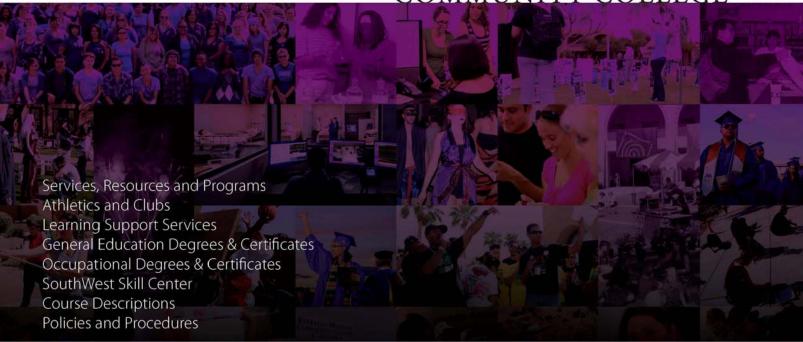
## ACADEMIC CATALOG



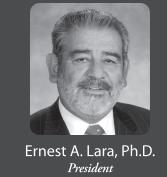


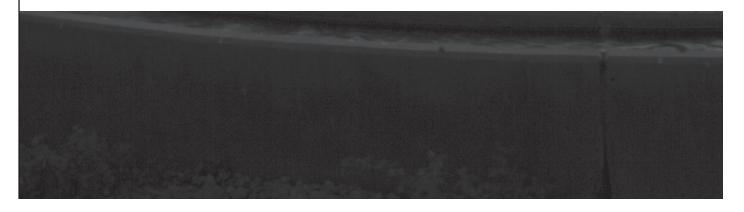


# Welcome to Estrella Mountain Community College, where "Your Success is Our Success."

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.











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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.



### 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 on page 226 or online at <a href="maricopa.edu/publicstewardship/governance/boardpolicies/vision\_mission\_values.php">maricopa.edu/publicstewardship/governance/boardpolicies/vision\_mission\_values.php</a>

### MCCCD General Information

### Academic Calendar

#### **FALL 2011**

Priority Registration Begins	March 7
Open Registration Begins	March 21
Classes Begin	August 20
Labor Day Observed	September 5
Last Day for Withdrawal w/out Instr. S	Signature+
Graduation Application Deadline	November 4
Veteran's Day Observed	November 11
Thanksgiving Break	November 24-27
Last Day Withdrawal Accepted	++
Final Exams	December 12-15
Mid-Year Recess Begins for Students .	December 16
Winter Break (Campus Closed)	.December 25-January 2

#### **SPRING 2012**

Priority Registration Begins	October 10
Open Registration Begins	October 17
Classes Begin	January 14
M.L. King Birthday Observed	January 16
President's Day Observed	February 20
Last Day for Withdrawal w/out Instr. Signature	+
Graduation Application Deadline	April 6
Spring Break	.March 12-18
Last Day Withdrawal Accepted	++
Final Exams	May 7-10
Commencement	May 11
Memorial Day Observed	May 28

#### **SUMMER 2012**

Priority Registration Begins	March 5
Open Registration Begins	March 19
Summer Graduation Deadline	April 6
Memorial Day Observed	May 28
First 5-Week Day & 8-Week Evening Sessions Begin	May 29
First 5-Week Session Ends	June 28
Independence Day Observed	July 4
Second 5-Week Day Session Begins	July 2
8-Week Evening Sessions End	July 19
Second 5-Week Day Session Ends	. August 2

- $+ \, See \, your \, student \, schedule \, in \, my. maricopa. edu \, for \, the \, Last \, Day \, to \, Withdraw \, without \, an \, Instructor \, Signature \, for \, each \, class \, in \, which \, you \, are \, enrolled.$
- $++{\sf Refer}$  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



Support systems across the college help you do the best you can.

**Advisement** | 623 935 8597

Sit down with an experienced advisor who can help build an educational plan tailored to your needs and goals.

**Testing Services** | 623 935 8860 This area helps you choose courses appropriate for your skill level.

**Counseling** | 623 935 8909 Visit with our counselors to help you plan your career and balance your life.

Career & Transfer Center | 623 935 8740 A visit to the Career Center will help you identify and get started on the right career for you.

**Disability Resource Center** | 623 935 8863 or 623 208 4035 VP

Discover the support and services available for students with disabilities with the help of caring professionals.

**Learning Enhancement Center** | 623 935 8189 Get assistance as you work on essays, research papers and other areas of writing, as well as aeneral tutorina.

NASA Center for Success in Math and Science | 623 935 8221

The center provides tutoring services for all levels of math and science courses.

You can do it. But you don't have to do it alone.



SUPPORT SYSTEMS AND RESOURCES

# Succeed

### in your journey. Find success in your destination.

#### A successful journey.

Throughout history there were those who believed in the impossible and those who...well...gave up. But for those who were determined to see their dreams through to the finish, the most extraordinary things happened, simply because they believed. Today, succeeding in achieving your goals will take the same level of determination and trust in yourself, your abilities and the support at your fingertips. Whatever barriers stand in your way, EMCC is here to help you overcome them and fulfill your journey to success.

#### Learn your way, at your own pace.

The right time to start college is now. Whether it's working parents who rush home to make dinner for their families in between work and school, retired veterans looking to begin the next phase of their lives, or young people right out of high school, each classroom at EMCC is filled with students with unique stories and diverse backgrounds. According to the U.S. Department of Education, almost 40% of all college students are over 25 years of age. This is one time when becoming another statistic is the best thing that could happen to you.

#### Draw your own path.

Guess what? Most people who enroll in college are uncertain about their career path. You aren't alone. In addition to a large selection of classes, EMCC also offers interest assessment testing, career planning, one-on-one counseling, and academic advisement to help narrow down what fits your skill set and appeals to your interests. And with classes offered at a fraction of the cost of a university, **you have the freedom to try lots of different areas** until you find what works best for you.

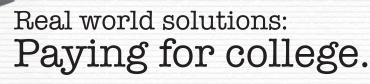
#### Grow into a new you.

What you did in high school has no bearing on what you can do now. As long as you have a high school diploma, GED, or are over 18 years of age, you are eligible to enroll at EMCC. An admissions test will determine what level of classes you can be placed into, ensuring that you will not be stressed out by courses that are too hard, or bored by classes that are too easy. **There are on-campus support systems to make sure you do the best you can**, with tutoring in the areas of math, science, reading, and writing. You can succeed.

#### Working with you and your life.

At EMCC, flexibility is key to meeting our students' needs with courses offered on the weekends and evenings. The college also offers online classes and hybrid courses which blend classroom time with online activities, reducing the amount of hours you need to be on campus. Why not get started this semester with just one class as a test to see how you can balance your life with your education? Even just one class will get you that much closer to reaching your degree.

#### **PAYING FOR COLLEGE**



In this uncertain economy, pursuing your education may seem like a luxury. But in a volatile job market, a college education and specialized career training become the ultimate necessity. At Estrella Mountain Community College, we are ready and able to assist you with payment options to get you started on the path to your degree.

Financial aid is available to those who qualify, with differing eligibility based on each funding source. There are four types of financial aid available:

- Scholarships are funds donated for students who meet the donor's criteria. These
  funds generally do not have to be repaid, but usually come with standards that
  must be met during a specific time period.
- Grants work much the same way, though are usually extended by state, city, or federal government, often due to a demonstrated financial need.
- · Work-study enables a student to earn money while working on campus.
- Loans are borrowed money that must be repaid with interest; some types of loans do not have to be repaid until after graduation.

If you are enlisted in the U.S. military, or are a veteran or veteran's dependent, there also are additional funding options.

You can also balance the costs of tuition with the other demands on your income by making use of the tuition payment plan. The tuition payment plan is open to all students, but can be especially beneficial to those who cannot qualify for federal financial aid or loans. These payment plans enable you to make installment payments spread out over the course of the semester, from your checking account or with a credit card. Because it's not a loan, there is no credit check or interest charged. Enrollment in the payment plan incurs a fee of only \$20 per semester.





## Financial Aid office @ EMCC

Monday-Thursday 8 a.m.-6 p.m. Friday 9 a.m.-5 p.m. 623 935 8888 estrellamountain.edu/students/ financial-aid

Hours of operation subject to change. Please call or check website for updates.

Success is within reach.

Learn more about scholarships at: maricopa.edu/resdev/scholarships azfoundation.org/scholarships estrellamountain.edu/students/scholarships





### ATHLETICS | STUDENT CLUBS



# Join the pride.

Estrella Mountain Lions kick off new year of cross country, golf.

Estrella Mountain's **men's and women's cross-country** teams and **men's and women's golf** will begin their second season during the 2011–2012 academic year. The inaugural Estrella Mountain Lions athletics season saw great success for the student athletes in both regional and national competitions.

The college's athletic programs have partnered with local golf courses and communities to host team practices and competitions. The teams are headed by local coaches with extensive cross country and golf experience, and the teams compete in the Arizona Community College Athletic Conference (ACCAC) and Region 1 of the National Junior College Athletic Association (NJCAA).

If you are interested in participating in the college's athletic programs, you must be a full-time Estrella Mountain Community College student and maintain a grade-point average (GPA) of 2.0 or higher.

Team up with EMCC! For more information, visit estrellamountain.edu/students/athletics

# Learn. Lead. Discover.

Get involved in campus life with student clubs and organizations.

Enrich your learning experience by participating in one of Estrella Mountain's student clubs and organizations. Gain confidence and leadership skills while contributing to the campus and community. Drop by the Student Life and Leadership Office in Komatke Hall C or visit estrellamountain.edu/students/student-life.





Art Club Asian Pacific Islander Awareness **Black Student Union (BSU)** Christian Challenge **Creative Writing Club Drama Club Entrepreneur Club EMCC Fashion Club Future Teachers Club P.R.I.D.E.** (formerly known as GSA) International Student Intersections **Latin Dance Club** M.E.Ch.A. Men of Color Association (MOCA) Phi Theta Kappa – Beta Alpha Xi Chapter Psi Beta **Social Awareness Sports Club** STEM Club Veterans Club

**Administration of Justice** (AJS)

Forensics Club German Club Xpress Club

## Start your bachelor's degree at Estrella Mountain Community College by earning your associate's degree first.

Preparing for a successful career in a demanding job market requires advanced education. Benefits of completing a bachelor's degree include increased career opportunities, greater work earnings, knowledge, and skills that keep you competitive in the job market.

Estrella Mountain Community College provides an affordable way for you to earn a bachelor's degree, by completing the first two years here, then transferring to a university. To learn more about transfer opportunities go to:

### www.maricopa.edu/transfer

# Complete your bachelor's degree at ASU!



If you have decided on your major and plan to transfer to ASU to earn a bachelor's degree, then the Maricopa-ASU Pathways Program (MAPP) might be an excellent option for you. This program includes the specific coursework that allows students attending one of the Maricopa Community Colleges to transfer to ASU without loss of credit. Along the pathway, you will complete the Arizona General Education Curriculum (AGEC) and earn a transfer associate's degree. Many majors are available now!

### KEEP LEARNING WITHOUT LEAVING

Earn your NAU degree in the West Valley! Through the partnership, your upper-division Northern Arizona University (NAU) courses are taught by NAU faculty on or near Maricopa Community College campuses—in your home community.

Sarah Padelford, NAU On-Campus Advisor 623 935 8558 sarah.padelford@nau.edu



www.maricopa.edu/nau







#### **Student Services**

#### **Komatke Hall B**

#### estrellamountain.edu/studentservices

Student Services at Estrella Mountain has always focused on a commitment to offer quality and convenience to the students and community. To further this commitment, an innovative way of providing service has been created called One-Stop Enrollment. As the name implies, the One-Stop Model gives students "one-stop" service by providing all services such as placement testing, advisement, financial aid, registration, quick stop services, and payment all in one area for student convenience.

#### **EMCC's Smart 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 Early Outreach Department at 623.935.8900.

#### Enrollment Services | 623.935.8888 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 MCCCD 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

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

<u>Testing is a required enrollment step for new students.</u> For more information on testing and placement policies, please see page 242.

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

All new college students are required to attend a preadvisement 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

- 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)

<u>Academic Advisement is a required enrollment step for</u> <u>new students</u>. For more information on advisement policies, please see page 241.

#### New Student Orientation (NSO) | 623.935.8900

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

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

The Career & Transfer Center offers services and assistance to both current and prospective students 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 to access information related to career development and to view the centers upcoming events and workshops.

#### Counseling | 623.935.8909

#### estrellamountain.edu/students/counseling

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

### Disability Resources Center (DRC) | 623.935.8863 or 623.208.4035 VP

#### 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.

#### Job and Internship Search | 623.935.8740

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 MCCCD students, at maricopa.jobing.com. The Maricopa Career Network is a free system with 24/7 Internet accessibility. Listings of available internships can be found in the Career & Transfer Center or online. For more information on internships please visit estrellamountain.edu/students/internships.

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

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

For more information on Financial Aid benefits please see page 246.

#### **Online Services**

#### My.maricopa.edu

- Register for classes
- · View class schedule
- Drop/Withdraw from classes
- View charges on student account
- · View financial aid status
- Make payments
- View grades
- Request transcripts
- Update contact information
- Establish student tuition payment plan

#### Student Life | 623.935.8807 estrellamountain.edu/studentlife

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 is 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.

#### Re-Entry Services | 623.935.8909

Offering: Skills building seminars

Registration assistance

Personal development seminars

College Transition

#### Veterans' Services | 623.935.8937 estrellamountain.edu/students/veterans-services

Estrella Mountain Community College, through the Veterans Administration, offers higher education to veterans and eligible dependents under U.S. Code Title 38, Chapters 30, 31, 33, 35, 1606, and 1607. The Veterans Services office provides information and application assistance for those eligible for Veterans' educational benefits, certifying, and monitoring veterans' enrollment. To secure benefits, the student must apply through the Veterans Services office on campus. For more information on Veterans benefits please see page 250.

### **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 and assists them in making the smooth transition from high school through the 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.

#### 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.

### High School Dual Enrollment | 623.935.8443 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 are taught by high school instructors who have met community college hiring qualifications. Registration is coordinated on the high school campus and there are 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.

#### **Athletics & Clubs**

#### Athletics | 623.935.8910

#### estrellamountain.edu/students/athletics

The Estrella Mountain Community College Athletic Program competes in the Arizona Community College Athletics Conference. The mission of EMCC is to provide student athletes the opportunity to be successful academically & athletically. A strong emphasis is placed upon academic achievement, while providing opportunities to compete for team & individual championships. EMCC has a support system, structured to facilitate the academic athletic and social success of our student athletes. Men's and women's golf and cross country programs 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

The purpose of the APIAC is to reach out to those who want to learn and/or be a part of an organization which promotes racial, political, cultural, and self awareness of the Asian Pacific Islander minorities.

#### Black Student Union (BSU) Advisor: Arlisa Richardson | 623.935.8436

The purpose of the Black Student Union is to stimulate education by providing an awareness, recognition of and appreciation toward contributions by the Black American culture to the United States of America and to the world.

#### Christian Challenge Advisor: Andy Burch | 623.935.8955

Christian Challenge is an organization that promotes interest in Jesus Christ and provides fellowship among students and faculty. The club objectives are to represent student needs and wants in regard to visibility and role of Priority College Ministry and Christianity, and to provide a forum for presentation of innovative ideas to the benefit of the college community to assist students in discovering their full potential as contributing members of the college community and society.

#### **Drama Club**

#### Advisor: TBA | 623.935.8807

The purpose of this organization is to stimulate strong interest in the theatrical arts among students on campus and to promote thespian activity on campus.

#### **EMCC Fashion Club**

#### Advisor: TBA | 623.935.8807

The purpose of the EMCC Fashion Club is to provide fellowship among the fashion enthusiast and to promote unity among the members.

#### **Entrepreneur Club**

#### Advisor: Shawn Gear | 623.935.8139

The purpose of this organization is to stimulate student interest in any Business major; to provide the opportunity for all members to develop leadership skills when interacting with various professionals in any kind of business field; and most importantly to promote career opportunities in any Business or related field.

#### **Forensics Club**

### Advisors: Cheryl Hebert | 623.935.8470 and Roxan Arntson | 623.935.8139

The Estrella Mountain Community College Forensics Club consists of students interested in a variety of speech styles including: Informative, Impromptu, Competitive, Prose Interpretation, and Communication Analysis. The EMCC Forensics Club will compete on the local, regional and national levels. The club also sponsors on campus programs throughout the year.

#### Future Teachers Club Advisors: Deborah Raffin | 623.935.8441 and Pete Turner | 623.935.8705

The purpose of the organization is to provide professional development opportunities for students to complete their degree programs and be well prepared for the teaching profession. Participation in club activities will help students develop communication and leadership skills as they create a support network with fellow students and west valley teachers and administrators to achieve their goals.

#### **German Club**

#### Advisor: Selina Schuh | 623.935.8139

The German Club helps introduce new cultures to campus and strengthens academic German programs.

#### International Club

#### Advisor: Lisa Widowski | 623.935.8814

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

#### Intersections

#### Advisor: Alex Andrews | 623.935.8094

The purpose of this organization is to stimulate a strong interest in human relations to provide fellowship among the social enthusiasts and promote intellectual growth among members.

#### **Latin Dance**

#### Advisor: Tristan Peigne | 623.935.8139

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

#### Movimiento Estudiantil Chicano de Aztlan (M.E.Ch.A) Advisor: Elena Beltran | 623.935.8331

M.E.Ch.A. (Movimiento Estudiantil Chicano de Aztlan) is an organization that promotes and supports higher education for Chicano/Hispano students. M.E.Ch.A. also encourages student involvement in cultural and social issues, on and off campus, especially those affecting the Chicano/Hispano community.

### Men of Color (MOCA) Advisor: Jason Martinez | 623.935.8906

The purpose of this organization is to stimulate a strong interest in the retention and successful degree completion of minority male students. The organization will also provide fellowship among the male students of color and promote internal and external community support and among members.

#### National Student Nurse Association (NSNA) Advisor: Debby Storey | 623.935.8620

NSNA's mission is to mentor students preparing for initial licensure as registered nurses, and to convey the standards, ethics, and skills that students will need as responsible and accountable leaders and members of the profession.

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

# Advisors: Kathleen Iudicello | 623.935.8460, Sandy Zetlan | 623.935.8458 and Michael Bartley | 623.935.8057

P.R.I.D.E. (Practicing Respect Individuality Diversity and Equality) is a club for all students. The Gay Straight Alliance works to create a safe space within the EMCC community for GLBTQ (gay, lesbian, bisexual, transgender, and questioning) students. It does so through an alliance of GLBTQ and straight students.

#### Social Awareness Club Advisors: Elizabeth Foley | 623.935.8139 and Patrick Crowley | 623.935.8139

The Social Awareness Club focuses on bringing awareness of social issues to the campus community. The club focuses on activism, awareness, and tolerance. Some of the social issues include gun control, the environment, health care and cultural diversity.

#### **Sports Club**

#### Advisor: Lyle Bartelt | 623.935.8405

The purpose of this organization is to stimulate a strong interest in health and wellness, promoting an active lifestyle.

### Science, Technology, Engineering, Mathematics (STEM) Club

#### **Advisor: Holly Dison | 623.935.8028**

The purpose of the STEM Club is to stimulate a strong interest in Science, Technology, Engineering, Math, and Physics to provide fellowship among the STEM enthusiasts, and to improve Science, Technology, Engineering, Math and Physics among the members.

#### Veteran's Club

### Advisors: Eddie Zuleger | 623.935.8310 and Robert Cavan | 623.935.8938

The purpose of this organization is to stimulate a strong interest in Veteran's Affairs, to provide fellowship among the Veterans and those interested in Veteran's Affairs, and to provide social networking as well as support for local Veterans and their families.

#### **Writing Circle**

#### Advisor: TBA | 623.935.8807

The purpose of this organization is to stimulate a strong interest in writing to provide fellowship among the writing enthusiasts and to promote original fiction or non-fiction production among the members.

#### **Additional Student Resources**

#### Bookstore Komatke Hall | 623.935.8875 efollet.com

The Estrella Mountain Bookstore is managed by Follett College Stores and provides textbook and academic supplies required by students and staff at Estrella Mountain. Additional gift and Estrella Mountain specialty items are available. Students may purchase computer software through the Bookstore at a special discount. Textbooks and software are also available through: 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 the 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 can be comfortable to pursue their education. Students may contact Public Safety via Estrella Mountain's web page: <a href="mailto:estrellamountain.edu/security">estrellamountain.edu/security</a> or by calling:

Emergencies: 623.935.8911 Non-emergency: 623.935.8915

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

### **Learning Support Services**

# Information Commons Estrella Hall-First Floor | 623.935.8150 <u>estrellamountain.edu/students/information-</u> 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

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 Resources Estrella Hall | 623.935.8191 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 <u>estrellamountain.edu/ students/learning-support/</u> 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

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 the 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 placed in ENG101 Honors, into 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.

#### **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 about 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. 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/

#### 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 Instruction 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. From 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 which provide pathways to certifications that 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 Workforce Training for more information at 623.535.2700.

#### **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 Center**

Employing a learning center approach, the Fitness Center at EMCC is "reshaping fitness". From the array of equipment to the focus on wellness, the Fitness Center offers members a wide range of options. Consider the following:

- A place to work out
- · A wellness center
- Experienced and Credentialed Fitness Instructors
- Personal health feedback
- A personal wellness plan
- Eating and nutrition coaching
- Collegiate community support
- Special events and monthly incentive programs to stay on track

As a learning center, the Fitness Center helps members gain awareness of the pathways to improve physical wellness. Following those pathways strengthens every function of life. The pathways include wellness monitoring, nutrition training, and fitness mentoring. Here the learner can take a class, or take a journey to a new place where fitness supports wellness, and wellness supports a full life.

Courses available include degree and certificate programs for those students pursuing a career or avocation in fitness or wellness. A wide variety of non credit courses are available, as well. These provide students with opportunities to improve their well being, increase body strength, lower stress, improve nutrition, and fight obesity.

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







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 into these courses through placement testing. Required courses must be successfully completed before moving on 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 th	nat a course has prerequisites or corequisites.	

#### **English as a Second Language**

### **Basic Level:** +ESL001BA Basic ESL I: Personal and Health Safety

+RDG010

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

+ESL001BB Basic ESL I: Services and Employment

#### **Recommended Courses**

+ESL013	Vocabulary for ESL I
+ESL014	Idiomatic English for ESL I
+RDG008	Phonics

Reading English as a Second Language I

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 3	
(non-native s	speakers)		

#### 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**

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

#### Level \

2

2

3

3

1 3

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

#### **Recommended Courses**

+COM080	Conversation Circles Practice in Conversing in	1
	English (non-native speakers)	3

- + 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
+ indicates t	hat a course has prerequisites and/or corequ	isites.

#### **Mathematics**

MAT082	Basic Arithmetic	3
+MAT091	Introductory Algebra	4
+MAT092	Introductory Algebra	3
+ indicates	that a course has prerequisites and/or	student
placement.		







## **EMCC General Education Statement**

At Estrella Mountain, students experience a collaborative and stimulating environment which stresses a solid foundation of general education. Each facet of the Estrella Mountain experience is designed to provide students with the necessary information, knowledge, abilities, intellectual concepts, and 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 Fiona Lihs 623.935.8702

#### estrellmountain.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 and professional 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: <a href="mailto:estrellamountain.edu/employees/committees/saac/gen-ed-abilities.">estrellamountain.edu/employees/committees/saac/gen-ed-abilities.</a>

## **General Education Degrees and Certificates**

#### **Arizona General Education Curriculum (AGEC)**

AGEC-A (liberal arts major), or	21
AGEC-B (business majors), or	
AGEC-S (majors with more prescriptive mathematics	
mathematics-based science requirements)	21

#### **Academic Degrees**

Associate in Arts (AA)	27
Associate in Arts in Elementary Education (AAEE)	
Associate in Arts (AA), Fine Arts-Art	
Associate in Arts (AA), Fine Arts-Dance	35
Associate in Arts (AA), Fine Arts-Theater	39
Associate in Business (ABUS) - General	42
Associate in Business (ABUS) - Special	44
Associate in General Studies (AGS)	47
Associate in Science (AS)	50
Associate of Applied Science	53

#### **Academic Certificates**

Academic Certificates	55
Advanced Interdisciplinary Storytelling	57
Chicana and Chicano Studies	58
Interdisciplinary Storytelling	56
Sustainability and Ecological Literacy	

#### **Graduation Requirements**

General Graduation Requirements	60
Catalog Under Which a Student Graduates	62

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

General Education Degrees and Academic Certificates Offered by the Estrella Mountain Community College are viewable at <a href="mailto:maricopa.edu/academic/ccta/curric/progem.php">maricopa.edu/academic/ccta/curric/progem.php</a>

### **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.

	AGEC - A	1. Core Areas		35 Credits
Associate in Arts		2. Awareness Ar	eas	
(AA) 60-64 Credits	—— MCCD Requireme			0-6 Credits
(AA) 60-64 Credits	General Electives		o complete a minimum o	f 60 credits but no
		more than a tota	l of 64 semester credits.)	
Associate in Arts	AGEC-A	1. Core Areas		35-38 Credits
		<ol><li>Awareness Ar</li></ol>	eas	
Elementary Education		ation Requirements		25 Credits
(AAEE) 60-63 Credits	-Education For	undations		(18 Credits)
	-Elective for Az	Z Professional Teacher St	andards	(7 Credits)
	AGEC - A	1. Core Areas		35-38 Credits
Associate in Arts		2. Awareness Ar	reas	
Fine Arts	Fine Arts Require			(28 Credits)
(AAFA) 60-64 Credits	Fine Arts Require	ment- Dance		(29 Credits)
	Fine Arts Require	ment - Theatre		(25-29 Credits)
	Associate in	AGEC B	1. Core Areas	35 Credi
	Business General	AGEC B	2. Awareness Areas	35 Credi
	Requirements	Common Lower Divisio		27-28
	ABus-GR Pathway	Common Lower Division Credits	(Select courses to com	
	62-63 credits	General Electives	of 62 credits but no m	
	All Business Majors	General Electives		ore than a total of
Associate in Business	except ACC & CIS		63 semester credits)	
(ABus)	Associate in	AGEC B	1. Core Areas	35 Credit
	Business Special		2. Awareness Areas	
	Requirements	Common Lower Division	n Requirements	27-28 Credit
	ABus-SR Pathway 62-63 credits	General Electives	(Select courses to com	plete a minimum
	CIS Majors		of 62 credits but no m	ore than a total of
	(ACC TG-XR)		63 semester credits)	
		AGEC S	1. Core Areas	35 Credi
<b>Associate in Science</b>	Associate in	/ NOLC 3	2. Awareness Areas	33 Cicai
(AS)	Science	MCCD Requirements	(Communication, Rea	dina) 0-6
(M3)	60-64 Credits	Credits	(Communication, Near	anig) 00
	ov of cicuits	General Electives	(Select courses to com	nlete a minimum
		General Licetives	of 60 credits but no m	
		I	or oo creatts but 110 III	ore triair a total Of

#### **Additional Programs for University Transfer**

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

- 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 mathematicsbased 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.
- 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;

- Require that a minimum of 12 semester credits of course work be taken at any of the MCCCD colleges;
- Include both courses and their modular equivalents, either the course or the modular equivalents will satisfy the AGEC;
- Accept one of the courses that is cross-referenced with other courses;
- Provide for exemption from Arizona university admission requirements for: Students who complete the AGEC A, AGEC B, or AGEC S with a minimum 2.5 on a 4.0=A scale, or students who complete an associate or higher degree from a regionally accredited post-secondary institution with a minimum 2.0 on a 4.0=A scale for Arizona residents and a minimum 2.5 on a 4.0=A scale for non-residents.
- · AGEC Requirements

The 35-38 semester credits required for each of the three AGECs follow. See the list entitled 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/

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

#### A. Core Areas: 35

1. First-Year Composition (FYC)

2. Literacy and Critical Inquiry [L] 0-3
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)

3. Mathematical Studies [MA/CS] 4-6 The Mathematics [MA] requirement differs for AGEC A, AGEC B, and AGEC S.

To complete the Mathematical Studies requirement for AGEC A and AGEC B, select one course to satisfy Mathematics [MA], and a second course from Computer/Statistics/Quantitative Applications [CS]. AGEC S does not require the [CS] area.

#### **AGEC A requires;**

a. Mathematics [MA] (3 credits) AND

(Requires a course in college mathematics (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.)

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

#### **AGEC B requires**;

a. Mathematics [MA] (3 credits) AND (Requires a course in brief calculus (MAT212) or a higher level

mathematics course (MAT216, MAT220, or MAT221 or any course for which these courses are prerequisites).

b. Computer/Statistics/Quantitative Applications [CS] (3 credits) CIS105 Survey of Computer Information Systems

#### **AGEC S requires;**

a. Mathematics [MA] (4 credits) AND

Requires a calculus course (MAT220 or MAT221) OR any mathematics course for which MAT220 or MAT221 are prerequisites 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 MCCCD AGECs because courses can satisfy a Core area and one or two Awareness areas simultaneously. Therefore, no additional semester credits are required to satisfy the two Awareness areas.

- 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.

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

II. General Electives

#### **Purpose of the Degree**

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

In most cases, courses used to satisfy the MCCCD Associate in Arts will apply to university graduation requirements of the university major for which the Associate in Arts is designed. Information regarding the articulation of the Associate in Arts with majors at the Arizona public universities can be accessed via the following website: www.aztransfer.com

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

- Completion of the Associate in Arts and the AGEC-A provides for exemption from Arizona public university admission requirements for Arizona residents who have a minimum Grade Point Average of 2.0 on a 4.0=A scale and a minimum 2.5 on a 4.0=A scale for non-residents.
- The graduation policies within the general catalog must be satisfied for completion of the Associate in Arts degree.
- A minimum of 60 semester credits in courses numbered 100 and above to be completed with a grade of "C" or better. Credit units transferred from outside of the district need to be at a grade of "C" or better. A grade of "C" equals 2.0 on a 4.0 grading scale or equivalent. On an exception basis, P-grades may be allowed in the AGEC for credit transferred if documentation collected by the community college indicates that the P-grade issued was the only option for the student and the P-grade is a "C" or better. The P-grade exception does not apply to credits awarded by AGEC granting/receiving institutions.

- Credit received through prior learning assessment or credit by evaluation is transferable within the Maricopa Community Colleges but is not necessarily transferable to other colleges and universities. No more than 20 semester credit hours may be applied toward AGEC.
- The General Education Requirements for AGEC-A may be completed in 35 semester credits with the following stipulations
  - Courses can satisfy a Core Area and one or two Awareness Areas simultaneously
  - A course cannot be used to satisfy more than one Core Area
- General Education Courses can satisfy multiple areas within the degree simultaneously (AGEC-A Core Area, AGEC Awareness Area, MCCCD Additional Requirements, or lower-division courses applicable to the major).
- 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 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/
- 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 Degree.
- Courses and their modular equivalents will satisfy AGEC-A and Associate in Arts requirements.

