiction

3 Credits. 3 Periods.

Analysis, writing, and revision of genre or element within non-fiction. Prerequisites: CRW150 or permission of instructor.

## CRW290

### Intermediate Screenwriting

3 Credits. 3 Periods.

Drafting and revision of original screenplay; overview of marketing a screenplay. Prerequisites: CRW190 or permission of instructor.

## CRW291

### Topics in Writing: Plays

Analysis, writing, and revision of genre or element within plays and/or motion picture screenplays. Prerequisites: CRW150 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 grade of "C" or better in RDG091 or RDG095).

## 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

## 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 Manger

3 Credits. 5 Periods.

Prepares students for employment in garde manger 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: HRM102

## 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.

## 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, souffles, crepe desserts, and flammeries. Preparation and use of sauces, 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.

## 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.



# Course Descriptions

## 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

## 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.

**Cultural Geography  
(See Geography,  
Cultural (GCU))**

**Customer Service  
Management**

## 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.

## Dance

## 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 Notes: 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 Notes: 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.

# Course Descriptions

## 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 Notes: DAN132 may be repeated for credit.

## DAN133

### Modern Jazz Dance I

1 Credit 3 Periods.

Introduction to the theory and practice of modern jazz dance at the 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.

## DAN150

### Dance Performance I

1 Credit 3 Periods.

An introduction to the process and practice of dance performance. Prerequisites: None. Course Notes: DAN150 may be repeated for credit.

## 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: DAN130 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.

## DAN231AA

### Ballet III: Intensive

2 Credits 5 Periods.

Theory and intensive practice of ballet at the beginning intermediate level. Development of movement quality and performance skills. Prerequisites: DAN134 or permission of Instructor. Course Notes: DAN231AA 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.

## 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 Note: 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 Credits 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.

## 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.

# Course Descriptions

## 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.

## 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.

## 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.

## Dance Humanities

## 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.

## 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. DAH100 strongly suggested but not required.

## Disaster Preparedness and Emergency Response

## 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

## Early Childhood Education

## 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

## Early Education

## 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.

## Economics

## ECN211

### ECN2201

### 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

### ECN2202

### 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.

## ECN263

### The Economics of Natural Resources, Population and the Environment

3 Credits. 3 Periods.

Applies economic analysis to both the causes and possible remedies of the problems of environmental deterioration and natural resource depletion. Includes discussion of the economic problems of urban communities and the relationship between population and economic growth and the depletion of natural resources and environmental pollution. Prerequisites: ECN100, or ECN211, or ECN212.

## Education

## 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.

# Course Descriptions

## EDU220

### Introduction to Serving English Language Learners (ELL)

3 Credits. 3 Periods.

Rationale for and current educational and legal issues for serving English Language Learners (ELL). Comparison and evaluation of various types of language educational models including Structured English Immersion (SEI), English as a Second Language (ESL) and bilingual. Includes SEI, ESL, and bilingual strategies. Prerequisites: None. Course Note: Approved school-based practicum is required. EDU220 incorporates the 45-clock hour curricular framework for provisional SEI endorsement through the Arizona Department of Education.

## 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) and English as a Second Language (ESL) 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 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: (EDU220 or EPD220 or EDU225) 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.

## EDU236

### Classroom Relationships

3 Credits. 3 Periods.

Analysis of K-12 classroom interactions, classroom environment, and classroom management skills from a teacher's point of view. Focus on classroom as a multidimensional environment in which principles of classroom design, communication, management, and resources determine effectiveness. Prerequisites: None. EDU221 suggested but not required.

## 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.

## 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

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.

## 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.

# Course Descriptions

## 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 Credits. 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.

## 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-clock 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 definitions of giftedness, ways of identifying gifted and talented students, and types of programs and services developed for this population. Students address issues in educating gifted and 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).

# Course Descriptions

## 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, 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 elementary, secondary, or special education teaching certificate and (EDU220 or EPD220 or EDU225), 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.

## Education Support Services

## EDS250

### Introduction to Student Services

3 Credits 3 Periods.

Student affairs profession with standards and a theoretical base explored. Integrates theory and practice of student services, with the participants exploring on-the-job situations. Prerequisites: Completion of an Associate Degree or permission of Department or Division Chair.

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## EDS251

### Foundations of Developmental Advising

3 Credits 3 Periods.

Academic advising using student development and developmental advising theories and framework. Fundamentals of academic advising including roles and tasks as well as skills and techniques for effective advisement, use of resources, legal and ethical issues, and advising special populations. Prerequisites: Completion of an Associate Degree or permission of Department or Division Chair.

## EDS252

### Foundations of Student Affairs Management

3 Credits 3 Periods.

Management functions in a Student Affairs Division of a college or university. Practical training to manage functional units in student affairs including budgeting, fiscal management, and human resource management. Prerequisites: EDS250 and completion of an Associate Degree or permission of Department or Division Chair.

## Electrical Engineering

## 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.

Electricity related to industrial applications. Operation of and safety protocols for the use of electrical meters. Electrical loads calculations and evaluation of air conditioning power sources. Single-phase motors, motor resistance and motor terminals. Function of electro-magnetic solenoids and transformers. National Electric Code. Prerequisites: None. Corequisites: ELC/FAC/HVA105LL or permission of instructor. Cross-References: HVA105, FAC105.

## 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.

Principles of three-phase motors. Wye and Delta wiring. Calculation of motor current draw. Sequence of operation, wiring diagram and electrical components associated with industrial equipment. Procedures for evaluating electrical problems. Safety stressed. Prerequisites: ELC/FAC/HVA105 or permission of department or ELC/FAC/HVA105LL or permission of department. Corequisites: ELC/FAC/HVA115LL or permission of department. Cross-References: FAC115, HVA115.

## ELC115LL

### 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: FAC115LL, HVA115LL.

# Course Descriptions

## 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. Hand 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.

## Electronics Technology

### ELT100

#### Survey of Electronics

3 Credits. 3 Periods.

An introduction to the field of electronics for those who may not intend to specialize in electronics. Essentially nonmathematical in nature; includes familiarization with a wide range of electronic components. Application to electronic systems, such as radio transmitters and receivers - both AM(amplitude modulation) and FM(frequency modulation), television transmitters and receivers, logic control, and computers. Application also to automotive electronics. Prerequisites: None.

### 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

#### Mathematics for Electronics II

3 Credits. 3 Periods.

The study of simultaneous equations, quadratic equations, trigonometric relationships, periodic functions and logarithms as applied to AC(alternating current) circuit analysis. Application of the scientific calculator to technical problem solving in electronics. Prerequisites: ELT101 or equivalent.

### 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

# Course Descriptions

## **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, and blood-glucose monitoring. Includes participation in two eight-hour clinical rotations through a local emergency department scheduled during the semester 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 ninth 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 rubella (German measles) and rubeola. Cross-Reference: FSC104.

## **EMT235**

### **Emergency Cardiac Care**

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/ [184]

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.

## **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 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.



# Course Descriptions

## 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 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

#### **SUN#** EGR1102

### 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

### 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

### 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).

## ECE105

### MATLAB Programming

1 Credits. 1 Periods.

Use MATLAB to solve engineering problems. An overview of programming, including arrays, structures, strings, functions, control flow, file management, data analysis, graphing, and performing calculations. Prerequisites: None.

## 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.

# Course Descriptions

## 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 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.

## English

## ENG071

### Language Skills: Speaking and Writing Standard English

3 Credits. 3 Periods.

Emphasis on basic Standard English speaking and writing skills with a focus on essential grammar in developing effective sentence-level speaking and written strategies. Prerequisites: Appropriate writing placement test score or permission of Department or Division.

## ENG081

### Basic Writing Skills

3 Credits. 3 Periods.

Emphasis on preparation for college-level composition with a focus on foundational skills. Establishing effective writing strategies through six or more writing projects comprising at least 1500 words in total. Prerequisites: Appropriate writing placement test score, or a grade of C or better in ENG071 or ESL077, or permission of Department or Division.

## ENG091

### Fundamentals of Writing

3 Credits. 3 Periods.

Emphasis on preparation for college-level composition with a focus on organizational skills. Developing effective writing strategies through five or more writing projects comprising at least 2000 words in total. Prerequisites: Appropriate writing placement test score, or a grade of C or better in ENG081 or ESL087, or permission of Department or Division.

## ENG101

### ENG1101

#### 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.

## ENG102

### ENG1102

#### First Year Composition

3 Credits. 3 Periods.

Emphasis on rhetoric and composition with a focus on persuasive, research-based writing and understanding writing as a process. Developing advanced college-level writing strategies through three or more writing projects comprising at least 4,000 words in total. Prerequisites: Grade of C or better in ENG101.

## ENG107

### First-Year Composition for ESL

3 Credits. 3 Periods.

Description: Equivalent of ENG 101 for students of English as a Second Language (ESL). Emphasis on rhetoric and composition with a focus on expository writing and understanding writing as a process. Establishing effective college-level writing strategies through four or more writing projects comprising at least 3,000 words in total. Prerequisites: Appropriate writing placement test score, or a grade of C or better in 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.

## ENG210

### 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.

## ENG213

### 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.

## 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.

Basic skills and techniques used by professional writers for publication in magazines. Includes analyzing markets, identifying article slant,

# Course Descriptions

writing query letters, research techniques, editing, and submission procedures. Emphasis on nonfiction. Prerequisites: None.

## **ENG236**

### **Magazine Writer's Workshop**

3 Credits. 3 Periods.

In-depth instruction in the production of marketable articles for magazines. Emphasis on producing fresh, targeted, well-structured writing, critiquing, and revising articles for submission. Prerequisites: ENG235 or permission of Instructor. Course Notes: ENG236 may be repeated for a total of six (6) credit hours.

## **ENG260**

### **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: THE260

## **English as a Second Language**

## **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.

## **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. May be repeated for a maximum of six (6) credits. Prerequisites: Approximate 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. Practice with question and answer patterns. 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.

## **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).

## **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 speech. Introduction to the prewriting and writing process in a college setting. May be repeated for a maximum of six (6) credits. Prerequisites: Appropriate ESL course placement score, or a grade of C or better in ESL022, or permission of instructor.

## **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 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 ESL030, or (ESL030AA, ESL030AB, and ESL030AC).

# Course Descriptions

**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.

**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.

## **English Humanities**

**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.

**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.

**ENH205**

### **Asian American Literature**

3 Credits. 3 Periods.

Survey of major Asian American writers. Examines literary types and selected works in their relationship to American cultural

heritage and to contemporary culture. Prerequisites: ENG101 or ENG107.

**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.

**ENH212**

### **The Mexican American Novel**

3 Credits. 3 Periods.

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. Cross-References: CCS212

**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.

**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.

# Course Descriptions

## 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.  
History, motivations, and effects of censorship in a democratic society. Censorship and book banning as a method of silencing diverse voices. Critical analysis of banned or challenged literature for children and adults. Prerequisites: None.

## 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.

## Exercise Science

## EXS101

### Introduction to Exercise Science, Kinesiology, and Physical Education

3 Credits. 3 Periods.  
Introductory course that will provide the student with a general overview of the disciplines and professions associated with the fields of Exercise Science, Kinesiology and Physical Education. Basic history, philosophy, and theory of each discipline will be examined as well as relevant career potential and options. 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.

# Course Descriptions

**EXS132**

## **Cardiovascular Fitness: Physiological Principles and Training Techniques**

3 Credits. 3 Periods.

Covers principles and techniques of aerobic training and the application of these to the development of aerobic training programs. Includes instructional techniques and safety, and stresses injury prevention. Prerequisites: None.

**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.

**EXS239AA**

## **Practical Applications of Personal Training Skills and Techniques Internship**

1 Credit. 1.8 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. 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.

Major components of refrigeration systems. Properties of refrigerants and piping practices. Principles of pressure, work, energy, power, matter, internal energy, heat, temperature and the ideal gas processes. Saturated and superheated vapors. Pressure-enthalpy chart and its component parts, vapor compression

system, cycle analysis of a single saturated cycle. Prerequisites: None. Corequisites: FAC/HVA101LL or permission of instructor. Cross-References: HVA101

**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.

Electricity related to industrial applications. Operation of and safety protocols for the use of electrical meters. Electrical loads calculations and evaluation of electro-mechanical power sources. Single-phase motors, motor resistance and motor terminals. Function of electro-magnetic solenoids and transformers. National Electric Code. Prerequisites: None. Corequisites: ELC/FAC/HVA105LL or permission of Instructor. Cross-References: HVA105, ELC105

**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: ELC105LL, HVA105LL

**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, 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: GTC106, MIT106, OSH106

# Course Descriptions

## **FAC115**

### **Motors, Controls and Wiring Diagrams**

3 Credits. 3 Periods.

Principles of three-phase motors. Wye and Delta wiring. Calculation of motor current draw. Sequence of operation, wiring diagram and electrical components associated with industrial equipment. Procedures for evaluating electrical problems. Safety stressed. Prerequisites: ELC/FAC/HVA105, or permission of department, or ELC/FAC/HVA105LL, or permission of department. Corequisites: ELC/FAC/HVA115LL or permission of department. Cross-References: ELC115, HVA115.

## **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 psychometrics 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.

## **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-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 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.

## **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.

# Course Descriptions

## **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 pumpers. 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

## **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

## **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**

### **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.

## **FSC210**

### **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/



# Course Descriptions

arson scene. Includes class room and field exercises on each section. Prerequisites: FSC209 or permission of Instructor.

## **FSC211**

### **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.

## **FSC212**

### **Fire Investigation IV**

3 Credits. 3 Periods.

Skills and information for those responsible for fire investigation. Focus on courtroom and testimony. Includes continuing arson task force team assignment. Prerequisites: FSC211 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.

## **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.

## **Food and Nutrition**

### **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.

### **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.

### **FON230**

#### **Nutrition for Special Populations**

3 Credits. 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.

### **GBS114**

#### **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.

# Course Descriptions

**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**

## **SUN# BUS2201**

### **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.

## **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. Recommended for all technology students except electronics. Prerequisites: None. Cross-References: MET107.

**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: GTC/MET107 or permission of instructor. Cross-References: MET108.

**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.

# Course Descriptions

**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.

## **Geology**

**GLG101**

**SUN# GLG1101**

## **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**

**SUN# GLG1101**

## **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 floods, earthquakes, and landslides; use of fossil fuels; mining of raw materials. 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.

## **Geography, Cultural**

**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.

## **German**

**GER101**

**SUN# GER1101**

## **Elementary German I**

4 Credits. 4 Periods.  
Basic grammar, pronunciation and vocabulary of the German language. Includes the study of German culture, practice of listening, speaking, reading and writing skills. Prerequisites: None.

**GER102**

**SUN# GER1102**

## **Elementary German II**

4 Credits. 4 Periods.  
Continued study of grammar and vocabulary of the German language along with the study of German culture. Emphasis on German language skills. Prerequisites: GER101 or equivalent.

## **Health Care Related**

**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.

**HCR240**

## **Human Pathophysiology**

4 Credits. 4 Periods.  
Chemical, biological, biochemical, and psychological processes as a foundation for the understanding of alterations in health. The structural and functional pathophysiology of alterations in health; selected therapeutics considered. Prerequisites: BIO202 or BIO205 or equivalent.

## **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.

# Course Descriptions

## 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.

## HCC146

### Common Medical Terminology for Health Care Workers

2 Credits. 2 Periods.

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 using word parts. Medical abbreviations and symbols and term spelling. Prerequisites: None.

## Health Related

## HLR101

### Cardiopulmonary Resuscitation/Basic Cardiac Life Support

See description under cross-reference course EMT101

## Health Science

## HES100

### Healthful Living

3 Credits. 3 Periods.

Health and wellness and their application to an optimal life style. Explores current topics of interest such as stress management, nutrition, fitness, and environmental health. Evaluates common risk factors associated with modern lifestyles. Prerequisites: None.

## 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.

## Heating, Ventilating & Air Conditioning

## 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

## Heavy Equipment Operation

## 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.

# Course Descriptions

## **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**

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**

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.

## **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.

## **Hotel Restaurant Management**

## **HRM102**

### **Menu Planning Development**

See description under cross-reference course CUL102

# Course Descriptions

## 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.

## HRM120

### Hotel Facility Management

3 Credits. 3 Periods.

Fundamental duties and responsibilities of hotel facility management. Emphasis on detail tasks, including personnel, cleaning, purchasing, equipment, textiles, maintenance, and safety. Examines basic systems for hotel facility management record keeping. 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 Credits. 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

## HUM107

### Humanities Through the Arts

3 Credits. 3 Periods.

Introduction to humanities including film, drama, music, literature, painting, sculpture, and architecture. Prerequisites: None.

## HUM108

### Contemporary Humanities

3 Credits. 3 Periods.

An exploration of human expression in contemporary arts and sciences. Prerequisites: None.

## HUM190AA-AD

### Honors Forum

1 Credit. 1 Period.

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.

# Course Descriptions

## HUM120

### Cultural Viewpoints in the Arts

3 Credits. 3 Periods.

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.

## HUM201

### Humanities: Universal Themes

3 Credits. 3 Periods.

Origins and creation myths, the materials world, and the spiritual world as themes in the humanities. Prerequisites: None.

## HUM205

### Introduction to Cinema

See description under cross-reference course THE205

## HUM206

### Introduction to Television Arts

See description under cross-reference course THE206

## HUM209

### Women and Films

3 Credits. 3 Periods.

Analysis of images of women in films from both historical and contemporary perspectives. Prerequisites: None. Cross-References: WST209

## HUM210

### Contemporary Cinema

See description under cross-reference course THE210

## HUM213

### Hispanic Film

3 Credits. 3 Periods.

Analysis of Hispanic film as art form and as social commentary. Prerequisites: None.

## HUM214

### African-Americans in Film

3 Credits. 3 Periods.

Study of films featuring African-American performers and directors from the Silent Era to the present. Emphasis on the historical and social elements of African Americans in film and basics of film analysis. Prerequisites: None.

## HUM250

### Ideas and Values in the Humanities

3 Credits. 3 Periods.

An historical analysis of the interrelationships of art, architecture, literature, music, and philosophy from the early civilizations to the Renaissance, including western and non-western cultures. Prerequisites: ENG101.

## HUM251

### Ideas and Values in the Humanities

3 Credits. 3 Periods.

An historical analysis of the interrelationships of art, architecture, literature, music, and philosophy from the Renaissance to modern period, including western and non-western cultures. Prerequisites: ENG101.

## HUM292

### 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, STO292.

## Industry

## IND133

### Speaking in Business

3 Credits. 3 Periods.

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.

## Interior Design

## 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.

# Course Descriptions

## 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.

## Italian

### ITA101

#### ITA1101

#### Elementary Italian I

4 Credits. 4 Periods.

Introduction to basic grammar, pronunciation, and vocabulary of Italian. Development of speaking, listening, reading, and writing skills. Study of the Italian culture. Prerequisites: None.

### ITA115

#### Beginning Italian Conversation I

3 Credits. 3 Periods.

Conversational Italian. Basic sentence structure, pronunciation and vocabulary necessary to develop speaking ability in Italian. Designed for students seeking speaking and listening abilities with little emphasis on grammar. Prerequisites: None.

## Journalism

### JRN201

#### News Writing

3 Credits. 5 Periods.

Writing news for the print media. Composing at the computer keyboard. Associated Press editing style, writing skills, and organizational structure for news. Prerequisites: ENG101, ENG107, or equivalent.

## 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.

### 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.

### MGT251

#### Human Relations in Business

3 Credits. 3 Periods.

Analysis of motivation, leadership, communications, and other human factors. Cultural differences that may create conflict and affect morale individually and within organizations. Prerequisites: None. MGT101, or MGT175, or MGT229 suggested but not required.

### MGT253

#### Owning and Operating a Small Business

3 Credits. 3 Periods.

Starting, organizing, and operating a small business, including location, finance management processes, advertisement and promotion, credit, inventory control and ethics. Prerequisites: None.

### 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 worksite. 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.

## Marketing

### 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.

### 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.



# Course Descriptions

## **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.

## **Manufacturing Industrial Technology**

## **MIT106**

### **Industrial Safety**

See description under cross-reference course GTC106

## **Manufacturing Technology**

## **MET102**

### **Machine Processes, Theory and Application**

5 Credits. 9 Periods.

Study and application of principles and theory of common metal removal processes including drilling, reaming, boring, milling, turning, and grinding. Cutting tool geometry and materials, cutting speeds and feeds, coolants, and precision measurement.

Prerequisites or Corequisites: MET/GTC107 and MET109 or minimum score of 80% on related competency evaluation.

## **MET107**

### **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. Prerequisites: None. Cross-References: GTC107

## **MET108**

### **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: GTC/MET107 or permission of instructor. Cross-References: GTC108

## **MET109**

### **Machine Trades Print Reading**

3 Credits. 3 Periods.

Analysis and interpretation of technical drawings (prints) common to manufacturing. Types of print formats, line types, and view projections. Mathematical calculations for determining dimensions. Symbols and features present on prints. Introduction to Geometric Dimensioning and Tolerancing (GD&T) as it relates to prints. Prerequisites: None.

## **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 suggested but not required.

## **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.

# Course Descriptions

## **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.

## **Mass Communications**

## **MCO120**

### **Media and Society**

3 Credits. 3 Periods.  
Study of historical and contemporary roles of media and its pervasiveness in society as it relates to culture, politics and education. Prerequisites: ENG101 or ENG107.

## **Mathematics**

## **MAT082**

### **Basic Arithmetic**

3 Credits. 3 Periods.  
Primary emphasis placed on fundamental operations with whole numbers, fractions, decimals, integers, and rational numbers; proportions, and percentages. Other topics include representations of data, geometric figures, and measurement. Prerequisites: Satisfactory score on district placement exam. Course Note: Students may receive credit for only one of the following: MAT081, MAT082, or MAT083.

## **MAT082AA**

### **Basic Arithmetic I**

1 Credit. 1 Period.  
Fundamental operations with whole numbers and integers. Prerequisites: Satisfactory score on district placement exam. Course Notes: Students may receive credit for only one of the following: MAT081, MAT082, or MAT083. MAT082AA, MAT082AB, and MAT082AC are equivalent to MAT082.

## **MAT082AB**

### **Basic Arithmetic II**

1 Credit. 1 Period.  
Fundamental operations with fractions and decimals. Prerequisites: Satisfactory score on district placement exam. Course Notes: Students may receive credit for only one of the following: MAT081, MAT082, or MAT083. MAT082AA, MAT082AB, and MAT082AC are equivalent to MAT082.

## **MAT082AC**

### **Basic Arithmetic III**

1 Credit. 1 Period.  
Fundamental operations with percentages; bar, line and pie graphs; measurement. Prerequisites: Satisfactory score on district placement exam. Course Notes: Students may receive credit for only one of the following: MAT081, MAT082, or MAT083. MAT082AA, MAT082AB, and MAT082AC are equivalent to MAT082.

## **MAT090**

### **Developmental Algebra**

5 Credits. 5 Periods.  
Linear behavior; linear equations and inequalities in one and two variables; graphs; systems of equations in two variables; function notation, graphs, and data tables; operations on polynomials; properties of exponents; applications. Prerequisites: Grade of "C" or better in MAT082, or MAT102, or equivalent, or satisfactory score on District Placement exam. Course Note: May receive credit for only one of the following: MAT090, MAT091, MAT092, or MAT093.

## **MAT091**

### **Algebra/Anxiety Reduction**

4 Credits. 4 Periods.  
Linear behavior; linear equations and inequalities in one and two variables; graphs; systems of equations in two variables; function notation, graphs, and data tables; operations on polynomials; properties of exponents; applications. Prerequisites: Grade of C or better in MAT082, or MAT102, or equivalent, or satisfactory score on District Placement exam. Course Note: Students may receive credit for only one of the following: MAT090, MAT091, MAT092, or MAT093.

# Course Descriptions

## **MAT092**

### **Introductory Algebra**

3 Credits. 3 Periods.

Linear behavior; linear equations and inequalities in one and two variables; graphs; systems of equations in two variables; function notation, graphs, and data tables; operations on polynomials; properties of exponents; applications. Prerequisites: Grade of "C" or better in MAT082, or MAT102, or equivalent, or satisfactory score on District Placement exam. Course Note: May receive credit for only one of the following: MAT090, MAT091, MAT092, or MAT093.

## **MAT092AA**

### **Introductory Algebra/1st Degree Equation Inequalities**

1 Credit. 1 Period.

The study of basic operations on integers, and rational numbers and the solving of first degree one variable equations and inequalities. Prerequisites: Grade of "C" or better in MAT082, or MAT102, or equivalent, or satisfactory score on District Placement exam.

## **MAT092AB**

### **Introductory Algebra/Polynomials**

1 Credit. 1 Period.

Fundamental operations with polynomials in one or more variables. Techniques in factoring and its use in equation solving. Prerequisites: Grade of "C" or better in MAT092AA.

## **MAT092AC**

### **Introductory Algebra/Graphing Systems**

1 Credit. 1 Period.

Graphing linear equations in two variables and solving systems of equations in two variables. Also problem solving using systems of equations, operations with rational expressions, and problem solving with rational expressions. May receive credit for only one of the following: MAT090 or MAT092. Prerequisites: Grade of "C" or better in MAT092AB.

## **MAT102**

### **Mathematical Concepts / Applications**

3 Credits. 3 Periods.

A problem solving approach to mathematics as it applies to life and the world of work. Development, demonstration, and communication of mathematical concepts and formulas that relate to measurement, percentage, statistics, and geometry. Prerequisites: Grade of "C" or better in

MAT082, or equivalent, or satisfactory score on District placement exam.

## **MAT103AA**

### **Mathematics for Industrial Applications I**

2 Credits. 2 Periods.

Fundamental operations with whole numbers, common fractions, decimals, percentages, and ratio and proportion. Graphs, measurements, and measurement tools. Fundamentals of algebra to include signed numbers, algebraic operations, linear equations, graphs of linear equations, and systems of equations. Includes applied math problems. Prerequisites: Grade of "C" or better in MAT082, or equivalent, or satisfactory score on District placement exam.

## **MAT103AB**

### **Mathematics for Industrial Applications II**

2 Credits. 2 Periods.

Fundamentals of plane geometry and angular measure. Theorems, axioms, corollaries and definitions applying to triangles, congruent and similar figures, polygons, and circles. Computed measure of geometric figures, area, volume, surface area, and weight. Fundamentals of trigonometry, trigonometric functions, right triangles, law of sines and law of Cosines. Includes applied math problems. Prerequisites: MAT103AA or permission of the instructor.

## **MAT120**

### **Intermediate Algebra**

5 Credits. 5 Periods.

Quadratic, rational, radical, exponential, and logarithmic functions and equations; graphs of quadratic, exponential, and logarithmic functions; equations quadratic in form; operations on rational expressions, radical expressions, and complex numbers; rational exponents; applications. Prerequisites: Grade of "C" or better in MAT090, MAT091, MAT092, MAT093, or equivalent, or a satisfactory score on the District placement exam. Course Note: May receive credit for only one of the following: MAT120, MAT121, or MAT122.

## **MAT121**

### **Intermediate Algebra**

4 Credits. 4 Periods.

Quadratic, rational, radical, exponential, and logarithmic functions and equations; graphs of quadratic, exponential, and logarithmic functions; equations quadratic in form; operations on rational expressions, radical expressions, and complex numbers; rational

exponents; applications. Prerequisites: Grade of "C" or better in MAT090, MAT091, MAT092, MAT093, or equivalent, or a satisfactory score on the District placement exam. Course Note: May receive credit for only one of the following: MAT120, MAT121, or MAT122.

## **MAT122**

### **Intermediate Algebra**

3 Credits. 3 Periods.

Quadratic, rational, radical, exponential, and logarithmic functions and equations; graphs of quadratic, exponential, and logarithmic functions; equations quadratic in form; operations on rational expressions, radical expressions, and complex numbers; rational exponents; applications. Prerequisites: Grade of "B" or better in MAT090, MAT091, MAT092, MAT093, or equivalent, or a satisfactory score on the District placement exam. Course Note: Students may receive credit for only one of the following: MAT120, MAT121, or MAT122.

## **MAT142**

### **College Mathematics**

3 Credits. 3 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: Grade of "C" or better in MAT120, or MAT121, or MAT122 or equivalent, or satisfactory score on District placement exam.

## **MAT150**

### **College Algebra / Functions**

5 Credits. 5 Periods.

Analysis and interpretation of the behavior and nature of functions including polynomial, rational, exponential, logarithmic, power, absolute value, and piecewise-defined functions; systems of equations, modeling and solving real world problems. Additional topics may include matrices, combinatorics, sequences and series, and conics. Prerequisites: Grade of "C" or better in MAT120, or MAT121, or MAT122 or equivalent, or satisfactory score on District placement exam.

# Course Descriptions

## **MAT151**

### **SUN# MAT1151**

#### **College Algebra/Functions**

4 Credits. 4 Periods.

Analysis and interpretation of the behavior and nature of functions including polynomial, rational, exponential, logarithmic, power, absolute value, and piecewise-defined functions; systems of equations, modeling and solving real world problems. Additional topics may include matrices, combinatorics, sequences and series, and conics. Prerequisites: Grade of "C" or better in MAT120, or MAT121, or MAT122, or equivalent, or satisfactory score on District placement exam.. Course Note: May receive credit for only one of the following: MAT150, MAT151, MAT152, or MAT187.

## **MAT152**

### **College Algebra / Functions**

3 Credits. 3 Periods.

Analysis and interpretation of the behavior and nature of functions including polynomial, rational, exponential, logarithmic, power, absolute value, and piecewise-defined functions; systems of equations, modeling and solving real world problems. Additional topics may include matrices, combinatorics, sequences and series, and conics. Prerequisites: Grade of "B" or better in MAT120, or MAT121, or MAT122, or equivalent, or satisfactory score on District placement exam. Course Note: May receive credit for only one of the following: MAT150, MAT151, MAT152, or MAT187.

## **MAT156**

### **Mathematics for Elementary Teachers I**

3 Credits. 3 Periods.

Focuses on numbers and operations. Algebraic reasoning and problem solving integrated throughout the course. Prerequisites: Grade of "C" or better in MAT142 or MAT150 or MAT151 or MAT152 or equivalent, or satisfactory score on District placement exam.

## **MAT157**

### **Mathematics for Elementary Teachers II**

3 Credits. 3 Periods.

Focuses on measurement, geometry, probability and data analysis. Appropriate technologies, problem solving, reasoning, and proof are integrated throughout the course. Prerequisite: MAT156 or equivalent.

## **MAT182**

### **Plane Trigonometry**

3 Credits. 3 Periods.

A study of measures of angles, properties of graphs of trigonometric functions, fundamental identities, addition and half-angle formulas, inverse trigonometric functions, solutions of trigonometric equations, complex numbers and properties of triangle solution. May receive credit for only one of the following: MAT182 or MAT187. 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.

## **MAT187**

### **SUN# MAT1187**

#### **Precalculus**

5 Credits. 5 Periods.

A precalculus course combining topics from college algebra and trigonometry. Preparation for analytic geometry and calculus. Prerequisites: Grade of B or better in MAT120, or MAT121, or MAT122, or equivalent, or satisfactory score on district placement exam. Course Notes: Strongly recommended that students have some knowledge of trigonometry. Students may receive credit for only one of the following: MAT150, MAT151, MAT152, or MAT187.

## **MAT212**

### **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.

## **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.

## **MAT218**

### **Mathematical Analysis for Business**

4 Credits. 4 Periods.

An introduction to the mathematics required for the study of business. Includes multivariable optimization, Lagrange multipliers, linear programming, linear algebra, probability, random variables, discrete and continuous distributions. Prerequisites: Grade of C or better in MAT212 or MAT213.

## **MAT220**

### **SUN# MAT2220**

#### **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**

### **SUN# MAT2227**

#### **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) or permission of Instructor.

# Course Descriptions

## **MAT230**

### **SUN# MAT2230**

#### **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.

## **MAT240**

### **Calculus with Analytic Geometry III**

5 Credits. 5 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.

## **MAT241**

### **SUN# MAT2241**

#### **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.

## **MAT262**

### **SUN# MAT2262**

#### **Differential Equations**

3 Credits. 3 Periods.

Ordinary differential equations with applications including LaPlace transforms with numerical methods. Prerequisites: Grade of "C" or better in MAT230, or MAT231, or equivalent.

## **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.

## **MAT277**

### **Modern Differential Equations**

3 Credits. 3 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: CIS102 and CIS105, or permission of instructor. Prerequisites or Corequisites: MST150XP.

## **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.

# Course Descriptions

## **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.

## **MST155DA**

### **Windows Server Network Infrastructure Configuration**

4 Credits. 5 Periods.

Information and skills necessary to design a Microsoft Windows networking services infrastructure design. Includes network foundation design, Internet and private networks connectivity, in addition to functionality security and performance features of networking services. Prerequisites: MST150, or any MST150++ course, or permission of Instructor. Course Notes: MST155DA is a preparation for the Microsoft 70-642 certification exam.