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

#### **Degree Requirements**

The 60-64 semester credits required for the Associate in Arts 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: <a href="https://www.maricopa.edu/academic/ccta/">www.maricopa.edu/academic/ccta/</a> This list identifies the courses in alphaorder 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: 35

a. First-Year Composition (FYC)

b. Literacy and Critical Inquiry [L]

c. Mathematical Studies [MA/CS]

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]

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 <u>can not</u> 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 United States [C] AND Global Awareness [G] OR Historical Awareness [H]

#### 3. MCCCD Additional Requirements 0-6

Students must satisfy Oral Communication and Critical Reading areas. However, it is not necessary for students to exceed the thirty-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

6

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

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/

Students must select MCCCD courses that are transferable to the university or universities to whic 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 MCCCD Associate in Arts in Elementary Education (AAEE) requires the student to complete a total of 60-63 semester credits in the program of study. The degree has two major components:

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

II. Elementary Education Requirements Education Foundations Electives for Arizona Professional Teacher Standards

#### **Purpose of the Degree**

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

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

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

- Completion of the Associate in Arts and the AGEC-A provides for exemption from Arizona public university admission requirements for Arizona residents who have a minimum Grade Point Average of 2.0 on a 4.0=A scale and a minimum 2.5 on a 4.0=A scale for non-residents.
- The graduation policies within the general catalog must be satisfied for completion of the Associate in Arts degree.
- A minimum of 60 semester credits in courses numbered 100 and above to be completed with a grade of "C" or better. Credit units transferred from outside of the district need to be at a grade of "C" or better. A grade of "C" equals 2.0 on a 4.0 grading scale or equivalent. A grade of "C" equals 2.0 on a 4.0 grading scale or equivalent. On an exception basis, P-grades may be allowed in the AGEC for credit transferred if documentation collected by the community college indicates that the P-grade issued was the only option for the student and the P-grade is a "C" or better. The P-grade exception does not apply to credits awarded by AGEC granting/receiving institutions.

- Credit received through prior learning assessment or credit by evaluation is transferable within the Maricopa Community Colleges but is not necessarily transferable to other colleges and universities. No more than 20 semester credit hours may be applied toward AGEC.
- The General Education Requirements for AGEC-A may be completed in 35 semester credits with the following stipulations:
  - Courses can satisfy a Core Area and one or two Awareness Areas simultaneously
  - A course cannot be used to satisfy more than one Core Area
  - Courses can satisfy an Elementary Education Requirement and one or more Awareness Areas simultaneously.
  - A course cannot satisfy both the Elementary Education Requirement and a Core Area Requirement simultaneously.
- 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 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:
  <a href="http://www.maricopa.edu/academic/ccta/">http://www.maricopa.edu/academic/ccta/</a>
- 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. MCCCD General Education Requirements Credits

#### **MCCCD 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

c. Literacy and Critical Inquiry [L]
Select the following:
COM225 Public Speaking

3

d. Humanities and Fine Arts [HU]

6

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:

**ENH110 Introduction to Literature** 

ENH241 American Literature Before 1860

ENH242 American Literature After 1860

EDU/ENH291 Children's Literature

HUM250 or HUM251 Ideas and Values in the Humanities

THE111 Introduction to Theatre

DAH100 Introduction to Dance

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DAH201 World Dance Perspectives MHL140 Survey of Music History MHL143 Music in World Cultures e. Social and Behavioral Sciences [SB] 1) Select 3 semester credits from the following courses: HIS103 United States History to 1870 **PSY101 Introduction to Psychology** GCU122 World Geography II: Western Hemisphere

HIS104 United States History 1870 to Present

2) Select 3 semester credits from the following courses:

GCU121 World Geography I: Eastern Hemisphere

**ECN211 Macroeconomic Principles** 

**ECN212 Microeconomic Principles** 

POS110 American National Government

ECH/CFS176 Child Development

CFS205 Human Development

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

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 atten as requirements for lab sciences may vary.

g. Awareness Areas

The MCCCD AAEE requires coursework in two Awareness Areas: Cultural Diversity in the U.S. [C]

AND

Historical Awareness [H]

OR

Global Awareness [G]

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

#### **MCCCD Additional Requirements**

0-3

a. Oral Communication

Satisfied by COM225 taken for Literacy and Critical Inquiry Requirement

b. Critical Reading

CRE101 or exemption by testing

#### **II. Elementary Education Requirements**

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. Electives for Arizona Professional Teacher Standards A total of 7 semester credits are required to satisfy the Electives for Arizona Professional Teacher Standards:

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: Heath, Safety, Nutrition and

**Fitness** 

**FON100 Introductory Nutrition** 

AAA/CPD115 Creating College Success

#### **AAEE Total Credits:**

60-63

# 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) MCCCD Additional Requirements II. Fine Arts Requirements – Art

#### **Purpose of the Degree**

The Associate in Arts, Fine Arts - Art degree is designed for students planning to transfer to four-year colleges and universities. In general, the components of the degree meet requirements for majors in the Fine Arts. The degree is designed to prepare students to meet selective admission criteria for programs such as the Bachelor of Fine Arts, which may require a portfolio or performance requirement.

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

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

- Completion of the Associate in Arts, Fine Arts Art degree and the AGEC-A provides for exemption from Arizona public university admission requirements for Arizona residents who have a minimum Grade Point Average of 2.0 on a 4.0=A scale and a minimum 2.5 on a 4.0=A scale for non-residents.
- The graduation policies within the general catalog must be satisfied for completion of the Associate in Arts, Fine Arts - Art degree.
- A minimum of 63 semester credits in courses numbered 100 and above to be completed with a grade of "C" or better. Credit units transferred from outside of the district need to be at a grade of "C" or better. A grade of "C" equals 2.0 on a 4.0 grading scale or equivalent. On an exception basis, P-grades may be allowed in the AGEC for credit transferred if documentation collected by the community college indicates that the P-grade issued was the only option for the student and the P-grade is a "C" or better. The P-grade exception does not apply to credits awarded by AGEC granting/receiving institutions.

- Credit received through prior learning assessment or credit by evaluation is transferable within the Maricopa Community Colleges but is not necessarily transferable to other colleges and universities. No more than 20 semester credit hours may be applied toward AGEC.
- The General Education Requirements for AGEC-A may be completed in 35 semester credits with the following stipulations
- Courses can satisfy a Core Area and one or two Awareness Areas simultaneously
- A course cannot be used to satisfy more than one Core Area
- General Education Courses can satisfy multiple areas within the degree simultaneously (AGEC-A Core Area, AGEC Awareness Area, MCCCD Additional Requirements, or lower-division courses applicable to the major).
- 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 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/
- 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 Degree.

- Courses and their modular equivalents will satisfy AGEC-A and Associate in Arts, Fine Arts – Art requirements.
- If a course is cross-referenced with one or more other courses, then only one of the cross-referenced courses will be accepted to meet requirements.
- Courses completed at one of the Maricopa Community Colleges to satisfy Common Courses must be transferable as elective or better to the universities that have the shared majors listed on a Common Course Matrix. A shared major is a university degree program that has similar academic preparation to one or more degree programs at other Arizona public universities as listed on the Common Course Matrices. For appropriate course selection, students should consult with an advisor.

#### **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/ 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.

Credits: 35

#### **MCCCD AGEC-A**

1. Core Areas:

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)

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

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.

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) MCCCD Additional Requirements

II. Fine Arts Requirements - Dance

#### **Purpose of the Degree**

The Associate in Arts, Fine Arts - Dance degree is designed for students planning to transfer to four-year colleges and universities. In general, the components of the degree meet requirements for majors in the Fine Arts. The degree is designed to prepare students to meet selective admission criteria for programs such as the Bachelor of Fine Arts, which may require a portfolio or performance requirement.

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

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

- Completion of the Associate in Arts, Fine Arts -Dance degree and the AGEC-A provides for exemption from Arizona public university admission requirements for Arizona residents who have a minimum Grade Point Average of 2.0 on a 4.0=A scale and a minimum 2.5 on a 4.0=A scale for non-residents.
- The graduation policies within the general catalog must be satisfied for completion of the Associate in Arts, Fine Arts - Dance degree.
- A minimum of 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 AGEC for credit transferred if documentation collected by the community college indicates that the P-grade issued was the only option for the student and the P-grade is a "C" or better. The P-grade exception does not apply to credits awarded by AGEC granting/receiving institutions;

- Credit received through prior learning assessment or credit by evaluation is transferable within the Maricopa Community Colleges but is not necessarily transferable to other colleges and universities. No more than 20 semester credit hours may be applied toward AGEC.
- The General Education Requirements for AGEC-A may be completed in 35 semester credits with the following stipulations
- Courses can satisfy a Core Area and one or two Awareness Areas simultaneously
- A course cannot be used to satisfy more than one Core Area
- General Education Courses can satisfy multiple areas within the degree simultaneously (AGEC-A Core Area, AGEC Awareness Area, MCCCD Additional Requirements, or lower-division courses applicable to the major).
- 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 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/
- 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-Dance Degree.

- Courses and their modular equivalents will satisfy AGEC-A and Associate in Arts, Fine Arts - Dance requirements.
- If a course is cross-referenced with one or more other courses, then only one of the cross-referenced courses will be accepted to meet requirements.
- Courses completed at one of the Maricopa Community Colleges to satisfy Common Courses must be transferable as elective or better to the universities that have the shared majors listed on a Common Course Matrix. A shared major is a university degree program that has similar academic preparation to one or more degree programs at other Arizona public universities as listed on the Common Course Matrices. For appropriate course selection, students should consult with an advisor

#### **Degree Requirements**

The 64 semester credits required for the Associate in Arts, Fine Arts - Dance 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/ 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)

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 from the following options to complete three credits:

Credits

DAH100 Introduction to Dance DAH201 World Dance Perspectives3 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.

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]

#### 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

#### b. Critical Reading: Credits: 3

Part I:

COM230 [SB] (3 credits)

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.

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

Credits 11

#### 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 modul	e)
	1-3
DAN291 Dance Conservatory II (any modu	le)
	1-3
DAN292 Dance Conservatory III (any modu	ıle)

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

	ı
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

DAN280 Dance Practicum

DAN150 Dance Performance I	1
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 mo	dule)
	1-3
DAN291++ Dance Conservatory II (any mo	dule)
	1-3
DAN292++ Dance Conservatory III (any mo	odule)
	1-3
*DAN298++ Special Projects (any module)	1-3

<sup>\*</sup> 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) MCCCD Additional Requirements

II. Fine Arts Requirements - Theatre

#### Purpose of the Degree

The Associate in Arts, Fine Arts - Theatre degree is designed for students planning to transfer to four-year colleges and universities. In general, the components of the degree meet requirements for majors in the Fine Arts the degree is designed to prepare students to meet selective admission criteria for programs such as the Bachelor of Fine Arts, which may require a portfolio or performance requirement.

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

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

- Completion of the Associate in Arts, Fine Arts Theatre and the AGEC-A provides for exemption from Arizona public university admission requirements for Arizona residents who have a minimum Grade Point Average of 2.0 on a 4.0=A scale and a minimum 2.5 on a 4.0=A scale for non-residents.
- The graduation policies within the general catalog must be satisfied for completion of the Associate in Arts, Fine Arts - Theatre degree.
- A minimum of 60 semester credits in courses numbered 100 and above to be completed with a grade of "C" or better. Credit units transferred from outside of the district need to be at a grade of "C" or better. A grade of "C" equals 2.0 on a 4.0 grading scale or equivalent. On an exception basis, P-grades may be allowed in the AGEC for credit transferred if documentation collected by the community college indicates that the P-grade issued was the only option for the student and the P-grade is a "C" or better. The P-grade exception does not apply to credits awarded by AGEC granting/receiving institutions.
- Credit received through prior learning assessment or [Estrella Mountain Community College | 2011-2012 Catalog]

credit by evaluation is transferable within the Maricopa Community Colleges but is not necessarily transferable to other colleges and universities. No more than 20 semester credit hours may be applied toward AGEC.

- The General Education Requirements for AGEC-A may be completed in 35 semester credits with the following stipulations
- Courses can satisfy a Core Area and one or two Awareness Areas simultaneously
- A course cannot be used to satisfy more than one Core Area
- General Education Courses can satisfy multiple areas within the degree simultaneously (AGEC-A Core Area, AGEC Awareness Area, MCCCD Additional Requirements, or lower-division courses applicable to the major)
- 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 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/
- Courses completed at one of the Maricopa Community Colleges to meet the General Electives requirement must betransferable 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.
- 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 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/ 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

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 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]

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.

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 Arts3 HUM/THE210 Contemporary Cinema 3

THE118 F	Playwriting	3
THP120	AA Audition Techniques:	Prepared
Monolog	jue	1
THP120 <i>A</i>	AB Audition Techniques: Cold Rea	dings
		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 Scenogr	aphy
		3
THP219	Introduction to Puppetry	3
THP267	Painting Techniques for Fil	m, TV and
Theatre		
3		
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. MCCCD General Education, which includes Arizona General Education Curriculum for Business (AGEC-B),
- II. Common Lower Division Program Requirements,
- III. General Electives.

#### **Purpose of the Degree**

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

Generally, the degree transfers as a block without loss of credit to Arizona's public universities and other institutions with district-wide articulation agreements. In most cases, courses used to satisfy the MCCCD Associate in Business General Requirements will apply to university graduation requirements of the university major for which the ABus GR was designed.

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

- Requires 62-63 semester credits in courses numbered 100 and above to be completed with a grade of "C" or better. Credit units transferred from outside of the district need to be at a grade of "C" or better. A grade of "C" equals 2.0 on a 4.0 grading scale or equivalent. On an exception basis, P-grades may be allowed in the AGEC for credit transferred if documentation collected by the community college indicates that the P-grade issued was the only option for the student and the P-grade is a "C" or better. The P-grade exception does not apply to credits awarded by AGEC granting/receiving institutions;
- Credit received through prior learning assessment or credit by evaluation is transferable within the Maricopa Community Colleges but is not necessarily transferable to other colleges and universities. No more than 20 semester credit hours may be applied toward AGEC.

- Uses the following policies to help students complete the required Core and Awareness Areas in AGEC B without exceeding the 35 semester credits
- Courses can satisfy a Core Area and one or two Awareness Areas simultaneously.
- A course cannot be used to satisfy more than one Core Area requirement.
- Uses the following policies to help students complete the program requirements at a minimum of 62 semester credits but not more than 63 semester credits:
- Courses can satisfy multiple areas within the degree simultaneously (AGEC B Core Area, AGEC B Awareness Area, and/or Common Lower Division Program Requirements)
- 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 MCCCD and the institutions to which MCCCD students transfer, students have the option to petition for general education evaluations and/or general education designations.
- Requires courses that transfer as an equivalent course, departmental elective credit (XXXXDEC), or general elective credit (Elective) at all Arizona public universities according to the Arizona Course Equivalency Guide (CEG) within the 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 nonresidents.

**Credits** 

#### **Degree Requirements**

The 62-63 semester credits required for the Associate in Business General Requirements follow. See the list entitled 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/

• Click on the page labeled Curriculum

I. MCCCD General Education

 Select Matrix of Courses that Can be Used to Satisfy MCCCD 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.

MCCCD AGEC B 1. Core Areas:	35
a. First-Year Composition (FYC)	6
b. Literacy and Critical Inquiry [L]	3
c. Mathematical Studies [MA/CS] 6 To complete the Mathematical Studies requirement select one course to satisfy Mathematics [MA] B and a second course from Computer/Statistics/Quantitative Applications [CS].	

1) Mathematics [MA] B (3 credits)

MAT212, Brief Calculus, or a higher level mathematics course

AND

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

CIS105 [CS] Survey of Computer Information Systems

d. Humanities 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]

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: 27-28

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:

\* 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 ACC250 or ACC211 may be taken in lieu of ACC111.

\*\*MCCCD 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

GBS220 Quantitative Methods in Business OR

\*MAT217 Mathematical Analysis for Business OR

3

6

\*MAT218 Mathematical Analysis for Business

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

#### **Business Electives:**

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

#### **Purpose of the Degree**

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

Generally, the degree transfers as a block without loss of credit to Arizona's public universities and other institutions with district-wide articulation agreements. In most cases, courses used to satisfy the MCCCD Associate in Business Special Requirements may apply to university graduation requirements of the university major for which the ABus SR was designed.

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

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

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

- uses the following policies to help students complete the required Core and Awareness Areas AGEC B without exceeding the 35 semester credits Courses can satisfy a Core Area and one or two Awareness Areas simultaneously. A course cannot be used to satisfy more than one Core Area requirement.
- uses the following policy to help students complete the program requirements at a minimum of 62 semester credits but not more than 63 semester credits:
- Courses can satisfy multiple areas within the degree simultaneously (AGEC B Core Area, AGEC B Awareness Area, and/or Common Lower Division Program Requirements
- 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 MCCCD and the institutions to which MCCCD students transfer, students have the option to petition for course evaluations and/or general education designations
- requires courses that transfer as an equivalent course, departmental elective credit (XXXXDEC), or general elective credit (Elective) at all Arizona public universities according to the Arizona Course Equivalency Guide (CEG). The course evaluation and/or general education designation as listed in 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 nonresidents

#### **Degree Requirements**

The 62-63 semester credits required for the Associate in Business Special Requirements 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/

- Click on page labeled Curriculum
- Select Matrix of Courses that Can be Used to Satisfy MCCCD 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. MCCCD General Education Credits **MCCCD AGEC B** 1. Core Areas: 35 a. First-Year Composition (FYC) 6 b. Literacy and Critical Inquiry [L] 3 c. Mathematical Studies [MA/CS] 6

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

> 1) Mathematics [MA] B (3 credits) MAT212, Brief Calculus, or a higher level mathematics course AND

> 2) Computer/Statistics/Quantitative Applications [CS] CIS105 [CS] Survey of Computer Information Systems

d. Humanities 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] Students are encouraged to choose course work from more

than one discipline for a total of six semester credits

f. Natural Sciences [SQ/SG]

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

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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:

27-28

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: 6-7
\*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 ACC250 or ACC211 may be taken in lieu of ACC111.

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

**Programming I:**CIS162AD C#: Level I

3 **Programming II: Management Information Systems** GBS205 Legal, Ethical, and Regulatory Issues in **Business** 3 GBS221 [CS] Business Statistics 3 3 ECN211 [SB] Macroeconomic Principles 3 ECN212 [SB] Microeconomic Principles **Ouantitative Methods** 3 GBS220 Quantitative Methods in Business \*MAT217 Mathematical Analysis for Business

\*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;
  - 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 Mathematics102/120/121/122/122AA/
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
AGB	Agribusiness 139
AJS	Administration of Justice Studies 119/205
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,

Computer Science Any CSC Course(s) (except 200,

200AA, 200AB, 210, 210AA, 210AB)

183AA, 259, 262)

CSC

	Court Reporting 101/102	MHL	Music: History/Literature
DFT	Drafting Technology 103/105/any 105 module/		140/143/145/146/153/155/242
	150/251/any 251 module/any 254 module/256AA	PHI	Philosophy Any PHI Course(s) (EXCEPT 113)
ECH	Early Childhood Education 238	REL	Religious Studies Any REL Course(s)
EEE	Electrical Engineering 120		(EXCEPT 213, 271)
ELE	Electronic 131/181/241/243/245/281	SLC	Studies in Language & Culture 201
ELT	Electronic Technology 131/241/243	SPA	Spanish 241/242/265/266
ENG	English 100AE	SPH	Spanish Humanities 245
ENV	Environmental Sciences 119	STO	Storytelling 292/294
FON	Food & Nutrition 100/100AA/100AC/100AD	THE	Theater 111/205/206/210
GBS	General Business 221	THP	Theater/Performance/Production 241
GPH	Physical Geography 220	WST	Women's Studies 209/284/285/290
HRM	Hotel Restaurant Management 126		
JAS	Justice & Government Agencies Admin 225		and Behavioral Sciences (9 credits)
JRN	Journalism 133		ts are encouraged to choose courses from more than
LAS	Paralegal Studies 229	one dis	cipline.
MAT	Mathematics 206		
MET	Manufacturing Technology 264	AFR	African American Studies 202/203/204
MTC	Music Theory/Composition 180/191	AIS	American Indian Studies 101/140/141/160/170
NET	Networking Technology 181/181AA	AJS	Administration of Justice Studies 101/119/162/200/
OAS	Office Automation Systems 111AA/111AB/113/		225/258/259/270
	119/130DK/135DK/235DK	ASB	Anthropology 102/202/211/214//222/223/230/
PSY	Psychology 230		235/238/245/252
	ealtime Reporting 101/102	ASM	Anthropology 104/275
SBS	Small Business 211	CFS	Child/Family Studies 157/159/176/205/253/259
SMT	Semiconductor Manufacturing Technology 150	COM	Communication 100/100AA&100AB&100AC/
SWU	Social Work 225	F.C	110/110AA&110AB&110AC/163/230/250/263
TVL	Travel Agent Technology 203	ECH	Early Childhood Education 176
VPT	Video Production Technology 106	ECN	Economics Any ECN Course(s)
CENER	AL EDUCATION DISTRIBUTION ADEAS	EDU	Education 221/222
	AL EDUCATION DISTRIBUTION AREAS	EED	Early Education 200/205/222
(28-29	credits)	ENG	English 213 Emergency Medical Technology 258
Шинаан	sitios and Fina Auts (O supplies)	EMT	· · · · · · · · · · · · · · · · · · ·
	nities and Fine Arts (9 credits)	FOR	Forensic Science 275
Studen	ts are encouraged to choose courses from more than	FOR FSC	Forensic Science 275 Fire Science Technology 258
Studen		FOR FSC FUS	Forensic Science 275 Fire Science Technology 258 Future Studies 101
Studen one dis	ts are encouraged to choose courses from more than cipline.	FOR FSC FUS GCU	Forensic Science 275 Fire Science Technology 258 Future Studies 101 Cultural Geography 102/121/122/141/223
Studen one dis	ts are encouraged to choose courses from more than cipline.  American Indian Studies 213	FOR FSC FUS GCU HES	Forensic Science 275 Fire Science Technology 258 Future Studies 101 Cultural Geography 102/121/122/141/223 Health Science 100
Studen one dis AIS AJS	ts are encouraged to choose courses from more than cipline.  American Indian Studies 213 Administration of Justice Studies 123	FOR FSC FUS GCU HES HIS	Forensic Science 275 Fire Science Technology 258 Future Studies 101 Cultural Geography 102/121/122/141/223 Health Science 100 History any HIS Course(s) (EXCEPT 111, 135, 204, 277)
Studen one dis AIS AJS ARH	ts are encouraged to choose courses from more than cipline.  American Indian Studies 213 Administration of Justice Studies 123 Art Humanities Any ARH Course(s)	FOR FSC FUS GCU HES HIS IBS	Forensic Science 275 Fire Science Technology 258 Future Studies 101 Cultural Geography 102/121/122/141/223 Health Science 100 History any HIS Course(s) (EXCEPT 111, 135, 204, 277) International Business 109
Studen one dis AIS AJS ARH ASB	ts are encouraged to choose courses from more than cipline.  American Indian Studies 213 Administration of Justice Studies 123 Art Humanities Any ARH Course(s) Anthropology 211/220/222/223/253	FOR FSC FUS GCU HES HIS IBS MCO	Forensic Science 275 Fire Science Technology 258 Future Studies 101 Cultural Geography 102/121/122/141/223 Health Science 100 History any HIS Course(s) (EXCEPT 111, 135, 204, 277) International Business 109 Mass Communications 120
AIS AJS ARH ASB CCS	ts are encouraged to choose courses from more than cipline.  American Indian Studies 213 Administration of Justice Studies 123 Art Humanities Any ARH Course(s) Anthropology 211/220/222/223/253 Chicana and Chicano Studies 101	FOR FSC FUS GCU HES HIS IBS MCO POS	Forensic Science 275 Fire Science Technology 258 Future Studies 101 Cultural Geography 102/121/122/141/223 Health Science 100 History any HIS Course(s) (EXCEPT 111, 135, 204, 277) International Business 109 Mass Communications 120 Political Science Any POS course(s)
AIS AJS ARH ASB CCS CNS	ts are encouraged to choose courses from more than cipline.  American Indian Studies 213 Administration of Justice Studies 123 Art Humanities Any ARH Course(s) Anthropology 211/220/222/223/253 Chicana and Chicano Studies 101 Construction 101	FOR FSC FUS GCU HES HIS IBS MCO	Forensic Science 275 Fire Science Technology 258 Future Studies 101 Cultural Geography 102/121/122/141/223 Health Science 100 History any HIS Course(s) (EXCEPT 111, 135, 204, 277) International Business 109 Mass Communications 120 Political Science Any POS course(s) Psychology 101/123/132/156/157/215/218/225/
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AIS AJS ARH ASB CCS CNS COM DAH EDU ENG	ts are encouraged to choose courses from more than cipline.  American Indian Studies 213 Administration of Justice Studies 123 Art Humanities Any ARH Course(s) Anthropology 211/220/222/223/253 Chicana and Chicano Studies 101 Construction 101 Communication 241 Dance Humanities 100/201/250 Education 291**/292/294 English 200/213/218	FOR FSC FUS GCU HES HIS IBS MCO POS PSY	Forensic Science 275 Fire Science Technology 258 Future Studies 101 Cultural Geography 102/121/122/141/223 Health Science 100 History any HIS Course(s) (EXCEPT 111, 135, 204, 277) International Business 109 Mass Communications 120 Political Science Any POS course(s) Psychology 101/123/132/156/157/215/218/225/235/240/241/243/245/250/258/260/266/270/277/280/292 Recreation 120 Society and Business 200
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AIS AJS ARH ASB CCS CNS COM DAH EDU ENG ENH FRE HCR	ts are encouraged to choose courses from more than cipline.  American Indian Studies 213 Administration of Justice Studies 123 Art Humanities Any ARH Course(s) Anthropology 211/220/222/223/253 Chicana and Chicano Studies 101 Construction 101 Communication 241 Dance Humanities 100/201/250 Education 291**/292/294 English 200/213/218 English Humanities Any ENH Course(s) French 265 Health Care Related 210	FOR FSC FUS GCU HES HIS IBS MCO POS PSY REC SBU SLC SOC	Forensic Science 275 Fire Science Technology 258 Future Studies 101 Cultural Geography 102/121/122/141/223 Health Science 100 History any HIS Course(s) (EXCEPT 111, 135, 204, 277) International Business 109 Mass Communications 120 Political Science Any POS course(s) Psychology 101/123/132/156/157/215/218/225/ 235/ 240/241/243/245/250/258/260/266/ 270/277/280/292 Recreation 120 Society and Business 200 Studies in Language & Culture 201 Sociology Any SOC course(s) (EXCEPT 242, 251, 253, 265, 270)
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AIS AJS ARH ASB CCS CNS COM DAH EDU ENG ENH FRE HCR HIS	ts are encouraged to choose courses from more than cipline.  American Indian Studies 213 Administration of Justice Studies 123 Art Humanities Any ARH Course(s) Anthropology 211/220/222/223/253 Chicana and Chicano Studies 101 Construction 101 Communication 241 Dance Humanities 100/201/250 Education 291**/292/294 English 200/213/218 English Humanities Any ENH Course(s) French 265 Health Care Related 210 History 101/102/103/108/109/111/113/114/243/253/254/275	FOR FSC FUS GCU HES HIS IBS MCO POS PSY REC SBU SLC SOC SWU WED	Forensic Science 275 Fire Science Technology 258 Future Studies 101 Cultural Geography 102/121/122/141/223 Health Science 100 History any HIS Course(s) (EXCEPT 111, 135, 204, 277) International Business 109 Mass Communications 120 Political Science Any POS course(s) Psychology 101/123/132/156/157/215/218/225/235/240/241/243/245/250/258/260/266/270/277/280/292 Recreation 120 Society and Business 200 Studies in Language & Culture 201 Sociology Any SOC course(s) (EXCEPT 242, 251, 253, 265, 270) Social Work 102/171/258/292 Wellness Education 110
AIS AJS ARH ASB CCS CNS COM DAH EDU ENG ENH FRE HCR	ts are encouraged to choose courses from more than cipline.  American Indian Studies 213 Administration of Justice Studies 123 Art Humanities Any ARH Course(s) Anthropology 211/220/222/223/253 Chicana and Chicano Studies 101 Construction 101 Communication 241 Dance Humanities 100/201/250 Education 291**/292/294 English 200/213/218 English Humanities Any ENH Course(s) French 265 Health Care Related 210 History 101/102/103/108/109/111/113/114/243/253/254/275 Humanities Any HUM course(s)	FOR FSC FUS GCU HES HIS IBS MCO POS PSY  REC SBU SLC SOC SWU WED WST	Forensic Science 275 Fire Science Technology 258 Future Studies 101 Cultural Geography 102/121/122/141/223 Health Science 100 History any HIS Course(s) (EXCEPT 111, 135, 204, 277) International Business 109 Mass Communications 120 Political Science Any POS course(s) Psychology 101/123/132/156/157/215/218/225/ 235/ 240/241/243/245/250/258/260/266/ 270/277/280/292 Recreation 120 Society and Business 200 Studies in Language & Culture 201 Sociology Any SOC course(s) (EXCEPT 242, 251, 253, 265, 270) Social Work 102/171/258/292 Wellness Education 110 Women's Studies 100/110/160/161
AIS AJS ARH ASB CCS CNS COM DAH EDU ENG ENH FRE HCR HIS	ts are encouraged to choose courses from more than cipline.  American Indian Studies 213 Administration of Justice Studies 123 Art Humanities Any ARH Course(s) Anthropology 211/220/222/223/253 Chicana and Chicano Studies 101 Construction 101 Communication 241 Dance Humanities 100/201/250 Education 291**/292/294 English 200/213/218 English Humanities Any ENH Course(s) French 265 Health Care Related 210 History 101/102/103/108/109/111/113/114/243/253/254/275 Humanities Any HUM course(s) (EXCEPT 108, 120, 203, 207)	FOR FSC FUS GCU HES HIS IBS MCO POS PSY REC SBU SLC SOC SWU WED	Forensic Science 275 Fire Science Technology 258 Future Studies 101 Cultural Geography 102/121/122/141/223 Health Science 100 History any HIS Course(s) (EXCEPT 111, 135, 204, 277) International Business 109 Mass Communications 120 Political Science Any POS course(s) Psychology 101/123/132/156/157/215/218/225/235/240/241/243/245/250/258/260/266/270/277/280/292 Recreation 120 Society and Business 200 Studies in Language & Culture 201 Sociology Any SOC course(s) (EXCEPT 242, 251, 253, 265, 270) Social Work 102/171/258/292 Wellness Education 110
AIS AJS ARH ASB CCS CNS COM DAH EDU ENG ENH FRE HCR HIS	ts are encouraged to choose courses from more than cipline.  American Indian Studies 213 Administration of Justice Studies 123 Art Humanities Any ARH Course(s) Anthropology 211/220/222/223/253 Chicana and Chicano Studies 101 Construction 101 Communication 241 Dance Humanities 100/201/250 Education 291**/292/294 English 200/213/218 English Humanities Any ENH Course(s) French 265 Health Care Related 210 History 101/102/103/108/109/111/113/114/243/253/254/275 Humanities Any HUM course(s)	FOR FSC FUS GCU HES HIS IBS MCO POS PSY  REC SBU SLC SOC SWU WED WST	Forensic Science 275 Fire Science Technology 258 Future Studies 101 Cultural Geography 102/121/122/141/223 Health Science 100 History any HIS Course(s) (EXCEPT 111, 135, 204, 277) International Business 109 Mass Communications 120 Political Science Any POS course(s) Psychology 101/123/132/156/157/215/218/225/235/240/241/243/245/250/258/260/266/270/277/280/292 Recreation 120 Society and Business 200 Studies in Language & Culture 201 Sociology Any SOC course(s) (EXCEPT 242, 251, 253, 265, 270) Social Work 102/171/258/292 Wellness Education 110 Women's Studies 100/110/160/161

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

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

AGS	Agricultural Science 164/260
ASB	Anthropology 231
ASM	Anthropology 104
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/150/151/
	151LL/152/152LL/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)
GPH	Physical Geography 111/112/113/210/211/
	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
CRE	Critical Reading 101
ENG	English 111/200/215/216/217/218
ENH	English Humanities 254/255
FON	Food & Nutrition 206
GBS	General Business 233
GPH	Physical Geography 211
HUM	Humanities 250/251
IFS	Information Studies 101
JRN	Journalism 201/234
MCO	Mass Communications 220
PHI	Philosophy 103/106
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) MCCCD Additional Requirements

II. General Electives

#### **Purpose of the Degree**

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

In most cases, courses used to satisfy the MCCCD Associate in Science will apply to university graduation requirements of the university major for which the Associate in Science is designed. Information regarding the articulation of the Associate in Science with majors at the Arizona public universities can be accessed via the following website: www.aztransfer.com

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

- Completion of the Associate in Science and the AGEC-S provides for exemption from Arizona public university admission requirements for Arizona residents who have a minimum Grade Point Average of 2.0 on a 4.0=A scale and a minimum 2.5 on a 4.0=A scale for non-residents.
- The graduation policies within the general catalog must be satisfied for completion of the Associate in Science degree.
- A minimum of 60 semester credits in courses numbered 100 and above to be completed with a grade of "C" or better. Credit units transferred from outside of the district need to be at a grade of "C" or better. A grade of "C" equals 2.0 on a 4.0 grading scale or equivalent. On an exception basis, P-grades may be allowed in the AGEC for credit transferred if documentation collected by the community college indicates that the P-grade issued was the only option for the student and the P-grade is a "C" or better. The P-grade exception does not apply to credits awarded by AGEC granting/receiving institutions
- Credit received through prior learning assessment or

credit by evaluation is transferable within the Maricopa Community Colleges but is not necessarily transferable to other colleges and universities. No more than 20 semester credit hours may be applied toward AGEC.