## **MST157**

### **Implementing Windows Directory Services**

3 Credits. 4 Periods.

Knowledge and skills to install, configure, and administer Microsoft Windows Active Directory directory services. Prerequisites: Any MST+++ or any MST+++++ Microsoft Technology course, or permission of Instructor. Course Notes: Preparation for Microsoft certification examination.

## **MST157DA**

### **Active Directory Windows Server Configuration**

4 Credits. 5 Periods.

Information and skills necessary to install, configure and administer Active Directory service. Covers tasks required to create users and groups, and to implement Group Policies which provide centralized management of users and computers. Prerequisites: Any MST course or permission of Instructor. Course Notes: MST157DA is a preparation for the Microsoft 70-640 professional certification test.

## **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.

## **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.

## **Multimedia Technology**

## **MMT140**

### **Survey of Multimedia Technology**

See description under cross-reference course CIS140

## **Music: History/Literature**

## **MHL140**

### **Survey of Music History**

3 Credits. 3 Periods.

Study of composers, compositions, styles, and periods in music history. Prerequisites: None.

## **MHL143**

### **Music in World Cultures**

3 Credits. 3 Periods.

Non-European musical traditions including the study of music in rituals, musical instruments and the impact of cultures on musical styles. Prerequisites: None.

# Course Descriptions

## MHL145

### American Jazz and Popular Music

3 Credits. 3 Periods.

The study of cultural and social contributions to the evolution of American Jazz and popular music from the mid-1800's to the present. Prerequisites: None.

## MHL147

### Music of African-American Cultures

3 Credits. 3 Periods.

African-American music traced from its origin in Africa to the present. Includes spirituals, blues, gospel, jazz, and classical style. Prerequisites: None.

## MHL153

### Rock Music and Culture

3 Credits. 3 Periods.

History of Rock music and how cultural, social, political and economic conditions have shaped its evolution. Prerequisites: None.

## MHL155

### Survey of American Music

3 Credits. 3 Periods.

History of the music of North America from the earliest American Indian music to the present. Introduction to the musical trends, composers, socioeconomic developments and trends, musical forms and styles that influence our modern American musical sense. Prerequisites: None

## MHL156

### Music in Latin America and the Caribbean

3 Credits. 3 Periods.

To discuss the role of music in Latin and Caribbean cultures and the impact of these cultures on music. To present a historical survey to the evolution and development of musical styles from rumba to reggae.

Among the topics, and to include: origins, gender, race, ethnicity, politics, elements of music, instruments, both sacred and secular music, and significant individuals influencing the evolution of many different genres of music in Latin America and Caribbean cultures. Prerequisites: None.

## 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.

## 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.

## Music: Theory/ Composition

## MTC101

### Introduction to Music Theory

3 Credits. 3 Periods.

Designed to develop written and aural skills necessary for advanced study of music theory and skills. Recommended for music majors. Prerequisites: None.

## MTC103

### Introduction to Aural Perception

2 Credits. 2 Periods.

An introduction to the aural skills necessary to hear relationships of intervals, rhythms, melody, and harmony in music. Prerequisites: None. Course Notes: MTC103 may be repeated for a total of four (4) credit hours.

## 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: MTC106.

## 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.

## Networking Technology

## 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: BPC101AA, or CAD125, or equivalent, or permission of department.

# Course Descriptions

## Nursing

### 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 Credits. 5 Periods.

Introduction to fundamentals of nursing theory and practice utilizing critical thinking based on the nursing process and principles of evidence based practice. Focus on meeting basic human needs within the wellness/illness continuum. Theoretical concepts related to holistic care of well, geriatric, and adult clients. Provides safe nursing care to clients with selected alterations in health. Introduction to professional nursing practice. Applies concepts of health promotion, disease/illness prevention. Provides care based upon integration of pathophysiology, nutrition, communication and physical, biological, and psycho-social sciences. Uses information technology in performing and evaluating client care. 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 nurse assisting [208]

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 and geriatric clients. Role development as the professional nurse member of the health care team. Participation in client teaching and discharge planning. Application of previous knowledge of physical, biologic, psycho-social sciences, and the cultural and spiritual aspects of nursing care. Application of nursing concepts in the development of plan of care to include pathophysiology, nutrition, pharmacology, and skills in communication. Uses information technology in planning, documenting, and evaluating client care. Prerequisites: NUR151 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.

### NUR191

#### 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. Emphasis on nursing care related to pediatric and care of the well childbearing client and childbearing family. Focus on the role of practical nurse in providing care through interventions consistent with established nursing care plans. Prerequisites: NUR171 or permission of Nursing Department Chair.

### NUR251

#### Nursing Theory and Science III

8 Credits. 4 Periods.

Application of critical thinking strategies related to holistic care of the newborn, pediatric, and childbearing clients. Integration of concepts related to holistic care of adults and geriatric clients with selected acute and chronic alterations in health. Integration of professional nursing standards in role development. Utilization of previous knowledge of physical, biologic, psycho-social sciences, and the cultural, spiritual aspects of nursing care. Integration of concepts of nutrition, pharmacology, communication, health promotion, and pathophysiology into nursing care. Prerequisites: (BIO202, BIO205, and NUR171) or permission of Nursing Department Chairperson.

### NUR271

#### Nursing Theory and Science IV

7 Credits. 4 Periods.

Integration of critical thinking strategies for complex holistic needs of high-risk clients with multi-system health alterations. Application of strategies related to holistic care of the client with psychiatric/mental health disorders. Introduction to community based care. Assimilation of professional role into practice. Evaluation of care based on the knowledge of physical, biologic, psycho-social sciences, and the cultural and spiritual beliefs of clients. Development of nurse leadership and management roles. Integration of concepts of nutrition, pharmacology, communication, health promotion, and pathophysiology into nursing care. Prerequisites: NUR251 or permission of Nursing Department Chairperson.

### 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.



# Course Descriptions

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. Overview of the regulatory framework related to safety and environmental program management. 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, 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 Credit. 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 I

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.

### OAS111AA Computer Keyboarding I

1 Credit. 1.7 Periods.  
Mastery of essential microcomputer keyboarding skills. Emphasis on touch typing of alphabetic and numeric keys and symbols. Prerequisites: None. Cross-References: BPC111AA

### OAS113 Micro-Alphabetic Indexing

1 Credit. 1.7 Periods.  
Mastery of essential microcomputer filing skills. Emphasis on indexing and alphabetizing 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.

# Course Descriptions

## 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 resume, 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 resume and practicing interview techniques. Prerequisites: None.

## Philosophy

## PHI101

### SUN# PHI1101

### 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

### SUN# 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.

## 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

### SUN# PHI1105

### Introduction to Ethics

3 Credits. 3 Periods.

Major theories of conduct. Emphasis on normative ethics, theories of good and evil from Plato to the present. Prerequisites: None.

## 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.

## 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

## 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.

## PED101FL

### Fitness for Life

1 Credit. 2 Periods.

Learn the basics of designing and implementing a personalized fitness program to meet your needs in the areas of Cardiovascular Fitness, Weight Control, Muscular Strength and Flexibility. Prerequisites: None.

# Course Descriptions

## **PED101FW**

### **Fitness Walking**

1 Credit. 2 Periods.

Development of safe and effective walking skills through proper exercises and use of equipment to enhance a walking program. Prerequisites: None.

## **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.

## **PED101JR**

### **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.

## **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.

## **PED101PS**

### **Pilates**

1 Credit. 2 Periods.

Mat-based exercise system focused on improving flexibility and strength for the total body. Teaches core control and stabilization while improving postural alignment. Prerequisites: None.

## **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.

## **PED101TC**

### **Tai Chi**

1 Credit. 2 Periods.

Fundamentals of Tai Chi including moves, breathing and meditation. Prerequisites: None.

## **PED101VB**

### **Volleyball**

1 Credit. 2 Periods.

Basic skills and game strategy of volleyball. Class emphasis on competition and drills. 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.

## **PED101WW**

### **Weight Training for Women**

1 Credit. 2 Periods.

Introduction for women to the use of free weights, strength machines and cardio equipment. Prerequisites: None.

## **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. Fuses hypnotic Latin rhythms and easy to follow moves. Interval training sessions where fast and slow rhythms and resistance training are combined to tone and sculpt while burning fat. 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.

# Course Descriptions

## PED115

### Lifetime Fitness

2 Credits. 4 Periods.

Fitness activity and wellness study to help develop a lifetime of regular exercise, stress management, and proper nutrition. Workout includes warm up/stretch, aerobic exercise, selected strength exercises, and cool down/stretch. May be repeated credit. 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.

## Physical Science

## 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.

## Physics

## 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 [212]

satisfactory score on Math Placement exam. Course Note: Students may receive credit for only one of the following: PHY101 or PHY101AA.

## PHY111

### SUN# PHY1111

#### General Physics I

LEC 4 Credits. 3 Periods.

LAB 0 Credits. 3 Periods.

Includes motion, energy, and properties of matter. Prerequisites: MAT182, or MAT187, 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

### SUN# PHY1112

#### General Physics II

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.

## 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

### SUN# PHY1121

#### 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

### SUN# PHY1131

#### 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

## POS110

### SUN# POS1110

#### 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.

# Course Descriptions

## 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

### POS1120

#### 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.

## Power Plant Technology

## PPT101

### Hand and Power Tools

1 Credits. 1 Periods.  
Identification and use of hand and hand-held power tools used in a power plant. Tool construction and purpose. Maintenance of hand and power tools. Prerequisites: None.

## PPT102

### Introduction to Electricity

3 Credits. 3 Periods.  
Basic electrical terminology and concepts. Fundamentals of electrical theory.  
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Calculations using electrical laws. Voltage and current production. Battery construction and applications. Principles of magnetism. Operation of motors, transformers, and generators. Electrical safety. Prerequisites: None.

## PPT103

### Print Reading and Plant Drawings

1 Credits. 1 Periods.  
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 Credits. 1 Periods.  
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 Credits. 1 Periods.  
Air compressor terminology. Principles of gas behavior and inter-cooling. Internal and external factors affecting compressor 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

### Turbines

1 Credits. 1 Periods.  
Operations, steam properties, energy transfer, parts, and types of turbines. Components and function. Turbine maintenance for oil and hydraulic systems, inspection of casings, nozzles and rotors. Turbine alignment and the tightening of joints using appropriate tools and equipment. Prerequisites: None.

## PPT109

### Pipefitting Auxiliaries I

2 Credits. 2 Periods.  
Principles of operation, maintenance procedures and inspection procedures. Basic piping systems, fittings, joints, and assorted piping materials. Prerequisites: None.

## PPT110

### Valve Maintenance I

2 Credits. 2 Periods.  
Safety, terminology, components, and operating principles of valves. Inspection and rework of valves. Components of the valve packing chamber. Packing and safety procedures. Stem packing installation. Quality assurance test methods for specific valves. Prerequisites: None.

## PPT112

### Principles of Machining

3 Credits. 3 Periods.  
Safety practices, machining methods, and principles of material removal. Types of cutting tools, lathe, milling, drill, and bandsaw components. Principles of operation of specific machines found in the machine shop including turning, milling, drilling and cutting machines. Prerequisites: None.

## PPT113

### Pumps I

2 Credits. 2 Periods.  
Types of pumps, applications and principles of operation and safety. Pump components identification. Inspection, use and maintenance of packing and mechanical seals. Prerequisites: None.

## PPT114

### Drive and Gear Components

1 Credits. 1 Periods.  
Terminology, identification and inspection of the component parts of a drive and gear system. Operation, maintenance and inspection of couplings, clutches, brakes, belt drives, chain drives, shafts and gears. Operation and configurations of variable speed drives. Prerequisites: None

# Course Descriptions

## **PPT115**

### **Hydraulics and Pneumatics**

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.

## **PPT116**

### **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.

## **PPT117**

### **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-hands operation of a forklift. Prerequisites: None.

## **PPT118**

### **Conduct of Maintenance**

1 Credits. 1 Periods.

Safety and management expectations. Defense in Depth strategy and Conduct of Verifications. Maintenance procedures. Work control process. Performance of work standards and documentation including pre-job preparation, pre-job notification, job review, job verification and job close out specific to nuclear power plant operations. Prerequisites: None.

## **PPT119**

### **Instrument Air Compressor Maintenance**

2 Credits. 2 Periods.

Purpose, function, and identification of system drawings. Identification of major components. Instrument air compressor components and function. Air flow operations. Free air unloader components and function. Fluids and flow paths. Compressor cooling water and lubricating oil. Inspection and repair of parts. Troubleshooting. Prerequisites: None.

## **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.

## **PPT200**

### **Industry Events**

1 Credits. 1 Periods.

Information distribution; methods and avenues of communication. Material and design problems in the nuclear power plant. Procedural deficiencies of motor and equipment operation. Operation of sensitive equipment. Potential plant vulnerabilities. Personnel errors including mis-positioning, flooding, testing and procedural violations. Prerequisites: None.

## **PPT202**

### **Plant Systems and Components I**

2 Credits. 2 Periods.

Plant mission, numbering and drawing systems. Components and function of reactor coolant, volume control, safety injection, and nuclear sampling systems. Function and operation of main stream and turbine systems. Main and auxiliary feedwater systems. Operation and function of steam and heater drain systems. Prerequisites: None.

## **PPT203**

### **Plant Systems and Components II**

2 Credits. 2 Periods.

Advanced course on plant systems and components. Water, electrical and cooling systems. Safe shutdown cooling water system. Waste drain system. Fuel handling and storage systems. Fuel pool cooling and cleanup. Purpose and operation of radioactive waste management. Service air and gas systems. Ventilation and fire protection systems. Prerequisites: PPT202.

## **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.

Heat exchanger theory including heat transfer and operating principles. Classification of heat exchangers including types, construction, and operation. Inspection of heat exchangers. Cleaning of exchanger tubes and shells. Cleaning of component parts. Troubleshooting tubes. Maintenance of exchangers. Prerequisites: None.

## **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.

Purpose, terminology and system stress factors related to piping systems. Principles of fluid flow, and piping inspection procedures. Fabrication and installation of tubing materials, specific joints, and flanges. Basic piping system component maintenance, rework and installation procedures. Prerequisites: PPT109.

## **PPT210**

### **Valve Maintenance II**

3 Credits. 3 Periods.

Fundamentals of hand lapping. Dexter and Unislip resurfacing tools. Valve packing: purpose, components and specifications. Valve survey data sheet. Procedure for field manufacture of die-formed packing rings. Function of the Optical Flat. Valve inspection. Gaskets and torquing techniques. Prerequisites: PPT110.

# Course Descriptions

## 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.

Modulating control terminology. Disassembly, inspection and assembly processes. Construction and operation of specific actuators. Maintenance of pneumatic and hydraulic valve actuators. Principles of operation, inspection and testing of control valves. Bench testing. Prerequisites: None.

## PPT213

### Pumps II

3 Credits. 3 Periods.

Rotary, reciprocating and centrifugal pump operation. Positive displacement and metering pump operation. Diaphragm pulsafeder operation. Disassembly, inspection and reassembly of radially and axially split centrifugal pumps. Troubleshooting and lab safety. Prerequisites: None.

## PPT214

### Machine Alignment

3 Credits. 5 Periods.

Calculations and practical lab exercises using alignment principles. Determination of indicator sag and thermal growth. Obtaining readings for alignment or misalignment. Rim-face method of alignment stressed and practiced. Prerequisites: None.

## PPT215

### Relief and Safety Valves

1 Credits. 1 Periods.

Concepts of pressure and pressure measurement. Components and operation of rupture discs, relief valves, and safety valves. Maintenance procedures. Prerequisites: None.

## PPT217

### Refueling Overview

1 Credits. 1 Periods.

Destack and restack operations of the Reactor Vessel. Purpose and location of refueling equipment. Refueling operation including spent fuel, refueling machines and fuel transfer equipment. Safety. New fuel receipt, transfer and moving of spent fuel. Prerequisites: None.

## PPT218

### Lathe Operations

2 Credits. 4 Periods.

Safe and proper operation of the lathe. Component and accessories and their functions. Cutting tools and methods. Processes of machining including mounting, aligning, knurling, grooving, turning, thread cutting, drilling, reaming boring, and tapping. Machining techniques using a chuck. Prerequisites: None.

## PPT219

### Milling Machine Operations

2 Credits. 2 Periods.

Components of horizontal and vertical milling machines. Common milling machine accessories and cutters. Cutting speeds, feeds and depths for materials and cutters. Machine set up and operations. Common cutter failure. Operation of horizontal and vertical milling machines. Milling safety. Prerequisites: None.

## Psychology

## PSY101

### SUN# PSY1101

#### 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.

## PSY231

#### Laboratory for Statistics

1 Credit. 2 Periods. (Lab)

Applications of inferential and descriptive statistics to computers in the field of psychology. Prerequisites: None. Corequisites: PSY230.

## 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.

# Course Descriptions

## 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.

## 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.

## Public Administration

### 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.

### PAD296WA

#### 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.

### 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.

## Radiation Protection Technician

### 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.

Presents scenarios in which Radiation Protection Technicians are required to 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



# Course Descriptions

protection principles. Prerequisites: RPT233, or permission of instructor.

## Reading Also See: Critical Reading (CRE)

### **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).

### **RDG010**

#### **Reading English as a Second Language I**

3 Credits. 3 Periods.

Designed for students who are learning English as a second language. Provides students with skills needed to become proficient readers in English. Teaches sound symbol relationships of the English alphabet. Expands essential vocabulary for daily communication both in isolation and context. Includes development of reading comprehension skills. Prerequisites: Appropriate ESL placement test score

### **RDG020**

#### **Reading English as a Second Language II**

3 Credits. 3 Periods.

Designed for students who are learning English as a second language. Includes continued development of vocabulary and reading comprehension skills. Prerequisites: Appropriate ESL placement test score or grade of "C" or better in RDG010 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: 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, interdisciplinary vocabulary development, recognizing patterns of organization, interpreting inference. Reviews interpreting graphic materials. Emphasis on identifying main ideas and related details. Prerequisites: Appropriate reading placement test score, or grade of "C" or better in RDG071.

### **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.

### **RDG105**

#### **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.

## Real Estate

### **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.

## Recreation

### **REC150AB**

#### **Outdoor Adventure Skills**

3 Credits. 3 Periods.

Camping and outdoor skills including types of camping, equipment selection and use, cooking and fire building, camp programs, backpacking, and safety. Prerequisites: None.

# Course Descriptions

## Religious Studies

### 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.

### 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.

### 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.

### 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.

## Sign Language

### SLG101

#### American Sign Language I

4 Credits.

4 Periods.

Introduction of principles, methods,

and techniques for communicating with deaf people who sign. Development of expressive and receptive sign skills, manual alphabet, numbers and sign vocabulary. Overview of syntax, grammar, and culture related to American Sign Language (A.S.L.). Prerequisites: None. SLG103 suggested as a corequisite but not required.

### 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.

## 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.

## Sociology

### SOC101

#### SUN# SOC1101

#### Introduction to Sociology

3 Credits.

3 Periods.

Fundamental concepts of social organization, culture, socialization, social institutions and social change. 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.

### SOC140

#### SUN# SOC2215

#### Racial & Ethnic Minorities

3 Credits.

3 Periods.

Contemporary/Historical racial and ethnic intergroup relations emphasizing cultural origins, developments, and problems of minority groups in the United States. Prerequisites: None.

### SOC157

#### Sociology of Marriage & Family

3 Credits.

3 Periods.

The study of courtship, marriage, and family patterns, their historical development, their adaptation to a changing culture, and their impact on individuals. 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.

### 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.

# Course Descriptions

## Small Business Management

### 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 with emphasis on practical use of financial data for the successful management of a small business. Develops an understanding of the accounting cycle and preparation of financial statements. Includes section on tax consequences and preparation for small business owners. Designed for the non-financially oriented owner/manager of a small business. Prerequisites: None.

### SBS203

#### 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.

### SBS204

#### 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.

### SBS214

#### Small Business Customer Relations

2 Credits. 2 Periods.

Developing and improving customer relations for the small business. Planning and delivering quality customer service. Includes topics on attitude of employees, customer perceptions and motivations, handling customer dissatisfaction, and developing customer, supplier, vendor, and distributor loyalty. Prerequisites: None.

### SBS217

#### 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.

### SBS220

#### 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.

## Spanish

### SPA101

#### SPA1101

#### 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.

### SPA101AA

#### Elementary Spanish I

4 Credits. 5 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

#### SPA1102

#### 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.

### SPA102AA

#### Elementary Spanish II

4 Credits. 5 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.

### SPA104

#### Elementary Spanish for Spanish Speakers II

4 Credits. 4 Periods.

Continued review of grammatical problems in speaking and writing and reading in Spanish. Prerequisites: SPA103 or equivalent or departmental approval.

# Course Descriptions

## SPA115AA

### Beginning Spanish Conversation I

3 Credits. 4 Periods.

Conversational Spanish. Basic sentence structure, pronunciation and vocabulary necessary to develop speaking ability in Spanish. Designed for students seeking speaking and listening abilities with little emphasis on grammar. Prerequisites: None.

## SPA201

### **SUN#** SPA2201

#### Intermediate Spanish I

4 Credits. 4 Periods.

Continued study of essential Spanish grammar and Spanish-speaking cultures. Continued practice and development of reading, writing, and speaking skills in Spanish. Emphasis on fluency and accuracy in spoken Spanish. Prerequisites: Grade of "C" or better in SPA102, or SPA111, or permission of Department or Division.

## SPA202

### **SUN#** SPA2202

#### 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 SPA202. Prerequisites: SPA203, or SPA201, or permission of instructor or department chair.

## Spanish Humanities

### SPH245

#### Hispanic Heritage in the Southwest

3 Credits. 3 Periods.

A survey of Hispanic heritage in the Southwest. Cultural and social institutions and their contribution to the development of the region and its heritage. Prerequisites: None.

## 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 or SLP205 or permission of instructor.

## SLP214

### Articulation and Phonological Disorders and Rehabilitation

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: SLP210.

## SLP215

### Speech and 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: SLP210

## 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, or SLP214, or permission of Instructor.

## SLP218

### Behavior Management

2 Credits. 2 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 or SLP214 or permission of Instructor.

## SLP235AA

### Speech-Language Pathology Practicum

1 Credits. 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

# Course Descriptions

therapeutic environments. A minimum of 50 hours in a therapeutic environment required. Prerequisites: SLP212, and SLP214.

## **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, and SLP214.

## **SLP235AC** **Speech-Language Pathology Practicum**

3 Credits. 3 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 150 hours in a therapeutic environment required. Prerequisites: SLP212, and SLP214.

## **SLP240** **Assistive Technology and Augmentative Communication**

3 Credits. 3 Periods.  
Provides an 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: SLP205, or permission of 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, or SLP205, or permission of 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.

## Storytelling

## **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

## **STO289AB** **Using Storytelling in Business Settings**

1 Credits. 1 Periods.  
The application of storytelling and storytelling activities in business settings. Prerequisites: None.

## **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.

# Course Descriptions

## 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.

## 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

## THE 206

### Introduction to Television Arts

3 Credits. 3 Periods.

History and development of electronic media and its impact on popular arts. Prerequisites: None. Cross-References: HUM206

## 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

### SUN# THE2220

### 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.

Purposes, materials, and techniques of theatrical makeup. Prerequisites: None.

## 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 Credits. 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.

# Course Descriptions

## 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: THP 213 or permission of instructor

## THP219

### Introduction to Puppetry

3 Credits. 4 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

### Welding I

3 Credits 6 Periods.

Principles and techniques of electric arc and oxyacetylene welding and cutting. Provides technical theory and basic skill training in these welding processes. Prerequisites: None.

## 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.

## WLD206

### 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 departmental permission.

## WLD208

### Advanced Arc 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.



# Course Descriptions

## 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 Studies

### **WST209**

#### **Women and Films**

See description under cross-reference course HUM209



# EMCC Guidelines for Public Expression

## Estrella Mountain Community College

### STUDENT GUIDELINES FOR PUBLIC EXPRESSION ON CAMPUS FOR NON-COLLEGE SPONSORED EVENTS

Estrella Mountain Community College recognizes and supports the rights of students to speak in public and to demonstrate in a lawful manner in designated areas of the campus and at designated times. In order to maintain safety, security, and order, to insure the orderly scheduling of campus facilities, and to preclude conflicts with academic and co-curricular activities, Estrella Mountain Community College reserves the reasonable right to limit such activities by the following regulations regarding time, place and manner of such activities.

**TIME:** The time designated for public expression on campus is between 1:00pm and 3:00pm and 6:00pm-8:00pm Monday through Friday, subject to summer and holiday college closures.

**PLACE:** The base of the Montezuma circular staircase is designated as the college's open forum space for the purposes of speakers in order to avoid unreasonable conflict with the normal functions and requirements of the College and to assure that the flow of vehicular and pedestrian traffic will not be impeded. The staircase cannot be blocked and the designated area will be marked off for each event.

**MANNER:** Demonstrations, speeches, and debates may be held only in the designated space only. Authorization is granted based on space availability through the Office of Student Life and Leadership. Notice must be received no less than 48 hours in advance of the activity. College sponsored events take precedence. The use of amplification equipment in association with any public expression activity is prohibited.

Public expression activities must not violate the College's harassment policies or any other college policies. Public expression cannot jeopardize public or individual safety. Participants in the open forums may not approach students beyond the boundaries described above. The College reserves the right to relocate or suspend any assembly that violates College or District policy or regulation.

The College recognizes that individual students or student groups may be opposed to certain acts of public expression. Disagreement with different opinions is acceptable; however, hindering or obstructing such activity compromises the College's goal of creating an environment where issues can be openly discussed. An individual or group wishing to protest at an event may do so as long as the protest is held in accord with the "time, place, and manner" guidelines detailed above and the speaker's ability to speak and the audience's right to see and to hear a speaker are not unreasonably impeded.

The Vice President for Student Affairs or his/her designee will be responsible for administering this policy. Violations of this policy are subject to judicial review and disciplinary sanctions, as are demonstrations that become disruptive. Community groups or individuals not enrolled at EMCC acting in violation of this policy will be required to leave campus, and may be referred to the City of Avondale Police in the event of criminal action. Any police arrests and criminal charges are separate from judicial actions at Estrella Mountain Community College.

*Approved at EMCC Leadership Council Meeting on February 10, 2010.*



### Catalog Common Pages 2012-2013

#### MARICOPA COUNTY COMMUNITY COLLEGE DISTRICT

**Amended through the Administrative Regulations approval process on March 13, 2012**

**Non-Instructional Complaint Resolution Process** ([AR 2.3.12](#) and [Appendix S-8](#)) (added April 2012)

**Tuition and Fee Schedule** ([S-4](#)) revised to reflect new out-of-county surcharge (updated May 2012)

**Verification of Information** ([S-5: Student Financial Assistance](#)) added (updated May 2012)

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:

[http://www.maricopa.edu/publicstewardship/governance/adminregs/adminregs\\_toc.php](http://www.maricopa.edu/publicstewardship/governance/adminregs/adminregs_toc.php)

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, 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,

# MCCCD Policies and Procedures

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.

## 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.

### **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.

## DECLARACIONES DE ACCIÓN AFIRMATIVA

### **Mandato de No Discriminación**

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 discriminará o tolerará discriminación 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 información genésica. Así mismo, es el mandato de los Colegios Comunitarios proveer para cada aplicante, empleado, y estudiante un ambiente libre de acoso sexual como también libre de acoso e intimidación 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 discriminación 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 discriminación 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 discriminará o tolerará discriminación 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 discriminarán o tolerarán discriminación en contra ningún aplicante o empleado debido a su discapacidad/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 incapie en sus incapacidades físicas o mentales en la selección de recursos humanos y prácticas decisivas como son las siguientes: anuncios, beneficios, compensación, disciplina (incluyendo período 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 discapacidad/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 discapacidad/incapacitación o condición de veterano en todas las áreas de recursos humanos y decisiones como son las siguientes: anuncios, beneficios, compensación, disciplina (incluyendo período 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 genética. 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:

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

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

## **Community**

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

## **Excellence**

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

## **Honesty and Integrity**

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

## **Inclusiveness**

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

## **Innovation**

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

## **Learning**

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

## **Responsibility**

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

## **Stewardship**

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

## **ADMISSION, REGISTRATION AND ENROLLMENT**

### **2.1 General Regulation**

#### **1. General Statement**

##### *Compliance with Policies, Rules and Regulations*

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

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

# MCCCD Policies and Procedures

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

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

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

## **2. Outcomes Assessment**

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

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

### **2.2.1 Admission Policy**

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

### **Admission Classifications**

#### **1. Admission of Regular Students**

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

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

#### **2. Admission of Students Under 18 Years of Age**

- A. 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).

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- v. The completion of a college placement test designated by the community college district that indicates the student is at the appropriate college level for the course.
  - vi. Is a graduate of a private or public high school or has a high school certificate of equivalency.
  - B. A community college may limit the number of semester hours in which the student may enroll to not more than six (6) credit hours.
  - C. Home schooled students are exempt from this sub-section.
  - D. 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 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



# MCCCD Policies and Procedures

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:

Tuition and Fees	\$ 7,690(1)
Living Expenses	10,140(2)
Books	1,200(3)
Health Insurance	1,000(4)
Total	\$20,030(5)

## D. Dependent Financial Guarantee

Evidence of financial support for dependents of F-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 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 students is highly recommended. The Maricopa Community Colleges contracts with an insurance provider annually to offer a health insurance plan for F-1 students. For more information contact the college Admissions and Records Office/Office of Student Enrollment Services or designated international student office.

Footnotes:

- (1) Based on 2011-2012 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. Assumes books are sold at the end of the semester.
- (4) Based on the 2009-2010 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

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- 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.

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- 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.
    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.
      - 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.
    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

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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. Beginning in the fall semester of 2011, a person who is honorably discharged from the armed forces of the United States 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
    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 without lawful immigration status is not entitled to classification as an in-state student pursuant to ARS §15-1802 or entitled to classification as a county resident pursuant to ARS §15-1802.01. A student will be assessed out-of-state tuition until such time that documentation of status is received in the Office of Admissions and Records/Enrollment Services and (eligibility for) residency is confirmed. Documentation must be provided prior to the end of the term in which residency classification is being requested. Documentation received after the end of term will be used for residency determination in subsequent terms.
  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 Resident 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**=Intracompany Transferee or Spouse or Child
    - N6**=NATO-6
    - 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

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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. In the event that an alien student's parent is domiciled in this state and is allowed to claim the student as an exemption for state or federal tax purposes (3.c.i.2.a), the student's parent, in order to establish domicile, must hold a valid, unexpired visa in one of the categories listed in section 3 above.

### iii. Presumptions Relating to Student Status

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

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

### iv. Proof of Residency

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

#### 1. 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.

## 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.
- "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.
  - "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.
  - "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 MCCCD colleges for specially approved programs. No more than 20 credit hours may be applied to AGECE. 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 MCCCD 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:

<b>Exam</b>	<b>Score</b>	<b>Credit Hours/Equivalency</b>
English-Language and Composition	5 or 4	6 credit hrs/ENG 101, ENG 100, AA, AC, AD, eligible for Honors ENG
English-Literature and Composition	5 or 4	6 credit hrs/ENG 101 ENH 110 eligible for Honors ENG 102

Math AP Recommendation:

<b>Exam</b>	<b>Score</b>	<b>Credit Hours/Equivalency</b>
Math-Calculus AB	5,4, or 3	MAT 220 or MAT 221
Math-Calculus BC	5, or 4	MAT 220 or MAT 221, and MAT 230 or MAT 231, upon completion of MAT 241 MAT220 or MAT221
	3	MAT220 or 221
Computer Science A and AB	4 or 5	CSC 100

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.



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- 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.

## English Composition:

Students pursuing credit for ENG 101 must take the English Composition with Essay. 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:

Course	Spanish	French	German	Credit
101	40-49	39-48	39-45	4 (101)
102	50-54	49-53	46-50	8 (101, 102)
201	55-61	54-62	51-59	12 (101, 102, 201)
202	62-80	63-80	60-80	16 (101, 102, 201, 202)

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:

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

- 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.