- The General Education Requirements for AGEC-S may be completed in 36-38 semester credits with the following stipulations
- Courses can satisfy a Core area and one or two Awareness areas simultaneously.
- A course cannot be used to satisfy more than one Core area requirement in the AGEC A and B.
- A course can be used to satisfy the L and SB or L and HU requirements simultaneously in the Core area for the AGEC S.
- General Education Courses can satisfy multiple areas within the degree simultaneously (AGEC-S Core Area, AGEC Awareness Area, MCCCD Additional Requirements, or lower-division courses applicable to the major).
- 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-S 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 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/
- 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.

- 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 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/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-S and MCCCD Additional Requirements.

#### **MCCCD AGEC-S**

1. Core Areas:

36-38

a. First-Year Composition (FYC)

6

b. Literacy and Critical Inquiry [L]

0-3

Recommend selecting a course that satisfies L (Literacy and Critical Inquiry) and SB (Social 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

f. Natural Sciences

that satisfies both L and SB requirements simultaneously.

To complete the Natural Sciences requirement: Select eight (8) semester credits of either general chemistry CHM151 & CHM151LL and CHM152 & CHM152LL

OR

Eight (8) semester credits of university physics PHY115 & PHY116 or PHY121 & PHY131

OR

Eight (8) semester credits of general biology, BIO181 & BIO182 appropriate to the major.

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

#### 2. Awareness Areas:

Students must satisfy two Awareness Areas: Cultural Diversity in the United States [C] and either Global Awareness [G] or Historical Awareness [H]. However, it is not necessary for students to exceed thirty-six to thirty-eight semester credits to complete the Awareness Areas because courses can satisfy a Core Area and one or two Awareness Areas simultaneously. Therefore no additional semester credits are required to satisfy the two Awareness Areas.

Cultural Diversity in the U.S. [C] AND Historical Awareness [H] OR Global Awareness [G]

#### 3. MCCCD Additional Requirements

0-6

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

#### a. Oral Communication

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

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

#### 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

Students must select MCCCD 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

**ENG** 

Mathematics102/120/121/122/
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 211/220/222/223/253
CCS	Chicana and Chicano Studies 101
CNS	Construction 101
COM	Communication 241
DAH	Dance Humanities 100/201/250
EDU	Education 291**/292/294

English 200/213/218

**AGS** 

ASB

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 203, 207)
INT	Interior Design 115/120/225
LAT	Latin 201/202
MHL	Music: History/Literature
	140/143/145/146/153/155/242
PHI	Philosophy Any PHI Course(s) (EXCEPT 113)
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 202/203/204
AJS	Administration of Justice Studies 101/162/200/ 225/258/259/270
ASB	Anthropology 102/202/211/214/222/223/230/ 235/238/245/252
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/ 223
HES	Health Science 100
HIS	History Any HIS course(s) (EXCEPT 111,135,204,277)
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/

Sociology Any SOC course(s) (EXCEPT 242, 251, 253,

270/277/280/292

Society and Business 200

Studies in Language & Culture 201

Recreation 120

265, 270)

**REC** 

SBU

SLC

SOC

[54]

SWU	Social Work 102/171/258/292
WED	Wellness Education 110
WST	Women's Studies 100/110/160/161
YAO	Yagui Indian History and Culture 100

Agricultural Science 164/260

Anthropology 231

#### 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.

ASM	Anthropology 104
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/
	150&151LL/151&151LL/152&152LL/
	154&154LL/230&230LL
FON	Food and Nutrition 241&241LL
FOR	Forensic Science 105/106
GLG	Geology Any GLG course(s) (EXCEPT
	140/251MC/275)
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

### **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:	FING 101	OR ENGIO/	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 Province Councie (O Corputs) Durace choose a Toack spour Priority Councie to the Province	D COURCEC IN C	CONCLUEATION	LIMITU AN ADVICO	0	

II. Required Courses (9 Credits) Please choose a Track from Below to Complete the Required Courses in Consultation with an Advisor						
Track:						

Required Courses: Students Must Select one of the Following Ti	RACKS
Track 1: Performance Emphasis (9 Credits)	
STO297 Creating and Telling Personal Stories	3
Students should select a total of 6 credits in consultation with an advisor	from the following:
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
Students should select a total of 6 credits in consultation with an advisor	from the following:
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



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 FOLLO	WING 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			

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

Track 2: Digital Emphasis (12 Credits)	Track 2: Digital Emphasis (12 Credits)				
ENG217 Personal and Exploratory Writing, or	3				
HUM107 Humanities Through the Arts					
Students should select a total of 6 credits in consultation with an advisor from t	he following:				
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				
Students should select a total of 3 credits in consultation with an advisor from t	he following:				
ART111 Drawing l	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				

### **Chicana and Chicano Studies (AC)**

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 Equiv	ALENT						
I. REQUIRED COURSES (9 CREDITS)							
Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	Advisor		
CCS101 Chicano 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 FOLLO	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, S	SPA201, SPA2	02, SPA203	3, 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.

Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	Comments	Apvisoi
ENG101 First Year Composition, OR			,		
ENG107 First Year Composition for ESL	3				
Required Courses (7 Credits)					
Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	Comments	Adviso
PHI216 Environmental Ethics	3				
BIO105 Environmental Biology, OR					
GLG110 Geological Disasters and the Environment, AND	4				
GLG111 Geological Disasters and the Environment Lab					
RESTRICTED ELECTIVES (9 CREDITS)					
Students will choose 2 different course from the following list					
ECN263 Economics of Nature Resources, Population and the	2				
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 Physchology and Culture	3				
SOC101 Introduction to Sociology	3				

### Graduation Requirements

#### General Graduation Requirements

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:

 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.

 have filed an application for the degree or certificate with the Admissions and Records Office/Office of Student Enrollment Services on the date determine 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.
- 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).

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.

### 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.

 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 Publ	ic 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 Subsec	quent 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 Su	bsequent 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 F	Public Community			
College	Fall '04	(Active)		
Transferred to a University	Spring '05	(2004 or		
	Any Subsequ	uent 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.

 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:**

olic Community	Collegeor
Summer '04	(Active)
Fall '04, Spring '05	(Active)
Fall '05	(Inactive)
ublic	
Spring '06	(Active)
Summer '06	(2004 or
Any Subsequ	ient
	Fall '04, Spring '05 Fall '05 Public Spring '06 Summer '06

Catalog)

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

#### **Note: Time Limit for Transfer Coursework**

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







#### **Occupational Programs**

Associate in Applied Science (AAS) Degrees

Accounting	64
Administration of Justice	66
Automation Technology	68
Banking and Finance	70
Computer Applications Technology	73
Culinary Studies	
Emergency Response and Operations	78
Fire Science Technology	80
Hospitality/Hotel Management	
Linux Networking Administration	87
Microsoft Networking Technology	93
Networking Technology: Cisco	
Nursing	
Organizational Management	104
Power Plant Technology	105
Programming and System Analysis	108
Radiation Protection Technology	110
Retail Management	112
Speech Language Pathology Assistant	114
Strength, Nutrition & Personal Training	116
Teacher Assisting	

#### **Occupational Certificates**

Certificate of Completion (CCL)

Accounting	65
Administration of Justice	67
Automation Technology: Level I	67
Baking and Pastry	
Banking and Finance	71
Basic Culinary Studies	72
Building Inspection	
Computer Applications Technology	74
Computer Hardware and Desktop Support	
Culinary Studies	76
Customer Service Management	
Data Entry Clerk	77
Desktop Publishing	77
Driver Operator	
Evidence Technology	80
Fire Officer Leadership	
Fire Science	81
Firefighter Operations	82
Foundations of Student Services	82
General Office Secretary	83
Gifted Education	
Hospitality/Hotel Management	83

Linux Associate	86
Linux Networking Administration	89
Linux Professional	91
Microsoft Desktop Support Technology	92
Microsoft System Administration	
Microsoft Systems Engineer	95
Networking Administration: Cisco	
Networking Technology: Cisco	100
Network Administration: Microsoft Windows Server	96
Nurse Assisting	101
Organizational Leadership	103
Practical Nursing	101
Programming and System Analysis	109
Public Works Leadership	109
Radiation Protection Technology	111
Receptionist	
Retail Management	113
Small Business Management	113
Speech Language Pathology Assistant	115
Web Design	118
Web Developer	119

#### **SouthWest Skill Center Certificate Programs**

Distribution Logistics Technician	121
Emergency Medical Technician	
Medical Assistant	
Medical Billing and Coding	124
Nurse Assistant	
Phlebotomy	125
Practical Nurse	
Spanish Medical Interpreter	129

### **Program Disclosures**

For certificates that are Title IV financial aid eligible, please visit <u>www.estrellamountain.edu/disclosures/programs</u> 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

### **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.

ENERAL EDUCATION CORE REQUIREMENTS (22-24 CREDITS)					
Must earn "C" or higher in all courses required within the program	CREDITS	GRADE	Semester	COMMENTS	Advisor
ENG101or 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				
REQUIRED COURSES (23 CREDITS)					
ACC105 Payroll, Sales and Property Taxes	3				
ACC115 Computerized Accounting	2				
ACC121 Income Tax Preparation, or	3				
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				
Required Courses (6-9 Credits) Please choose 6-9 Credits from the Required Coursi	OPTIONS BELOW				
RESTRICTED ELECTIVES (9 CREDITS) STUDENTS SHOULD SELECT FROM THE FOLLOWING COURSES	IN CONSULTATION W	ITH A DEPARTI	MENT ADVISOR.		
NNOT BE SHARED WITH REQUIRED COURSES): ANY ACC COURSE, BPC/CIS117DM, GBS1	31, GBS207, G	BS220			

Required Course Options (6-9 Credits) Choose 1 Group of Courses from Below		
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 <a href="mailto:estrellamountain.edu/academics/programs">estrellamountain.edu/academics/programs</a>.

\*Courses must meet AAS General Education Requirements (refer to page 52 for approved AAS courses).

### **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.

I. Required Courses (23-26 Credits)					
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				
II. REQUIRED COURSES (6-9 CREDITS) PLEASE CHOOSE 6-9 CREDITS FROM THE REQUIRED COURSE OF	TIONS BELOW				

REQUIRED COURSE OPTIONS (6-9 CREDITS) CHOOSE 1 GROUP OF COURSES FROM BELOW	
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 <a href="mailto:estrellamountain.edu/academics/programs">estrellamountain.edu/academics/programs</a>.

\*Courses must meet AAS General Education Requirements (refer to page 52 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.

First-Year Composition* First-Year Composition*	3				Advisor
· · · · · · · · · · · · · · · · · · ·					
	3				
Oral Communication*	3				
Critical Reading*	3				
Mathematics*	3				
Natural Science*	4				
Humanities/Fine Arts*	3				
Social/Behavior Science*	3				
equired Courses (33 Credits)					
AJS101 Introduction to Criminal Justice	3				
AJS109 Substantive Criminal Law	3				
AJS123 Ethics and the Administration of Justice, or	3				
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				
ESTRICTED ELECTIVES (6 CREDITS) STUDENTS SHOULD SELECT FROM THE FOLLO	WING COURSES IN	CONSULTATION	I WITH A DEPARTMENT	ADVISOR.	
AJS110, AJS124, AJS133, AJS200, AJS201, AJS205, AJS210, AJ					

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 <a href="mailto:estrellamountain.edu/academics/programs">estrellamountain.edu/academics/programs</a>.

### **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 <a href="mailto:estrellamountain.edu/academics/programs">estrellamountain.edu/academics/programs</a>.

\*Courses must meet AAS General Education Requirements (refer to page 52 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.

ENERAL EDUCATION CORE REQUIREMENTS (25-27 CREDITS)						
Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	Adviso	
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					
REQUIRED COURSES (30 CREDITS)						
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 Analig 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					
. RESTRICTED ELECTIVES (9-11 CREDITS) STUDENTS SHOULD SELECT ONE TRACK, AND TAKE THE	REQUIRED ELECT	IVES THEREIN.				
TRACK 1 - Process Control Systems a	nd Program	ming (9 cr	edits)			
ATP160 PLC II-HMI Interfaces and Function Block Programming		_			2	
ATP245 Introduction to Solid Modeling - Solidworks					3	
ATP251 Fluid Power II-Automation Applications						
ATP260 Automation System Integration I						
TRACK 2 - Electromechanical and H	ybrid Syste	ms (11 cre	dits)			
ATP235 CNC Programming						
ATP245 Introduction to Solid Modeling - Solidworks						
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 <a href="mailto:estrellamountain.edu/academics/programs">estrellamountain.edu/academics/programs</a>.

### **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
FON118 Commercial Baking Techniques	3				
FON218 Commercial Baking: Classical Desserts	3				
HRM244 Quality Sanitation Management	3				
FON126 Specialty Breads and Breakfast Pastry	3				
FON221 Commercial Wedding Cake Production	3				
FON224 Professional Pastry Techniques	3				
FON120 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 <a href="mailto:estrellamountain.edu/academics/programs">estrellamountain.edu/academics/programs</a>.

\*Courses must meet AAS General Education Requirements (refer to page 52 for approved AAS courses).

### **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.

ENERAL EDUCATION CORE REQUIREMENTS (23-24 CREDITS)					
Must earn "C" or higher in each course in the	Credits	Grade	Semester	COMMENTS	Advisor
Required Courses and Restricted Electives areas					
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				
REQUIRED COURSES (36 CREDITS)					
ACC111 Accounting Principles I, and					
ACC230 Uses of Accounting Information I, and					
ACC240 Uses of Accounting Information II					
OR	9				
ACC111 Accounting Principles I, and					
ACC112 Accounting Principles II, and					
ACC212 Managerial Accounting					
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				
RESTRICTED ELECTIVES (6 CREDITS) STUDENTS SHOULD SELECT FROM THE FOLLO	WING COURSES IN	CONSULTATION	N WITH A DEPARTMENT	T ADVISOR.	
ACC270AC, GBS270AC, CIS114DE, CIS117DM, GBS114,		*			
	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 <a href="mailto:estrellamountain.edu/academics/programs">estrellamountain.edu/academics/programs</a>.



### **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	6-9				
ACC112 Accounting Principles II, and	0-9				
ACC212 Managerial Accounting					
OR					
ACC211 Financial Accounting, and					
ACC212 Managerial Accounting					
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 <a href="mailto:estrellamountain.edu/academics/programs">estrellamountain.edu/academics/programs</a>.

#### **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: ENGO91, 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				
FON179 Garde Manger	3				
FON119 Catering - Planning and Production	1				
FON 180 Principles and Skills for Professional Cooking	3				
FON118 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	2				
CNS296WC Cooperative Education, or	3				
CNS298AC Special Projects					

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 <u>estrellamountain.edu/academics/programs</u>.

## **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.

Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	Adviso
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>EQUIRED COURSES (30 CREDITS)</b> BPC/CIS120++ COURSES CANNOT BE USED TO	O SATISFY BOTH	"REQUIRED C	OURSES" AND RES	TRICTED <b>E</b> LECTIVES" AREAS.	
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				
RESTRICTED ELECTIVES (9 CREDITS) STUDENTS SHOULD SELECT FROM THE FOLLOWI	NG COURSES IN	CONSULTATIO	N WITH A DEPARTN	IENT ADVISOR.	
BPC/CIS120DB, BPC/CIS120DC, BPC/CIS120DF, BPC170, CIS/MN CIS250	IT140, CIS1	50, CIS159	, CIS233DA, O	AS101AA or OAS102, T	QM/CSM10

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 <a href="mailto:estrellamountain.edu/academics/programs">estrellamountain.edu/academics/programs</a>.

# 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.

I. Required Courses (20 Credits)					
Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	Advisor
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				
II. RESTRICTED ELECTIVES (6 CREDITS) STUDENTS SHOULD SELECT FROM THE FOLLOW	ING COURSES IN (	CONSULTATION	I WITH A DEPARTM	ENT ADVISOR.	
BPC/CIS118 (any Module), BPC/CIS120DB, CIS120DC, BPC/CIS OAS102, TQM101					01AA or

## Computer Hardware and Desktop Support - Certificate of Completion (5026)

**Description:** The Certificate of Completion in Computer Hardware and Desktop Support 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 through an internship.

PROGRAM PREREQUISITES: IF REQUIRED					
Required Courses (16-20 Credits)					
Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	Adviso
BPC110 Computer Usage and Applications, or	3				
CIS105 Survey of Computer Information Systems	3				
BPC/CIS121AB MS-DOS Operating System	1				
BPC170 Computer Maintenance I: A+ Prep	3				
BPC171 Recycling Used Computer Technology	1				
BPC270 Microcomputer Maintenance II	3				
CIS102 Customer Service/Technical Support	1				
CIS190 Introduction to Local Area Networks, or					
CNT140 Cisco Networking Basics, or	3-4				
MST140 Microsoft Networking Essentials					
CIS290AA Internship (1), or					
CIS290AB Internship (2), or	1-4				
CIS290AC Internship (3), or	1-4				
CIS296W- Cooperative Education (Any module)					

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 <a href="mailto:estrellamountain.edu/academics/programs">estrellamountain.edu/academics/programs</a>.

#### **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, RDG091, and MAT090, 091, or 092

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				
Required Courses (36 Credits)					
FON100 Introductory Nutrition	3				
HRM126 Food Cost Systems	2				
HRM140 Food Production Concepts	3				
FON118 Commercial Baking Techniques	3				
FON144 Gourmet Foods	3				
FON 179 Garde Manager	3				
FON182 American Regional Cuisine	3				
FON183 International Cuisines	3				
FON119 Catering – Planning and Production	1				
FON180 Principles and Skills for Professional Cooking	3				
FON218 Commercial Baking: Classical Desserts	3				
HRM244 Quality Sanitation Management	3				
HRM275 Restaurant Management	3				
<b>RESTRICTED ELECTIVES (3 CREDITS)</b> STUDENTS SHOULD SELECT FROM THE FOLLO	OWING COURSES IN	CONSULTATIO	N 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 <a href="mailto:estrellamountain.edu/academics/programs">estrellamountain.edu/academics/programs</a>.

#### **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.

REQUIRED COURSES (33 CREDITS)					
FON100 Introductory Nutrition	3				
HRM126 Food Cost Systems	2				
HRM140 Food Production Concepts	3				
FON118 Commercial Baking Techniques	3				
FON144 Gourmet Foods	3				
FON179 Garde Manger	3				
FON182 American Regional Cuisine	3				
FON119 Catering - Planning and Production	1				
FON180 Principles and Skills for Professional Cooking	3				
FON218 Commercial Baking: Classical Desserts	3				
HRM244 Quality Sanitation Management	3				
RESTRICTED ELECTIVES (3 CREDITS) STUDENTS SHOULD SELECT FROM THE FOLLOW	VING COURSES IN	CONSULTATIO	ON WITH A DEPAR	TMENT ADVISOR.	

### **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.

I. Required Courses (9 Credits)					
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 <a href="mailto:estrellamountain.edu/academics/programs">estrellamountain.edu/academics/programs</a>.

#### **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	2								
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 <a href="mailto:estrellamountain.edu/academics/programs">estrellamountain.edu/academics/programs</a>.

#### **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 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.

+ 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. GENERAL EDUCATION CORE REQUIREMENTS (25 CREDITS) Must earn "C" or higher in all courses within the program **C**REDITS GRADE SEMESTER COMMENTS **A**DVISOR 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>. Required Courses (17.5-24 Credits)</b> Please choose a track from Below to Complete the Required Courses									
Track:									
III. RESTRICTED ELECTIVES (14-20.5 CREDITS) STUDENTS SHOULD SELECT FROM THE	FOLLOWING CC	OURSES IN CON	SULTATION WITH A	A DEPARTMENT ADVISOR.					
Any AJS, DPR, EMT, FSC, LET courses. Cannot be shared with Re	equired Cou	ırses.							

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 <a href="mailto:estrellamountain.edu/academics/programs">estrellamountain.edu/academics/programs</a>.

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

REQUIRED COURSES: STUDENTS MUST SELECT ONE OF THE FOLLOWING FOUR TRACKS	
Track I: Fire Operations (18 Credits Required)	
Program Prerequsite: 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: ADVANCED EMERGENCY MEDICAL TECHNOLOGY-PARAMEDIC (17.5 CREDITS REQUIRED)	
Program Prerequsite: Current validation in Basic Life Support (BLS) Health Care Provider/Professional Rescuer, OR	
EMT235 AND EMT236, OR	
Advanced cardiac life support course, OR	
Emergency cardiac care course AND Current employment as n EMT Paramedic, OR	
Permission of Program Director	
EMT242 Pediatric Advanced Life Support, or	1
EMT265 Pediatric Education for Prehospital Providers: Advanced	1
EMT240 Advanced Cardiac Life Support	2
EMT245 Trauma Management I	2
EMT272AA Advanced Emergency Medical Technology	12.5
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	3
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 <a href="mailto:estrellamountain.edu/academics/programs">estrellamountain.edu/academics/programs</a>.

#### **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.

Must earn "C" or higher in all courses within the program	<b>C</b> REDITS	GRADE	SEMESTER	COMMENTS	Adviso
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				
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				
RESTRICTED ELECTIVES (4 CREDITS) STUDENTS SHOULD SELECT FROM THE FOLLOWII	NG COURSES IN	CONSULTATION	N WITH A DEPARTMEN	T ADVISOR.	
Any approved FSC course. Cannot be shared with Required Cou	ırses.				

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 <a href="mailto:estrellamountain.edu/academics/programs">estrellamountain.edu/academics/programs</a>.

#### 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.

#### **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.

+ Program Prerequisites (3-13 Credits)					
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				
I. REQUIRED COURSES (14 CREDITS)					
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.

I. Required Courses (12 Credits)					
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 <a href="mailto:estrellamountain.edu/academics/programs">estrellamountain.edu/academics/programs</a>.

#### **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 Academic Certificate (AC) 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 <a href="mailto:estrellamountain.edu/academics/programs">estrellamountain.edu/academics/programs</a>.

#### **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.

I. Required Courses (32 Credits)					
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				
II. RESTRICTED ELECTIVES (6 CREDITS) STUDENTS SHOULD SELECT FROM THE FOLLOWING	COURSES IN CONS	SULTATION WIT	H A DEPARTMENT A	DVISOR.	
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 <u>estrellamountain.edu/academics/programs</u>.

### 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.

Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	Adviso
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				
REQUIRED COURSES (32 CREDITS)					
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				
	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 <a href="mailto:estrellamountain.edu/academics/programs">estrellamountain.edu/academics/programs</a>.

#### **Linux Associate - Certificate of Completion (5291)**

**Description:** The Certificate of Completion (CCL) Linux Associate program will 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 ensure a student's knowledge and skill level in preparation for employment or for improving current professional skills. Objectives for a variety of industry certifications are encompassed within course and program objectives.

I. REQUIRED COURSES (12 CREDITS)					
Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	Comments	Advisor
CIS126DL Linux Operating System or CIS126AL Linux Operating System I, and CIS126BL Linux Operating System II, and CIS126CL Linux Operating System III	3				
CIS238DL Linux System Administration	3				
CIS240DL Linux Network Administration	3				
CIS271DL Linux Security	3				
II. RESTRICTED ELECTIVES (12 CREDITS) PLEASE CHOOSE FROM THE LIST OF RESTRICTE	ELECTIVES <b>B</b> EL	ow.			

RESTRICTED ELECTIVES (12 CREDITS REQUIRED) STUDENTS SHOULD SELECT FROM THE FOLLOWING COURSES IN CONSULTATION	I WITH A DEPARTMENT ADVISOR.
BPC/CIS121AB Microsoft Command Line Operations	1
BPC/CIS133DA Internet/Web Development Level I, or	2
CNT120 Adobe Web Design	3
BPC170 Computer Maintenance I: A+ Prep	3
BPC/CIS224 Project Management Microsoft Project for Windows	3
BPC273 Advanced Server Computer Maintenance: Server+Prep	3
CIS105 Survey of Computer Information Systems	3
CIS190 Introduction to Local Area Networks	3
CNT140 Cisco Networking Basics (4), or	3-4
MST140 Microsoft Networking Essentials (3)	3-4
CIS233DA Internet/Web Development Level II	3
CIS239DL Linux Shell Scripting	3
CIS270 Essentials of Network and Information Security	3
CNT150 Cisco Network Router Technologies	4
MST150 Microsoft Windows Professional	3
CIS280 Current Topics in Computing	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 <a href="mailto:estrellamountain.edu/academics/programs">estrellamountain.edu/academics/programs</a>.



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

**Description:** This program will 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 ensure a student's knowledge and skill level in preparation for employment or for improving current professional skills. Objectives for a variety of industry certifications are encompassed within course and program objectives.

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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 <a href="mailto:estrellamountain.edu/academics/programs">estrellamountain.edu/academics/programs</a>.

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

RESTRICTED ELECTIVES (12 CREDITS REQUIRED) STUDENTS SHOULD SELECT FROM THE FOLLOWING COURSES IN C	ONSULTATION WITH A DEPARTMENT ADVISOR.
BPC110 Computer Usage and Applications, or	3
CIS105 Survey of Computer Information Systems	3
BPC/CIS120DF Computer Graphics: Adobe Photoshop	3
BPC/CIS121AB Microsoft Command Line Operations	1
BPC/CIS133DA Internet/Web Development Level I	3
BPC170 Computer Maintenance I: A+ Prep	3
BPC/CIS224 Project Management Microsoft Project for Windows	3
BPC270 Microcomputer Maintenance II	3
BPC273 Advanced Server Computer Maintenance: Server+Prep	3
BPC/CIS120DC Computer Graphics: Macromedia Flash	3
CIS190 Introduction to Local Area Networks	3
CNT140 Cisco Networking Basics (4), or	3-4
MST140 Microsoft Networking Essentials (3)	3-4
CIS233DA Internet/Web Development Level II	3
CIS270 Essentials of Network and Information Security	3
CIS296WC Cooperative Education	3
CIS298AC Special Projects	3
CNT120 Adobe Web Design	3
CNT150 Cisco Network Router Technologies	4
CNT160 Cisco Switching Basics and Intermediate Routing	3
CNT170 Cisco Wide Area Networks (WAN)	3
MST150++ Microsoft Windows Professional (Any Module)	3
MST152++ Microsoft Windows Server (Any Module)	4
MST155 Implementing Windows Network Environment	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

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 <u>estrellamountain.edu/academics/programs</u>.

#### **Linux Networking Administration - Certificate of Completion (5255)**

**Description:** The Certificate of Completion (CCL) Linux Networking Administration program will 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 ensure a student's knowledge and skill level in preparation for employment or for improving current professional skills. Objectives for a variety of industry certifications are encompassed within course and program objectives.

I. Required Courses (24-25 Credits)					
Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	Comments	Advisor
BPC170 Computer Maintenance I: A+ Prep, or	3				
BPC273 Advanced Server Computer Maintenance: Server+Prep	J				
CIS126DL Linux Operating System or					
CIS126AL Linux Operating System I, and	3				
CIS126BL Linux Operating System II, and	3				
CIS126CL Linux Operating System III					
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	3-4				
MST140 Microsoft Networking Essentials (3)					
MST150++ Microsoft Windows Professional (Any Module)	3				
III. RESTRICTED ELECTIVES (12 CREDITS) PLEASE CHOOSE FROM THE LIST OF RESTRICTED E	LECTIVES BELOV	V.			

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 <a href="mailto:estrellamountain.edu/academics/programs">estrellamountain.edu/academics/programs</a>.



# Linux Networking Administration - Certificate of Completion (5255) continued

RESTRICTED ELECTIVES (12 CREDITS REQUIRED) STUDENTS SHOULD SELECT FROM THE FOLLOWING COURSES IN CONSULTATION WITH A DEPARTMENT	NT ADVISOR.
BPC110 Computer Usage and Applications, or	2
CIS105 Survey of Computer Information Systems	3
BPC/CIS120DF Computer Graphics: Adobe Photoshop	3
BPC/CIS121AB Microsoft Command Line Operations	1
BPC/CIS133DA Internet/Web Development Level I	3
BPC170 Computer Maintenance I: A+ Prep	3
BPC/CIS224 Project Management Microsoft Project for Windows	3
BPC270 Microcomputer Maintenance II	3
BPC273 Advanced Server Computer Maintenance: Server+Prep	3
BPC/CIS120DC Computer Graphics: Macromedia Flash	3
CIS190 Introduction to Local Area Networks	3
CNT140 Cisco Networking Basics (4), or	3-4
MST140 Microsoft Networking Essentials (3)	3-4
CIS233DA Internet/Web Development Level II	3
CIS270 Essentials of Network and Information Security	3
CIS296WC Cooperative Education	3
CIS298AC Special Projects	3
CNT120 Adobe Web Design	3
CNT150 Cisco Network Router Technologies	4
CNT160 Cisco Switching Basics and Intermediate Routing	3
CNT170 Cisco Wide Area Networks (WAN)	3
MST150++ Microsoft Windows Professional (Any Module)	3
MST152++ Microsoft Windows Server (Any Module)	4
MST155 Implementing Windows Network Environment	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

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 <a href="mailto:estrellamountain.edu/academics/programs">estrellamountain.edu/academics/programs</a>.

#### **Linux Professional - Certificate of Completion (5204)**

**Description:** The Certificate of Completion (CCL) Linux Professional program will 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 ensure a student's knowledge and skill level in preparation for employment or for improving current professional skills. Objectives for a variety of industry certifications are encompassed within course and program objectives.

I. Required Courses (6 Credits)					
Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	Advisor
CIS126DL Linux Operating System or					
CIS126AL Linux Operating System I, and					
CIS126BL Linux Operating System II, and	3				
CIS126CL Linux Operating System III					
CIS238DL Linux System Administration	3				
II. RESTRICTED ELECTIVES (6 CREDITS) PLEASE CHOOSE FROM THE LIST OF RESTRICTED	ELECTIVES BELO	W.			

RESTRICTED ELECTIVES (12 CREDITS REQUIRED) STUDENTS SHOULD SELECT FROM THE FOLLOWING COURSES IN CONSULTATION WITH A DEPARTME	NT ADVISOR.
BPC/CIS121AB Microsoft Command Line Operations	1
BPC170 Computer Maintenance I: A+ Prep	3
BPC273 Advanced Server Computer Maintenance: Server+Prep	3
CIS105 Survey of Computer Information Systems	3
CIS190 Introduction to Local Area Networks	3
CIS240DL Linux Network Administration	3
CIS270 Essentials of Network and Information Security	3
CIS271DL Linux Security	3
CNT140 Cisco Networking Basics (4), or	3-4
MST140 Microsoft Networking Essentials (3)	3-4
CNT150 Cisco Network Router Technologies	4
MST150++ Microsoft Windows Professional (Any Module)	3
CIS280 Current Topics in Computing	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 <a href="mailto:estrellamountain.edu/academics/programs">estrellamountain.edu/academics/programs</a>.