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- 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: The changes to English Composition CLEP were agreed upon at their respective Articulation Task Force (ATF) meetings prior to approval by APASC members in April, 2008. These cut scores, which represent equivalencies, were implemented July 1, 2009. DISCLAIMER: Test scores are continually reviewed and may be updated at any time. Changes will be noted as they occur.*

Table Revised March 2012

Examination General	MCCCD		
	Score	Sem. Hrs.	Equivalency
College Composition	50 (July 1, 2001 or later), 600 (1986 version), 500 (1978 version)	4	With essay qualifies for ENG101(3) and ENG297(1)
College Composition—Modular	-	0	No credit
Humanities	50 (July 1, 2001 or later), 500 (prior to July 1, 2001)	6	Elective Credit
Natural Sciences	50 (July 1, 2001 or later), 500 (prior to July 1, 2001)	8	Elective Credit*
Social Sciences and History	50 (July 1, 2001 or later), 500 (prior to July 1, 2001)	3	Elective Credit
<b>Subject</b>			
American Government	ACE Score	3	POS110
American Literature	ACE Score	6	ENH241, 242
Analyzing and Interpreting Literature	ACE Score	3	Elective Credit
Biology	ACE Score	8	BIO Elective Credit*
Calculus (Previously Calculus with Elem Functions)	ACE Score	4	MAT221
Chemistry	50 or higher	4	CHM151(3) and CHM151LL(1)
College Composition (Replaces English Composition with Essay)	50	4	With essay qualifies for ENG101, ENG297
English Literature	ACE Score	3	Elective Credit
Financial Accounting	50	3	Elective Credit
French Language, Level 1 (Previously French Language)	50-54 55-61	4 5	FRE101 FRE101, 102
French Language, Level 2 (Previously French Language)	62-65 66-80	12 16	FRE101, 102, 201 FRE101, 102, 201, 202
German Language, Level 1	39-45	4	GER101

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(Previously German Language)	46-50	8	GER101, 102
German Language, Level 2 (Previously German Language)	51-59 60-80	12 16	GER101, 102, 201 GER101, 102, 201, 202
Human Growth and Development	50 or higher	3	CFS205
Information Systems and Computer Applications	ACE Score	3	CIS Elective Credit
Intro to Educational Psychology	ACE Score	3	EDU Elective Credit
Introductory Business Law	50	3	Elective Credit
Introductory Psychology	ACE Score	3	PSY101
Introductory Sociology	50 or higher	3	SOC101
Macroeconomics, Principles of (Replaces Introductory Macroeconomics)	ACE Score	3	ECN211
Management, Principles of	50	0	No credit
Marketing, Principles of	50	0	No credit
Mathematics, College	ACE Score	3	MAT142
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 55-65	4 8	SPA101 SPA101, 102
Spanish Language, Level 2 (Previously Spanish Language)	66-67 68-80	12 16	SPA101, 102, 201 SPA101, 102, 201, 202
Trigonometry	ACE Score	3	MAT182
U.S. History I – Early Colonization to 1877	ACE Score	3	HIS103
U.S. History II – 1865 to the Present	ACE Score	3	HIS104
Western Civilization I – Ancient Near East to 1648	ACE Score	6	HIS100, 101
Western Civilization II – 1648 to the Present	ACE Score	3	HIS102
*The general studies requirement in natural sciences (SQ and SG) and Literacy and Critical Inquiry (L) are not satisfied by CLEP			

## Advanced Placement Credit

*NOTE: The changes to AP scores to include Japanese were agreed upon at their respective Articulation Task Force (ATF) meetings prior to approval by APASC members in April, 2008. These cut scores, which represent equivalencies, were implemented fall 2009.*

Table Revised March 2012

Examination	Score	MCCCD	Sem. Hrs.
Art – History	5 or 4	ARH101, 102	6
	3	ARH101 or 102	3
Art – Studio Art (2-D Design) (Previously Art – Studio – General)	5	ART111, 112	6
	4	ART112	3
Art – Studio Art (Drawing) (Previously Art – Studio – Drawing)	5	ART111, 112	6
	4	ART111	3

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Biology	5 or 4 3	BIO181, 182 BIO100 or Equivalent	8 4
Chemistry	5 or 4	CHM151/151LL	4
Calculus AB (Previously Mathematics – Calculus AB)	5, 4, or 3	MAT221	4
Calculus BC (Previously Mathematics – Calculus BC)	5 or 4 3	MAT221 or MAT231 MAT221	8 4
Comparative Government and Politics (Previously Political Science – Comparative Government and Politics)	5 or 4	POS140	3
Computer Science A	5 or 4	CSC100	3
Computer Science AB	5 or 4	CSC100	3
Economics – Macroeconomics	5 or 4	ECN211	3
Economics – Microeconomics	5 or 4	ECN212	3
English – Language and Composition	5 or 4	ENG100AA, AC, AD and ENG101	6
English – Literature and Composition	5 or 4	ENG101 and ENH110	6
Environmental Science	5 or 4	No Credit	3
European History	5 or 4	HIS101, HIS102	6
French – Language	5, 4, or 3	FRE101, 102, 201, 202	16
French – Literature	5, 4, or 3	FRE101, 102, 201, 202	16
German – Language	5, 4, or 3	GER101, 102, 201, 202	16
German – Literature	5, 4, or 3	GER101, 102, 201, 202	16
Japanese Language and Culture (Previously Japanese – Language)	5 4 3	JPN101, 102, 201 and 202 JPN101, 102 and 201 JPN101 and 102	20 15 10
Latin: Vergil (Previously Latin – Language)	5 4 3	LAT101, 102, 201, 202 LAT101, 102, 201 LAT101, 102	16 12 8
Music Theory (Previously Music)	5 or 4	MTC105	3
Physics B	5 4	PHY111 and PHY112 PHY111	8 4
Physics C – Electricity and Magnetism	5,4 or 3	PHY112	4
Physics C – Mechanics	5,4 or 3	PHY111	4
Psychology	5 or 4	PSY101	3
Spanish – Language	5, 4, or 3	SPA101, 102, 201, 202	16
Spanish – Literature	5, 4, or 3	SPA101, 102, 201, 202	16
Statistics	5, 4, or 3	MAT206	3
U.S. Government and Politics (Previously Political Science – American Government)	5 or 4	POS110	3
U.S. History (Previously History – American)	5 or 4	HIS103, HIS104	6

## 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.

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## International Baccalaureate Diploma/Certificate Credit

Table Revised March 2012

Examination	Score	Sem. Hrs.	MCCCD Equivalency
Biology	7, 6, or 5 4	8 4	BIO181, 182 BIO100 or equivalent
Business and Management	5 or higher	3	Elective credit
Chemistry	7, 6, or 5 4	9 4	CHM151, 152 CHM151
Economics	7, 6, or 5	6	ECN211, 212
English A	7, 6, or 5 4	6 3	ENG101, ENG100AB, AC, AD ENG100AB, AC, AD
English B	No Credit		None
Foreign Language A or B	7, 6, or 5 4	8 8	Foreign Language 201, 202 Foreign Language 101, 102
Geography (Previously Human Geography)	5, 4, or 3	3	GCU102
History (Previously History – American)	7, 6, or 5 4	6 3	HIS103, 104 HIS103
History (Previously History – European)	7, 6, or 5 4	6 3	HIS101, 102 HIS101
Mathematics HL Mathematics SL Mathematical Studies SL Further Mathematics SL (Previously Mathematics)	7, 6, or 5	4	MAT221
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

### 3. Health Care Integrated Educational System (HCIES) Credit for Prior Learning

#### *National/Regional Credential Recognition*

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@domail.maricopa.edu](mailto:ican@domail.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

# MCCCD Policies and Procedures

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 (I CAN). 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," "Credity 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.

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- 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.
- 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 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](http://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](http://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](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/ccta/artic/partner\\_list.php](http://www.maricopa.edu/academic/ccta/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](http://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](http://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

Academic advising assists students in the formation of educational plans and goals. This is an ongoing process of clarification, evaluation, re-clarification, and re-evaluation.

1. The ultimate responsibility for making decisions about life goals and educational plans rests with the student. The academic advisor helps to identify and assess alternatives and consequences.
2. The academic advisor also serves as a resource for accurate information. The advisor is knowledgeable about institutional policies, procedures, programs and resources and assists students in making use of printed and online materials.
3. Advisors are in a position to help students identify their learning-related needs. Feedback received from advisors could be beneficial and should be used in policy-making decisions at all levels of the institutional administration.

With the help of an academic advisor, students will:

1. gain an understanding of their academic abilities and interests
2. be reinforced in their successes



3. be provided information regarding the nature and purpose of higher education
4. be referred to counselors and other resources to explore their interests, skills, abilities, and values
5. define and refine educational goals and objectives and understand the consequences of alternative courses of action
6. consider alternative careers through counselors, workshops, seminars, and other resources
7. make course, certificate, and/or degree selections
8. understand and utilize placement test results
9. be encouraged to be active participants in their educational planning and college life
10. be informed of support services that are available and how to make an appointment, if appropriate
11. be aware of transfer articulation arrangements
12. be informed about research results and general perceptions of student experiences at the institution
13. receive accurate printed materials on academic majors, minors, and other degree and program requirements
14. be encouraged to use the technology, which supports the academic advising process.

## 2.2.7 Student Assessment and Course Placement

The Maricopa Community Colleges are committed to providing students with opportunities for successful academic experiences. Student academic achievement is directly related to the proper initial course placement. Students choosing to enroll will register for the courses indicated by their English, mathematics or reading course placement tests, or in a lower level course. Initial course placement should be discussed with an advisor or counselor who is skilled in assessing the student's needs and factors that affect student success.

### 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 and/or math course, or any college course for which English, reading or math is a prerequisite.
  - ii. The student is pursuing a degree 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 does not have a high school diploma or GED, and is applying for federal financial aid.
  - iv. 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.
  - v. College may determine additional conditions under which students would be required to complete course placement testing. Contact the college for additional conditions.
- B. Students will be strongly encouraged to complete a course placement test under any one of the following conditions:
  - i. The student is taking a math course and has a college-level prerequisite on file that is more than five (5) years old.
  - ii. The student is taking a college course for which English, reading or math is a prerequisite, and such credit is more than five (5) years old.
- C. Students MAY 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.
  - ii. The student has earned college credits from a regionally accredited college in English, reading, and math with a grade of C or higher, and such credit is no more than five (5) years old.
  - iii. The student has currently valid district approved course placement scores on file

*Note: Being exempt from taking a course placement test does not exempt the student from fulfilling the minimum graduation requirements.*

### 2. Course Placement

- A. Students choosing to enroll in the courses indicated will be advised and placed into courses based on highest test or retest scores.

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- B. Students will be permitted one re-test in English, reading or by math level after at least a 24-hour waiting period. An additional re-test is permitted one year from the date of student's original or re-test at any course placement testing site.
- C. The vice president of student affairs or designee may approve re-testing for students with special needs or circumstances. The re-test date will then serve as the date of record.
- D. Students may request a Course Placement Waiver from the appropriate department/division chair or designee. The waiver will be granted at the chair/designee's discretion. Additional testing may also be required. 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, with the exception of the reading exemption, will be valid for two years from the date of the original or re-test.

### 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.

#### 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

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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, 2012 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 2012-2013 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

2012-2013	Maricopa County Resident (In County)	In County Resident Audit Rate	Out of County Resident	Non-Resident Living in Arizona	Non-Resident Study Abroad Program	Non-Resident Distance Learning	Western Undergraduate Exchange (WUE)
	IN-STATE			OUT-OF-STATE			
Credit Hours	A	B	C*	D**	E	F***/+	G
1	76.00	101.00	317.00	317.00	196.00	215.00	114.00
2	152.00	202.00	634.00	634.00	392.00	430.00	228.00
3	228.00	303.00	951.00	951.00	588.00	645.00	342.00
4	304.00	404.00	1,268.00	1,268.00	784.00	860.00	456.00
5	380.00	505.00	1,585.00	1,585.00	980.00	1,075.00	570.00
6	456.00	606.00	1,902.00	1,902.00	1,176.00	1,290.00	684.00
7	532.00	707.00	2,219.00	2,219.00	1,372.00	1,505.00	798.00
8	608.00	808.00	2,536.00	2,536.00	1,568.00	1,720.00	912.00
9	684.00	909.00	2,853.00	2,853.00	1,764.00	1,935.00	1,026.00
10	760.00	1,010.00	3,170.00	3,170.00	1,960.00	2,150.00	1,140.00
11	836.00	1,111.00	3,487.00	3,487.00	2,156.00	2,365.00	1,254.00
12	912.00	1,212.00	3,804.00	3,804.00	2,352.00	2,580.00	1,368.00
13	988.00	1,313.00	4,121.00	4,121.00	2,548.00	2,795.00	1,482.00
14	1,064.00	1,414.00	4,438.00	4,438.00	2,744.00	3,010.00	1,596.00
15	1,140.00	1,515.00	4,755.00	4,755.00	2,940.00	3,225.00	1,710.00
16	1,216.00	1,616.00	5,072.00	5,072.00	3,136.00	3,440.00	1,824.00
17	1,292.00	1,717.00	5,389.00	5,389.00	3,332.00	3,655.00	1,938.00
18	1,368.00	1,818.00	5,706.00	5,706.00	3,528.00	3,870.00	2,052.00

\* 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.

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- \*\*** 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 students who are taking distance learning courses or students who are taking classroom-based credit courses through a contract agreement between MCCCD and the company they work for. This rate does not apply to Study Abroad Programs as there is a separately calculated rate for those students.
- A. Determine Student Residency Status  
Refer to admissions information (AR 2.2.2) of the college catalog for residency information and to review the requirements for classification as a Maricopa county resident. Contact the Admissions and Records Office/Office of Student Enrollment Services if you have questions about residency requirements.
- B. Use the Chart to Locate Tuition Charges  
Determine the correct column based on your residency status and then select the number of credit hours. The general tuition chart is provided for reference only.
- C. Add Any Additional Fees  
A one-time, per semester \$15 registration fee is due by the official start of the term (semester) or by the specified due date or at time of registration.
- D. There may also be additional course fees for classes, please refer to the college schedule for course fees.
- E. If you choose to audit a class, add an additional fee of \$25 per credit hour.
- F. Additional course fees may apply for specific courses. Check with the college's Admissions and Records Office/Office of Student Enrollment Services for a current listing of course fees.
- G. Pay Your Fees  
Payment of fees may be made by cash, check, money order, VISA, MasterCard, Discover or American Express. Payment Plan options are also available.

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

## **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	\$74.00 per credit hour
Contract Rate	\$37.00 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:

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- 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. All Maricopa Community College services will 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 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.

#### 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.

Length of Class	Official Withdrawal Deadlines for 100% Refund
1-9 calendar days	Prior to the class start date
10-19 calendar days	1 calendar day including the class start date
20-29 calendar days	2 calendar days including the class start date
30-39 calendar days	3 calendar days including the class start date

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40-49 calendar days	4 calendar days including the class start date
50-59 calendar days	5 calendar days including the class start date
60-69 calendar days	6 calendar days including the class start date
70+ calendar days	7 calendar days including the class start date

*\*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

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

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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;
- 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 [www.maricopa.edu/foundation/apply/index.php](http://www.maricopa.edu/foundation/apply/index.php) 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

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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



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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).

Total Credits Attempted*	Min CGPA
< 15.75	1.60
16-30.75	1.75
31-45.75	1.90
46 +	2.00

*\*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.

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.

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## **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

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and requirements and procedures for withdrawing from school at [www.maricopa.edu/publicstewardship/governance/adminregs/students/2\\_2.php](http://www.maricopa.edu/publicstewardship/governance/adminregs/students/2_2.php)

## 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.

### Academic Progress Policy for Students Receiving Veteran's Educational Benefits

Credit Hours for Which Grade Points are Computed at Resident Maricopa Community College (A, B, C, D, F, and Y)	Minimum Grade Point Average Required
12-15	1.60
16-30	1.75
31-45	1.90
46 +	2.00

Department of Veterans Affairs regulations require that all persons using any type of veteran educational assistance program be making satisfactory academic progress toward achievement of their educational objective (program of study). A student who does not meet the minimum standards (see above) will be placed on probation for a maximum of two (2) consecutive semesters. 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.

## 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.

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- 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 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.

#### Grade Key

A	Excellent	4 grade points per credit hour
B	Above Average	3 grade points per credit hour
C	Average	2 grade points per credit hour
D	Passing	1 grade point per credit hour
F	Failure	0 grade points per credit hour

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I	Incomplete	Not computed in grade point average
IP	Course in Progress	Not computed in grade point average
N	Audit	Not computed in grade point average
P*	Credit	Not computed in grade point average
W	Withdrawn, passing	Not computed in grade point average
Y	Withdrawn, failing	0 grade points per credit hour
Z	No Credit	Not computed in grade point average

\* 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 seven (7) months will have their grade recorded in accordance with the written contract. Students should NOT reregister for the course to complete the contract.

## 3. Repeating a Course/Improving a Grade

To improve a previously earned grade, students may repeat the course 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) for repeated courses will automatically be excluded from the grade point calculation. 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 classes which meet fewer than sixteen (16) weeks are adjusted accordingly. See "Important Deadlines for Students".
- C. In courses with credit/no credit (P/Z) grading, the student may request standard grading (A, B, C, D, F), within fourteen (14) days including the date of the first class meeting. The instructor must immediately notify the Admissions and Records Office/Office of Student Enrollment Services.
- D. In courses with standard grading (A, B, C, D, F), the instructor determines if the credit/no credit option is available. If the option is available, the student must obtain the permission of the instructor. The instructor must notify the Admissions and Records Office/Office of Student Enrollment Services within fourteen (14) days including the day of the first class meeting.
- E. It is the student's responsibility to verify the transferability of credit/no credit courses. Some universities place a limitation on the number of credit/no credit courses that can be transferred.