## 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	2				
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	3-4				
MST140 Microsoft Networking Essentials (3)					
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 <u>estrellamountain.edu/academics/programs</u>.



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

**Description:** The Associate in Applied Science in Microsoft Networking Technology develops skills to implement a network infrastructure and install, configure, monitor, optimize, and troubleshoot Windows server and Windows client workstations. Courses in the program also help to prepare for Microsoft Certified Product Specialist (MCP), Microsoft Certified Systems Administrator (MCSA), and Microsoft Certified Systems Engineer (MCSE) examinations. The curriculum is taught by Microsoft Certified Professionals.

ENERAL EDUCATION CORE REQUIREMENTS (25 CREDITS)					
Must earn "C" or higher in all courses within the program	CREDITS	GRADE	Semester	Comments	Adviso
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				
EQUIRED COURSES (24-25 CREDITS)					
BPC/CIS121AB MS-DOS Operating System	1				
BPC170 Computer Maintenance I: A+ Prep	3				
CIS102 Interpersonal and Customer Service Skills for IT					
fessionals	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	2				
CIS126DL Linux Operating System (3), or	3				
CIS126AL Linux Operating System I (1), and					
CIS126BL Linux Operating System II (1), and					
CIS126CL Linux Operating System III (1)					
CIS190 Introduction to Local Area Networks (3), or					
CNT140 Cisco Networking Basics (4), or	3-4				
MST140 Microsoft Networking Essentials (3)					
MST150++ Any Course Module	3				
MST152++ Any Course Module	4				
MST155 Implementing Windows Network Infrastructure	3				
MST157 Implementing Windows Directory Services	3				
RESTRICTED ELECTIVES (13 CREDITS) STUDENTS SHOULD SELECT FROM THE FOLLOW	VING COURSES I	N CONSULTATI	ON WITH A DEPARTME	INT ADVISOR.	
THE POLICE					

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 <a href="mailto:estrellamountain.edu/academics/programs">estrellamountain.edu/academics/programs</a>.

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

RESTRICTED ELECTIVES (13 CREDITS REQUIRED)	
Students should select from the following courses in consultation with a department advisor. Courses cannot be shared with Ri	EQUIRED COURSES.
BPC110 Computer Usage and Applications, or	3
CIS105 Survey of Computer Information Systems	3
BPC171 Recycling Use Computer Technology	1-3
BPC270 Microcomputer Maintenance II	3
CIS150 Programming Fundamentals	3
CIS159 Visual Basic Programming I	3
CIS162AB C++: Level I, or	3
CIS162AC Visual C++: Level I	3
CIS280++ Any CIS280 Course	1-3
NOTE: Students may select no more than four (4) credits combined from CIS282AA-AC, CIS290AA-AC and CIS296WA-W	'D courses.
CIS282++ Volunteerism for Computer Information Systems: A Service Learning Experience (Any Module), or	
CIS290++ Computer Information Systems Internship (Any Module), or	1-4
CIS296++ Cooperative Education (Any Module)	
CNT150 Cisco Networking Router Technologies	4
MST141 Supporting Microsoft Windows Desktop Operating Systems	3
MST142 Supporting Applications on Microsoft Windows Desktop Operating Systems	3
MST150++ Any MST150 course	3
MST152++ Any MST152 course (Cannot be shared with Required Courses)	4
MST232 Managing a Windows Network Environment	3
MST242 Microsoft Exchange Server	4
MST244 Microsoft SQL Server Administration	3
MST253 Designing a Microsoft Windows 2000 Directory Services Infrastructure	3
MST254 Microsoft SQL Server Design and Implementation	3
MST255 Designing Windows Network Infrastructure	3
MST259 Designing Windows Network Security	3
MST298A++ Special Projects (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 <u>estrellamountain.edu/academics/programs</u>.

#### Microsoft Systems Administration - Certificate of Completion (5852)

**Description:** The Certificate of Completion in Microsoft Systems Administration provides 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 also prepare for Microsoft Certified Product Specialist (MCP), Microsoft Certified Systems Administrator (MCSA), and Microsoft Certified Systems Engineer (MCSE) examinations.

+ PROGRAM PREREQUISITES: CIS105 OR PERMISSION OF DEPARTMENT/DIVISION	ON				
I. Required Courses (20-21 Credits)					
Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	Advisor
BPC/CIS121AB MS-DOS Operating System	1				
BPC170 Computer Maintenance I: A+ Prep	3				
CIS190 Introduction to Local Area Networks (3), or					
CNT140 Cisco Networking Basics (4), or	3-4				
MST140 Microsoft Networking Essentials (4)					
MST150++ Any MST150 course	3				
MST152++ Any MST152 course	4				
MST155 Implementing Windows Network Infrastructure	3				
MST232 Managing a Windows Network Environment	3				

### **Microsoft Systems Engineer - Certificate of Completion (5843)**

**Description:** The Certificate of Completion in Microsoft Systems Engineer provides training for an intermediate- to supervisory-level position working with Windows networks. The program develops skills to install, configure, customize, optimize, and troubleshoot Windows servers, Windows client workstations and Microsoft Backoffice products. The courses in the program also help to prepare for Microsoft Certified Product Specialist (MCP), Microsoft Certified Systems Administrator (MCSA), and Microsoft Certified Systems Engineer (MCSE) examinations. The curriculum is taught by Microsoft Certified Professionals.

+ PROGRAM PREREQUISITES: CIS105 OR PERMISSION OF DEPARTMENT/DIVISION					
I. Required Courses (32-33 Credits)					
Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	COMMENTS	Advisor
BPC/CIS121AB MS-DOS Operating System	1				
BPC170 Computer Maintenance I: A+ Prep	3				
CIS190 Introduction to Local Area Networks (3), or					
CNT140 Cisco Networking Basics (4), or	3-4				
MST140 Microsoft Networking Essentials (4)					
MST150++ Any MST150 course	3				
MST152++ Any MST152 course	4				
MST155 Implementing Windows Network Infrastructure	3				
MST157 Implementing Windows Directory Services	3				
MST232 Managing a Windows Network Environment	3				
MST244 Microsoft SQL Server Administration	3				
MST253 Designing a MS Windows 2000 Directory Services Infrastructure, or	,				
MST259 Designing Windows Network Security	3				
MST255 Designing Windows Network Infrastructure	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 <a href="mailto:estrellamountain.edu/academics/programs">estrellamountain.edu/academics/programs</a>.



## Network Administration: Microsoft Windows Server - Certificate of Completion (5124)

Description: The Certificate of Completion (CCL) in Network Administration: Microsoft Windows Server program provides students with background knowledge and skills required for learning the specific tasks and industry recognized standards associated with computer networks and data communications. This program also prepares students to complete the required certification tests for Microsoft Administrator.

- + PROGRAM PREREQUISITES: CRE101 OR EQUIVALENT BY ASSESSMENT
- + Program Note: The Network core courses will also prepare students towards certification in Microsoft and Novell

I. Required Courses (18 Credits)					
Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	Comments	Advisor
CIS105 Survey of Computer Information Systems, or BPC110 Computer Usage and Applications	3				
MST150 or MST150++ Any MST150 course	3				
MST155DA Windows Server Network Infrastructure Configuration	4				
MST157DA Active Directory Windows Server Configuration	4				
MST152 Microsoft Windows Server, or MST152DA Microsoft Windows 2000 Server, or MST152DB Microsoft Windows 2003 Server, or 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 <u>estrellamountain.edu/academics/programs</u>.

#### 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	л 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
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 <a href="mailto:estrellamountain.edu/academics/programs">estrellamountain.edu/academics/programs</a>.

#### **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.

Must earn "C" or higher in all courses within the program	CREDITS	GRADE	Semester	Comments	Adviso
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				
EQUIRED 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				
REQUIRED COURSES FROM TRACK 1 OR TRACK 2 (14-18 CREDITS) PLEASE	E CHOOSE A TRACK F	rom Page 2	то <b>С</b> омр <i>l</i> ете тне	REQUIRED COURSES	
Track 1: Exploration or Track 2: Discovery -	14-18				
RESTRICTED ELECTIVES (15 CREDITS) PLEASE CHOOSE FROM THE LIST OF RESTR	RICTED ELECTIVES ON	PAGE 2. COU	RSES CANNOT BE SI	HARED WITH ANY REQUIRED COU	JRSES.

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 <u>estrellamountain.edu/academics/programs</u>.

# 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	3
CIS105 Survey of Computer Information Systems (3)	3
CIS126 UNIX/Linux Operating System (Any Module) (3), or	2
MST150 Microsoft Windows Professional (Any Module) (3)	3
CIS190 Introduction to Local Area Networks (3), or	2
MST140 Microsoft Networking Essentials (3)	3
CIS270 Essentials of Network and Information Security	3
CIS296WA Cooperative Education (1), or	
CIS296WB Cooperative Education (2), or	1 4
CIS296WC Cooperative Education (3), or	1-4
CIS296WD Cooperative Education (4)	
CIS298AA Special Projects (1), or	
CIS298AB Special Projects (2), or	1-3
CIS298AC Special Projects (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	1-3
CIS290AC Computer Information Systems 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 <a href="mailto:estrellamountain.edu/academics/programs">estrellamountain.edu/academics/programs</a>.

#### **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 C	HOOSE A TRACK F	ROM PAGE 2	то Сомреете тне	REQUIRED COURSES	
Track 1: Exploration or Track 2: Discovery -	14-18				
	İ				

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 <a href="mailto:estrellamountain.edu/academics/programs">estrellamountain.edu/academics/programs</a>.

#### **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.

IN TATIENT CAME OFFICE THE CENTIFICATE AND ON EIGENSE IS TALIS AND OTHER THICTEST					
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	0-4				
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	0-4				
school chemistry					
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				

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 <a href="mailto:estrellamountain.edu/academics/programs">estrellamountain.edu/academics/programs</a>.

\*Courses must meet AAS General Education Requirements (refer to page 52 for approved AAS courses).

**NUR191 Practical Nursing Transition Course** 

#### **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.

+ Program Notes: 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. + Admission Criteria: High School Diploma/GED, Formal Application and Admission is Required, and a Passing score on a nursing program admission test is required to complete an application. More information on Admission Criteria on Page 2. + Program Prerequisites (10-20 Credits) The credit hour range is subject to change depending on the student's education experience. Must earn "C" or higher in all courses within the program **C**REDITS GRADE SEMESTER COMMENTS Advisor BIO156 Introductory Biology for Allied Health, or BIO181 General Biology (Majors) I, or 0-4 One year of high school biology BIO201 Human Anatomy and Physiology I CHM130 and CHM130LL Fundamental Chemistry and Lab 4 MAT120 or MAT121 or MAT122 Intermediate Algebra, or 3-5 Satisfactory completion of higher level mathematics course PSY101 Introduction to Psychology, or 3 PSY240 Developmental Psychology I. GENERAL EDUCATION CORE REQUIREMENTS (16-19 CREDITS) 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 II. REQUIRED COURSES (35 CREDITS) NUR151 Nursing Theory and Science I 10 NUR171 Nursing Theory and Science II 8 NUR251 Nursing Theory and Science III 8

7

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 <u>estrellamountain.edu/academics/programs</u>.

NUR271 Nursing Theory and Science IV

NUR291 Nursing Clinical Capstone

#### **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	3				
CIS105 Survey of Computer Information Systems					
GBS110 Human Relations in Business and Industry, or	2				
MGT251 Human Relations in Business	3				
GBS151 Introduction to Business	3				
GBS233 Business Communication	3				
MGT175 Business Organization and Management (3), or	2-3				
TQM240 Project Management in Quality Organizations (2)	2-3				
MGT101 Techniques of Supervision, or	2				
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 <u>estrellamountain.edu/academics/programs</u>.

#### **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.

ENG101 or ENG107  ENG102 or ENG108  Oral Communication*  CRE101 or Equivalent by assessment  Mathematics*  Natural Science*  Humanities/Fine Arts*  Social/Behavior Science*	GRAE 3 3 3 3 3 0-3 6-5 4 3	DE SEMESTER	COMMENTS	Advisor
ENG102 or ENG108  Oral Communication*  CRE101 or Equivalent by assessment  Mathematics*  Natural Science*  Humanities/Fine Arts*  Social/Behavior Science*	3 3 3 0-3 3-5 4			
Oral Communication*  CRE101 or Equivalent by assessment  Mathematics*  Natural Science*  Humanities/Fine Arts*  Social/Behavior Science*	3 0-3 8-5 4			
CRE101 or Equivalent by assessment  Mathematics*  Natural Science*  Humanities/Fine Arts*  Social/Behavior Science*	0-3 3-5 4			
Mathematics* 3 Natural Science* Humanities/Fine Arts* Social/Behavior Science*	3-5 4			
Natural Science* Humanities/Fine Arts* Social/Behavior Science*	4			
Humanities/Fine Arts* Social/Behavior Science*				
	J			
o clair, beliation believed	3			
<b>REQUIRED COURSES (17-1X CREDITS)</b> COMPLETION OF CERTIFICATE OF COMPLETION IN G	-	FADERSHIP (5731)		
RPC110 Computer Usage and Application or		-EADENSHIF (3731)		
CIS105 Survey of Computer Information Systems	3			
GRS110 Human Relations in Rusiness and Industry, or				
MGT251 Human Relations in Business	3			
	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	3			
MGT229 Management and Leadership  RESTRICTED ELECTIVES (19-25 CREDITS) STUDENTS MUST CHOOSE 19-25 INDUSTRY,				

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 <u>estrellamountain.edu/academics/programs</u>.

#### **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.

GENERAL EDUCATION CORE REQUIREMENTS (22 CREDITS)  Must earn "C" or higher in all courses within the program	CREDITS	GRADE	Semester	Comments	Advisor
ENG101	3				
ENG102 or ENG111	3				
COM100 or COM110	3				
CRE101 or CRE111 or equivalent by assessment	3				
Mathematics Waived. Met by MET107 & MET108 in Required ourses	0				
PHS110	4				
Humanities/Fine Arts*	3				
Social/Behavior Science*	3				
. Required Courses (21 Credits)			·		
BPC101AA Introduction to Microcomputers I: IBM	1				
GTC/FAC/MIT/OSH106 Industrial Safety	2				
GTC/MET107 Technical Mathematics I	3				
GTC/MET108 Technical Mathematics 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				
I. RESTRICTED ELECTIVES (17 CREDITS) STUDENTS SHOULD SELECT FROM THE FOLLOW	VING COURSES I	N CONSULTATION	ON WITH A DEPARTME	NT 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 <a href="mailto:estrellamountain.edu/academics/programs">estrellamountain.edu/academics/programs</a>.



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

**Restricted Electives: Credits: 17** 

Students will select one of the following tracks and complete 17 craft-related credits from the list of restricted elective courses indicated in each specialty track below.

	Track I: Power Plan Technolo	gy: 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
	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 Technol	ogy: 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 <a href="mailto:estrellamountain.edu/academics/programs">estrellamountain.edu/academics/programs</a>.

# 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 Techno	ology: Heating, Ventilation and Air Conditioning					
+	FAC101	Refrigeration Applications and Components I	3				
	FAC101LL	Refrigeration Applications and Components I Lab	1				
	FAC105	Electricity for Industry	3				
	FAC105LL	Electricity for Industry Electricity for Industry Lab	1				
	FAC115	Motors, Controls and Wiring Diagrams	3				
	FAC115LL	Motors, Controls and Wiring Diagrams  Motors, Controls and Wiring Diagrams Lab	1				
	FAC210	Facilities Air Conditioning Systems	3				
	FAC210LL	- ·					
		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 Technol	logy: 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 Techno	ology: Machining					
+		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				
+	MET206	CNC Programming	3				
'	GTC236	CAD/CAM Computer Numerical Control (CNC) Programming	3				
		Crub, Crust Computer Numerical Control (CNC) Hogianifilling	5				
			2				
+	MET260 MET264	Tooling and Fixturing Manufacturing Process Planning	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 <a href="mailto:estrellamountain.edu/academics/programs">estrellamountain.edu/academics/programs</a>.

\*Courses must meet AAS General Education Requirements (refer to page 52 for approved AAS courses).

Track III: Power Plan Technology: Instrumentation

# **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.

ENERAL EDUCATION CORE REQUIREMENTS (22-24 CREDITS)  Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	Comments	Apviso
ENG101 or ENG107	3	0.0.02	JEMESTER.	<b>C</b> 01111121113	7 15 1150
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				
EQUIRED COURSES (36-37 CREDITS) STUDENTS SHOULD SELECT COURSES IN CONSULTATION WI		NT 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	3				
MST150VI Microsoft Windows Vista Administration, or					
MST150XP Microsoft Windows XP Professional					
CIS150 Programming Fundamentals, or	2				
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	3				
CIS166AD Web Scripting with Java Server Pages (JSP), or					
CIS166AE Web Scripting with PHP: Hypertext Preprocessor (PHP), or					
CIS166AF Web Scripting with Python					
CIS190 Introduction to Local Area Networks, or					
CNT140 Cisco Networking Basics, or	3-4				
MST140 Microsoft Networking Essentials					
CIS225 Business Systems Analysis and Design, or					
CIS225AB Object-Oriented Analysis and Design, or	3				
CIS250 Management of Information Systems					
BPC/CIS217AM Advanced Microsoft Access: Database Management, or					
CIS119DO Introduction to Oracle: SQL, or	3				
CIS276DA My SQL Database	E0 CIS: 1-	CICA 12.1	CICACCAC	164 60 A B 1616 : -	
Select two courses from the following for a total of 6 credits: CIS151, CIS1		CIS162AB,	CIS162AC, C	IS162AD, CIS16	3AA
	3				-
	3				
RESTRICTED ELECTIVES (6 CREDITS) STUDENTS SHOULD SELECT FROM THE FOLLOWING COURSES I	N CONSULTATIO	N WITH A DEPA	RTMENT 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 <a href="mailto:estrellamountain.edu/academics/programs">estrellamountain.edu/academics/programs</a>.

\*Courses must meet AAS General Education Requirements (refer to page 52 for approved AAS courses).

### 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	3				
MST150VI Microsoft Windows Vista Administration, or					
MST150XP Microsoft Windows XP Professional					
CIS150 Programming Fundamentals, or	3				
CIS150AB Object-Oriented Programming Fundamentals					
CIS151 Computer Game Development: Level I, or					
CIS159 Visual Basic Programming I, or	3				
CIS162++ Any C Programming: Level I course, or					
CIS163AA Java Programming: Level I					
CIS225 Business Systems Analysis and Design, or	_				
CIS225AB Object-Oriented Analysis and Design, or	3				
CIS250 Management of Information Systems					
BPC/CIS217AM Advanced Microsoft Access: Database					
Management, or	3				
CIS119DO Introduction to Oracle: SQL, or					
CIS276DA My SQL Database					
II. RESTRICTED ELECTIVES (3 CREDITS) STUDENTS SHOULD SELECT FROM THE FOLLOWING O	COURSES IN CON	SULTATION WI	TH A DEPARTMENT	ADVISOR.	
CIS251, CIS259, CIS262 (any module), CIS263AA	1				

### **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	1-3				
BLT298AC 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 <a href="mailto:estrellamountain.edu/academics/programs">estrellamountain.edu/academics/programs</a>.

\*Courses must meet AAS General Education Requirements (refer to page 52 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.

ieneral Education Core Requirements (28 Credits)  Must earn "C" or higher in all courses within the program	CREDITS	GRADE	Semester	COMMENTS	Advisor
ENG101	3	GIADE	SEMESTER	COMMENTS	7 (DVISOR
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				
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				
	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 <u>estrellamountain.edu/academics/programs</u>.

### 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.

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				
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 <a href="mailto:estrellamountain.edu/academics/programs">estrellamountain.edu/academics/programs</a>.

\*Courses must meet AAS General Education Requirements (refer to page 52 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.

ENERAL EDUCATION CORE REQUIREMENTS (25 CREDITS)  Must earn "C" or higher in all courses within the program	CREDITS	GRADE	Semester	Comments	Adviso
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				
REQUIRED COURSES (39 CREDITS)	·				
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	2				
IND133 Speaking in Business	3				
GBS110 Human Relations in Business and Industry, or	3				
MGT251 Human Relations in Business	3				
GBS131 Business Calculations, or	3				
GBS161 Mathematics of Business	3				
GBS205 Legal, Ethical, and Regulatory Issues in Business	3				
GBS233 Business Communication	3				
MGT101 Techniques of Supervision, or	3				
MGT229 Management and Leadership	3				
MGT179 Utilizing the Human Resources Department, or	3				
MGT276 Personnel/Human Resources Management	3				
MKT268 Merchandising, or	3				
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 <u>estrellamountain.edu/academics/programs</u>.

### **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 competed 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 <a href="mailto:estrellamountain.edu/academics/programs">estrellamountain.edu/academics/programs</a>.

\*Courses must meet AAS General Education Requirements (refer to page 52 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 Statue for Speech Language Pathology Assistants. In addition to work in the classroom, the program provides students with the opportunity to gain practical experience in working with clients/patients in a variety of settings under the direction and supervision of an ASHA certified speech-language pathologist. A CCL in Speech-Language Pathology Assistant is also available.

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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 <a href="mailto:estrellamountain.edu/academics/programs">estrellamountain.edu/academics/programs</a>.



# **Speech Language Pathology Assistant - Certificate of Completion** (5994)

**Description:** The Certificate of Completion (CCL) in Speech-Language Pathology Assistant is designed to provide comprehensive academic and practical education and training for Speech-Language Pathology Assistants. The program provides training in working with speech and language disordered adults and children, including bilingual populations. The program content is based upon the recommendations of the American Speech-Language-Hearing Association (ASHA) and the Arizona State Licensure Statue for Speech Language Pathology Assistants. In addition to work in the classroom, the program provides students with the opportunity to gain practical experience in working with clients/patients in a variety of settings under the direction and supervision of an ASHA certified speech-language pathologist. An AAS in Speech-Language Pathology Assistant is also available.

I. Required Courses (35 Credits)					
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	3				
SLP235AC Speech-Language Pathology Practicum					
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 <a href="mailto:estrellamountain.edu/academics/programs">estrellamountain.edu/academics/programs</a>.

# 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.

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				
REQUIRED COURSES (37-40 CREDITS)					
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				İ
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 <a href="mailto:estrellamountain.edu/academics/programs">estrellamountain.edu/academics/programs</a>.

\*Courses must meet AAS General Education Requirements (refer to page 52 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.

Must earn "C" or higher in all courses within the program	CREDITS	GRADE	SEMESTER	Comments	Adviso
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				
REQUIRED COURSES (6 CREDITS)					
EDU236 Introduction to Relationships in a Classroom Setting	3				
	_				
EDU221 Introduction to Education <b>RESTRICTED ELECTIVES (9 CREDITS)</b> STUDENTS SHOULD SELECT FROM THE FOLLOWI EDU222, EDU230, EDU291 or ENH291, EDU282AA or EDU282AE POS220					C, ENG213,
<b>RESTRICTED ELECTIVES (9 CREDITS)</b> STUDENTS SHOULD SELECT FROM THE FOLLOWI EDU222, EDU230, EDU291 or ENH291, EDU282AA or EDU282AE	NG COURSES IN				C, ENG213,
<b>RESTRICTED ELECTIVES (9 CREDITS)</b> STUDENTS SHOULD SELECT FROM THE FOLLOWI EDU222, EDU230, EDU291 or ENH291, EDU282AA or EDU282AE	NG COURSES IN				C, ENG213,
<b>RESTRICTED ELECTIVES (9 CREDITS)</b> STUDENTS SHOULD SELECT FROM THE FOLLOWI EDU222, EDU230, EDU291 or ENH291, EDU282AA or EDU282AE	NG COURSES IN				C, ENG213,
<b>RESTRICTED ELECTIVES (9 CREDITS)</b> STUDENTS SHOULD SELECT FROM THE FOLLOWI EDU222, EDU230, EDU291 or ENH291, EDU282AA or EDU282AE	NG COURSES IN				C, ENG213,
RESTRICTED ELECTIVES (9 CREDITS) STUDENTS SHOULD SELECT FROM THE FOLLOWING EDU222, EDU230, EDU291 or ENH291, EDU282AA or EDU282AE POS220	NG COURSES IN				C, ENG213,
<b>RESTRICTED ELECTIVES (9 CREDITS)</b> STUDENTS SHOULD SELECT FROM THE FOLLOWI EDU222, EDU230, EDU291 or ENH291, EDU282AA or EDU282AE	NG COURSES IN				C, ENG213,
RESTRICTED ELECTIVES (9 CREDITS) STUDENTS SHOULD SELECT FROM THE FOLLOWING EDU222, EDU230, EDU291 or ENH291, EDU282AA or EDU282AE POS220	NG COURSES IN				C, ENG213,
RESTRICTED ELECTIVES (9 CREDITS) STUDENTS SHOULD SELECT FROM THE FOLLOWING EDU222, EDU230, EDU291 or ENH291, EDU282AA or EDU282AE POS220	NG COURSES IN				C, ENG213,
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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 <a href="mailto:estrellamountain.edu/academics/programs">estrellamountain.edu/academics/programs</a>.

\*Courses must meet AAS General Education Requirements (refer to page 52 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.

I. REQUIRED COURSES (18 CREDITS)					
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	2				
BPC/CIS120BF Computer Graphics: Adobe Photoshop Level II, and	3				
BPC/CIS120CF Computer Graphics: Adobe Photoshop Level III					
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 <u>estrellamountain.edu/academics/programs</u>.



### **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				
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 <a href="mailto:estrellamountain.edu/academics/programs">estrellamountain.edu/academics/programs</a>.







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. Age requirements for admission vary by program and are subject to change.

Tuition is \$5.00 per clock hour for Distribution Logistics 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 graduation fee, and a \$15.00 registration fee. Registration fees are nonrefundable. Tuition and fees apply from July 1, 2011 through June 30, 2012, and are subject to change per Governing Board approval.

#### **SouthWest Skill Center Certificate Programs**

Distribution Logistics Technician	. 121
Emergency Medical Technician	. 122
Medical Assistant	. 122
Medical Billing and Coding	. 124
Nurse Assistant	. 126
Phlebotomy	. 125
Practical Nurse	. 126
Spanish Medical Interpreter	129

### **Get Started Today!**

Advisor 623.935.8961 or 623.935.8037 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**

<u>**DLT101 - Orientation to CDP Program**</u> This course provides an overview and outcomes of the entire program, attendance, grading policies and campus resources.

<u>DLT103 - Introduction to CDP Program</u> This course provides an overview of warehousing and distribution and the CDP program.

**<u>DLT105</u>** - **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.

**<u>DLT107 - General Plant Safety</u>** This course stresses the importance of awareness and responsibility of employees working in a warehousing environment.

**<u>DLT109 - Learning for Success</u>** 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.

<u>**DLT113-Self Management and Personal Wellness**</u> This course emphasizes the importance of managing three important areas of one's life; Personal Wellness, Time Management and Stress Management.

<u>**DLT115 - Positive Work Ethic**</u> 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.

<u>**DLT117 - The Art of Effective Communication**</u> This course provides basic skills and techniques for communicating more effectively in the workplace.

**<u>DLT119 - Working Together</u>** 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.

<u>**DLT121 - Positive Image**</u> This course stresses the importance of personal image and how it affects one's personal and professional life.

<u>**DLT123 - Interview Skills**</u> This course identifies the steps involved in the job interviewing process and prepares participants for successful interviews.

**<u>DLT125 - Warehousing & Distribution</u>** 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).

<u>**DLT127 - Warehousing Productivity Measures**</u> This course discusses metrics commonly used by warehouses and distribution centers, what they measure, and how to calculate them.

<u>**DLT129 - Methods of Inventory Management</u>** This course discusses the types of inventory control systems, including MRP, Just-In-Time philosophy and the Kanban Process.</u>

<u>**DLT131 - Protecting Materials and Merchandise**</u> This course discusses protection of product throughout the manufacturing process and special handling of product and materials.

**<u>DLT133 - Palletizing</u>** This course focuses on methods of preparing products and materials for warehousing and transport.

<u>**DLT135 - Handling Systems**</u> This course familiarizes trainees with different types of conveyors that are used on packaging line(s) in warehouses.

<u>**DLT137 - Processing Hazardous Materials**</u> This course provides an understanding of requirements by federal, state, and local agencies placed on warehouse employees concerning hazardous materials.

**<u>DLT139 - Scanners & Data Entry</u>** 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.

<u>**DLT141 - Warehousing Data Applications**</u> This course discusses warehouse management systems commonly used on maintaining accurate and efficient inventory.

**<u>DLT143 - Problem Solving</u>** 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.

<u>**DLT145 - Introduction to Industrial Controls**</u> This course provides a basic understanding of industrial control circuits used in a manufacturing environment.

<u>**DLT147 - Introduction to Computers & Automation**</u> 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.

<u>**DLT151 - Calculators**</u> This course teaches the use of a basic handheld calculator and provides practice in performing mathematical computations.

<u>DLT153 - Powered Industrial Truck Operator</u> This course provides the knowledge of methods and procedures necessary to safely operate a powered industrial truck in the workplace.

**<u>DLT155 - Warehousing Simulations</u>** 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 / 152 clock hours

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

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

#### 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.

#### **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

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.

**SKHCE102 - Orientation to the Physiological and Psychological Body Systems** Application of basic physiology and psychology of body systems as they relate to an entry-level health care professional's role. Prerequisites: HCC130, HCC145 or (HCC145AA, HCC145AB, and HCC145AC), or permission of instructor.

**SKHCE109 - Phlebotomy & Specimen Processing Basic Skills** Theory and practice of basic phlebotomy and specimen processing including laboratory test codes, equipment, and procedures. Prerequisites: None. Corequisites: HCC130, HCC145AA or permission of coordinator.

**SKHCE110 - Fundamental Phlebotomy Skills** Application of fundamental phlebotomy techniques in a clinical laboratory setting or health care environment. Prerequisites: HCE109 or permission of coordinator.

**SKHCE162 - 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 State center for Communicable Disease Control (CDC), and Clinical Laboratory Improvement Amendments (CLIA). Prerequisites: None. Corequisites: HCC130, HCC145, or permission of Program Director.

**SKHCE167 - 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: None. Corequisites: HCC130, HCC145, or permission of coordinator.

**SKHCE221 - Administration of Medication** Principles and procedures for administering medications. Includes classifications, uses, effects, legal regulations, calculating dosages, and correct terminology. Emphasis on oral and parental drug administration. Prerequisites: None. Corequisites: HCC130, HCC145, or permission of coordinator.

**SKHCE222 - 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: None. Corequisites: HCC130, HCC145, or permission of coordinator.

**SKHCE226 - 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: None. Corequisites: HCC130, HCC145 or permission of coordinator

**SKHCE227 - 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: None. Corequisites: HCC130, HCC145, or permission of coordinator.

**SKHCE229 - 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. Includes use of accounting cycle from originating data to closing ledger entries. Prerequisites: None. Corequisites: HCC130, HCC145 or equivalent or permission of coordinator.

SKHCE251 - Emergencies in the Medical Office Emphasis on methods of identification and response to emergencies in a medical office. Prerequisites: SKHCE162 and acceptance into the Medical Assisting Program. Corequisites: HCC130, HCC145, or permission of coordinator.

**SKHCE261 - 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 of the appropriate medical/clinical professional to review. Selected specific non-invasive cardiac testing procedures. Prerequisites: None. Corequisites: HCC130, HCC145, or permission of coordinator.

**SKHCE274 - Administrative Medical Assisting Externship** Practicum in administrative medical assisting. Application of administrative duties procedures, and knowledge derived from medical assisting courses. Prerequisites: HCC130, HCC145, HCE226, HCE227, HCE/BPC229, and permission of coordinator.

**SKHCE275 - Clinical Medical Assisting Externship** Practicum in clinical medical assisting. Application of clinical skills, procedures, and knowledge derived from medical assisting courses. Prerequisites: HCC130, HCC145, HCE104, HCE109, HCE110, HCE167, HCE221, HCE222, HCE251, HCE261, and permission of coordinator.