**Advisory note:** Some institutions outside the Maricopa Community Colleges may translate the Z grade as failing.

## 5. Audit Courses

- A. Auditors are those who enroll in a course for the sole purpose of obtaining information; they receive no credit, grades, homework, or tests. If an auditor wishes to earn credit, he or she must change from audit status to credit status within the first week. If a student wishes to audit a course for which he or she is enrolled for credit, the change must be made within the first five (5) weeks of a semester. Auditors are subject to the same attendance policies as other students and must meet the same prerequisite requirements or obtain approval of the instructor. See the fee schedule for charges. Financial aid is not available for audited courses.

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B. The prescribed time limits are for full-semester classes. Time limits for classes which meet fewer than sixteen (16) weeks are adjusted accordingly and appear in the "Important Deadlines for Students."

## 6. Important Deadlines for Students (See Appendix S-12)

Class Length	Deadline for Students to Withdraw with Guaranteed Grade of W	Deadline for Students to Withdraw from a Course (Instructor Signature Required)	Deadline for Students to Request Complete Withdrawal	Deadline to Change Type of Grading (A-F to P/Z, or P/Z to A-F)	Deadline to Change From Audit Grade to Credit Grade	Deadline to Change from Credit Grade to Audit Grade
<b>One Week or Less (1 to 7 days)</b>	1 <sup>st</sup> Day of Class	1 <sup>st</sup> Day of Class or Prior to the Last Day of Class	1 <sup>st</sup> Day of Class or Prior to the Last Day of Class	1 <sup>st</sup> Day of Class	1 <sup>st</sup> Day of Class	1 <sup>st</sup> Day of Class
<b>Two Weeks (8 to 14 days)</b>	3 <sup>rd</sup> Calendar Day	6 <sup>th</sup> Calendar Day	6 <sup>th</sup> Calendar Day	1 <sup>st</sup> Day of Class	1 <sup>st</sup> Day of Class	3 <sup>rd</sup> Calendar Day
<b>Three Weeks (15 to 21 days)</b>	6 <sup>th</sup> Calendar Day	12 <sup>th</sup> Calendar Day	12 <sup>th</sup> Calendar Day	2 <sup>nd</sup> Calendar Day	1 <sup>st</sup> Day of Class	5 <sup>th</sup> Calendar Day
<b>Four Weeks (22 to 28 days)</b>	9 <sup>th</sup> Calendar Day	17 <sup>th</sup> Calendar Day	17 <sup>th</sup> Calendar Day	3 <sup>rd</sup> Calendar Day	2 <sup>nd</sup> Calendar Day	7 <sup>th</sup> Calendar Day
<b>Five Weeks (29 to 35 days)</b>	12 <sup>th</sup> Calendar Day	23 <sup>rd</sup> Calendar Day	23 <sup>rd</sup> Calendar Day	4 <sup>th</sup> Calendar Day	2 <sup>nd</sup> Calendar Day	9 <sup>th</sup> Calendar Day
<b>Six Weeks (36 to 42 days)</b>	14 <sup>th</sup> Calendar Day	29 <sup>th</sup> Calendar Day	29 <sup>th</sup> Calendar Day	5 <sup>th</sup> Calendar Day	3 <sup>rd</sup> Calendar Day	11 <sup>th</sup> Calendar Day
<b>Seven Weeks (43 to 49 days)</b>	17 <sup>th</sup> Calendar Day	35 <sup>th</sup> Calendar Day	35 <sup>th</sup> Calendar Day	5 <sup>th</sup> Calendar Day	3 <sup>rd</sup> Calendar Day	12 <sup>th</sup> Calendar Day
<b>Eight Weeks (50 to 56 days)</b>	20 <sup>th</sup> Calendar Day	41 <sup>st</sup> Calendar Day	41 <sup>st</sup> Calendar Day	6 <sup>th</sup> Calendar Day	3 <sup>rd</sup> Calendar Day	15 <sup>th</sup> Calendar Day
<b>Nine Weeks (57 to 63 days)</b>	23 <sup>rd</sup> Calendar Day	46 <sup>th</sup> Calendar Day	46 <sup>th</sup> Calendar Day	7 <sup>th</sup> Calendar Day	4 <sup>th</sup> Calendar Day	17 <sup>th</sup> Calendar Day
<b>Ten Weeks (64 to 70 days)</b>	26 <sup>th</sup> Calendar Day	52 <sup>nd</sup> Calendar Day	52 <sup>nd</sup> Calendar Day	8 <sup>th</sup> Calendar Day	4 <sup>th</sup> Calendar Day	19 <sup>th</sup> Calendar Day
<b>Eleven Weeks (71 to 77 days)</b>	29 <sup>th</sup> Calendar Day	58 <sup>th</sup> Calendar Day	58 <sup>th</sup> Calendar Day	9 <sup>th</sup> Calendar Day	5 <sup>th</sup> Calendar Day	21 <sup>st</sup> Calendar Day
<b>Twelve Weeks (78 to 84 days)</b>	32 <sup>nd</sup> Calendar Day	63 <sup>rd</sup> Calendar Day	63 <sup>rd</sup> Calendar Day	10 <sup>th</sup> Calendar Day	5 <sup>th</sup> Calendar Day	23 <sup>rd</sup> Calendar Day
<b>Thirteen Weeks (85 to 91 days)</b>	35 <sup>th</sup> Calendar Day	70 <sup>th</sup> Calendar Day	70 <sup>th</sup> Calendar Day	10 <sup>th</sup> Calendar Day	5 <sup>th</sup> Calendar Day	25 <sup>th</sup> Calendar Day
<b>Fourteen Weeks (92 to 98 days)</b>	38 <sup>th</sup> Calendar Day	76 <sup>th</sup> Calendar Day	76 <sup>th</sup> Calendar Day	11 <sup>th</sup> Calendar Day	6 <sup>th</sup> Calendar Day	27 <sup>th</sup> Calendar Day
<b>Fifteen Weeks (99 to 105 days)</b>	41 <sup>st</sup> Calendar Day	82 <sup>nd</sup> Calendar Day	82 <sup>nd</sup> Calendar Day	12 <sup>th</sup> Calendar Day	6 <sup>th</sup> Calendar Day	28 <sup>th</sup> Calendar Day
<b>Sixteen Weeks or more</b>	End of the 7th week	Two weeks before the	Two weeks before the	Within 14 days	Within first week of class	Within first five weeks of



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(106 or more days)		last class period	last class period	including the first class period		class
<i>Deadlines are based on calendar day and begin with the first day of class. Deadlines that fall on a weekend or holiday advance to the next college work day.</i>						

## 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:

Credit Hours for Which Grade Points are Computed at Resident Maricopa Community College (A,B,C,D,F, and Y)	Minimum Grade Point Average Required
12-15	1.60
16-30	1.75
31-45	1.90
46+	2.00

*(Students should also be aware that graduation requires a cumulative minimum grade point average of 2.00.)*

Students on academic probation may take no more than twelve (12) credit hours per semester unless approved by the Admissions and Standards Committee.

### 2. Continued Probation

A student on academic probation who fails to raise the cumulative grade point average to the required minimum standards (see above) will be placed on continued probation and may be limited to taking six (6) credit hours. Regulations regarding continued probation do not apply to the summer session. Credit hours earned in summer sessions will be included in the cumulative grade point average.

## 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 expires one year 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, should discuss the issue first with the faculty member involved. This conference should 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, national origin, gender, age, disability, veteran status, or sexual orientation, the student should refer to the Discrimination Complaint Procedures for Students as administered by the Vice President for Student Affairs.

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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 complaint with the Department/Division Chairperson and appropriate administrative officer at the college/center. This written complaint must be filed within ten working days following the previous deadline. The written complaint will be given to the faculty member five days before any official meetings are convened.
2. Upon receipt of a written complaint, 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 complaint which is not in writing and which, when appropriate, did not have specific documentation including dates, times, materials, etc. The written complaint 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 complaint 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.

**Note:** The appeal process for grades expires one year 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 or appropriate college/center dean and/or associate dean, 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.

See fee schedule for charges.

See Graduation with Honors for information on honors designation.

### Certificates/Degrees

The Maricopa Community Colleges offer Certificates of Completion as well as Associate Degrees, 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).

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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

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- 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.

## 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  
Enrolled But Earned All Ws, Zs, or Fs  
Enrolled in Audit Courses Only  
Nonattendance  
Transferred to a University

Fall '02 (Active)  
Spring '03 (Inactive)  
Fall '03 (Inactive)  
Spring '04 (Inactive)  
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  
Nonattendance

Fall '02 (Active)  
Spring '03, Fall '03, Spring '04  
(Inactive)

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Readmitted & Earned Course Credit at a Public Community College  
Transferred to a University

Fall '04 (Active)  
Spring '05 (2004 or Any  
Subsequent Catalog)

## EXAMPLE B

Admitted & Earned Course Credit at a Public Community College or University  
Nonattendance  
Readmitted & Earned Course Credit at a Public Community College  
Nonattendance  
Transferred to a University

Fall '02 (Active)  
Spring '03 (Inactive)  
Fall '03, Spring '04 (Inactive)  
Summer '03 (Active)  
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  
Continued at a Public Community College  
Nonattendance  
Readmitted & Earned Course Credit at a Public Community College  
Transferred to a University

Summer '04 (Active)  
Fall '04, Spring '05 (Active)  
Fall '05 (Inactive)  
Spring '06 (Active)  
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 (see also 5.1.8) Sexual Harassment Policy for Employees and Students

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



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and/or physical conduct or communications constituting sexual harassment as defined and otherwise prohibited by state and federal law.

Each college has designated its vice president for student affairs as Title IX Coordinator, and student complaints of sexual harassment must be reported to him or her. Sexual violence against employees is prohibited by Title VII of the Civil Rights Act of 1964. Employee complaints of sexual harassment must be reported to the District Office of Equity, Opportunity, and Engagement.

Sexual harassment is unwelcome, verbal, or physical conduct of a sexual nature that is sufficiently severe, persistent, or pervasive that it alters working conditions and creates a hostile environment for employees, or 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 sexual harassment complaints. Sexual harassment by and between, employees; students; employees and students; and campus visitors and students or employees, is prohibited by this policy.

Due process is afforded any employee, student, or visitor accused of sexual harassment. On receipt of a complaint, an immediate preliminary investigation will be conducted to determine if there is reasonable cause to believe the nondiscrimination policy has been violated. If so, then a prompt, thorough, impartial investigation will be conducted by the authorized administrator. If the final decision is that sexual harassment occurred, the college will take immediate action to eliminate the hostile environment, prevent its recurrence, and address its effects. Remedies for the complainant will also be sought. Violations of this policy may result in disciplinary action up to and including termination for employees; sanctions up to and including suspension or expulsion for students; and appropriate sanctions against campus visitors. This policy applies to prohibited conduct that occurs both on and off campus and covers students, employees, and visitors.

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.

## 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);

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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 MCCC 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 MCCC 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 MCCC EEO/AA Office.
- B. The college/center/MCCC 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/MCCC.

## **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 MCCC'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 MCCC policy. Disciplinary action by MCCC 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.

## **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 utilize the Report process (as described below) in addition to the Informal and Formal Resolution processes. 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 student may choose to ask the Vice President of Student Affairs to assist in the informal resolution process. The Vice President of Student Affairs may designate an employee to provide such assistance. 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.

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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 written complaint under the formal resolution procedure of this policy.

If the complaint cannot be informally resolved to the satisfaction of the complainant, the complainant has the right to file a written complaint within 300 days of the most recent alleged discriminatory act 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. The Vice President of Student Affairs will accept complaint filings within 300 calendar days of the most recent occurrence of the alleged discriminatory act.

A complaint must be signed by the student and filed on the form prescribed by the Office of General Counsel. 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 constituted an alleged act or practice of unlawful or MCCCD-prohibited discrimination. The complaint must also allege that the action, decision, or occurrence was taken or based on the complainant's race, color, religion, sex, sexual orientation, gender identity, national origin, citizenship status (including document abuse), age, physical or mental disability, veteran status, genetic information, or any other unlawful discriminatory grounds.

Upon receipt of a complaint, the Vice President of Student Affairs will notify the college president or provost and the Office of General Counsel. The Office of General Counsel will assign a case number to the complaint.

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.

Respondent must provide a written response to the complaint within fifteen (15) calendar days of his or her receipt of the complaint.

After accepting a complaint, the Vice President 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 Vice President 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 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 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.

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The president or provost will accept, reject, or modify the recommendations and will provide a written notification of his or her action to the complainant and respondent within fifteen (15) calendar days of receiving the written findings and recommendations from the Vice President 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.

## **MCCCD Administrative Review Process**

### **Request for Reconsideration**

A complainant or respondent who is not satisfied with the decision of the president or provost has ten (10) working days to request, in writing, administrative review of the decision by his or her college president or provost. The request for administrative review must state specific 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 complainant 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. Every student complaint of discrimination shall be investigated under the authority of the Vice President 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 complainant 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

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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.

## **Filing a Report of Sexual Harassment**

A student who believes that he or she is, or has been, the victim of sexual harassment as prohibited by MCCCD policy may Report (either orally or in writing) the harassment to the Vice President of Student Affairs at each college or center. The Report should be made within 180 calendar days of the most recent alleged incident of sexual harassment. A student who is or has been the victim of a sexual assault, or witness to a sexual assault on campus, may also report the incident to College Public Safety (CPS). In this case, the Title IX Coordinator and College Public Safety will each conduct an investigation, sharing information as appropriate.

Upon receipt of the Report, the Title IX Coordinator will have a meeting with the alleged harasser. The meeting shall include: identifying the behavior as described in the Report, alerting the alleged harasser to the perception of the impact of his or her behavior, providing the individual with a copy of the MCCCD Sexual Harassment Policy, encouraging completion of the Office of General Counsel's Sexual Harassment Online Tutorial, and encouraging greater awareness of behaviors that may lead to perceptions of sexual harassment. Neither the Report nor the meeting with the alleged harasser shall in any way constitute a finding of sexual harassment. The name of the complainant shall not be identified to the respondent during the Report process; however, complainants should be aware that they may be called as witnesses in subsequent disciplinary or due process proceedings, as well as in litigation. The meeting with the alleged harasser must be conducted within ten (10) working days of receipt of the Report.

## **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

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Fax: 303-844-4303  
TDD: 303-844-3417  
E-mail: [OCR\\_Denver@ed.gov](mailto:OCR_Denver@ed.gov)

## 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.

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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



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provide proof of insurance that indicates at least \$1 million in general liability coverage and names the MCCCD as an additional insured for the anticipated use date.

The fee and proof-of-insurance provisions of this Administrative Regulation shall not be applied to low-impact, non-commercial users. A user may request designation as a low-impact, non-commercial user from the applicable College's Responsible College Official. Any questions or comments about the criteria for approval or denial of such request shall be directed to the District Ombudsman.

**Permits:** The approved request form will describe the location of the authorized activity and any other restrictions specific to the event. Violation of the terms of the permit, District policy, administrative regulation or law shall be grounds for immediate revocation of the permit, and the individual violators and their organizations may be banned from the campus.

**Priorities and Criteria for Approval of Permits:** The content or subject of the proposed expressive activity or event will not affect approval of the application. Availability of space is not guaranteed. Reservations shall be approved on a space-available basis and will be addressed on a first come-first served basis, subject to the following priorities and criteria for the use and scheduling of space on campus grounds:

## Scheduling Priorities (in order)

1. The use of facilities and grounds for the operations of the College. For example, there are times when the college is unusually crowded by members of the campus community, such as registration and orientation at the beginning of the semester. Other uses may reasonably be precluded during those times.
2. Activities and events sponsored by the College administration.
3. Activities and events sponsored by MCCCD student organizations or employee groups.
4. Activities of non-MCCCD-affiliated individuals and organizations.
5. Commercial advertising or activities.

## Criteria

1. Capacity of college grounds to accommodate the number of participants at the scheduled time and proposed location.
2. Capacity of College Safety staff to provide security for all events and activities scheduled at the time.
3. Possible interference or conflict with College operations or other scheduled activities and events on the grounds.
4. General feasibility of hosting the event as proposed.

**Other Policies:** This administrative regulation will be applied in conjunction and coordination with all other MCCCD policies and administrative regulations and College processes and procedures, including but not limited to regulations on facilities use, signage, sales of alcohol and/or food, and solicitation of donations.

Specific procedures on how to implement the Use of College Grounds regulation can be found in Appendix S-15.

### 2.4.10 Children on Campus

Children (younger than 18) may not attend any class unless they are officially registered for the class.

Children will not be allowed on campus unless participating in an authorized college program or under the supervision of an adult.

## **2.4.11 Crime Awareness and Campus Security Act**

Federal legislation requires the college to maintain data on the types and number of crimes on college property as well as policies dealing with campus security. To obtain additional information on this subject, contact the college Safety and Security Department.

## **2.4.12 Workplace Violence Prevention**

It is the policy of the Maricopa Community Colleges to promote a safe environment for its employees, students, and visitors. The Maricopa Community Colleges are committed to working with its employees to maintain an environment free from violence, threats of violence, harassment, intimidation, and other disruptive behavior.

Violence, threats, harassment, intimidation, and other disruptive behavior in our facilities will not be tolerated, and it is the responsibility of all members of the Maricopa Community Colleges to report any occurrence of such conduct. Every employee, student and visitor on Maricopa Community College District property is encouraged to report threats or acts of physical violence of which he/she is aware. All reports will be taken seriously and will be dealt with appropriately. Such behavior can include oral or written statements, gestures, or expressions that communicate a direct or indirect threat of physical harm.

This policy applies to employees and students, as well as independent contractors and other non-employees doing business with the Maricopa Community Colleges. 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.

### **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.

# MCCCD Policies and Procedures

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.

# MCCCD Policies and Procedures

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).

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

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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.

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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



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- B. The act contributes to a substantial risk of potential physical injury, mental harm or personal degradation, or causes physical injury, mental harm or personal degradation.
3. Any solicitation to engage in hazing is prohibited.
4. Aiding and abetting another person who is engaged in hazing is prohibited.
5. Victim consent is not a defense for violation of the Maricopa Community Colleges Hazing Prevention Regulation.
6. All students, faculty and staff must take reasonable measures within the scope of their individual authority to prevent violations of the MCCCD Hazing Prevention Regulation.
7. Hazing activities and situations include, but are not limited to, the following:
  - A. Pre-pledging, illegal pledging or underground activities.
  - B. Acts of metal and physical abuse, including, but not limited to: paddling, slapping, kicking, pushing, yelling, biting, duck-walking, line-ups, tuck-ins, belittling, excessive exercise, beating or physical abuse of any kind, and the potentially forced consumption of any food or beverage that contributes to or causes physical injury, mental harm or personal degradation.
  - C. Sleep deprivation (activities that deprive prospective and/or current students and/or members of the opportunity of a minimum of six hours sufficient sleep each day).
  - D. Encouraging or forcing use of alcohol or drugs.
  - E. Any type of student club/organization scavenger hunt, quest, road trip or other activity that would physically or psychologically endanger prospective and/or current students and/or members or others.
  - F. Stroking or physically touching in an indecent or inappropriate manner. See Sexual Harassment Policy 5.1.8
  - G. Student club/organization activities that subject prospective and/or current students and/or members or others to public nuisance or spectacle.
  - H. Aiding or abetting theft, fraud, embezzlement of funds, destruction of public, personal or private property, or academic misconduct.
  - I. Being required to wear odd or look-alike apparel that contributes to or causes physical injury, mental harm or personal degradation.
  - J. Personal services that contribute to or cause physical injury, mental harm or personal degradation.
8. Alleged violations of this regulation by students or student organizations can be reported to the vice president of student affairs' office for investigation by any member of the college community. The vice president of student affairs' office will investigate the complaint in accordance with the student disciplinary code, all other college and MCCCD policies, and local and state laws.

Alleged violations of the MCCCD hazing prevention regulation or interference with an investigation under this regulation by students or student organizations are subject to sanctions under the student disciplinary code.

The student disciplinary code shall govern all proceedings involving such a complaint. Decisions arrived at as outcomes of the proceedings shall be final, pending the normal appeal process.

9. Alleged violations of the MCCCD hazing prevention regulation by any faculty or staff member can be reported to the vice president of student affairs' office for investigation by any member of the college community. The vice president of student affairs' office will investigate the complaint in accordance with college and MCCCD policies, and local and state laws.

Any MCCCD faculty or staff member who knowingly permitted, authorized or condoned the alleged hazing activity is subject to disciplinary action in accordance with college and MCCCD policies, and local and state laws.

10. If the vice president of student affairs' office receives a report or complaint of an alleged hazing activity involving physical injury, threats of physical injury, intimidation, harassment or property damage, or any other conduct that appears to violate Arizona state law, the college will report such conduct to the appropriate college safety office. The said college safety office will investigate, respond to and report on the alleged hazing activity in accordance with all college, district, local, state and federal guidelines, policies and laws.

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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.

This policy statement has been constructed on the belief that higher education has a responsibility to face safety and health factors of substance abuse/misuse issues forthrightly and innovatively. We believe that the community college needs to adapt programs applicable to their community as well as to our individual student's needs. The policy statements should be comprehensive, understood by those expected to comply, realistic and enforceable, consistently applied, and cover foreseeable dangers.

Construction of this statement has been founded on concerns of individual safety, educational quality, and legal liability. It is recognized that each individual is responsible for his/her actions and must be afforded an opportunity to develop knowledge, skills and talent, and be willing to share community responsibilities. The Maricopa Community College District has an equal "duty to care" responsibility and a commitment to substance abuse/misuse education for all students and employees.

The Maricopa Community College District shall:

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- A. Visibly demonstrate a performance of the Maricopa Community College District "duty to care".
- B. Comply with requirements for federal funds.
- C. Describe what the college does about substance abuse/misuse (alcohol, drugs, anabolic steroids).
- D. Inform/educate members of the academic community of adverse effects of these substances.
- E. Inform/educate the academic community about the policies concerning substance misuse and abuse.
- F. Discourage illegal drug abuse and legal substance misuse.
- G. Provide individual and group counseling.
- H. Provide assistance and guidance to obtain treatment and rehabilitation of any identified problem.

To achieve these objectives, the program must provide an environment capable of:

- A. Developing and implementing substance misuse/abuse prevention programs.
- B. Providing educational training and prevention programs for the college and community it serves.
- C. Providing timely and accurate information dissemination.
- D. Establishing supportive counseling programs as needed.
- E. Establishing a strong on-going evaluation of services.
- F. Providing assistance to obtain treatment and rehabilitation of substance abuse/misuse.
- G. Clarifying the college regulations for control of alcohol and drug use.
- H. Providing procedures that the college will follow to correct and stabilize emergency situations.

Each college will identify key people to provide emergency services and to contact and work with outside agencies.

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.

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.

## **2. Student Program to Prevent Illicit Use of Drugs and Abuse of Alcohol**

### **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. Based upon that concern, it is intended that this program on prevention of alcohol and drug abuse on college campuses will go beyond the strict dictates of the law and will serve as a comprehensive educational and resource tool.

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. Part of the educational mission of the Maricopa Community Colleges, in conjunction with this program, is to educate students about positive self-development, the benefits of a healthy lifestyle and the health risks associated with substance abuse.

The purpose of this program is to:

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- i. Ensure that the Maricopa Community Colleges working and learning environment for students and the public is safe, orderly and free of illegal activity.
  - ii. Comply with the Drug-Free School and Communities Act of 1989, and other relevant substance abuse laws.
  - iii. Provide students with access to appropriate treatment and rehabilitation assistance for problems associated with substance use or abuse.
- 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 Consequences of Alcohol and Other Drugs
- i. Laws Governing Alcohol  
The State of Arizona sets twenty-one as the "legal drinking age". An underage person who buys, receives, possesses or consumes alcoholic beverages is guilty of a misdemeanor and may be subject to a fine and imprisonment for up to six months.

Arizona Revised Statutes, Title 28, Chapter 4, Article 3 prohibit driving while under the influence of intoxicating liquor or drugs (DWI). Drivers arrested for a DWI who refuse to be tested face suspension of their licenses or permits to drive for twelve months. A driver whose test results show a blood or breath alcohol concentration of 0.08 or more will, on conviction for a first offense, be sentenced to no less than ten days in jail, pay a fine of not less than \$250, pay an additional assessment of \$1,000, and may be required to perform community restitution and equip his or her vehicle with a certified ignition interlock device. On conviction of a second offense within 84 months, the person shall have his/her driving privilege revoked for one year. Additionally, this person shall be sentenced to not less than 90 days in jail, pay a fine of not less than \$500, pay an assessment of \$2,500, and shall be ordered to perform at least 30 hours of community restitution. Additionally, the person may be required to equip his or her vehicle with a certified ignition interlock device for up to twelve months starting on the date that his or her driving privileges are restored.

- ii. Federal Penalties and Sanctions for Illegal Possession of a Controlled Substance
  1. First conviction: Up to one year imprisonment and fined at least \$1,000 but not more than \$100,000, or both. (21 United States Code §844)
  2. After one prior drug conviction: At least fifteen days in prison, not to exceed two years and fined at least \$2,500 but not more than \$250,000, or both. (21 United States Code §844)
  3. After two or more prior drug convictions: At least ninety days in prison, not to exceed three years and fined at least \$5,000 but not more than \$250,000, or both. (21 United States Code §844)
  4. Special sentencing provisions for possession of crack cocaine (21 United States Code §844):
    - a. Mandatory at least five years in prison, not to exceed twenty years and fined up to \$250,000, or both, if:
      1. First conviction and the amount of crack possessed exceeds five grams.
      2. Second conviction and the amount of crack possessed exceeds three grams.
      3. Third or subsequent crack conviction and the amount of crack possessed exceeds one gram.

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- b. Forfeiture of personal and real property used to possess or to facilitate possession of a controlled substance if that offense is punishable by more than one year imprisonment. (See special sentencing provisions re: crack) (21 United States Code §853)
- c. Forfeiture of vehicles, boats, aircraft or any other conveyance used to transport or conceal a controlled substance. (21 United States Code §§853 and 881(a)(4))
- d. Civil fine of up to \$10,000 (pending adoption of final regulations). (21 United States Code §884(a))
- e. Denial of Federal benefits, such as student loans, grants, contracts, and professional and commercial licenses, up to one year for first offense, up to five years for second and subsequent offenses. (21 United States Code §862)
- f. Ineligible to receive or purchase a firearm. (21 United States Code §922(g))
- g. Miscellaneous: Revocation of certain Federal licenses and benefits, e.g. pilot licenses, public housing tenancy, etc., are vested within the authorities of individual Federal agencies.

**Note:** These are only some of the Federal penalties and sanctions.

### iii. State Penalties and Sanctions

Title Thirteen, Chapter 34 of the Arizona Revised Statutes lists drug offenses and their penalties. Following is list of drugs that are frequently misused with a description of the potential penalties attached to a conviction.

1. Marijuana: A first offense for possession or use of marijuana in an amount of less than two pounds constitutes a class 6 felony and carries a possible prison term of one year and a fine of not less than \$750. The sale of marijuana in an amount of less than two pounds constitutes a class 3 felony and carries a prison sentence of three and one-half years and a fine of not less than \$750. There are other possible penalties as well. (ARS §13-3405)
2. LSD and Methamphetamine: Possession, use and sale are felonies carrying sentences from four to five years and fines of not less than \$1,000. There are other possible penalties as well, including a presumptive sentence of ten years for the sale of methamphetamine. (ARS §13-3407)
3. Heroin and Cocaine: Possession, use and sale are felonies carrying sentences up to five years and a fine of not less than \$2,000. There are other possible penalties as well. (ARS §13-3408)

### 3. 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

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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: <http://www.maricopa.edu/publicstewardship/governance/adminregs/appendices/print/AS-6.doc>. On signing the form, the Chancellor will provide a copy of it to the requestor and to the MCCCD Risk Manager. For events that the Chancellor sponsors, he or she will complete the form, sign it and provide it to the MCCCD Risk Manager no later than 10 business days before the event.
- E. **Service restrictions required by law.** An event approved under Paragraph D must, by law, comply with the all of the following restrictions:
- i. The only alcoholic beverages that may be served and consumed are wine and beer. Wine consumption is limited to 6 oz. per person, and beer consumption is limited to 24 oz;
  - ii. The gathering must be by invitation only, and not open to the public;
  - iii. The gathering may not exceed 300;
  - iv. Invitees may not be charged any fee for either the event or the beer or wine; and
  - v. The consumption may only take place between noon and 10:00 p.m.

Additionally, beer and wine may only be served by a beverage service contractor whose liquor license with the state of Arizona is in good standing, except as provided in Paragraph F. The contractor must provide all of the beverages served and well as the servers or bartender. Before the event, the contractor must provide a certificate of insurance that meets the requirements of the District's Risk Manager and that adds the District as an additional insured. The contractor must also agree in writing to indemnify the District regarding the service of the beverages.

- F. **Culinary Institutes.** The Chancellor may sponsor or approve an event at one of the District's culinary institutes. Students may serve wine and beer at the event as part of their class requirements, subject to the limitations of Paragraph E. Any student serving those beverages must, by law, be 19 years or older.
- G. **Third-Party Event.** The Maricopa County Community College District Foundation and the Friends of Public Radio Arizona may, with the approval of the Chancellor, sponsor an event on District-owned property under this regulation. The City of Phoenix and the Friends of the Phoenix Public Library may also do so, with the approval of the Chancellor, at the joint library on the campus of South Mountain Community College. These third-party, non-district entities are solely responsible for determining the steps that they are required to take to comply with Arizona's alcoholic beverages laws. Additionally, they must comply with the following steps:
- i. The entity obtains a liquor license, if required by law, from the Arizona Department of Liquor Licenses and control for each event and fully complies with the laws, rules and other requirements applicable to that license;
  - ii. The entity completes the form available at <http://www.maricopa.edu/publicstewardship/governance/adminregs/appendices/print/AS-7.doc>. 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;

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- 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.

#### 4. 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 (Proposition 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.

#### **2.8.1 Eligibility for Accommodations & Required Disability Documentation**

##### **Purpose**



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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 accommodations 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 receiving any accommodation.

## 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.
- **Reasonable accommodation:** Reasonable accommodation is the provision of an auxiliary aid or modification to the course or program which will allow access to the job duties, the educational process, program and degree, or activity. The ADA requires an institution of higher education to provide reasonable accommodations to a qualified individual with a disability provided that accommodation does not:
  - ♦ fundamentally alter the basic nature or essential elements of a course, program, or activity
  - ♦ pose a health or safety risk to others; The student may choose to assume risk to self
  - ♦ substantially adversely affect the manner in which the course is taught
  - ♦ create an undue financial or administrative burden on the institution

*\*\*Documentation can be transferred within MCCCD for current consideration for eligibility.*

*\*\*Determination made by another institution or organization does not guarantee eligibility.*

## Special Considerations

The DRS Office is responsible for evaluating documentation and determining accommodation eligibility. All situations shall be considered on an individual, case-by-case basis. DRS may exercise its right to require additional documentation.

Reasonable accommodation is required for students with known disabilities. MCCCD is not required to provide "best" or "most desired" accommodations but rather a reasonable accommodation sufficient to meet accessibility needs. Ideally, the reasonable accommodations should be the product of an interactive exchange with the student, DRS Office, and instructors.

## 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.
- iv. A clear statement specifying functional limitations.
- 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)

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- 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.

### B. Diagnostic Report

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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

### 2.3.11 Academic Misconduct

#### 1. Definitions

- A. Academic Misconduct - includes misconduct associated with the classroom, laboratory or clinical learning process. Examples of academic misconduct include, but are not limited to, cheating, plagiarism, excessive absences, use of abusive or profane language, and disruptive and/or threatening behavior.
- B. Cheating - includes, but is not limited to, (a) use of any unauthorized assistance in taking quizzes, tests, assessment tests or examinations; (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; or (c) the acquisition, without permission, of tests or other academic material belonging to a member of the college faculty or staff.
- C. Plagiarism - includes, but is not limited to, the use of paraphrase or direct quotation of the published or unpublished work of another person without full and clear acknowledgment. It also includes the unacknowledged use of materials prepared by another person or agency engaged in the selling of term papers

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or other academic materials. Information gathered from the internet and not properly identified is also considered plagiarism.

## 2. Sanctions

Any student found by a faculty member to have committed academic misconduct maybe subject to the following sanctions: (Note: sanctions A, B, C, and D may be imposed by a faculty member. The faculty member may recommend to the department chairperson and the appropriate vice president of academic affairs or designee that sanctions E, F, or G be imposed. College suspension or expulsion will be imposed only by the appropriate vice president of academic affairs or designee.

- A. Warning - A notice in writing to the student that the student has violated the academic code.
- B. Grade Adjustment - Lowering of a score on a test or assignment.
- C. Discretionary Sanctions - Additional academic assignments determined by the faculty member.
- D. Course Failure - Failure of a student from a course where academic misconduct occurs.
- E. 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.
- F. College Suspension - Separation of the student from the college for a definite period of time, after which the student is eligible to return. Conditions for readmission may be specified. (A suspension from one Maricopa Community College will apply to all other colleges/centers in the District.)
- G. College Expulsion - Permanent separation of the student from the college. (Expulsion from one Maricopa Community College will apply to all colleges/centers in the District.)