**SKHIM105 - Health Record Documentation** Introduction to health record content, structure, and origin of clinical information for various healthcare settings. A basic review of federal, state, and orantizational documentation guidelines. Legal and ethical issues applicable to health information documentation and coding practices. Prerequisites: HCC130 or permission of Program Director.

#### **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 Approximately 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

#### 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 [124]

communication skills and an understanding of how effective communication skills promote teamwork. Focus on intercultural communication strategies.

#### <u>SKHCC145 - Medical Terminology for Health Care Workers.</u>

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).

**SKHCE102 - Orientation to the Physiological & Psychological Body Systems** 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.

#### 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.

**SKBPC110-Computer Usage and Applications**. Introduction to business and personal computer operations and usage. Software applications for analyzing and solving business problems including word processing, spreadsheet, database, and presentation graphics

**SKBPC111AA - 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 [Estrella Mountain Community College | 2011-2012 Catalog]

**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.

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).

#### **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

#### 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.

**SKHCE109 - Phlebotomy: Basic Skills** Theory and practice of basic phlebotomy and specimen processing including laboratory test codes, equipment, and procedures. Prerequisites: None Corequisites: HCC130, HCC145AA or permission of coordinator.

**SKHCE111-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: HCE109 or permission of instructor.

**SKHCE122 - Practicum: Phlebotomy and Specimen Processing** Application of phlebotomy and specimen processing techniques in a clinical laboratory setting or health care environment. Prerequisites: HCE109 or permission of Program Director. Prerequisites or Corequisites: HCE111 or permission of Program Director.

**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.

**SKBPC005 - Brief Introduction to Computers** Introductory course in fundamentals of computers, including hardware components, operating system characteristics, and basic software applications. Prerequisites: None

**SKBPC111AA - Computer Keyboarding I** Mastery of essential microcomputer keyboarding skills. Emphasis on touch typing of alphabetic and numeric keys and symbols. Prerequisites: None

### **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 / 144 clock hours

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

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

#### **Nurse Assistant Curriculum**

**SKNUR156 - Nurse Assisting** Role of the nursing assistant for clients across the wellness/illness continuum with the nurse assisting needs of clients. Processional communication skills essential for the nursing assistant. Nursing interventions to ensure the needs and safety of the client. Specific types of diseases, conditions and alterations in behavior of the client. Principles of nutrition and fluid balance. Special needs of the elder client in the acute and long-term care settings. Basic emergency care skills and procedures.

**SKNUR157 - Nurse Assisting Lab** Demonstration of problem solving, professional behavior and therapeutic communication skills. Demonstration of caring behaviors and ensuring environmental safety for the client. Provides opportunity for the development of clinical competency in the performance of selected nursing assisting skills and procedures through participation in the care of clients. Prerequisites: None. Corerequisites: NUR156.

#### **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

#### **Practical Nurse Curriculum:**

**SKNUR161 - Nursing Process/Critical Thinking** This course provides basic nursing knowledge and skills to render care to the client. Emphasis is placed on developing the role of the nurse using critical thinking skills for safe practice in providing nursing care. It gives an introduction the nursing process, critical thinking, and nursing care plans. Based on the wellness/illness continuum within the practical nurse scope of practice, it provides an overview of nursing concepts and theories while focusing on meeting basic human needs. The theoretical concepts focus on care of the well client, elder, and clients with selected alterations in health and psychological/mental health disorders. Prerequisites: Admission into the Practical Nursing Program and successful completion of Core Nursing Courses. Corequisite: SKNUR 163, SKNUR 167 & SKNUR 169

<u>SKNUR163 - Health Assessment/Health</u> Promotion I Emphasis on basic health assessment and history skills and promotion of wellness by using holistic nursing assessments for clients. Includes use of healthy life style strategies and primary prevention. Prerequisites: Admission into the Practical Nursing Program and successful completion of Core Nursing Courses. Corequisites: SKNUR 161, SKNUR 167, & SKNUR 169.

**SKNUR167 - Pharmacology Medication Administration**I Basic pharmacology knowledge and skills to administer medications. Emphasis on developing the role of the nurse using critical thinking skills for safe practice in the administration of medications. Introduction and application of mathematical concepts to drug dosage calculations. Overview of selected drug classifications and groupings. Emphasis on principles of drug metabolism and effects, interactions and adverse reactions, and nursing implications for safe practice. Prerequisites: Admission into the Practical Nursing Program and

successful completion of Core Nursing Courses. Corequisites:

SKNUR 161, SKNUR 163, & SKNUR 169.

**SKNUR169 - Nursing Science I** Development of clinical competency in the performance of selected nursing skills and procedures. Participation in the care of clients experiencing problems of alteration in health and selected mental health disorders. Clinical practice experiences with individuals and families in a variety of acute and community settings. Application of holistic nursing concepts and theories related to health promotion, disease/illness prevention, and health restoration of individuals. Prerequisites: Admission into thePractical Nursing Program and successful completion of Core Nursing Courses. Corequisites: SKNUR 161, SKNUR 163, & SKNUR 167.

**SKNUR181 - Nursing Process/Critical Thinking II** Continuation of the role of the practical nurse as a provider of care and a member of the profession. It includes concepts and skills required of the practical nurse to function as a member of the health care team. Introduces concepts including delegation and focus on nursing concepts and theories to meet basic human needs across the life span based on the wellness/illness

continuum. Also, it integrates concepts of anatomy, physiology, microbiology, pathophysiology, and clinical nutrition to the care of clients across the lifespan. Emphasis on nursing care related to pediatric and adult clients with selected alterations in health. There is an introduction to care of the well childbearing client and family. Focus on the role of the practical nurse in providing care through interventions consistent with established nursing care plans. Emphasis on the utilization of critical thinking processes related to nursing care of clients in an acute care and community settings. Prerequisites: Nursing Core Courses, SKNUR161, SKNUR163, SKNUR167, SKNUR169, Corequisites: SKNUR 185, SKNUR 187, SKNUR 189.

**SKNUR185 - Developing Nurse's Role I** Overview of roles in nursing with emphasis on transition from nursing assistant to practical nurse. Includes introduction of the core values of the nursing program, nursing history, standards, and scope of practice. Introduces concepts and skills required of the practical nurse, and application of communication techniques and delegation to teamwork and leadership. Prerequisites: Admission into the Practical Nursing Program, NUR161, NUR163, NUR167, and NUR169.

#### **SKNUR187 - Pharmacology & Medication Administration**

<u>II</u> Overview of selected drug classifications and categories. Emphasis on principles of drug metabolism and effects, interaction and adverse reactions, and nursing implications for safe practice. Requires application of previous knowledge of physical, biological, and social sciences. Prerequisites: Nursing Core Courses, SKNUR161, SKNUR163, SKNUR167, SKNUR169, Corequisites: SKNUR 181, SKNUR 185, SKNUR 189.

**SKNUR189 - Nursing Science II** Application of holistic nursing concepts and theories related to health promotion, disease/illness prevention and health restoration of individual and families. Development of clinical competency in the performance of selected nursing skills, participation in the care of clients across the life span including clients with alterations in health. Focus on role of the practical nurse collaborating with other healthcare personnel to provide nursing care to childbearing families, infants, children, and adolescents. Includes concepts of delegation, prioritizing care, and decision-making. Includes concepts of critical thinking, cultural diversity, interpersonal communication, legal/ethical issues to integrate holistic care for clients across the lifespan. Prerequisites: Nursing Core Courses, SKNUR161, SKNUR163, SKNUR167, SKNUR169, Corequisites: SKNUR 181, SKNUR 185, SKNUR 187.

#### **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.

**SKHCC145AA** - **Medical Terminology for Health Care Workers I** Introduction to medical terms used in health care. Body systems approach to selected terms related to structures, functions, diseases procedures, and diagnostic tests. Building and analyzing terms using basic word parts. Selected medical abbreviations and symbols and term spelling. Prerequisites: None.

**PNC200AB -Structure and Function of the Body** Structure and Function of the body is the study of anatomy & physiology. Includes 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.

**PNC200AD-Medical Math Calculations** Review of basic math skills, addition, subtraction, multiplication, division, fractions, decimals, percentages, metric conversions, pharmacology abbreviations, common equivalents and drug calculations for oral and IV medications in both adults and children.

**PNC200AE - Fundamentals of Nursing** This course introduces the practical nursing student to the fundamental skills and concepts of patient care. Fundamentals of nursing gives a general picture of healthcare, health careers, healthcare facilities, healthcare providers and the basic techniques and skills to perform and provide quality patient care. The student is introduced to the Licensed Practical Nurse (LPN) scope of practice, roles, and collaborative relationship with the Registered Nurse (RN) and other healthcare disciplines. This course includes an introduction to the basic principles of human nutrition, therapeutic nutrition for the treatment of common health concerns, and health promotion. The Students will be instructed on learning and developing purposeful, goaldirected communication with clients, colleagues, subordinates, and other professional healthcare disciplines. Students will be instructed in the areas of accurate and legal reporting and documentation. This course is designed to assist the entry level nursing student in acquiring a solid foundation in nursing and nutrition basics, which will enable them to make the transition into PN1: Nursing Process & Critical Thinking.

# 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 of 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 MCCCD 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.

#### 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.

[Estrella Mountain Community College | 2011-2012 Catalog]

#### **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.

#### **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
- Apply to transfer the program certificate as articulated credit within the Maricopa Community College District.
- · Apply for national certification.

This program exceeds the minimum training necessary to apply nationally for Spanish Certified Healthcare Interpreter (www. healthcareinterpretercertification.org/).

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

### Length of Program 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..







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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Solar PV Boot Camp	134
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Veterinary Assistant	134

### **Get Started Today!**

Advisor 623.535.2802 or 623.935.8037 estrellamountain.edu/community-education

#### **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 [Estrella Mountain Community College | 2011-2012 Catalog]

- 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 maxiofacial 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.

### 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, 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**

WRKDFV 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 principales 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 <u>does not</u> include a national or state certification and it <u>does not</u> 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.

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** 

Agribusiness Sales and Service	
Agricultural Production and Management	
Agribusiness	MC
(See Agribusiness Sales and Service and Horticulture sections for additional	****
Urban Horticulture	MC
(See Horticulture section for additional programs and related areas)	WC
(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
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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

#### **Building and Construction**

Construction Trades: Sheet Metal

Architecture MC

GW

Architectural CADD Level III M	IC
Architectural Detailing CADD Level III Me	IC
Architectural CAD Technology PC	C
Architectural Technology SC	C
Building Inspection EN	M, MC
Building Safety and Construction Technology PC	C
Building Safety Technology SC	C
Construction Trades: Carpentry GN	W
Civil Engineering Technology PC	C
Construction Me	IC
Construction Drafting CADD Level III Me	IC
Construction Trades: Heavy Equipment Operations GN	W
Construction Management PC	C
Plan Review Me	IC
Pre-Contractor Licensing Me	IC
Residential Drafting CADD Level II	IC
Survey and Civil Drafting - CADD Level II	
Workforce Development: Carpentry Level I	S
Workforce Development: Carpentry Level II	S
Workforce Development: Furniture Construction/Refinishing Level I RS	S
Workforce Development: Furniture Construction/Refinishing Level II RS	S

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

#### **Home Economics**

GC, RS
PC
GC, RS
PC
MC
PC
MC
PC
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: AdvancedMCInterior Design: Professional LevelSCKitchen and Bath DesignPC

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

Music

Audio Production Technologies GC, MC, PC, PV, SC

Dance Technology SC

Music Business CG, GC, MC, PC, PV, SC, SM

Commercial Art/Advertising Art

Computer Graphic Design PC

(See Media Technology section for additional programs and related areas)

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

(See Business Administration for additional programs and related areas)

Software Quality Assurance MC Accounting Paraprofessional GC

#### **Business Administration**

Business MC, SC

Business (Fastrack) SC

General Business CG, GC, MC, PC, RS, SCC, SMC

(See Management and Finance section for additional programs and related areas)
Import/Export Trade PV
International Business PV
International Trade MCC

#### Management

SM **Business Management** General Business Specialized PVC **Human Resources Management** PC PC, MC, SC Management Management I PC PC Management II 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
Supervision and Management I	SM
	SM
Supervision and Management II	
Supervision	GC
M2.1.11. M. ou o o ou out	
Middle Management	
Public Relations	MC
(See Management section for additional programs and related areas)	
Office Occupations	
Administrative Office Coordinator	GC
Computer Applications	PC
Computer Software Applications	PV
Customer Service / Information Professional	PV
Data Entry Clerk	EM
General Office Secretary	EM, GC
Administrative Office Professional	PV
Administrative Technology	GW
Office Automation Systems	SC, SM
· · · · · · · · · · · · · · · · · · ·	
Office Coordinator	GC
Business Technology Specialist	GW
Office Technology	GW
Paralegal Studies	PC
Realtime Reporting-Advanced Placement CART	GW
Realtime Reporting-Advanced Placement Broadcast Captioning	GW
Realtime Reporting-Broadcast Captioning	GW
Realtime Reporting-CART	GW
Realtime Reporting-Judicial	GW
Realtime Reporting Scoping	GW
Receptionist	EM
·	GW
Management of Clinical Information Technology	
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 Level I	MC
Technology Support Analyst Level II	MC
Word Processing	SC
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 Carvisas Assistances Customer Carvisa	DC

RS

Human Services-Assistance: Customer Service

Human Services-Long Term Care: Customer ServiceRSHuman Services-Specialist: Customer ServiceRSInsurance-Customer ServiceRSMotor Vehicle: Customer ServiceRS

Organizational Leadership CG, EM, GW, MC, PV, RS
Organizational Management CG, EM, GW, MC, PV, RS

Pharmacy: Customer Service SM
Quality Customer Service GW
Quality Customer Service RS
Quality Process Leadership GW, RS
Travel Agency: Customer Service RS
Broadband Telecommunications: Technical Support Services RS
Utilities Customer Service RS

#### **Education and Training**

#### **Early Childhood Education**

Child and Family Organizations Management and Administration GC, MC, RS 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

#### **Workforce Development**

Workforce Development and Community Re-Entry RS

#### Education

Bilingual Endorsement MC, PC
ESL Endorsement MC, PC
Instructional Assistance MC, PC
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 Hydrologic Studies GW Occupational Safety and Health Technology GW Radiation Protection Technology ΕM PV Safety, Health and Environmental Studies Wastewater Treatment GW Water Distribution and Collection GW Water Purification Technology GW

Water Technologies	GW
Water Technologies Level 1	GW
Water Technologies Level 2	GW
Water Technologies Level 3	GW
Water Technologies Level 4	GW
Water Treatment	GW

#### **Finance**

#### Finance

Banking and FinancePC, EMBank Account Management: Customer ServiceRSCertified Residential AppraiserMCHome InspectionMCLicensed Real Estate AppraiserMC

Real Estate GC, MC, PC

Real Estate: Prelicense PC
Residential Appraisal Trainee MC

#### **Government and Public Administration**

Public Administration RS
Tribal Development SC

#### **Health Science**

#### Allied Health

Advanced Behavioral Health Sciences GC, SM **Advanced Nursing** SM Basic Behavioral Health GC, SM **Clinical Laboratory Sciences** PC Clinical Research Associate GW Community Health Advocate, Diabetes MC **Developmental Disabilities Specialist** GC, CG Diagnostic Medical Sonography GW Electroneurodiagnostics GW **Health Information** PC Health Information Technology PC **Health Services Management** GW Health Unit Coordinating GW PC Histologic Technology Hospital Central Service Technology GW Laboratory Assisting PC **Computed Tomography** GW Magnetic Resonance Imaging GW PC Medical Assisting Medical Billing and Coding: Physician-Based PC Medical Front Office PC Medical Radiography GW **Medical Transcription** GW **Nuclear Medicine Technology** GW Patient Care Technician PC 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) Basic Emergency Medical Technology Community Emergency Response Team (CERT): Level I Emergency Communications and Deployment Intermediate Emergency Medical Technology Paramedicine Secondary Basic Emergency Medical Technology	GC, PC, PV, SC GC, MC, PC, PV, SC PC PC MC, PC MC PC
<b>Dental</b> Clinical Dental Assisting Dental Assisting Dental Hygiene Dental Office Management	RS PC PC, RS, MC PC
<b>Nursing</b> Fast Track Practical Nursing Nursing Nurse Assisting Practical Nursing	GW CG, EM, GC, GW, MC, PC, PV, SC, RS CG, GC, GW, MC, PC, PV, SC, RS, EM CG, GC, GW, MC, PC, PV, SC, RS, EM
Hospitality and Tourism Food and Nutrition Advanced Professional Culinary Arts Baking and Pastry Basic Culinary Studies Commercial Baking 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 PC SC EM, PC, MC SC CG, PV PC PC PC PC PC PC PC PC, RS, MC
Hospitality Airline Operations Airline Operations: Ground Operations Airline Operations: Initial Flight Attendant Airline Operations: Passenger Services Airline Operations: Reservations Airline Operations: Reservations and Ticketing Operations Airline Operations: Vacations Culinary Arts (See Food & Nutrition section for additional programs and related areas) 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	RS RS RS RS RS RS RS C SC SC SC SC SC SC EM

Hospitality and Tourism/Tourism Development and Management SC

#### **Human Services**

Parks, Recreat	ion, Le	isure and	Fitness	Studies
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Recreation Management MC, PC, SC

#### Health and Physical Education/Fitness

Group Fitness Instructor GC, MC
Personal Trainer GC, MC

Strength and Conditioning Personal Trainer

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

Strength, Nutrition and Personal Training

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

Teaching, Healing, Meditation & Stress Management PV
Therapeutic Massage CG, PC
Yoga Instruction SC

#### Family and Consumer Science

Nutrition for Fitness and Wellness GC, MC

#### **Social Sciences**

Chemical Dependency Level IRSChemical Dependency Level IIRSChemical DependencyRSClinical Research CoordinatingGWDeaf StudiesPCInterpreter PreparationPCProfessional Addictions CounselingRS

#### Social Services

#### **Mortuary Science**

Mortuary Science MC

#### **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 PV **Computer Systems Maintenance** Computer Technology RS **Computer Usage and Applications** RS SC **Database Development Desktop Publishing** ΕM **Engineering Technology** GC, CG Game Technology GW, MC **Geographic Information Systems** MC Help Desk Specialist GC

Information AssuranceMCInformation SecurityEM, GC, GWInformation Security AdministrationEM, GC, GWInformation Security TechnologyEM, GC, GW

La Constantina Con	FM CC CW
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)	
Microcomputer Applications: Office Specialist/Core Level	CG
(See Office Occupations section for additional programs and related areas)	
Microcomputer Applications: Office Specialist/Expert Level	CG
(See Office Occupations section for additional programs and related areas)	CG
(See Office Occupations section for additional programs and related areas)	
Microcomputer Business Applications	CG, GC
(See Office Occupations section for additional programs and related areas)	cd, dc
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 SV
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
Media Technology	
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
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 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 Engineering recrimology  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
manadetaining i roductivity. Conventional Machines Level I	GVV

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

3,	
Automation Technology	GW, EM, MC
Automation Technology Level I	GW, EM, MC
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
(C. M. C. C. C. C. C. C. L. L. C. C. L. L. C.	

(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 PC, SC Crime and Accident Scene Photography Crime and Intelligence Analysis CGCrime Scene Investigation SC, PC Crime Scene Technology SC Cyber Forensics Technician MC **Detention Services** RS Evidence Technology PC **Evidence Technology** ΕM PC, SC Fingerprint Classification and Identification Forensic Investigation MC Forensic Science CG Forensic Technology PC Forensic Science: Crime Lab SC Global Citizenship MC **Homeland Security** CG Information Assurance MC EM, GC, GW Information Security Forensics **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

#### Fire Science

Basic FirefighterMC, PV, EMDriver OperatorMCEmergency ManagementGC, MC, PV, SMEmergency Response and OperationsCGCC, 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
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 PC: Phoenix College

EM: Estrella Mountain Community College PV: Paradise Valley Community College

GC: Glendale Community College RS: Rio Salado College

GW: GateWay Community College SC: Scottsdale Community College

MC: Mesa Community College SM: South Mountain Community College

### 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 healthcare community and its response to the dynamic changes occurring in the healthcare arena and healthcare professions' 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 healthcare workforce that meets employer and consumer needs. Refer to individual college catalogs for specific healthcare 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 which 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 healthcare 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 College of Attendance

As the allied health or nursing programs are integrated across the Maricopa County Community College District, college of attendance requirements for the completion of the healthcare program pathways can be met through the completion of coursework taken at all the Maricopa Community Colleges and Skill Centers.

#### **Requirement of Background Check**

Students enrolled in an allied health or nursing program will be in clinical learning experiences, working with children, elderly persons, and other vulnerable populations. Healthcare agency policies require evidence of background clearance prior to entering such learning experiences. The background clearance will consist of a fingerprint clearance, verification of social security number, and a periodic query of the Office of the Inspector General (OIG) List of Excluded Individuals/ Entities (LEIE) List. ARS §15-1881 provides the Department of Public Safety the authority to conduct background checks and issue clearance cards to healthcare students for the purpose of meeting the requirements for clinical training. Students seeking enrollment into health programs will be required to provide a current clearance card provided by DPS as evidence of an independent background check that meets healthcare industry standards. Individual programs will establish program policy regarding when the background check needs to be completed, either at the time of application to or enrollment in clinical courses. Evidence of a completed background clearance must be maintained for the duration of time of program enrollment. It is advised that students carry proof of the background clearance at all times during any agency learning experience. Any change in status that would affect the background clearance of a healthcare student may result in the interruption of student progress or dismissal from the program.

Note: Certain licensing boards may require a separate background check or clearance card upon application for licensure or certification.

#### **Duty to Report**

All students enrolled in health programs holding or receiving certification or licensure as a healthcare professional from a US state or territory must remain in good standing with that agency. Students receiving any disciplinary action against their certification and/or license must notify the program director within five (5) business days. Any student who is placed on the Office of the Inspector General (OIG) List of Excluded Individuals/ Entities List must notify their program director within five (5) business days. Any student who has his/her fingerprint clearance card revoked, suspended, or modified in any way must notify the program director within five (5) business days. The program director reserves the right to restrict the student's participation in clinical experience and involvement in patient care until the certificate or license is valid and unrestricted as determined by the agency who issued the disciplinary action; the student is removed from the OIG Exclusion List; and/or the fingerprint card is valid and unrestricted.

#### **Waiver of Licensure/Certificate Guarantee**

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.

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ACC	Accounting	.152	HVA	Heating, Ventilating & Air Conditioning	193
AES	Aerospace Studies	152	HRM	Hotel Restaurant Management	195
AFR	African-American Studies	153	HUM	Humanities	196
AIS	American Indian Studies	155	IND	Industry	196
AJS	Administration of Justice	153	ITS	Information Technology Security	197
ARH	Art Humanities	157	INT	Interior Design	196
ART	Art	156	ITA	Italian	198
ASB	Anthropology	155	JRN	Journalism	198
AST	Astronomy	157	LDR	Leadership	199
BIO	Biology	158	MAT	Mathematics	201
BLT	Building Safety & Construction Technology	159	MCO	Mass Communications	201
BPC	Business/Personal Computers		MET	Manufacturing Technology	199
CAD	Computer Aided Drafting		MGT	Management	
CFS	Child/Family Studies		MHL	Music: History/Literature	
СНМ	•		MKT	Marketing	
CIS	Computer Information Systems		MMT		
CNS	Construction		MST	Microsoft Technology	
CNT	Cisco Networking Technology		MUP	Music: Performance	
	Communication		NUR	Nursing	
CPD	Counseling and Personal Development		OAS	Office Automation Systems	
CRE	Critical Reading		OSH	Occupational Safety & Health	
CRW	Creative Writing		PAD	Public Administration	
DAN	Dance		PED	Physical Education	
ECE	Engineering Science		PHI	Philosophy	
ECH	Early Childhood Education		PHS	Physical Science	
ECN	Economics		PHY	Physics	
EDU	Education		POS	Political Science	
ELC	Electricity		PPT	Power Plant Technology	
ELT	Electronics Technology		PSY	Psychology	
EMT	Emergency Medical Technology		RDG	Reading English as a Second Language	
ENG	English		RDG	Reading Education	
ENH	English Humanities		REC	Recreation	
	Education Professional Development			Religious Studies	
EPD			REL RPT	Radiation Protection Technician	
ESS	Education Support Services				
EXS	Exercise Science		SBS	Small Business Management	
ESL	English as a Second Language		SBU	Society and BusinessSign Language	
FAC	Facilities Management		SLG		
FON	Food and Nutrition		SLP	Speech Language Pathology	
FSC	Fire Science Technology		SOC	Sociology	
GBS	General Business		SPA	Spanish	
GER	German		STO	Storytelling	
GLG	Geology		SWU	Social Work	
GPH	Physical Geography		TCM	Telecommunication	
GTC	General Technology		THE	Theatre	
HCC	Health Core Curriculum		THP	Theatre Performance & Production	
HCR	Health Care Related		TQM	Total Quality Management	
HES	Health Science			Welding Technology	
HIS	History	.194	WST	Women's Studies	222

#### **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

#### **Financial Accounting**

3 Credits. 3 Periods.

Introduction to theory and practice in the preparation and interpretation of general purpose financial statements. Prerequisites: None.

#### ACC212

#### **Managerial Accounting**

3 Credits. 3 Periods.

Development and analysis of accounting information for managerial planning and control. Prerequisites: A grade of "C" or better in (ACC111 and ACC112), or ACC211, and (CIS105 or permission of department.

#### 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.

#### **Aerospace Studies**

#### **AES101**

#### The Air Force Today I

LEC 2 Credits. 1

Period.

LAB 0 Credits. 1 Period.
Introduction to U.S. Air Force and AFROTC.
Topics include: the Air Force mission and organization, customs and courtesies, officer opportunities, officership and professionalism. Prerequisites: None.

#### **AES103**

#### The Air Force Today II

LEC 2 Credits.

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: AES101 or ASU Department of Aerospace Studies approval.

#### 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: AES103 or ASU Department of Aerospace Studies approval.

#### **AES203**

### Evolution of USAF Air and Space Power II

LEC 2 Credits. 1

Period.

LAB 0 Credits 1 Period.

Topics include: the air Force mission and organization, customs and courtesies, officer opportunities, officership, and professionalism. Prerequisites: AES201 or ASU Department of Aerospace Studies approval.

#### **AES294**

#### **Air Force Physical Fitness**

LEC 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. Corequisites: AES101, or AES103, or AES201, or AES203. Course Note: AES294 may be repeated for credit.

### African-American Studies

#### **AFR110**

### Introduction to African-American Studies

3 Credits. 3 Periods.

Introduction to the study of the African-American experience. Interdisciplinary approach includes historical underpinnings; population and cultural characteristics; social, economic, and political issues; and implications for the future. Preregs: None.

#### AFR202

### Ethnic Relations in the United States

3 Credits. 3 Periods.

Basic concepts and processes, including historic overview, of interethnic relations in the United States: culture, race, ethnicity, ethnocentrism, prejudice, discrimination, racism, assimilation, acculturation, and individual and group responses to interethnic contact. Cultural knowledge and intercultural communication skills and perspectives as fundamental tools for successful management of social relations in a multicultural world. Prerequisites: None.

#### **AFR203**

### African-American History: The Slavery Experience

3 Credits. 3 Periods.

History and cultural heritage of African-Americans, including arrival in the Americas, chattel slavery experience, emancipation, and participation in the American Civil War. Presented from an Afro-centric perspective. Prerequisites: AFR110, or permission of instructor.

#### **AFR204**

### African-American History: Reconstruction to the Present

3 Credits. 3 Periods.

History and cultural heritage of African-Americans from the Reconstruction period to the present, including the Depression, the Harlem Renaissance, the Civil Rights Movement, and affirmative action. Presented from an Afro- centric perspective. Prerequisites: AFR203, or permission of instructor.

#### AFR207 Black Women

3 Credits. 3 Periods.

Analysis and discussion of critical issues for Black women in America today.
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.

#### **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.

#### **AJS150**

#### **Defensive Tactics**

1 Credit. 1 Period.

Skills in the protection against persons armed with dangerous and deadly weapons,

demonstration and drill in a limited number of holds and come-alongs, and restraint of prisoners and the mentally ill. May be repeated twice for credit. 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.

#### AJS224

#### **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

#### 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.

#### **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.

#### **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.

#### 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.

#### **AIS140**

#### **American Indian History**

3 Credits. 3 Periods.

Survey of American Indian history with emphasis on the last 200 years including developments in the 20th century. Focuses on selected groups such as the Cherokee, Iroquois Confederation, Navajo, Sioux and Indians of the Southwest in relation to cultural, economic, political and social continuity and changes. Topics include development and influence of federal policies, past and present issues confronting Native Americans and how Native American individuals and communities maintain their identities as they confront social changes. Prerequisites: None. Cross-References: HIS140.

#### 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.

#### ASB202

### 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.

#### **ASB211**

#### **Women in Other Cultures**

3 Credits. 3 Periods.

Cross-cultural analysis of the economic, social, political, and religious factors that affect women's status in traditional and modern societies. Prerequisites: None.

#### **ASB214**

#### Magic, Witchcraft, and Healing: An Introduction to Comparative Religion

3 Credits. 3 Periods.

Origins, elements, and forms of religion; a comparative survey of religious beliefs, myths, rituals and symbolism including magic, witchcraft and healing as practiced in selected regions of the world; the place of religion in the total culture. Prerequisites: None.

#### **ASB220**

#### **Anthropology Goes to the Movies**

3 Periods

Archaeology and anthropology through the lens of popular films of the 20th and 21st Century. Explores the popularity of ancient humans as a topic for film ventures and how accurately they are portrayed. Provides the student with a basic knowledge of anthropology and offers film images of anthropologists and archaeologists and the practice of archaeology and anthropology. Analyzes accuracy of films depicting culture and our human past. Prerequisites: None.

#### **ASB222**

#### **Buried Cities and Lost Tribes: Old** World

3 Credits 3 Periods

Introduction to archaeology through discoveries and the researchers who made them. Emphasis on methods of archaeological fieldwork and what these discoveries reveal about humanity, including the nature of archaeological inquiry, the development of human social groups, the changing role of religion in evolving societies, the origins of agriculture, the origins of settled lifeways, the rise of cities and complex societies, political strife across different cultures and the forces which tend to fragment societies. Examples drawn from Africa, Asia, Europe, the Pacific Islands, and Australia. Prerequisites: None.

#### **ASB223**

#### **Buried Cities and Lost Tribes: New** World

3 Credits 3 Periods

Introduction to archaeology through discoveries and the researchers who made them. Emphasis on methods of archaeological fieldwork and what these discoveries reveal about humanity, including the nature of archaeological inquiry, the development of human social groups, the changing role of religion in evolving societies, the origins of agriculture, the origins of settled lifeways, the rise of cities and complex societies, political strife across different cultures and the forces which fragment societies. Examples drawn from North American, Central America, and South America. Prerequisites: None.

#### **ASB226**

#### **Human Impacts on Ancient Environments**

3 Credits 3 Periods

Interrelationship between humans and their environments, using archaeological data and case studies beginning with early hominids. Uses of research to identify environmental change and distinguish between climatic and human-induced global change. Explores ways in which prehistoric people caused and responded to environmental changes Prerequisites: None.

#### ASB234

#### Art and Archaeology of Ancient Egypt

3 Credits 3 Periods

Introduction to the major social, political, religious and economic institutions of Ancient Egypt. The historical events and people that shaped Egyptian civilization. Prerequisites: None.

#### ASB238

#### **Archaeology of N America**

3 Credits 3 Periods

Introduction to North American prehistory. Prerequisites: None.

#### **ASB251**

#### **Introduction to Museums**

3 Credits. 3 Periods.

The changing nature of museum practice in acquiring and managing collections and disseminating information. Prerequisites: None.

#### Art

#### **ART100**

#### **Introduction to Computer Graphic** Art

1 Credit. 2 Periods.

Conceptualization, visualization, and production of art using the computer. Prerequisites: None.