## 3. Appeal of Sanctions for Academic Misconduct

Students can appeal sanctions imposed for academic misconduct by following the instructional grievance process. (AR 2.3.5; Appendix S-6)

### 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. 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 or appropriate college/center dean and/or associate dean, 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.

## 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.

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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.
- 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.



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- 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

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- 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

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any person to the hearing shall be at the discretion of the Student Conduct Board and/or its Student Conduct Administrator.

- iii. In Student Conduct Board hearings involving more than one accused student, the Student Conduct Administrator, in his or her discretion, may permit the Student Conduct Board hearing concerning each student to be conducted either separately or jointly.
  - iv. The complainant and the accused shall have the right to be assisted by any advisor they choose, at their own expense. A party who elects to be assisted by an advisor must notify the student conduct administrator of the name and contact information of the advisor not less than two (2) days before the scheduled hearing. The advisor must be a member of the college community and may not be an attorney. Both the complainant and the accused are responsible for presenting their own information and, therefore, advisors are not permitted to speak or participate directly in any Student Conduct Board hearing before a Student Conduct Board.
  - v. The complainant, the accused student, and the Student Conduct Board may arrange for witnesses to present pertinent information to the Student Conduct Board. The Student Conduct Administrator will try to arrange the attendance of possible witnesses who are members of the college community, if reasonably possible, and who are identified by the complainant and/or accused student at least two days prior to the Student Conduct Board hearing. Witnesses will provide information to and answer questions from the Student Conduct Board. Questions may be suggested by the accused student and/or complainant to be answered by each other or by other witnesses. This will be conducted by the Student Conduct Board with such questions directed to the chairperson, rather than to the witness directly. This method is used to preserve the educational tone of the hearing and to avoid creation of an adversarial environment. Questions of whether potential information will be received shall be resolved in the discretion of the chairperson of the Student Conduct Board.
  - vi. The Student Conduct Administrator will present the information he or she received.
  - vii. Pertinent records, exhibits, and written statements may be accepted as information for consideration by a Student Conduct Board at the discretion of the chairperson.
  - viii. All procedural questions are subject to the final decision of the chairperson of the Student Conduct Board.
  - ix. After the portion of the Student Conduct Board hearing concludes in which all pertinent information has been received, the Student Conduct Board shall determine (by majority vote if the Student Conduct Board consists of more than one person) whether the accused student violated the section of this Student Conduct Code which the student is charged with violating.
  - x. The Student Conduct Board's determination shall be made on the basis of whether it is more likely than not that the accused student violated this Student Conduct Code.
- E. There shall be a single verbatim record, such as a tape recording, of all Student Conduct Board hearings before a Student Conduct Board (not including deliberations). The record shall be the property of the District.
  - F. No student may be found to have violated this Student Conduct Code because the student failed to appear before a Student Conduct Board. In all cases, the evidence and support of the charges shall be presented and considered.
  - G. The Student Conduct Board may accommodate concerns for the personal safety, well-being, and/or fears of confrontation of the complainant, accused student, and/or other witness during the hearing by providing separate facilities, by using a visual screen, and/or by permitting participation by telephone, videophone, closed circuit television, video conferencing, videotape, audio tape, written statement, or other means, where and as determined in the sole judgment of the college official responsible for administration of the Student Conduct Code.

## 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.

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- 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.

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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 decide that the student is ineligible to continue in the program. Academic consequences are determined by the faculty and academic administration, and are not dependent on the decisions of the student conduct board, the appeals board, or the student conduct administrator.

#### **6. Appeals Regarding Student Code of Conduct**

- A. A decision reached by the Student Conduct Board judicial body or a sanction imposed by the Student Conduct Administrator may be appealed by accused students or complainants to an Appellate Board within five (5) days of receipt of the decision. Such appeals shall be in writing and shall be delivered to the Student Conduct Administrator.
- B. Except as required to explain on the basis of new information, an appeal shall be limited to the review of the verbatim record of the Student Conduct Board hearing and supporting documents for one or more of the following purposes:
  - i. To determine whether the Student Conduct Board hearing was conducted fairly in light of the charges and information presented, and in conformity with prescribed procedures giving the complainant a reasonable opportunity to prepare and present information that the Student Conduct Code was violated, and giving the accused student a reasonable opportunity to prepare and to present a response to those allegations. Deviations from designated procedures will not be a basis for sustaining an appeal unless significant prejudice results.
  - ii. To determine whether the decision reached regarding the accused student was based on substantial information, that is, whether there were facts in the case that, if believed by the fact finder, were sufficient to establish that a violation of the Student Conduct Code occurred.
  - iii. To determine whether the sanction(s) imposed was appropriate to the violation of the Student Conduct Code which the student was found to have committed.
  - iv. To consider new information, sufficient to alter a decision or other relevant facts not brought out in the original hearing, because such information and/or facts were not known to the person appealing at the time of the original Student Conduct Board hearing.
- C. If an appeal is upheld by the appellate board, the matter shall be returned to the original Student Conduct Board and Student Conduct Administrator for reopening of the Student Conduct Board hearing to allow reconsideration of the original determination and/or sanction(s). If an appeal is not upheld, the matter shall be considered final and binding upon all concerned.

#### **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

Students will be notified of their further rights annually by publication in the college catalog and/or the student handbook:

## Rights of Access to Educational Records

The Family Educational Rights and Privacy Act (FERPA) affords students certain rights with respect to their education records. These rights are:

**A. *The right to inspect and review the student's education records within 45 days of 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 to be 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.

**C. *The right to consent to disclosures of personally identifiable information contained in the student's education records, except to the extent that FERPA authorizes disclosure without consent.***

One exception, which permits disclosure without consent, is disclosure to school officials with legitimate educational interest. A school official is defined as a person employed by the college or District in an administrative, supervisory, academic, or support staff position (including law enforcement unit and health staff); a person or company with whom the college or District has contracted (such as an attorney, auditor, or collection agent); a person serving on the Governing Board; or a person assisting another school official in performing his or her tasks.

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 responsibility.

Upon request, the college discloses education records without consent to officials of another school in which a student seeks or intends to enroll.

**D. *The right to file a complaint with the US Department to Education concerning alleged failures by the college to comply with the requirements of FERPA.***

The name and address of the Office that administers FERPA is:

Family Policy Compliance Office  
US Department of Education  
400 Maryland Avenue SW  
Washington, DC 20202-4605

## 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.

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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. Use of Education Records for Advisement Purposes

All colleges within the Maricopa Community Colleges have access to the computerized degree audit program. During the advisement process, each student may have his or her academic record reviewed for coursework taken at any of the District's colleges or centers. **The institution retains the right to exercise discretion in determining the release of directory information.**

## 7. Disclosure to Parents

In accordance with federal law, college officials may disclose educational records to parents of minors or 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.

## 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)

Student Employee Grievance Procedure



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- G. Part-time student employees working for one of the Maricopa Community Colleges may wish to file a grievance relating to certain working conditions or violation of student employment regulation. Please refer to the Non-Instructional Complaint Resolution Process (AR 2.3.12)

## 2. Student Security Guards

### A. Introduction and Philosophy

Students may be employed by the college as student help. If student guards do not come from the ranks of Administration of Justice classes, they must undergo appropriate training to qualify them as student guards. This training program is outlined in the regulation.

### B. Workload of Student Security Guards

- i. Student security guards shall be enrolled for a minimum of three (3) semester hours.
- ii. Student security guards shall be limited to 20 hours per week when the workweek starts at 7:00 a.m. on Monday and concludes at 11:00 p.m. on Friday. Additional hours may be worked if guards are assigned special duty at games or activities held on campus during the weekend, or if guards are assigned a shift on Saturday and Sunday, between 7:00 a.m. and 11:00 p.m.

### C. Students not in Administration of Justice Program

- i. Use of student other than those in Administration of Justice Program:
  - 1. Selection of the student must be personally approved by the vice president of students affairs and chief of security.
  - 2. Selection of a student should not extend beyond one semester without the approval of the vice president of students affairs.
  - 3. Selected student must undergo a special training program directed by the chief of security and approved by the vice president of student affairs.
- ii. Recommended program for students other than those in Administration of Justice programs: Students employed by campus security who are not majors in the Administration of Justice program should be given at least twenty (20) hours of training with pay before being allowed to function independently as a campus security guard. This training should include, but not be limited to instruction in:
  - 1. Wearing of the uniform, general appearance, and demeanor
  - 2. The use of the various security report forms and how to properly complete them to provide requested information; General report writing methods
  - 3. Public relations methods used on the campus
  - 4. Crime prevention methods used on the campus; Patrol methods used in buildings and grounds.
  - 5. Basic techniques for interviewing students, faculty and visitors relative to the incidents
  - 6. Laws and regulations governing the actions of campus security personnel concerning rendering of assistance to students, faculty and visitors on the campus
  - 7. Basic first aid

### D. Student Security Guards Employee Benefits

As student employees there are not entitlements to employee benefits; i.e., vacation retirement, sick leave, health and life, or disability insurance. Students will, however, be covered under Worker's Compensation Insurance.

### E. Student Employment Records

The student security guard's employment records will be maintained at the office of the chief of security and reviewed periodically by the vice president of student affairs.

## 2.5.5 Student Governance

Student governing bodies derive their authority from the Maricopa County Community College District Governing Board that exists in accordance with Arizona Revised Statutes. The administration of the District is vested in the Chancellor who delegates responsibility for each college to the college president who serves in a management and policy implementation capacity having the ultimate responsibility for all activities of the college. The president shall designate

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the administrator(s) (i.e., directors of student leadership) at each college who will be charged with the responsibility for working with the college student governing body(ies) in the development of college student activities and programs.

A representative form of student governance may exist at each college/center as well as district wide to provide an effective means of communication among students, faculty, staff and administration and to provide student input in college and District matters. Eligibility requirements are to be met and spelled out in detail in each student governance constitution. These constitutions shall establish the minimum requirements for the elective/appointive officers. All student government constitutions shall be submitted to the Governing Board General Counsel to ensure compliance with federal and state laws, 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)

# MCCCD Policies and Procedures

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.

## 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:

# MCCCD Policies and Procedures

- 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 <http://www.maricopa.edu/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.

2012-2013

Searchable online schedule | [estrellamountain.edu/sch](http://estrellamountain.edu/sch)

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Years of Service 2009-2014

**Ms. Debra Pearson, B.A.**  
Years of Service 2009-2014

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# Glossary of Terms

## GLOSSARY OF TERMS

### 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 Transfer Partnership (ATP); 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.

# Glossary of Terms

## 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.

## Recess

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.

## Transcript

An official record of a student's college coursework that is maintained by the college registrar. Courses taken, grades, GPA, and graduation information are included on a transcript.

## Transfer Credit

Course credit that is accepted from or by another college or university to meet requirements in a major or as general education.

## Trial Schedule

A form in which students list their course selections to determine the combination of courses and class times that work best during a particular term.

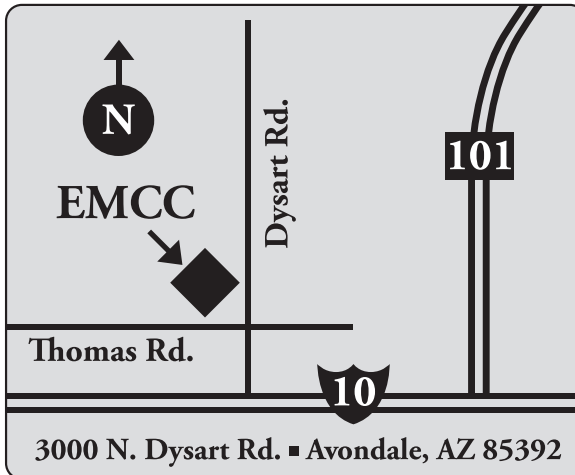
## Tuition and Fees

The cost per semester credit unit that students must pay for their college courses. Tuition and fees are determined by the Maricopa County Community College Governing Board.

## Withdrawal

Officially dropping any or all courses during a semester. Students withdrawing from one or more courses must notify the Admissions and Records Office in writing and request that they be officially withdrawn. Refunds are based on the refund schedule set forth in the catalog. After a specified date, students must have instructor approval before withdrawing from a course.

# EMCC Campus Map

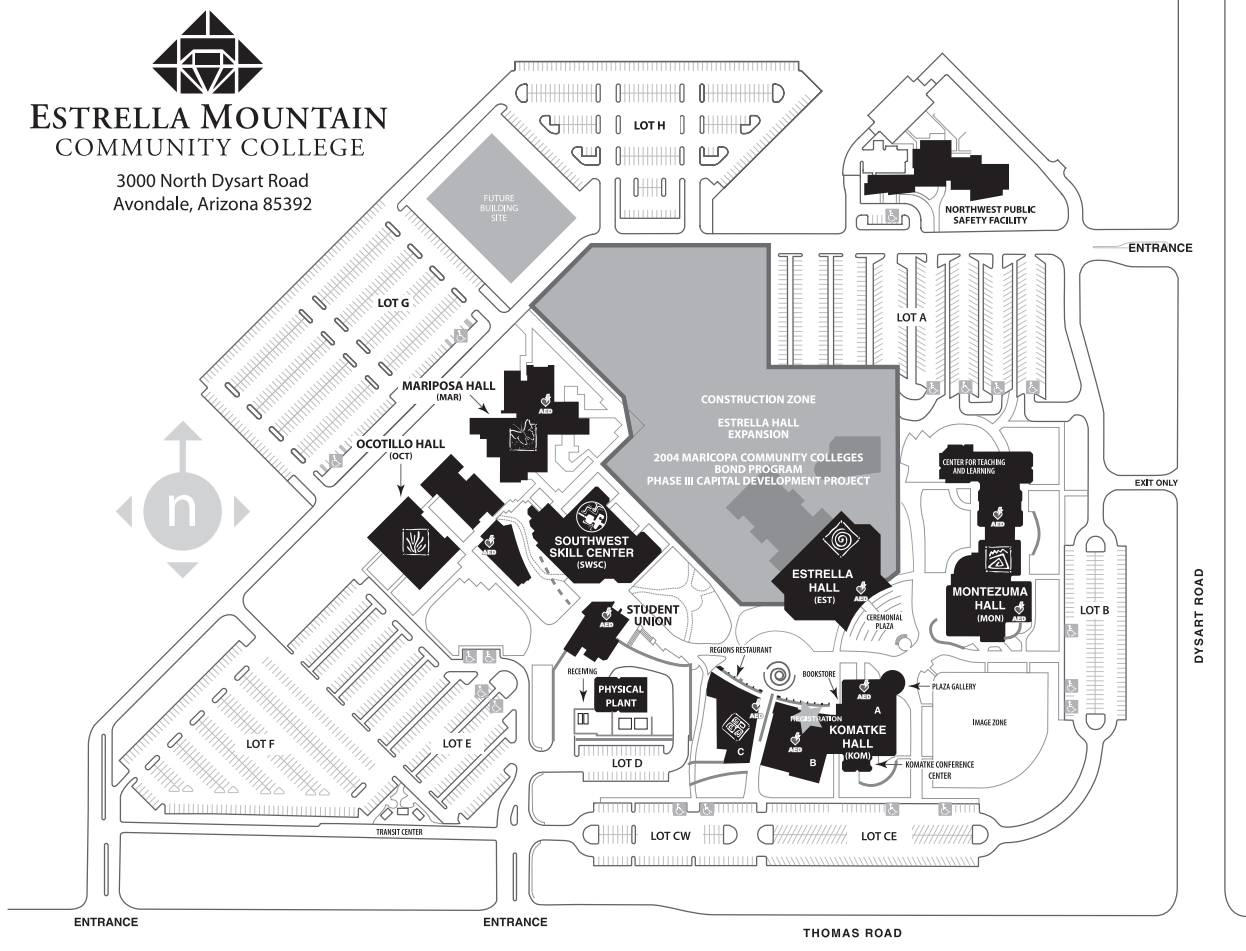


## Directions to EMCC from Phoenix

Travel west on I-10 to Dysart Road (Exit #129). Travel north on Dysart Road one mile to Thomas Road. The college is located on the northwest corner of Dysart and Thomas. Park in one of the many student lots.

## Directions to Buckeye Educational Center from Phoenix

Travel west on I-10 to Verrado Way/Airport Road (Exit #120). Travel south onto Airport Road. Continue south for approximately six miles. Turn right onto Maricopa 85 and continue west for approximately four miles. Turn right on E. Eason Avenue. Buckeye Educational Center will be on the right.



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