#### **ART111**

#### Drawing I

3 Credits. 6 Periods.

Fundamental principles of drawing. Emphasis on composition and facility in objective and expressive representation, using variety of drawing media. Prerequisites: None.

#### **ART112**

#### **Two-Dimensional Design**

3 Credits. 6 Periods.

Study of fundamental elements and principles of two-dimensional design. Prerequisites: None. Cross-References: ADA112

#### **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

6 Periods. 3 Credits.

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.

#### **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.

#### **ART152**

#### Sculpture II

3 Credits. 6 Periods. Emphasis on control of sculptural media.

#### **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.

#### **ART162**

#### **Ceramics II**

3 Credits. 6 Periods.

Major emphasis on wheel throwing, glaze making and decorating techniques. Prerequisites: ART161.

### 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.

### ART168 Painting II

3 Credits. 6 Periods.

Continued refinement of painting skills and investigation of new possibilities in painting. Prerequisites: ART167 or permission of instructor.

#### ART180AE

#### Designer's Tools: Adobe Photoshop

1 Credits. 2 Periods.

Introduction to the multiple elements of Photoshop software package using the microcomputer. Basic foundation in the use of electronic techniques including appropriate input and output production devices. Prerequisites: ART100 or permission of instructor. Cross-References: ADA180AE.

#### **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.

#### **ART261**

#### **Ceramics III**

3 Credits. 6 Periods.

Emphasis on wheel throwing skill and individual style development. Prerequisites: ART162.

#### **ART262**

#### **Ceramics IV**

3 Credits. 6 Periods.

Experimental work in clays and glazes. Prerequisites: ART261.

### 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**

#### **ARH101**

#### **Prehistoric through Gothic Art**

3 Credits. 3 Periods

History of art from prehistoric through medieval period. Prerequisites: None.

#### **ARH102**

#### Renaissance through Contemporary Art

3 Credits. 3 Periods

History of art from around the world from the Renaissance through contemporary period. Prerequisites: None.

#### **ARH109**

#### **History of American Art**

3 Credits. 3 Periods.

Development and variety of American Art. Presentation of architecture, sculpture, painting and decorative objects. Prerequisites: None.

#### **ARH112**

#### **History of Modern Art**

3 Credits. 3 Periods.

Development and significant aspects of modern art, including comparisons of relationships in expressionism, abstractions, fantasy, and art since mid-century. 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.

#### 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, Galazies, and Cosmology

3 Credits. 3 Periods.

Introduction to astronomy for the nonscience 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.

#### **AST114**

### Introduction to Stars, Galazies, and Cosmology Lab

1 Credit. 3 Periods.

Astronomical observations and exercises to supplement AST112. Prerequisites or Corequisites: AST112.

#### 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**

#### **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**

#### 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**

#### **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**

#### **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.

#### BIO205 Microbiology

LEC 4 Credits. 3 Periods. LAB 0 Credits. 3 Periods.

Study of microorganisms and their relationship to health, ecology, and related fields. Prerequisites: (BIO156 or BIO181 with a grade of "C" or better) or (one year high school biology 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.



#### **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.

#### BLT263AK

#### **Building Codes: IBC**

3 Credits 3 Periods.

Designed specifically to acquaint students with safety principles of building construction under the International Building Code (IBC), including structural requirements for wood, masonry and concrete, fire resistance of building construction, fire resistant materials, and ratings and occupancy requirements. Prerequisites: None.

# 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.

#### **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.

#### **BPC114AE**

#### Excel: Level I

1 Credit. 2 Periods.

Computer spreadsheet skills for solving business problems using Excel, including calculations, forecasting, and projections. Prerequisites: None.

#### **BPC117AM**

#### 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. Cross-reference: CIS117AM.

#### BPC117BM

### Database Management: Microsoft Access: Level II

1 Credit. 2 Periods.

Exploration of additional components of the Microsoft Access database management program. Prerequisites: BPC/CIS117AM or permission of instructor. Cross-reference: CIS117BM.

#### BPC117CM

### Database Management: Microsoft Access: Level III

1 Credit. 1 Period.

Application of the features of the Microsoft Access program to some common database management problems. Prerequisites: BPC117BM or CIS117BM. Cross-reference: CIS117CM.

#### BPC117DK

#### **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.Cross-References: CIS117DK

# BPC117DM 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. Cross-References: CIS117DM.

#### **BPC118AB**

#### **Powerpoint: Level I**

1 Credit. 2 Periods.

Use of Powerpoint software to produce professional-quality presentation visuals. Prerequisites: None. Cross-reference: CIS118AB.

#### BPC118BB

#### **Powerpoint: Level II**

1 Credit. 2 Periods.

Use of Powerpoint software add movement and sound to desktop presentations to enhance audience attention. Prerequisites: BPC/CIS118AB. Cross-reference: CIS118BB.

#### BPC118CB

#### **Powerpoint: Level III**

1 Credit. 1 Period.

Use of Powerpoint software for advanced desktop presentation techniques, including advanced animation and sound sequences. Prerequisites: BPC/CIS118BB. Cross-reference: CIS118CB.

#### BPC118DB

#### **Desktop Presentation: Powerpoint**

3 Credits. 5 Periods.

Use of PowerPoint to produce professionalquality presentation visuals with animation and sound. Prerequisites: None. Cross-Reference: CIS118DB.

#### **BPC120AF**

### Computer Graphics: Adobe Photoshop: Level I

1 Credit. 2 Periods.

Provides students with the capability to use Adobe Photoshop graphics software on a computer. Basic foundation course in the use of electronic techniques to select, manipulate, and edit images, for graphic design and image correction. Prerequisites: None. Cross-References: CIS120AF

#### BPC120BF

### Computer Graphics: Adobe Photoshop: Level II

1 Credit. 1 Period.

Provides students with the capability to use Adobe Photoshop graphics software on a computer. Includes working with masks, channels and layers, and combining raster and vector graphics. Prerequisites: BPC/CIS120AF. Cross-References: CIS120BF

#### BPC120CF

### 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: BPC/CIS120BF. Cross-References: CIS120CF

#### BPC120DB

### 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. Cross-References: CIS120DB

#### BPC120DC

#### Flash: Digital Animation

3 Credit. 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. Cross-References: CIS120DC

#### BPC120DF

### Computer Graphics: Adobe Photoshop

3 Credit. 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. Cross-References: CIS120DF

#### BPC121AB

### 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. Cross-References: CIS121AB

#### **BPC121AE**

#### **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. Cross-References: CIS121AE

#### **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.

#### BPC133AA

#### Internet/Web Development Level I -A

1 Credits. 2 Periods.

Overview of the Internet and its resources. Hands-on experience with various Internet communication tools. Prerequisites: None. Cross-References: CIS133AA

#### BPC133BA

#### Internet/Web Development Level I -B

1 Credits. 1 Periods.

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: BPC/CIS133AA. Cross-References: CIS133BA

#### BPC133CA

### Internet/Web Development Level I-C

1 Credits. 1 Periods.

Web site development using enhancement codes. Includes frames, style sheets and javascript as well as design principles and typography. Prerequisites: BPC/CIS133BA. Cross-References: CIS133CA

#### BPC133DA

#### 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. Cross-References: CIS133DA

#### BPC135DK 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.

#### BPC138AA

### Windows Desktop Design & Publishing

3 Credits. 4 Periods.

Use of Windows based microcomputers and appropriate commercial software package to compose and print textual and graphic materials of high quality. Includes overview of micro operating system, word processing of copy, use of graphics programs, layout of design elements, and printing alternatives. Prerequisites: CIS105 or BPC110 or permission of instructor.

#### BPC138BA

### Windows Desktop Design & Publishing Using Quark Express

3 Credits. 4 Periods.

Use of Windows based microcomputers and appropriate commercial software package to compose and print textual and graphic materials of high quality. Includes overview of micro operating system, word processing of copy, use of graphics programs, layout of design elements, and printing alternatives. Prerequisites: CIS105 or BPC110 or permission of instructor.

#### BPC138CA

### Windows Desktop Design & Publishing Using Pagemaker

3 Credits. 4 Periods.

Use of Windows based microcomputers and appropriate commercial software package to compose and print textual and graphic materials of high quality. Includes overview of micro operating system, word processing of copy, use of graphics programs, layout of design elements, and printing alternatives. Prerequisites: CIS105 or BPC110 or permission of instructor.

#### BPC138DA

### Desktop Design & Publishing Using Adobe In Design

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. Cross-References: CIS138DA

#### **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 trouble-shooting. Strong emphasis on network operating systems installations, data storage subsystems, and data recovery. Preparation for the CompTIA Server+ examination Prerequisites: (BPC170 and MST140) or permission of instructor.

#### **BPC278**

#### Software Installation - MS Windows

3 Credits. 4 Periods.

Installing and configuring microcomputer software. Emphasis placed on the installation, configuration, upgrade, and related problem resolution of microcomputer operating system and applications software. Prerequisites: CIS105, CIS114 (any module whose course number suffix begins with a "D"), CIS117 (any module whose course number suffix begins with a "D"), and BPC170 with grade of C or better, or permission of instructor.

#### Chemistry

#### **CHM107**

#### **Chemistry and Society**

3 Credits. 3 Periods.

A survey of chemistry and its impact on the environment. Completion of CHM107LL required to meet the Natural Science requirement. Prerequisites: None.

#### CHM107LL

#### **Chemistry and Society Lab**

1 Credits. 3 Periods.

A Laboratory experience in support of CHM107. Prerequisites or Corequisites: CHM107.

#### **CHM130**

#### **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 Fundamental Chemistry

#### Laboratory

1 Credit. 3 Periods.

Laboratory experience in support of CHM130. Prerequisites or Corequisities: CHM130.

#### **CHM150**

#### **General Chemistry I**

4 Credits. 4 Periods.

Detailed study of principles of chemistry for science majors and students in preprofessional 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.

#### CHM151

#### **General Chemistry I**

3 Credits. 3 Periods.

Detailed study of principles of chemistry for science majors and students in preprofessional 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

#### **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.

#### **CHM152**

#### **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

#### **General Chemistry II Lab**

1 Credit. 3 Periods.

Laboratory experience in support of CHM152. Prerequisites: CHM151LL or permission of instructor. Prerequisites or Corequisites: CHM152.

#### **CHM154**

### General Chemistry II with Qualitative Analysis

3 Credits. 3 Periods.

A study of the chemical properties of the major groups of elements, equilibrium theory, thermodynamics, kinetics, electrochemistry, and other selected topics. Includes qualitative analysis. Prepares students for all sophomore chemistry courses. Completion of CHM154LL 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.

#### CHM154LL

### General Chemistry II with Qualitative Laboratory

2 Credits. 6 Periods.

Laboratory experience in support of CHM154. Includes qualitative analysis. Prerequisites: CHM151LL or equivalent. Prerequisites or Corequisites: CHM154.

#### **CHM235**

#### **General Organic Chemistry I**

3 Credits. 3 Periods.

Rigorous introduction to chemistry of carbon-containing compounds. Reaction mechanisms and recent methods of synthesis emphasized. Prerequisites: CHM152 and CHM152LL, or CHM154 and CHM154LL. Completion of (CHM152 and CHM152LL) or (CHM154 and CHM154LL) within the last two years recommended.

#### CHM235LL

#### General Organic Chemistry I Laboratory

1 Credits. 4 Periods.

Laboratory experience in support of CHM235. Prerequisites: CHM152LL, or CHM154LL, or equivalent. Prerequisites or Corequisites: CHM235.

#### CHM236

#### **General Organic Chemistry IIA**

3 Credits. 3 Periods.

Study of chemistry of carbon-containing compounds continued. Structural determination and additional reaction mechanisms and modern methods of synthesis emphasized. Prerequisites: CHM235 and CHM235LL. Completion of CHM235 and CHM235LL within the last two years recommended.

#### CHM236LL

#### General Organic Chemistry IIA Laboratory

1 Credits. 4 Periods.

Laboratory experience in support of CHM236. Prerequisites: CHM235LL or equivalent. Prerequisites or Corequisites: CHM236.

#### **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

# CFS178 Survey of Early Childhood Education

3 Credits. 3 Periods.

Orientation to basic concepts of day care and nursery programs. History and philosophy of child care services including state regulations governing those services. Observation opportunities provided. Prerequisites: None.

#### CFS192 Child Care Center Staff Development

1 Credit. 1 Period.

Presents strategies to administrators and supervisors in child care centers for developing the personal and professional growth of child care staff. Prerequisites: None.

#### **CFS269**

#### **Child Care Seminar**

1 Credits. 1 Period.

Emphasizes the blend of job-related activities including career exploration, employment procedures, human relations, and on-the-job issues. May be repeated for a total of three (3) credit hours. Prerequisites: Departmental approval.

#### CFS284AB

### Early Childhood Teaching Internship

3 Credits. 3 Periods.

Work experience in child care centers. 80 hours of designated work per credit. Maximum of 6 credits allowed. Prerequisites: CFS/ECH176 and permission of department. Corequisites: CFS/ECH269. Cross Referenced: ECH284AB

#### CFS285AA

### Family-School Interaction: Preschool

1 Credit. 1 Period.

Interaction among parents, teachers and the preschool. Emphasis on methods used cooperatively by parents and preschool teachers to provide for education and developmental needs. Prerequisites: CFS176 or CFS278 or permission of instructor.

#### 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.

#### 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.

#### Cisco Networking Technology

#### CNT120

#### **Adobe Web Design**

3 Credits. 4 Periods.

Development of knowledge and skills required to design web pages and their elements using a variety of Adobe applications including GoLive, Premiere, Photoshop, Illustrator and Live Motion. Design theory relevant to maximizing web readership including interactive and multimedia elements, speed and accessibility optimization, and intuitive user interfaces. Prerequisites: CIS105 or permission of instructor. CIS150 recommended.

#### **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 fundaments 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.

#### **CNT145**

#### **Voice and Data Cabling**

4 Credits. 5 Periods.

Development of knowledge and skills related to the physical aspects of voice and data network cabling and installation. Emphasis of the cabling industry and its worldwide standards, types of media and cabling, physical and logical networks, and signal transmission. Hands-on experience and skills to read network design documentation, part list set up and purchase, pulling and mounting cable, cable management, choosing wiring closets and patch panel

installation and termination as well as installing jacks and cable testing. Use of diagnostic equipment, troubleshooting procedures, and documentation processes. Preparation for Building Industry Consulting Services International (BICSI) Registered Certified Installer, Level 1 exam. Prerequisites: CNT140 or permission of instructor

#### **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), Singlearea Open Shortest Path First (OSPF), and understanding the structure and behavior of routing tables. Preparation for Cisco certification examination. Prerequisites: CNT140 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.

#### **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.

#### **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 presale 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.

#### **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.

#### **CNT182**

### Cisco Secure PIX Firewall Configuration

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 firewall design, installation, configuration and maintenance, Authentication, Authorization, and Accounting (AAA), Failover, and Virtual Private Network (VPN) implementation using firewalls. Prerequisites: CNT170 or permission of instructor.

#### **CNT183**

### Cisco Secure Virtual Private Network Configuration

3 Credits. 4 Periods.

Knowledge and skills needed to describe, configure, verify and manage the Cisco Virtual Private Network (VPN) concentrator, Cisco Virtual Private Network (VPN) software client, and Cisco Virtual Private Network (VPN). Hardware Client Feature set. Prerequisites: CNT181 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.

#### **CNT186**

#### **Fundamentals of Wireless LANs**

4 Credits. 6 Periods.

Associate-level knowledge and skills required in Cisco wireless networks. Includes comprehensive hands-on labs to design, plan, implement, operate, secure, and troubleshoot wireless networks. Prerequisites: CNT170, or CNT170AA, or permission of Instructor.

#### **CNT187**

#### **Cisco SAFE Implementation**

3 Credits. 3 Periods.

Knowledge and skills needed to implement and use the principles and axioms presented in the SAFE white papers for small, medium, and remote user (SMR) Enterprise, Internet Protocol(IP) telephony and wireless Local Area Network (LAN) networks on specific devices. Describe the functionality and implement the configuration needed to build end-to-end security solutions using SAFE SMR as the blueprint. Basic implementation of SAFE wireless LAN. Prerequisites: CNT181 or permission of Instructor.

#### **CNT190**

#### **Cisco Network Design**

3 Credits. 4 Periods.

Development of knowledge and skills required to design small- to-midsize local and wide-area networks according to design principals developed by Cisco Systems. Preparation for Cisco Certified Design Associate (CCDA) industry examination.

Prerequisites: CNT170, or Cisco Certified Network Associate certification, or permission of instructor.

#### **CNT200**

### CCNP: Building Scalable Cisco Internetworks (BSCI)

4 credits 6 Periods.

Development of knowledge and skills needed to manage Internet Protocol (IP) traffic and access, understand scalable internetworks configure advanced routing protocols Border Gateway Protocol [BGP], Enhanced Interior Gateway Routing Protocol [EIGRP], Open Shortest Path First [OSPF], as well as Internet Protocol (IPv6), and configuration of secure routing solutions to support branch offices and mobile workers. Comprehensive labs emphasize hands-on learning and practice to reinforce configuration skills. Prerequisites: CNT170AA, or CCNA industry certification, or permission of Instructor. Corequisites: CNT220.

#### **CNT210**

### Cisco CCNP II: Implementing Secure Converged Wide Area Networks

4 Credits. 6 Periods.

Development of knowledge and skills in implementing secure enterprise-class network service for teleworkers and branch sites. Secure and expand the reach of an enterprise network with focus on VPN configuration and securing network access. Preparation for Cisco Certified Network Professional (CCNP) exam. Prerequisites: CNT170 or CCNA industry certification, or permission of instructor. Corequisites: CNT200 and CNT220.

#### **CNT220**

### Cisco CCNP: Building Multi-Layer Switched Networks

4 Credits. 6 Periods.

Development of knowledge and skills in building, monitoring, and maintaining switching in converged enterprise networks using advanced and multi-layer switching technologies. Planning, configuring, securing and verifying the implementation of complex enterprise switching solutions. Hands-on learning and practice to reinforce configuration skills. Prerequisites: CNT170AA, or CCNA industry certification, or permission of Instructor. Corequisites: CNT200.

#### **CNT230**

### Cisco CCNP IV: Optimizing Converged Networks

4 Credits. 6 Periods.

Introduction to optimizing and providing effective Quality of Service (QoS) techniques in converged networks operating voice, wireless and security applications. Topics include implementing a Voice over Internet Protocol (VoIP) network, implementing QoS on converged networks, specific Internet Protocol (IP) QoS mechanisms for implementing the DiffServ QoS model, AutoQ0S, wireless security and basic wireless management. Preparation for Cisco Certified Network Professional (CCNP) exam. Prerequisites: CNT170 or CNT170AA or CCNA industry certification, or permission of instructor. CNT200, CNT210, and CNT220 suggested but not required.

### CNT298AC 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.

#### **Communication**

#### **COM080**

#### **Conversation Circles**

3 Credits. 3 Periods.

Practice in conversing in English for nonnative speakers. Emphasis in developing conversational techniques to facilitate building and maintaining relationships: May be repeated for a total of six (6) credit hours. Prerequisites: None.

#### **COM100**

### Introduction to Human Communication

3 Credits. 3 Periods.

Theory and practice of communication skills in public, small group, and interpersonal settings. Includes study of the speech communication process. Prerequisites: None.

#### **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.

#### **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.

#### **COM259**

### Communication in Business and Professions

3 Credits. 3 Periods.

Interpersonal, group, and public communication in business and professional organizations. Emphasis on oral communication. Prerequisites: ENG101 or ENG107 or equivalent.

#### **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.

# 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.

#### **CAD120**

#### **Getting Started with CAD**

1 Credit. 2 Periods.

Basic commands, drawing aids; input devices; use of default settings. 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.

#### **CAD150**

#### **Two-Dimensional CAD**

1 Credit. 2 Periods.

Constructing scaled two-dimensional drawing using CAD. Prerequisites or Corequisites: (CAD105, CAD110, CAD115, CAD120, and CAD125) 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. Emphasison residential working drawings. Prerequisites: CAD145 or permission of Instructor. CAD255 is highly recommended.

#### **CAD167**

### Architectural Drawings (REVIT) I: Residential CAD

3 Credit.
6 Periods.

Introduction to REVIT architectural modeling software used by the architectural industry. Advanced software utilization and skills pertinent to architectural documentation. Emphasis on residential working drawings. Prerequisites: (ARC251 or CAD145) or permission of 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.

#### **CAD200**

#### Three-Dimensional CAD: AutoCAD

2 Credit. 4 Periods.

Advanced techniques in construction of threedimensional objects. Prerequisites: CAD150, or DFT105, 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.

#### **CIS103**

#### **Using Help Desk Software**

2 Credits. 3 Periods.

Help desk software applications for tracking calls, querying data, recording macros, and generating reports. Prerequisites: CIS105 or permission of instructor.

#### **CIS105**

### **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.

#### **CIS107**

#### **The Electronic Game Industry**

3 Credits. 4 Periods.

Introduction to the electronic game industry, including history, market, distribution and publishing channels, business models, team roles, and career landscape. Technical topics covered include software engineering, artificial intelligence, game physics, computer graphics, and networking. Prerequisites: CIS105, or permission of instructor.

#### **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.

#### CIS114AE

**Excel: Level I** 

1 Credit. 2 Periods.

Computer spreadsheet skills for solving business problems using Excel, including calculations, forecasting, and projections. Prerequisites: None. Cross-reference: BPC114AE.

#### CIS114BE

#### Excel: Level II

1 Credit. 2 Periods.

Additional Excel spreadsheet techniques, including macro programming, database searching, extraction, and linking to obtain prescribed reports and graphs. Prerequisites: CIS114AE or permission of instructor.

#### CIS114CE

#### **Excel: Level III**

1 Credit. 1 Period.

Additional Excel spreadsheet techniques, including complex macros, statistics, and matrix manipulation. Project design using multiple, integrated spreadsheets. Prerequisites: CIS114BE or permission of instructor.

#### 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.

#### CIS117BM

### Database Management: Microsoft Access: Level II

1 Credit. 2 Periods.

Exploration of additional components of the Microsoft Access database management program. Prerequisites: CIS117AM or permission of instructor.

#### CIS117CM

### Database Management: Microsoft Access: Level III

1 Credit. 1 Period.

Application of the features of the Microsoft Access program to some common database management problems. Prerequisites: BPC117BM or CIS117BM. Cross-reference: BPC117CM.

#### 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.

#### **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.

#### CIS119DP

#### **Oracle: Database Administration**

3 Credits. 4 Periods.

Basic administrative tasks performed by a database administrator (DBA). Conceptual understanding and hands-on applications of the Oracle database architecture and interaction of its components. Prerequisites: (CIS119DO, and CIS164AB), or CIS126++, or permission of instructor.

#### CIS119DQ

#### **Oracle: Backup and Recovery**

2 Credits. 3 Periods.

Various backup, failure, restore, and recovery scenarios that apply to Oracle database environments. Backup methodologies based on business requirements in a mission critical enterprise. Multiple strategies and Oracle tools such as Recovery Manager. Prerequisites: CIS119DP or permission of the instructor.

#### CIS119DR

#### **Oracle: Performance Tuning**

3 Credits. 4 Periods.

Recognizing, troubleshooting, and resolving common performance related problems in administering an Oracle database. Includes an interactive workshop that will provide participants with the opportunity to walk through numerous real-world performance tuning case studies. Prerequisites: CIS119DP or permission of the instructor.

#### CIS120AB

### Computer Graphics: Adobe Illustrator- Level I

1 Credit. 2 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, graphics design, and color graphics. Prerequisites: None.

#### CIS120AF

### Computer Graphics: Adobe Photoshop: Level I

1 Credit. 2 Periods.

Provides students with the capability to use Adobe Photoshop graphics software on a computer. Basic foundation course in the use of electronic techniques to select, manipulate, and edit images, for graphic design and image correction. Prerequisites: None.

#### CIS120BB

### Computer Graphics: Adobe Illustrator-Level II

1 Credit. 1 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, and create a PDF file. Prerequisites: CIS120AB.

#### 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.

#### CIS120CB

### Computer Graphics: Adobe Illustrator-Level III

1 Credit. 1 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, graphics design, color graphics, determine file formats appropriate for web and print, and utilize tools to optimize graphics. Prerequisites: CIS120BB.

#### 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.

#### 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.

#### CIS124AA

#### Project Management Software: Level I

1 Credits. 1.7 Periods.

Utilization of project management software packages by managers and advanced business students to solve critical management planning tasks. Evaluation of management opportunities utilizing software packages to monitor project progress and resource allocation. Includes "what-if" analyses, and preparation of management reports. 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.

#### 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.

#### **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.

### CIS158 COBOL Programming I

3 Credits. 4 Periods.

Programming in structured COBOL for preparation of business reports. Hands-on computer experience. Prerequisites: 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.

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.

#### 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.

#### CIS164AC

#### **Oracle: Developer Forms I**

3 Credits. 4 Periods.

Building and testing interactive applications consisting of one or more Developer forms modules. Building a complete forms application using Oracle Developer. Customizing forms with graphical user input items, such as check boxes, list items and radio groups. Modifying data access by creating event-related triggers. Prerequisites: CIS164AB, or permission of instructor.

#### CIS164AD

#### **Oracle: Developer Forms II**

2 Credits. 3 Periods.

An opportunity to broaden skills using Developer Forms. Complex concepts, such as programming function keys, timers, and record groups. Using programmatic controls to manage the behavior and appearance of windows at runtime. Creating advanced multiple-form applications and managing multiple transactions across modules. Prerequisites: CIS164AC or permission of instructor.

#### CIS164AE

#### **Oracle: Developer Reports**

3 Credits. 4 Periods.

Building a variety of standard and custom reports in a client-server environment. Using a graphical user interface (GUI) environment to retrieve, display, and format data in many styles to create tabular, matrix, mailing label, and letter reports. Customizing more complex reports, embedding graphical charts in reports, and using the Intelligent Remote Reports Server. Prerequisites: CIS164AB or permission of instructor.

#### CIS164AG

### Oracle: Data Modeling and Relational Database Design

2 Credits. 3 Periods.

Top-down, systematic approach to developing a relational database and defining requirements as entities, attributes, and relationships. Developing an entity-relationship (ER) diagram that accurately reflects the business. Mapping the ER diagram to an initial database design. Prerequisites: CIS105 or permission of instructor.

#### **CIS166**

#### **Web Scripting/Programming**

3 Credits. 4 Periods.

Software development for Web sites, including client-side script and Common Gateway Interface (CGI) scripting. Covers Web-based transaction processing and use of databases in conjunction with the Web. Includes security issues. Prerequisites: CIS133CA or CIS133DA or permission of instructor.

#### CIS166AA

#### **Introduction to JavaScripting**

3 Credits. 4 Periods.

Introduction to basic JavaScript programming concepts including syntax. Covers Hypertext Markup Language (HTML), programming logic and debugging, as well as forms manipulation and animation. Prerequisites: CIS133CA or CIS133DA or permission of instructor.

#### 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.

#### **CIS169**

### Introduction to Visual Basic for Applications

3 Credits. 4 Periods.

Introduction to Visual Basic for Applications (VBA) using Microsoft Office environments. Includes Dynamic Data structures, VBA class modules and error trapping and handling. Creation of customized office applications and network shares as well as multimedia techniques also covered. Prerequisites: CIS159 or permission of instructor.

#### CIS175EA

### Introduction to Structured Query Language

1 Credits. 2 Periods.

Introduction to Structured Query Language. Focuses on the query operation, including data collection, grouping and multitable queries. Prerequisites: None. Cross-References: CCT175

#### **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.

#### **CIS191**

### Novell NetWare System Administration

3 Credits. 4 Periods.

Knowledge and skills required to administer or manage a Novell NetWare local area network operating system. Level I, II, and III network management tasks. Prerequisites: CIS105 or permission of instructor.

#### CIS214DE

#### Advanced Excel Spreadsheet: Level II

3 Credits. 5 Periods.

Advanced Excel spreadsheet features including formatting techniques, macros and Visual Basic for applications. Templates, built-in functions and lists as well as analysis tools including Pivot Tables and Goal Seek covered. Import and export data, workgroup collaboration and Internet features of Excel emphasized. Prerequisites: CIS114DE or permission of instructor.

#### CIS217AM

### Advanced Microsoft Access: Database Management

3 Credits. 4 Periods.

Advanced database concepts including database design, primary and secondary key selection and relationships between tables. Queries, sub forms, macros, events, Visual Basic modules and Access Internet features also covered. Prerequisites: CIS117DM or CIS117CM.

#### CIS220DC

### Flash: Advanced Animation and ActionScript

3 Credits. 4 Periods.

Advanced Flash programming, action scripting, tweening, advanced buttons and user input, movie clips, using dynamic sound and text, managing information flow, Object-Oriented Programming concepts in relation to Flash. Prerequisites: BPC/CIS120DC or permission of Instructor.

#### CIS220DF

#### Advanced PhotoShop

3 Credits. 4 Periods.

Goes beyond the basic use of palettes, selections, layers, menus, and tool options, and focuses on using Photoshop software's advanced features to manipulate and correct digital and digitally produced images. Prerequisites: (CIS120AF, CIS120BF and CIS120CF) or CIS120DF, or permission of instructor.

#### **CIS221**

#### **Advanced DOS**

2 Credits. 3 Periods.

Advanced DOS commands, concepts, and usage. Emphasis on batch file programming, configuration and optimization of the DOS environment, various commercial utilities, security and disaster planning, and legal considerations. Prerequisites: CIS121AB or (BPC102AA and BPC102BA) 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.

#### CIS226AA

### Internet/Intranet Server Administration-UNIX

3 Credits. 4 Periods.

Set up and management of internet/intranet services, including World Wide Web (WWW) and Simple Mail Transfer Protocol (SMTP) in a UNIX environment. Includes coverage of security issues. Prerequisites: (CIS126DA and CIS133DA), or permission of instructor

#### CIS233AA

#### Internet/Web Development Level II-A

1 Credit. 2 Periods.

Design and creation of pages on the World Wide Web using hypertext markup language (HTML). Hands-on experience authoring HTML and preparing sophisticated web documents. Prerequisites: BPC/CIS133BA or permission of instructor

#### CIS233BA

#### Internet/Web Development Level II-B

1 Credit. 1 Period.

Hands-on experience designing Web presentations using advanced markup languages, programming languages, scripts, and multimedia. Prerequisites: CIS233AA or permission of instructor.

#### CIS233CA

#### Internet/Web Development Level II-C

1 Credit. 1 Period.

Exloration of best practices/issues for web design and publishing and careers in web development and e-commerce. Prerequisites: CIS233BA 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.

#### 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

#### CIS238US

#### **Unix Security**

3 Credits. 4 Periods.

Unix system administration and security management including directory structure, access control and authentication mechanisms, password management, system logs and monitoring, process accounting, configuring public services, restricted environments, the sudo command, SSH (Secure Shell), file system mount options, file integrity management, immutable/appendonly files and system security levels, loadable kernel modules, rootkits, non-executable stacks, backups, common vulnerabilities and exposures, and firewall filtering. Prerequisites: CIS238, 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.

#### 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 multiplatform 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.

#### **CIS253**

#### **Computer Game Development -Level III**

3 Credits. 4 Periods.

Advanced object oriented game development, controlling and programming game and windows resources using the game development language. Modeling real-time simulations and game worlds using advanced programming techniques and artificial intelligence. Creation of network and Internet based multi-player games using object oriented techniques and packet based communication protocols. Prerequisites: CIS251 or permission of Instructor.

#### **CIS259**

#### **Visual Basic Progamming 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: 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 Progamming: 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.

#### 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.

#### 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 Interships**

3 Credits. 18 Periods.

Work experience in business or industry. Prerequisites: Permission of 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.

### 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.

#### 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.

#### 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.

#### CPD103BC

### African American Cultural Pride and Awareness

2 Credits. 2 Periods.

Develop an awareness of cultural roots, history, and traditions with emphasis on the shaping of personal identity, social, career, and educational decisions Prerequisites: None.

#### CPD103BD

### Latino/Hispanic American Pride and Awareness

2 Credits. 2 Periods.

Develop an awareness of cultural roots, history, and traditions with emphasis on the shaping of personal identity, social, career, and educational decisions. Prerequisites: None.

#### CPD103BL

#### **Dynamics of Leadership**

2 Credits. 2 Periods.

Designed to provide strategies that may be used when assuming leadership roles. Focus on improving supervisory confidence through the development of appropriate competitive behaviors, problem-solving skills, and techniques of leadership. 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

#### CPD150AB

#### **Study Skills Development**

1 Credit. 1 Period.

Emphasis on increasing student success through the use of study strategies including materials organization, note-taking, reading, test-taking, memory, and critical and creative thinking. Prerequisites: None. Cross-reference: AAA150AB.

#### CPD150AC

#### **Educational & Career Planning**

1 Credit. 1 Period.

Emphasis on increasing student success through educational and career planning. Prerequisites: None. Cross-Reference: AAA150AC.

#### **CPD160**

#### Introduction to Multiculturalism

3 Credits. 3 Periods.

Examination of the multiple cultures and subcultures within the contemporary United States. Personal exploration of awareness and appreciation of multiculturalism. Activities for experiencing diverse cultural perspectives. Skills for recognizing, analyzing, and mediating cultural and psychological factors impacting conflict and accord between diverse cultures. Credit (P) or no credit (Z). Standard grading available according to procedures outlined in catalog. Prerequisites: None.

#### **Creative Writing**

#### **CRW150**

#### **Introduction to Creative Writing**

3 Credits. 3 Periods.

Introduces the student to elements and techniques of creative writing in a variety of genres; teaches terminology and concepts needed for successful participation in writing workshops; facilitates writing practice and evaluation; offers individual guidance on the student's development as a writer. Prerequisites: None.

#### **CRW160**

#### **Introduction to Writing Poetry**

3 Credits. 3 Periods.

Prewriting (invention and discovery); writing; analyzing and evaluating (in workshop); and revising to practice manipulating various elements of poetry, critique one's own and the poetry of others, and produce a portfolio of finished, marketable poems. Prerequisites: None. CRW150 recommended but not required.

#### **CRW170**

#### **Introduction to Writing Fiction**

3 Credits. 3 Periods.

Practice in writing fiction through a process of prewriting (invention and discovery), writing, analysis and evaluation (in workshop), and revision; practice in manipulating various elements and forms of fiction; production of

marketable quality short fiction. Prerequisites: None. CRW150 recommended but not required.

#### **CRW190**

#### **Introduction to Screenwriting**

3 Credits. 3 Periods.

Overview of screenwriting elements; introduction to screenwriting techniques. Prerequisites: None. CRW150 recommended but not required.

#### CRW240AB

### Studio Workshop I: Publishing Your Work

1 Credit. 1 Period.

Studio course focusing on elements of publication including manuscript preparation, appropriate markets, query, and cover letters. Prerequisites: None.

#### **CRW260**

#### **Intermediate Poetry Writing**

3 Credit. 3 Period.

Emphasis on writing a series of original poems; analysis and evaluation of the functions and effects of established works of poetry; concentration on evaluation and revising students' poetry through intensive workshopping.

#### **CRW270**

#### Intermediate Fiction Writing

3 Credit. 3 Period.

Writing a series of original short stories; analysis of established works of fiction; concentration on revising students' fiction through intensive workshopping. Prerequisites: CRW170 or permission of instructor.

#### **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.

#### **Critical Reading**

#### CRE101

#### **College Critical Reading**

3 Credits. 3 Periods.

Emphasis on applying critical inquiry skills to varied and challenging reading materials. Includes analysis, synthesis, and evaluation through written discourse. Prerequisites: (ENG101 or ENG107) and (appropriate reading placement score or grade of "C" or better in RDG091.)

#### **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.

#### Dance

#### 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.

#### **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.

#### 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.

#### 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.

#### **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.

#### **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.

#### **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.

#### 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

#### **ECH270**

#### **Observing Young Children**

1 Credit. 1 Period.

Introduction to techniques of observing young children. Recording methods, interpretation and use of collected information including legal and ethical implications. Prerequisites: None.

#### **ECH271**

#### **Arranging the Environment**

1 Credit. 1 Period.

Exploration of the influence of the environment on the behavior of young children. Indoor and outdoor spaces considered and analysis of environments practiced. Prerequisites: None.

#### **ECH275**

### Literacy Development and the Young Child

1 Credit. 1 Period.

Literacy from birth through the early childhood years. Focus on developmentally appropriate ways to encourage speaking, listening, writing, and reading in the home and classroom. Prerequisites: None. Cross-Reference: CFS275.

#### **ECH279**

### Early Childhood Curriculum Development

1 Credit. 1 Period.

An intensive focus on the process of building curriculum units appropriate to the developmental needs and abilities of the young child. Design, use and evaluation of materials and activities. May be repeated for a total of four (4) credits. Prerequisites: None.

#### **ECH282**

### Discipline/Guidance of Child Groups

1 Credit. 1 Period.

Exploration of techniques for guiding children in groups with focus on individual child and adult needs for a disciplined environment. Prerequisites: None.

#### **ECH287**

### Professional Development in Early Childhood Education

1 Credit. 1 Period.

Emerging professionalism within the field of early childhood education. Consideration of job responsibilities, rewards, ethics and current issues facing practitioners. Includes assessment and career planning. Prerequisites: None. Cross-Reference: CFS287.

#### **Economics**

#### **ECN211**

#### **Macroeconomic Principles**

3 Credits. 3 Periods.

A descriptive analysis of the structure and functioning of the American economy. Emphasis on basic economic institutions and factors that determine national income and employment levels. Consideration given to the macroeconomic topics of national income, unemployment, inflation and monetary and fiscal policies. Prerequisites: None.

#### **ECN212**

#### **Microeconomic Principles**

3 Credits. 3 Periods.

Microeconomic analysis including the theory of consumer choice, price determination, resource allocation and income distribution. Includes non-competitive market structures such as monopoly and oligopoly; and the effects of government regulation. Prerequisites: None.

#### **Education**

#### **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.

#### **EDU225**

### Foundations for Serving English Language Learners (ELL)

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. 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.

#### 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

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 schoolbased 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.

#### **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, onsite experience working with gifted students. Requires observations of gifted students in a variety of settings, evaluation of teaching techniques, and critical review of academic standards as they relate to gifted learners and related professional organizations. Prerequisites: Must hold a provisional or standard early childhood, elementary, secondary or special education teaching certificate and EPD225, EPD226, EPD227, and EPD228 (or permission of Department or Division chairperson).

### EPD230 Gifted Education Practicum II

3 Credits 4.5 Periods.

Supervised practicum. Emphasis on the provision of instruction and assessment to gifted and talented students. Covers lesson plan development, classroom procedures, classroom management, and assessment. Includes learner preparation, learner engagement, and learner outcome awareness. Prerequisites: Must hold a

provisional or standard early childhood, elementary, secondary or special education teaching certificate and EPD225, EPD226, 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.

#### **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.

#### 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.

### **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.

### **ELC219**

### **Programmable Controllers**

4 Credits. 6 Periods.

Principles and applications of programmable logic controls (PLC's). Numbering systems, control strategies, and ladder logic. Basic machine functions and operations to include programming, troubleshooting and maintenance. Application of PLC programming, operations and troubleshooting skills. Prerequisites: ELC105 and ELC115 and ELC119, or permission of instructor.

### **Electronics**

### **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. Handson hardware and computer-aided logic design experiments. Prerequisites: ELT113 or permission of instructor. Cross-References: SMT131.

#### **ELT195**

### **Solid State Electronics**

LAB 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

### **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 bloodglucose 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.

#### **EMT238**

# Vehicular Extrication and Patient Stabilization

2 Credits. 2 Periods.

Participative course designed for the Emergency Medical Technicians (EMT). Incorporates new knowledge and skills necessary to access, extricate, and care for victims of crash incidents. Provides exposure to scene management, including sizeup, disentanglement, victim stabilization for single and multi-victim situations, hazardous materials incidents, integration of local emergency medical services (EMS) for patient assessment and management, and standard operating procedures to selected victim scenarios. Prerequisites: Basic EMT certification, current enrollment in an EMT-Basic program, nurse with emergency department experience, or law enforcement personnel, or permission of instructor.

### **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.

#### **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.

## 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.

# **Engineering Science**

# 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.

### 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 and (high school physics or PHY111).

### **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.

# 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**

### **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**

### **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

Analysis, planning, organization, research, and writing of technical reports and oral presentations for specific job- related audiences. Preparation of recommendation and feasibility reports, proposals, and applications of graphics in documents and oral presentations. Prerequisites: ENG101 with a grade of "C", or better, or permission of instructor.

### **ENG200**

# Reading and Writing About Literature

3 Credits. 3 Periods.

Emphasis on critical analysis of various genres of literature; includes study of necessary terminology, introduction to methods of literary criticism, and practice in interpretation and evaluation. Prerequisites: ENG102.

### **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.

# English as a Second Language

### ESL001BA

# Basic ESL I: Personal Health and Safety

2 Credits. 2 Periods.

Listening, speaking, reading and writing in English at a basic level. Focus on survival skills related to personal health and safety when living in the United States. Introduction to elementary grammatical patterns. Prerequisites: None. Course Note: Credit (P) or no credit (Z). Standard grading available according to procedures outlined in catalog. May be repeated for a total of four (4) credits.

### ESL001BB

### **Basic ESL I: Services & Employment**

2 Credits. 2 Periods.

Listening, speaking, reading and writing in English at a basic level. Focus on survival skills related to services and employment when living in the United States. Introduction to elementary grammatical patterns. Prerequisites: ESL001BA or permission of instructor. Course Note: Credit (P) or no credit (Z). Standard grading available according to procedures outlined in catalog. May be repeated for a total of four (4) credits.

#### **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.

### **ESL013**

### **Vocabulary for ESL I**

1 Credits. 1 Periods.

Emphasis on the acquisition of basic English vocabulary including identifying and pronouncing words related to people, medical/dental care, occupations and other activities. May be repeated for a maximum of two (2) credits. Prerequisites: Appropriate ESL placement test score or permission of instructor.

#### **ESL014**

### **Idiomatic English for ESL I**

1 Credits. 1 Periods.

Study of idiomatic English for speakers of English as a Second Language (ESL). Emphasis on commonly misunderstood expressions. Includes practice on a computer or with audio tapes. May be repeated for a maximum of two (2) credits. Prerequisites: Appropriate ESL placement test score or permission of instructor.

### **ESL020**

# English as a Second Language II: Grammar

3 Credits. 3 Periods.

Second level of English as a Second Language (ESL). Continued emphasis on conversational skills, pronunciation, vocabulary building and grammar with some reading and sentence level writing. Credit (P) or no credit (Z). Standard grading available according to procedures outlined in catalog. May be repeated for a maximum of six (6) credits. Prerequisites: Appropriate ESL placement test score, or a grade of "P" or "C" or better in ESL010, or (ESL010AA, ESL010AB, and ESL010AC).

### **ESL021**

### **ESL II - Listening & Speaking**

3 Credits. 3 Periods.

Emphasis on listening and speaking skills involving social exchange. Asking and answering questions, using tag questions. 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).

#### **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.

#### **ESL043**

### **Vocabulary for ESL IV**

1 Credits. 1 Periods.

Emphasis on the acquisition of basic English vocabulary including identifying and pronouncing words related to people, medical/dental care, occupations and other activities. May be repeated for a maximum of two (2) credits. Prerequisites: Appropriate ESL placement test score or permission of instructor.

### **ESL044**

### **Idiomatic English for ESL IV**

1 Credits. 1 Periods.

Study of idiomatic English for speakers of English as a Second Language (ESL). Emphasis on commonly misunderstood expressions. Includes practice on a computer or with audio tapes. May be repeated for a maximum of two (2) credits. Prerequisites: Appropriate ESL placement test score 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.

### **ESL052**

# Job-Specific Writing and Speaking Skills for ESL

3 Credits. 3 Periods.

Using and understanding English for specific employment or vocational training. Includes English speaking, reading and writing skills. Prerequisites: Appropriate ESL test score or satisfactory completion of ESL049, or permission of instructor.

### **ESL071**

# Advanced Pronunciation and Oral Reading for ESL

3 Credits. 3 Periods.

Pronunciation practice and review, spelling of Pronunciation practice and review, spelling of English sounds, and oral reading for stress and intonation patterns in English. Prerequisites: A grade of C or better in ESL051, or permission of instructor.

Course Note: May be repeated for a total of six (6) credit hours.

# **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.

### **ENH114**

### **African-American Literature**

3 Credits. 3 Periods.

Survey of major African-American writers from Colonial period through the present; analysis of trends and movements within African-American literary history; analysis of literary types and selected works. Prerequisites: None.

### **ENH117**

## **Rap Literature: The Oral Tradition**

3 Credits. 3 Periods.

Survey of selected rap poetry looking at the oral tradition of Africa, the Caribbean, and the United States as precursors to East Coast, West Coast, Southern, North Central, and International development of the genre. Investigation of cultural environments, historical events, competitions (the "battles"), artists' biographies, and parallel art forms as they relate to the analysis of the genre and its themes. Prerequisites: None.

### **ENH120**

### The Literature of Science Fiction

3 Credits. 3 Periods.

Surveys the last one hundred and fifty years of Science Fiction literature. Investigates the similarities between Science Fiction and other imaginative literatures Examines the Science Fiction genre, sub genres, and themes from a variety of perspectives, as well as social issues. Prerequisites: None.

### **ENH201**

# World Literature Through the Renaissance

3 Credits. 3 Periods.

Examines a selection of the world's literary masterpieces within their cultural contexts from ancient times through the Renaissance. Analyzes the influences of major literary philosophies, themes, genre, and styles. Assesses the contributions of major writers. Introduces the terminology of literary analysis. 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.

#### **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

#### **ENH221**

# Survey of English Literature Before 1800

3 Credits. 3 Periods.

Emphasizes the social and political backgrounds as well as the form and content of English literature from Anglo-Saxon times to the end of the eighteenth century. Prerequisites: (ENG101 or ENG107) or equivalent.

### **ENH222**

# **Survey of English Literature After** 1800

3 Credits. 3 Periods.

Emphasizes the social and political backgrounds as well as the form and content of English literature in the nineteenth and twentieth centuries. Prerequisites: (ENG101 or ENG107) or equivalent.

### **ENH230**

### **Introduction To Shakespeare**

3 Credits. 3 Periods.

Introduces Shakespeare the playwright, the sonneteer, the linguist, and the citizen of the 17th century. Considers the major tragedies, comedies, histories, and sonnets; focuses on the use of language; and connects the writer to the time. Some emphasis on Shakespeare's influence through the centuries, noting parallels between the late 16th century and the late 20th century. Prerequisites: None.

#### **ENH241**

### **American Literature Before 1860**

3 Credits. 3 Periods.

Includes literature written prior to 1860 in the United States. Prerequisites: None.

### **ENH242**

### **American Literature After 1860**

3 Credits. 3 Periods.

Includes literature written after 1860 in the United States. Prerequisites: None.

# 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.

### **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.

### **ENH275**

### **Modern Fiction**

3 Credits. 3 Periods.

Includes novels and short stories of modern writers which reflect significant themes of our time. 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.

### **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.

# **Exercise Science**

#### 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

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.

### **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.

### EXS212CR

## Instructional Competency Laboratory: Cardiorespiratory Exercises and Activities

2 Credits 3 Periods.

Fundamental methods of instructing and leading fitness activities including cardiorespiratory exercises and activities. Core competencies identified by professional certification agencies. Prerequisites: None.

### EXS212FL

# Instructional Competency Laboratory: Flexibility and Mind-Body Exercises

2 Credits 3 Periods.

Fundamental methods of instructing and leading fitness activities including flexibility activities. Core competencies identified by professional certification agencies. Prerequisites: None.

#### EXS212SC

# Instructional Competency Lab: Muscular Strength and Conditioning

2 Credits 3 Periods.

Fundamental methods of instructing and leading fitness activities including strength and conditioning activities. Core competencies identified by professional certification agencies. Prerequisites: None.

### **EXS275**

### Methods of Enhancing Physical Performance

3 Credits 3 Periods

Theoretical and practical applications of performance enhancement methodologies and practices. Basic sport mechanics and exercise physiology. Training clients for speed, power, agility, balance, and endurance activities to enhance athletic performance. Application of training principles to specific sports and design of training programs. Prerequisites: EXS125 or EXS130 or permission of Instructor.

### **EXS285**

# Exercise Program Design and Instruction

3 Credits 3 Periods.

Business aspects of the fitness profession such as program administration, quality assurance, and effective communication skills for the professional personal trainer and/or strength and conditioning coach. Implementation of behavioral strategies, progression of program planning, and development of programs for populations with special physical/medical needs. Designing exercise programs in an internship setting. Prerequisites: EXS145 or permission of instructor.

# **Facilities Management**

### **FAC101**

# Refrigeration Components and Applications I

2 Credits. 2 Periods.

Major components of refrigeration systems. Properties of refrigerants and piping practices. 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

#### FAC104

# Introduction to Facilities Management

3 Credits. 3 Periods.

Survey of the total responsibilities of the facilities organization in manufacturing, business, and government. Includes methods for coordinating the physical workplace with the people and work of the organization. Prerequisites: None.

### **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 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, 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

### **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

### **FAC185**

### **Electro-Mechanical Devices**

4 Credits. 6 Periods.

Concepts, principles, maintenance, and troubleshooting of mechanical and electromechanical devices; mechanical alignment of shafts, pillowblocks, gears, and couplers on mechanical breadboard; transmission devices including lead screws, linkages, worm and worm wheels, gear trains, speed reducers, chain drives, and belt drives; principles of lubrication; operation of dc(direct current), ac(alternating current), and stepping motors; application of tachometers, stepping motors, linear actuators, relays, solenoids, switches, contactors, starters, and fuses; selection and specification of components from manufacturer's catalogs. Prerequisites: ELE101, or ELT101, or GTC108, or equivalent, or permission of instructor. Corequisites: None. ELE100 or ELT100 suggested but not required. Cross-References: GTC185, HVA185

### **FAC186**

### **Electro-Mechanical Devices**

3 Credits. 5 Periods.

Concepts, principles, maintenance, and troubleshooting of mechanical and electromechanical devices. Mechanical alignment of shafts, pillow blocks, gears, and couplers on mechanical equipment. Bearings removal and installation. Installation and troubleshooting of pump seals. Vernier calipers, micrometers, tachometers. Use and operation of air flow hoods for air balancing. Belt drive systems and set up and operation of variable frequency drives. Cooling tower water treatment controls and chemical additives. Prerequisites: (FAC/HVA101, FAC/HVA101LL, FAC/ELC/HVA105 and FAC/ELC/HVA105LL or equivalent), or permission of instructor. Cross-References: HVA186

### 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.

### FAC213 Controls

3 Credits. 3 Periods.

Control theory and terminology, pneumatics, electrical, and electronic control devices, flow control devices, elementary and advanced control systems. Electric and electronic control systems, programmable logic controls, and facilities management systems. Prerequisites: None. Cross-References: HVA213.

### **FAC214**

### Instrumentation

3 Credits. 3 Periods.

Process and terms used in instrumentation, methods of heat transfer, calculations for heat temperature, and heat transfer. Measuring and calculating pressure, fluid flow, measuring humidity, control action, and instrumentation symbols. Prerequisites: None. Cross-References: HVA214.

### **FAC220**

### **Controls and Instrumentation**

3 Credits. 3 Periods.

Control theory and terminology, pneumatics, electrical, and electronic control devices, flow control devices, elementary and advanced control systems. Electric and electronic controls, systems, programmable logic controls, and facilities management systems. Process and terms used in instrumentation, methods of heat transfer, calculations for heat temperature, and heat transfer. Measuring and calculating pressure, fluid flow, measuring humidity, control action, and instrumentation symbols. Prerequisites: FAC/HVA210 or permission of department. Corequisites: FAC/HVA220LL or permission of department.

### FAC220LL

### **Controls and Instrumentation Lab**

1 Credits. 3 Periods.

Calibrating pneumatic electrical, and electronic control devices. Commissioning and troubleshooting elementary and advanced control systems. Programming and tuning direct digital control (DDC) devices. Installing, testing and calibration control and instrumentation sensors. Developing and

testing sequences of operation for control loops. Recording and analyzing data from facility management systems. Prerequisites: FAC/HVA210 or permission of department. Corequisites: FAC/HVA220 or permission of department.

# 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: (EMT104, FSC105 and FSC130) and permission of instructor. Corequisites: FSC134.

#### **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.

### **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.

### **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. Preemployment, 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

### **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

### **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: AJS148

#### **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**

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

### 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.

### 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.

Basic nutrition concepts for health and fitness. Emphasizes current dietary recommendations for maximizing well-being and minimizing risk of chronic disease. Focuses on use of tables, food guides, and guidelines for making healthy food choices. Includes unique nutrition needs for selected stages of the lifecycle, methods for evaluating credibility of nutritional claims, principles of vegetarian nutrition, safe and economic use of supplements, principles of energy balance, basic elements of food safety, diet for exercise and sports, and personal dietary evaluation techniques. Not for predietetics or other preprofessional majors. May not be taken for credit if credit has been earned in FON100AA and/or FON100AC. Prerequisites: None.

# FON100AD Nutrition Sports and Physical Activity

1 Credits. 1 Periods.

Principles of nutrition applied to fitness, exercise, and sports. Dietary fundamentals as applied to body fuels, hydration, and other unique needs for exercise and sports. Includes dietary guidelines for weight or endurance training, glycogen loading, the pregame meal, and glycogen recovery. Emphasis on maximizing fitness, performance, and safety. Prerequisites: FON100AA, or equivalent, or permission of instructor.

### FON102 Menu Planning

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.

### **FON118**

### **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.

### **FON119**

### **Catering - Planning and Production**

1 Credits 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 breakdown for both in-house and off-premise catered events. Prerequisites: FON117 or FON180.

# **FON120**

# Baking Theory and Retail Operations

3 Credits. 5 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.

### **FON126**

# Specialty Breads and Breafast 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: FON118 or permission of Program Director.

#### **FON137**

### **Nutrition Supplements**

2 Credits 2 Periods.

Discussion of supplements and their effects on metabolic enhancement. The course will be divided into three major sections: anabolic, catabolic, and energy-producing agents. Addresses current supplements on the market in order to advise the general public. Prerequisites: FON100 or permission of instructor.

### **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

# FON179

## **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.

#### **FON180**

# 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.

### **FON182**

### **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.

### **FON183**

### **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.

### **FON190**

### **Professional Cooking Practicum**

7 Credits. 19 Periods.

Preparation of hot and cold foods in a commercial food service operation; experience in volume food production preparing salads, soups, stocks, sauces, entrees, starches, and vegetables; designed to develop knowledge and skills necessary to cook in a variety of commercial kitchens. Prerequisites: FON104, FON180, or departmental approval.

### **FON210**

# Sports Nutrition and Supplements for Physical Activity

3 Credits. 5 Periods.

Description: Principles of nutrition applied to fitness, exercise, and sports. Dietary fundamentals as applied to body fuels, hydration, and other unique needs for exercise and sports. Includes dietary guidelines for weight or endurance training, glycogen loading, the pre-game meal, and glycogen recovery. Emphasis on maximizing fitness, performance, and safety. Discussion of supplements and their effects on metabolic enhancement. Discussion of anabolic, catabolic, and energy-producing agents. Addresses current supplements on the market. Prerequisites: FON100AA, or FON100, or equivalent, or permission of instructor.

### **FON218**

# 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.

#### **FON221**

# 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: FON118 or permission of Program Director.

### **FON224**

## **Professional Pastry Techniques**

3 Credits. 5 Periods.

Advanced production techniques for plated desserts, frozen desserts, modern and classical gateaux, petits fours, and chocolates. Prerequisites: FON118 and FON218, or permission of Program Director.

### **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.

#### **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.

### **GBS220**

### **Quantitative Methods in Business**

3 Credits. 3 Periods.

Business applications of quantitative optimization methods in operations management decisions. Prerequisites: (Grade of "C" or better in MAT150, or MAT151, or MAT152) or equivalent, or satisfactory score on district placement exam.

#### **GBS221**

#### **Business Statistics**

3 Credits. 3 Periods.

Business applications of descriptive and inferential statistics, measurement of relationships, and statistical process management. Includes the use of spreadsheet software for business statistical analysis.

Prerequisites: Grade of C or better in GBS220

# or MAT217. **GBS233**

### **Business Communication**

3 Credits. 3 Periods.

Internal and external business communications, including verbal and nonverbal techniques. Prerequisites: ENG101 or ENG107 with grade of "C" or better, or permission of department/division.

#### **GBS261**

### Investments I

3 Credits. 3 Periods.

Evaluation of various investment forms including study of inflation, taxation, government securities, stocks and bonds, real estate and retirement plans. Prerequisites: None.

#### GBS270AC

# **Business Internship**

3 Credits. 3 Periods.

General business work experience in a business or industry. Eighty hours of designated work per credit. Prerequisites: Permission of Department.

### **GBS294**

#### **Consumer Credit**

3 Credits. 3 Periods.

Consumer lending by financial institutions. Prerequisites: None.

# **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.

### **GTC181**

### **Introduction to Fluid Power**

3 Credits. 6 Periods.

Develops an understanding of the fundamental laws and principles of fluids together with consideration of such fluid devices as valves, cylinders, pumps, sizes of lines, and simple hookups. Includes both hydraulics and pneumatics. Prerequisites: ELE101 or equivalent.

#### **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.

# Geology

### **GLG101**

### Intro to Geology I: Physical Lecture

3 Credits. 3 Periods.

A study of the kind and arrangement of materials composing the earth's crust and the geological processes at work on and within the earth's surface. Prerequisites: None.

#### **GLG102**

### Introduction to Geology II -Historical Lecture

3 Credits. 3 Periods.

Outlines the origin and history of the earth with emphasis on North America—its dynamic, geographic, and climatic changes; animals and plants of the past; the evolution of life. Prerequisites: None.

### **GLG103**

# Introduction to Geology I: Physical Lab

1 Credit. 3 Periods.

May accompany GLG101. Study of common rock-forming minerals, rocks, and maps. Prerequisites: None.

### **GLG104**

### Introduction to Geology II -Historical Lab

1 Credit. 3 Periods.

May accompany GLG102. Study of geological structures and rocks, fossils, and geologic maps. May require field trips. 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.

## German

### **GER101**

### **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.

### **GER115**

### **Beginning German Conversation I**

3 Credits. 3 Periods.

Conversational German. Basic sentence structure, pronunciation and vocabulary necessary to develop speaking ability in German. Designed for students seeking speaking and listening abilities with little emphasis on grammar. Prerequisites: None.

# **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.

# Health Core Curriculum

### HCC109 CPR for Health Care Provider

.5 Credit. .5 Period.

Current American Heart Association standards for one and two rescuer cardiopulmonary resuscitation (CPR) and obstructed airway procedures on the adult, infant, and pediatric victim. Use of automatic, external defibrillation and resuscitation equipment. Prerequisites: None. Cross-References: EMT109, RES109

### HCC130AA Health Care Today

.5 Credit. .5 Period.

Overview of current health care professions including career and labor market information. Health care delivery systems, third-party payers, and facility ownership. Health organization structure, patient rights and quality care. Prerequisites: None.

#### HCC130AB

### **Workplace Behavior in Health Care**

.5 Credit. .5 Period.

Health care and life values. Definition and importance of values, ethics, and essential behaviors in the workplace. Worker rights and responsibilities. Prerequisites: None.

#### HCC130AC

### **Personal Wellness and Safety**

.5 Credit. .5 Period.

Introduces healthful living practices to include nutrition, stress management and exercise. Includes Occupational Safety and Health Administration (OSHA) standard precautions and facility safety. Use of principles of body mechanics in daily living activities. Prerequisites: None.

### HCC130AD

# Communication and Teamwork in the Health Care Organizations

.5 Credit. .5 Period.

Emphasis on basic communication skills which facilitate team work in the health care setting. Focus on development of personal communication skills and an understanding of how effective communication skills promote team work. Focus on intercultural communication strategies. Prerequisites: None.

### HCC130AE Legal Issues in Health Care

.5 Credit. .5 Period.

Basic legal terminology used in the health care setting. Legal concepts related to health care employment, medical documentation, and communication. Introduction to regulatory requirements in health care. Prerequisites: None.

### HCC130AF

## Decision Making in the Health Care Setting

.5 Credit. .5 Period.

Principles and application of the decision making model. Description and application of ethics and process improvement and the relationship of both to the decision making model. Prerequisites: None.

### **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 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

### **HVA112**

### **Heating and Air Conditioning**

3 Credits. 3 Periods.

Types and styles of cooling equipment and duct systems. Methods of supplying air to spaces for heating and cooling. Human comfort factors related to heating and cooling. Psychrometric terminology and applications. Operation, control, and metering devices for heat pumps and package air conditioning systems. Basic heating and ventilating equipment including performance measurement of heating and combustion equipment. Procedures used with DX cooling and gas-fired and electric heating equipment. Troubleshooting

techniques, local gas and electric codes, and safety precautions. Prerequisites: HVA103, HVA/ELC/FAC105. Corequisites: HVA112LL.

### **HVA112LL**

### **Heating and Air Conditioning Lab**

1 Credits. 3 Periods.

Application of routine procedures related to heating and air conditioning. Includes identification of air conditioning and heating system components, evaluation of energy balance, identification of electrical malfunctions, and proper refrigerant handling procedures. Emphasis on safety. Prerequisites: HVA103, HVA/ELC/FAC105. Corequisites: HVA112.

### **HVA143**

### **Load Calculation and Duct Design**

3 Credits. 3 Periods.

Heat transmission factors calculations for specific types and combinations of construction materials. Application of design factors for cooling and heating load determination. Methods for residential applications. Design of residential and light commercial ducting systems. Calculation of duct size for constant and variable air flow, system operating characteristics and air measuring devices. Protocols to test, adjust, and balance an air distribution system. Prerequisites: None.

#### HVA234

# **HVAC and Refrigeration Installation**

3 Credits. 3 Periods.

Industry codes used by the trades. Pipe and duct installation practices. Procedure for the installation of heating, ventilation, air conditioning and refrigeration (HVAC) equipment. Calculation of roof pitch and wire size for HVAC equipment. Start-up procedures for HVAC equipment. Prerequisites: ELC/FAC/HVA115 or permission of instructor. Corequisites: HVA234LL.

# HVA234LL

# HVAC and Refrigeration Installation Lab

1 Credits. 3 Periods.

Practices and application for the installation of residential and commercial refrigeration and air conditioning equipment. Actual installation problems used as the basis of discussion and code application. Prerequisites: ELC/FAC/HVA115 or permission of instructor. Corequisites: HVA234.

### **HVA240**

### **Psychrometrics**

2 Credits. 2 Periods.

Composition of air, particle pressures of dry air and water vapor, terms and symbols associated with psychrometrics. Psychrometric chart, processes, calculations, mixed air conditions, and solving of actual air conditioning and refrigeration problems. Prerequisites: None.

# History

### **HIS100**

# History of Western Civilization to the Middle Ages

3 Credits. 3 Periods.

Survey of the origin and development of Western civilization and its institutions from prehistory through the Ancient World and the Middle Ages. Prerequisites: None.

### **HIS101**

# History of Western Civilization Middle Ages to 1789

3 Credits. 3 Periods.

Survey of origin and development of Western civilization and its institutions from the Renaissance and Reformation through Age of Enlightenment. Prerequisites: None.

### **HIS102**

# History of Western Civilization 1789 to Present

3 Credits. 3 Periods.

Survey of origin and development of Western civilization and its institutions from French Revolution through the present. Prerequisites: None.

### **HIS103**

# U.S. History to 1865

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.

### **HIS105**

### **Arizona History**

3 Credits. 3 Periods.

The prehistoric and contemporary Native

American experience, Spanish colonial times, the Mexican National period, the U.S. federal territorial years, and Arizona's political and economic development during the twentieth century. 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.

### **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.

#### **HIS241**

# Latin American Civilization in the Colonial Period

3 Credits. 3 Periods.

A survey of the political, economic, and social forces which molded Latin American civilization in the Colonial Period. 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.

# Hotel Restaurant Management

#### 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.

### **HRM220**

### **Hospitality Managerial Accounting**

3 Credits. 3 Periods.

Study of financial statement analysis, asset management, ratio analysis, analytical techniques, and investment decision making. Emphasis on planning, budgeting, and management decisions. Prerequisites: ACC211.

#### 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.

# 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 postforum 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.

### **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.

### **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

### **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**

### 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.

# Information Technology Security

### **ITS100**

### **Information Security Awareness**

1 Credits. 2 Periods.

Computer and network security topics, including network communication. Includes security policy, implementation of basic security measures, the importance of backups and the value of protecting intellectual property. Real-life examples and practical projects to reinforce the need for computer security. Prerequisites: None.

#### **ITS110**

### **Information Security Fundamentals**

4 Credits. 5 Periods.

Fundamental concepts of information technology security. Topics include authentication methods, access control, cryptography, Public Key Infrastructure (PKI), network attack and defense methods, hardening of operating systems and network devices, securing remote access and wireless technologies and securing infrastructures and topologies. Emphasis on hands-on labs in both the Windows and Linux environments. Builds on thorough understanding of Transmission Control Protocal/Internet Protocol (TCP/IP) and security concepts and Microsoft (MS) Windows and Linux Administration. Prerequisites: CIS126DA or CIS126DL and CNT150 and MST150DA or MST150XP or permission of instructor.

### 115120

# Legal, Ethical and Regulatory Issues

3 Credits. 3 Periods.

Exploration of legal and ethical issues unique to information security. Analysis of professional ethical codes and their application to information security practitioners. Federal and state laws as they relate to information security. Prerequisites: ITS110 or permission of instructor.

#### **ITS130**

### **Operating System Security**

3 Credits. 4 Periods.

In-depth examination of operating system security including Transmission Control Protocol/Data Encryption Standard (DES), Triple Data Encryption (3DES), Advanced Encryption Standard (AES), Pretty Good Privacy (PGP), and other encryption technologies (TCP/IP), Internet Protocol Security (IPSec) and Cisco Internetwork Operating Systems (IOS), Microsoft Windows, Linux and Mac OSX Security. Procedures to defend networks against attacks and recovery from network disasters. Web server security. Emphasis on hands-on labs in both the Windows and Linux environments. Builds on thorough understanding of Transmission Control Protocol/Internet Protocol (TCP/IP) and security concepts and MS Windows and Linux Administration. Prerequisites: ITS110 or permission of instructor.

### **ITS140**

## **Network Security**

3 Credits. 4 Periods.

Examination of techniques used to defend network security. Design and implementation of devices including firewalls and Intrusion Detection Systems (IDSs) and Virtual Private Networks (VPNs). Risk analysis and security policies methodologies. Emphasis on hands-on labs in both the Windows and Linux environments. Builds on thorough understanding of Transmission Control Protocol/Internet Protocol (TCP/IP) and security concepts and MS Windows and Linux Administration. Prerequisites: (ITS110 and ITS130) or permission of instructor.

### **ITS150**

# **Building Trusted Networks in the Enterprise**

3 Credits. 4 Periods.

Design of a trusted network to secure electronic transactions. Techniques to secure electronic transactions to include cryptography, digital signatures, digital certificates and strong authentication. Computer forensics techniques and legislative issues. Emphasis on hands-on labs in both the Windows and Linux environments. Builds on thorough understanding of Transmission Control Protocol/Internet Protocol (TCP/IP) and security concepts and MS Windows and Linux Administration. Prerequisites: ITS110, ITS130, and ITS140, or permission of instructor.

#### **ITS160**

### Managing Trusted Networks in the Enterprise

3 Credits. 4 Periods.

Establishment of trusted networks to ensure enterprise security. Techniques for planning and implementation of trusted networks including secure Wireless LANs (WLANs) and secure email. Emphasis on hands-on labs in both Windows and Linux environments. Builds on thorough understanding of Transmission Control Protocol/Internet Protocol (TCP/IP) and security concepts and MS Windows and Linux Administration. Prerequisites: ITS110, ITS130, ITS140 and ITS150 or permission of instructor.

### **ITS170**

# Information Security Policy Development

1 Credits. 1 Periods.

Components required to plan, develop and write information security policies. Policy development processes and the relationship between security and policy directions. Emphasis on writing effective information security policies in a governmental or corporate setting. Prerequisites: None.

### **ITS171**

## Information Security Risk Management

1 Credits. 1 Periods.

Examination and assessment of risk management in an information technology environment. Identification and valuation of organizational assets. Risk identification to include types of threats and exposures to loss. Risk mitigation techniques, documentation methods and regulatory requirements. Prerequisites: ITS110.

### **ITS172**

### Viruses and Other Malicious Software

1 Credits. 2 Periods.

Spyware, adware, viruses, worms and trojans. Available tools for identifying and removing malicious software. Techniques for analyzing the behavior of malicious software. Methods of infection and prevention of infection. Prerequisites: None.

#### **ITS230**

# Deploying Snort Intrusion Detection Systems (IDS)

3 Credits. 4 Periods.

Intrusion Detection System (IDS). Examination of network intrusion detection concepts, principles and practices. Study of the mechanics and behaviors of Transmission Control Protocol/Internet Protocol (TCP/IP). Creation of filters and rules for network monitoring. Analysis of packet structure. Evaluation of intrusion detection system architectures. Detection and analysis of scans, vulnerabilities, exploits, and attacks. Identification of countermeasures. Architectural considerations for intrusion detection systems. Prerequisites: ITS110 or permission of instructor.

### **ITS231**

### **Router Hardening**

1 Credits. 2 Periods.

The role of routers in communication networks. Device specific threats and vulnerabilities. Strategies to harden routers to protect networks. Includes standards-based and proprietary protocols. Prerequisites: CNT150 or permission of the instructor.

#### **ITS232**

# **Layer 2 Attacks and Defenses**

3 Credits. 4 Periods.

Security issues associated with Layer 2, the data link layer, of the seven-layer Open Systems Interconnection (OSI) model. Countermeasures and security best practices to mitigate Layer 2 attacks applied to Ethernet networking environments. Prerequisites: CNT160 and (ITS110 or CIS270) or permission of instructor.

### **ITS233**

# **Wireless Network Security**

3 Credits. 4 Periods.

Advanced concepts of securing wireless (802.11) communications. Auditing tools, Radio Frequency (RF) jamming and Wired Equivalent Privacy (WEP) decryption tools. Policies for implementing secure Wireless Local Area Networks (WLANs) including baselines, WLAN auditing and threat monitoring and responses. The role of encryption and Virtual Private Networks (VPNs), 802.11i and Wi-Fi Protected Access (WPA) as well as network segmentation and WLAN user authentication. Prerequisites: CNT186 and (ITS110 or CIS270) or permission of instructor.

#### **ITS290**

# Computer Security Incident Response

3 Credits. 3 Periods.

Study of computer security incidents and how to respond to those incidents. Examination of frameworks for developing response strategies. Development and presentation of an incident response plan. Prerequisites: BPC170 and ITS110 or permission of instructor.

### **ITS291**

# **Computer Forensics Foundations**

4 Credits. 5 Periods.

Development of foundational computer forensic skills. Introduction to preserving, identifying, extracting, interpreting, and documenting computer data as part of a forensically sound analysis. Examination of the physical and logical structure of hard drives. Study of the logical structure of Windows-based file systems and common applications. Introduction to the logical structure of Unix/Linux-based file systems and common applications of commercial forensic tools. Prerequisites: BPC170 and ITS110 or permission of instructor.

### **ITS292**

### **Advanced Computer Forensics**

4 Credits. 5 Periods.

Advanced computer forensics analysis techniques with commercial tools. Introduction to open-source forensic tools. Emphasis on data recovery from complex applications and media types. Study of the logical structure of Unix/Linux-based file systems. Advanced search techniques. Analysis of unallocated space, compound files, and NTFS artifacts. Prerequisites: ITS291 or permission of instructor.

### ITS295AA

# Special Topics in Information Security

1 Credits. 2 Periods.

Exploration of special topics in Information Security. Includes both theoretical and practical aspects of the selected topic. Prerequisites: Completion of Information Security Technology certificate program or permission of instructor.

#### ITS295AB

# Special Topics in Information Security

2 Credits. 3 Periods.

Advanced level seminar in Information Security. Focuses on both the theoretical

and practical aspects of selected Information Security topics. Prerequisites: Completion of Information Security Technology certificate program or permission of instructor.

### ITS295AC

# Special Topics in Information Security

3 Credits. 4 Periods.

Advanced level seminar in Information Security. Focuses on both the theoretical and practical aspects of selected Information Security topics. Research methods in specific Information Security disciplines. Prerequisites: Completion of Information Security Technology certificate program or permission of instructor.

### Italian

### **ITA101**

### **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.

### **JRN203**

### **Writing for Online Media**

3 Credits. 3 Periods.

Writing using the modes and resources available on the Internet. Use of information and resources available on the Internet in writing, as well as writing for the Internet itself. Prerequisites: Placement into ENG101 on a District-approved writing placement test.

# 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.

#### **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.

### **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.

# Manufacturing Technology

### MET100AA

# Tool Room I: Introduction to Machine Processes

2 Credits. 2 Periods.

Safe practices in the manufacturing environment. Organizational structure of a manufacturing organization. Equipment and processes used in material removal process. Required documentation. Tools and measurement devices used in manufacturing. Applied mathematics used in a manufacturing. Specific coolants, cooling oils and chemical used in the material removal process. Operator certification check sheet. Prerequisites: None.

#### MET100AB

# Tool Room II: Machine, Processes, and Employment

2 Credits. 2 Periods.

Career selection process and completion of a resume and job application. Job interview under a simulated situation. Ideal work habits, ethics and career opportunities in the manufacturing field. Operator certification check sheet. Prerequisites: MET100AA.

### **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.

# MET103AA Lathe I: Basic Manual Lathe Operations

2 Credits. 3 Periods.

Basic manual lathe operations and safety. Identification and selection of appropriate materials, tools, and chemicals for material removal process. Application of mathematical concepts in basic manual lathe operations. Process design and blueprint interpretation. Operator certification checklist. Prerequisites: MET100AA and MET100AB.

### MET103AB

# Lathe II: Secondary Manual Lathe Operations

1 Credits. 2 Periods.

Secondary manual lathe operations and safety. Identification and selection of appropriate materials, tools, and chemicals for material removal process. Application of mathematical concepts in secondary manual lathe operations. Process design and blueprint interpretation. Operator certification checklist. Prerequisites: MET103AA.

### MET104AA

# Mill I: Basic Machine Operations

2 Credits. 3 Periods.

Basic vertical mill operations and safety. Selection of correct tools for a specific machining operation. Mathematical calculations and operations essential in machining operations. Design of process flow charts, and material selection. Blueprint interpretation. Operator certification check sheet. Prerequisites: MET100AA and MET100AB.

### MET104AB

# Tool Room I: Introduction to Machine Processes

1 Credits. 2 Periods.

Secondary vertical mill set-up operations and safety. Selection of correct tools for a specific machining operation. Mathematical calculations and operations essential in machining operations. Design of process flow charts, and material. Blueprint interpretation. Operator certification check sheet. Prerequisites: MET104AA.

# **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.

### **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.

### **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.

### **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

### **MET236**

# CAD/CAM Computer Numerical Control (CNC) Programming

3 Credits. 6 Periods.

Programming of Numerical Control (NC) Mill, Lathe, and Wire Electrical Discharge Machine (EDM), utilizing Computer Aided Drafting and Computer Aided Manufacturing (CAD/CAM) for design and generation of part geometry. Verification of tool path using CAD graphics. Generate programs using CAM post processor. Prerequisites: GTC/MET206. Cross-References: GTC236.

#### **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**

### **MCO220**

### **Cultural Diversity and the Media**

3 Credits. 3 Periods.

Images of the diverse cultures and gender issues within the U.S. media. Exploration of racial and gender roles which shape the media as well as media roles which influence U.S. race relations and racial change. Roles, contributions, and challenges of the minority press in the United States. Prerequisites: ENG101, or ENG107, or equivalent.

# **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.

#### **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.

# MAT108 Tutored Mathematics

2 Credits. 2 Periods.

Structured tutorial assistance and math study skills to help students achieve success in a mathematics course in which they are concurrently enrolled. Mathematics study skills emphasized. Prerequisites: None. Corequisites: MAT082, or MAT090, or MAT091, or MAT092, or MAT120, or MAT121, or MAT122, or MAT140, or MAT 141, or MAT 142, or MAT150, or MAT151, or MAT152, or permission of department chair. Course Notes: MAT108 may be repeated for a total of 10 credits.

### 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.

### **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.

### **MAT151**

### **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.

#### **MAT172**

### **Finite Mathematics**

3 Credits. 3 Periods.

An introduction to the mathematics required for the study of social and behavioral sciences. Includes combinatorics, probability, descriptive statistics, matrix algebra, linear programming and the mathematics of finance. Includes applications of technology in problem-solving. Prerequisites: Grade of "C" or better in MAT150, or MAT151, or MAT152, or MAT187 or equivalent, or satisfactory score on District placement exam.

### **MAT182**

### **Plane Trigonometry**

3 Credits. 3 Periods.

A study of measures of angles, properties of graphs of trigonometric functions, fundamental identities, addition and halfangle 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.

### 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.

### **MAT220**

# Calculus with Analytic Geometry I

5 Credits. 5 Periods.

Limits, continuity, differential and integral calculus of functions of one variable. Prerequisites: Grade of "C" or better in [MAT182 and (MAT150, MAT151 or MAT152)], or MAT187, or appropriate Math placement test score.

### **MAT230**

### **Calculus with Analytic Geometry II**

5 Credits. 5 Periods.

Limits, continuity, differential and integral calculus of functions of one variable. Prerequisites: Grade of "C" or better in [MAT182 and (MAT150, MAT151 or MAT152)], or MAT187, or appropriate Math placement test score.

### **MAT241**

### **Calculus with Analytic Geometry III**

4 Credits. 4 Periods.

Multivariate calculus including vectors, vectorvalued 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 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.

# 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.

#### **MST142**

# Supporting Applications on 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 IT Professional: Enterprise Desktop Support Technician 7 (MCITP) certification examination, 70-685. Prerequisites: CIS102 and CIS105, or permission of Instructor. Prerequisites or Corequisites: MST150SV.

### **MST145**

# Microsoft Client System Administration

3 Credits. 4 Periods.

Knowledge and skills to install, configure, customize, optimize, maintain, and troubleshoot the Microsoft Windows client operating system in a Microsoft networking environment. Preparation for Microsoft certification examination. Prerequisites or Corequisites: MST140 or permission of instructor.

### MST150 Microsoft Windows Professional

3 Credits. 4 Periods.

**Administration** 

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. Course Notes: Preparation for Microsoft certification examination 70-680.

### MST150DA

# Microsoft Windows 2000 Professional

3 Credits. 5 Periods.

Knowledge and skills necessary to perform day-to-day administration tasks of Microsoft Windows 2000 Professional. 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.

### MST150XP

### Microsoft Windows XP Professional

3 Credits. 4 Periods.

Knowledge and skills necessary to perform day-to-day administration tasks of Microsoft Windows XP Professional. Preparation for Microsoft certification examination Prerequisites: None. CIS190, or CNT140, or MST140 suggested but not required.

### **MST152**

### **Microsoft Windows Server**

4 Credits. 5 Periods.

Knowledge and skills necessary to install, configure, customize, optimize, network, integrate, and troubleshoot Windows Server. Preparation for Microsoft certification examination. Prerequisites or Corequisites: Any MST150 course or permission of instructor.

#### 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. Preparation for Microsoft certification examination. Prerequisites or Corequisites: any MST152 course or permission of instructor.

### **MST157**

# Implementing Windows Directory Services

3 Credits. 4 Periods.

Knowledge and skills to install, configure, and administer Microsoft Windows Active Directory services. Preparation for Microsoft certification examination. Prerequisites: Any MST152 course or permission of instructor.

### **MST170**

### Visual Basic Desktop Application Development

4 Credits. 5 Periods.

Use of Visual Basic programming language to create database applications using Visual Data Access tools, ActiveX Controls, Component Objects, and Structured Query Language (SQL) Server database. Prerequisites: CIS159 or permission of instructor.

### MST171

### Microsoft FrontPage

3 Credits. 4 Periods.

Knowledge and skills to analyze, design, build, and implement enterprise Web sites using Microsoft FrontPage. Includes use of ActiveX components, databases, and FrontPage server extensions. Prerequisites: (CIS233BA or CIS233DA) and MST170, or permission of instructor.

### **MST172**

# Visual Basic .NET Web Application Development

4 Credits. 5 Periods.

Knowledge and skills to develop and implement Web-based applications using ASP.NET, Web forms, and the Microsoft.NET framework with Visual Basic. Preparation for Microsoft Certified Applications Developer (MCAD) certification examination. Prerequisites: (BPC/CIS133DA, or BPC/CIS133AA and BPC/CIS133BA and BPC/CIS133CA) and CIS259, or permission of instructor.

#### **MST174**

### Microsoft Visual InterDev

3 Credits. 4 Periods.

Web site programming tasks to create enterprise-level Web sites that use Component Object Model (COM) components on both the client and the server. Preparation for Microsoft Certified Solutions Developer (MCSD) examination. Prerequisites: (CIS233BA or CIS233DA) and MST170 or permission of instructor.

### **MST232**

### Managing a Windows Network Environment

3 Credits. 4 Periods.

Knowledge and skills necessary to administer Windows network operating systems. Preparation for Microsoft certification examination. Prerequisites: MST140, MST150, and MST152, or permission of instructor.

### **MST240**

### Microsoft Transmission Control Protocol/ Internet Protocol (TCP/IP)

3 Credits. 4 Periods.

Knowledge and skills necessary to install, configure, use, and support TCP/IP on Microsoft Windows network. Preparation for Microsoft certification examination. Prerequisites: MST152 or permission of instructor.

### **MST242**

### Microsoft Exchange Server

4 Credits. 5 Periods.

Knowledge and skills required to plan, implement, and administer Microsoft Exchange Server. Preparation for Microsoft certification examination. Prerequisites: any MST152 course or permission of instructor.

### **MST244**

### **Microsoft SQL Administration**

3 Credits. 4 Periods.

Knowledge and skills required to install, configure, and administer Microsoft SQL server. Preparation for Microsoft certification examination. Prerequisites: any MST152 course or MST170 or permission of instructor.

#### **MST246**

# Implementing Microsoft Internet Explorer

2 Credits. 3 Periods.

Strong foundation in the architecture and key features of Microsoft Internet Explorer. Set up, configure, use, and deploy Internet Explorer in a network environment, with particular emphasis on intranet use. Prerequisites: Any MST152 course or permission of instructor. Knowledge of HTML suggested but not required.

### **MST247**

### **Microsoft Proxy Server**

2 Credits. 3 Periods.

Knowledge and skills to install, configure, and administer Microsoft Proxy Server. Preparation for Microsoft certification examination. Prerequisites: MST155 or MST240 or permission of instructor.

#### **MST252**

## Microsoft Windows Network Upgrade

3 Credits. 4 Periods.

Evaluate differences between current version of Microsoft Windows network operating system and upgraded version. Intended for Microsoft network administrators seeking upgrade training. Prerequisites: MST152 or permission of instructor.

### **MST253**

## Designing a Microsoft Windows 2000 Directory Services Infrastructure

3 Credits. 4 Periods.

Provides students with the knowledge and skills necessary to plan and implement Microsoft Windows 2000 Directory Services in an enterprise environment. Prerequisites: any MST152 course or permission of instructor.

#### **MST254**

# Microsoft SQL Server Design and Implementation

3 Credits. 4 Periods.

Knowledge and skills required to design and implement databases using Microsoft SQL server. Preparation for Microsoft certification examination. Prerequisites: CIS259, or any MST152 course, or permission of instructor.

#### **MST255**

# Designing Windows Network Infrastructure

3 Credits. 4 Periods.

Knowledge and skills to create a networking services infrastructure design that supports network applications and the needs of an organization. Preparation for Microsoft certification examination. Prerequisites or Corequisites: MST155 or permission of instructor.

#### **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. Preparation for Microsoft certification examination. Prerequisites or Corequisites: MST157 or permission of instructor.

#### **MST270**

### **Microsoft Solution Architectures**

3 Credits. 4 Periods.

Knowledge and skills to analyze business requirements in a given scenario and define technical solution architectures to optimize business results using Microsoft development tools. Prerequisites: (ACC230 or GBS151) and MST170, or permission of instructor.

### 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

# MMT185

# **3-D Modeling for Animation**

3 Credits. 6 Periods.

Basic concepts of 3-D modeling. Anatomy of computer geometry; basic elements that make computer models-curves, surfaces, nurbs, and polygons. 3-D translation, shading, materials, and rendering. Prerequisites: ADA/ART184 or ADA/ART184AC or permission of Instructor. Cross-References: ART185

# 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.

#### 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 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.

### **MHL194**

### **Music and Culture**

3 Credits. 3 Periods.

Introduction to the study of multicultural music in its social, cultural, historical and economic contexts. Performance of music using percussion, rhythm, and the human body. Historical and social aspects of global cultures' musical expressions. Prerequisites: (MTC105 and MTC106) or Permission of instructor

# **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.

# Nursing

### **NUR111**

# Nursing Process and Critical Thinking I

4 Credits. 4 Periods.

Overview of nursing and critical thinking strategies focused on meeting basic human needs within the wellness/illness continuum. Theoretical concepts related to holistic care of well, geriatric, and adult clients with selected alterations in health including psychological/ mental health disorders. Emphasis on use of nursing process in the role of the nurse as member of the health care team. Includes concepts of pathophysiology, nutrition, and communication. Requires application of previous knowledge of physical, biological, and social sciences. Prerequisites: Admission to the Practical Nursing or Nursing programs. Corequisites: NUR118 or permission of Nursing Department chairperson.

### **NUR117**

# Pharmacology and Medication Administration I

2 Credits. 4 Periods.

Introduction to pharmacology. Includes foundation knowledge and skills instruction. Emphasis on core medication prototypes and skills necessary for safe administration of selected medication categories. Concepts of medication administration by selected routes introduced. Application of previous knowledge of physical, biological and social sciences. Prerequisites: Admission to the Practical Nursing or Nursing Programs.

### **NUR119**

### **Nursing Science I**

5 Credits. 15 Periods.

Development of clinical competency in the performance of selected nursing skills and procedures. Provides for participation in the care of clients experiencing problems of alteration in health and selected mental health disorders. Provides for clinical practice experiences with individuals and families in a variety of long term care and acute settings. Application of holistic nursing concepts and assessments related to health promotion, disease/illness prevention, and health restoration, as well as concepts of pathophysiology, nutrition, and communication. Prerequisites: Admission into the Practical Nursing or Nursing Programs. Corequisites: NUR111 or permission of Nursing Department chairperson.

### **NUR121**

# Nursing Process and Critical Thinking II

4 Credits. 4 Periods.

Nursing and critical thinking strategies focused on meeting basic human needs within the wellness/illness continuum. Theoretical concepts related to holistic care of adult and geriatric clients with selected alterations in health. Introduces human growth and developmental principles. Introduction to care of newborn, pediatric, well childbearing clients, and childrearing families. Continuation of the role of the nurse as member of the health care team. Includes concepts of pathophysiology, nutrition, and communication. Application of previous knowledge of physical, biologic, social, and nursing sciences. Prerequisites: NUR111, NUR117, and (NUR118 or NUR119). Corequisites: NUR128 or permission of Nursing Department chairperson.

### **NUR127**

# Pharmacology and Medication Administration II

2 Credits. 4 Periods.

Continues emphasis on core medication prototypes and skills. Emphasis on critical thinking skills for safe practice in medication administration. Introduces concepts of venipuncture and initiation of IV access. Requires application of previous knowledge of physical, biological, social and nursing sciences. Prerequisites: NUR111, NUR117, and (NUR118 or NUR119).

### **NUR129**

### **Nursing Science II**

5 Credits. 15 Periods.

Continuation of application of holistic nursing concepts and assessments related to health promotion, disease/illness prevention and health restoration of individuals and families. Provides continued opportunity for the development of clinical competency in the performance of selected nursing skills, participation in the care of clients with alterations in health. Provides clinical experiences with adult, pediatric, well childbearing clients and childrearing families in a variety of acute care and community settings. Application of nursing concepts in the development of care plans as well as concepts of pathophysiology, nutrition, and communication. Includes participation in client teaching and discharge planning. Prerequisites: NUR111, NUR117, and NUR119. Corequisites: NUR121 or permission of Nursing Department chairperson.

#### **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.

#### **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.

## NUR231 Nursing Process and Critical Thinking III

4 Credits. 4 Periods.

Nursing and critical thinking strategies. Emphasis on complex human needs within the wellness/illness continuum in a variety of acute care and community settings. Theoretical concepts related to holistic care of adults with selected acute and chronic alterations in health and psychiatric/mental health disorders. Introduction to role of the professional nurse as member of the health care team. Integrates concepts of nutrition,

communication, health promotion, and advanced pathophysiology. Application of previous knowledge of physical, biologic, social, and nursing sciences. Prerequisites: NUR121, NUR127, and (NUR128 or NUR129). Corequisites: NUR238 or permission of Nursing Department chairperson.

### **NUR237**

# Pharmacology and Medication Administration III

1 Credits. 2 Periods.

Knowledge and skills to safely prepare and administer intravenous medications and solutions. Emphasizes management of clients receiving complex therapies such as blood and blood products, parenteral nutrition, and advanced pain management. Application of previous knowledge of physical, biological, and social sciences. Includes an overview of parenteral medications and therapies used in selected situations. Prerequisites: NUR121, NUR127, and (NUR128 or NUR129).

### **NUR239**

### **Nursing Science III**

5 Credits. 15 Periods.

Application of critical thinking skills through the nursing process to clients and families with acute alterations in health and psychiatric/mental health disorders. Provides for the development of clinical and cultural competency and the continued development of selected nursing skills and procedures within the nursing scope of practice. Holistic care of clients, families, and small groups in a variety of acute and community health care settings. Application of nursing concepts related to health education/promotion for clients, families, and small groups. Integrates concepts of nutrition, communication, health promotion and advanced pathophysiology. Prerequisites: NUR121, NUR127, and NUR129. Corequisites: NUR231 or permission of Nursing Department chairperson.

### **NUR241**

# Nursing Process and Critical Thinking IV

4 Credits. 4 Periods.

Nursing and critical thinking strategies for complex holistic needs of high-risk clients with multi-system health alterations. Includes perinatal, newborn, pediatric, and adult clients in acute care settings. Continuation of role development of the professional nurse. Integrates concepts of nutrition, communication, health promotion, and advanced pathophysiology. Application of previous knowledge of physical, biologic, social, and nursing sciences. Prerequisites: NUR231, NUR237, and (NUR238 or NUR239).

Corequisites: NUR248 or permission of Nursing Department chairperson.

### **NUR249**

### **Nursing Science IV**

6 Credits. 18 Periods.

Synthesis of nursing concepts. Provides nursing care for high-risk newborn, pediatric, perinatal, and adult clients with multi-system alterations in health. Emphasis on leadership and management roles of the nurse. Includes a preceptorship experience to facilitate role transition from student to graduate nurse. Integrates concepts of nutrition, communication, health promotion and advanced pathophysiology. Prerequisites: NUR231, NUR237, and NUR239. Corequisites: NUR241 or permission of Nursing Department chairperson.

#### **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. 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.

### **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

# **Philosophy**

### **PHI101**

## **Introduction to Philosophy**

3 Credits. 3 Periods.

General consideration of human nature and the nature of the universe. Knowledge, perception, freedom and determinism, and the existence of God. Prerequisites: None.

### **PHI103**

### **Introduction to Logic**

3 Credits. 3 Periods.

Informal logic, logical fallacies, elementary symbolic logic, analysis of argument forms, and construction of proofs for validity. Prerequisites: ENG101 or ENG107 or equivalent.

### **PHI106**

### Critical Thinking and Problem-Solving

3 Credits. 3 Periods.

Commonly used informal fallacies; examination of emotive and unclear uses of language, including sexism and loaded terms; and methods for analyzing extended arguments. Application to news media, advertising, political speeches, and textbooks. Prerequisites: ENG101 or ENG107 or equivalent.

### **PHI201**

### **History of Ancient Philosophy**

3 Credits. 3 Periods.

Historical survey of the intellectual history of the Greco-Roman world, focusing on the philosophical tradition and social/historical context. Prerequisites: None.

#### **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.

### **PHI218**

# Philosophy of Sexuality

3 Credits. 3 Periods.

Philosophical examination of sexuality in human life. Historical and critical survey of philosophical and theological views. Comparison and evaluation of contemporary theories about the nature of sexual desire and sexual acts. Implications of theories for contemporary moral problems. Prerequisites: ENG101, or ENG107, or permission of Instructor.

### **PHI224**

### **Political Philosophy**

3 Credits. 3 Periods.

Predominant figures and theories in Euroamerican political philosophy from Plato to contemporary social/political philosophers. 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.

#### **PHI245**

### **Introduction to Eastern Philosophy**

3 Credits. 3 Periods.

Fundamental theories of Indian and Chinese metaphysics, epistemology, ethics and aesthetics. Prerequisites: None.

# **Physical Education**

# PED101BB

**Basketball** 

1 Credit. 2 Periods.

Basic skills and game strategy of basketball. Class emphasis on competition and drills. Prerequisites: None.

### PED101BD

### **Ballroom Dancing**

1 Credit. 2 Periods.

Basic level instruction on ballroom dancing footwork, timing, techniques, and style. Partners rotate. Prerequisites: None.

### 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.

#### 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.

### 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.

### PED101GF

### **Group Fitness/Aerobics**

1 Credit. 2 Periods.

Group exercise incorporating a variety of equipment to increase respiration, heart rates, strength, and flexibility. Prerequisites: None

### PED101HG

# Haidong Gumdo Korean Swordsmanship

1 Credit. 2 Periods.

Eastern Sea Swordsmanship. Fighting multiple opponents on a large scale battle setting as well as one-on-one combat with the sword. Various cuts, thrusts, blocks and stances through basics training and forms as well as the application of those techniques through cutting and sword sparring. Prerequisites: None

### PED101KA

### **Karate**

1 Credit. 2 Periods.

Training emphasizes fundamentals, traditional form, and applied sparring that follows the theory of Karate. Prerequisites: None

# PED101KB

### **Kickboxing**

1 Credit. 2 Periods.

Techniques to increase muscular endurance and strength, enhance flexibility and increase body awareness and self-confidence. Jabs, kicks, and blocks will be used in this martial arts based workout. Prerequisites: None.

### 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.

### PED101PC

### **Physical Conditioning**

1 Credit. 2 Periods.

Exercise program with access to free weights, strength machines and cardio equipment. Prerequisites: None.

### PED101SA

### Salsa

1 Credit. 2 Periods.

Basic moves for the popular, hot Latin dance Salsa. Partners rotate. Prerequisites: None.

# PED101SM

# **Swimming**

1 Credit. 2 Periods.

Basic strokes, breathing and improving cardiovascular endurance. Prerequisites: None.

### **PED101SO**

### Soccer

1 Credit. 2 Periods.

Basic skills and game strategy of soccer. Class emphasis on competition and drills. 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.

### PED101WW

### **Weight Training for Women**

I 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.

### PED101YI Iyengar Yoga

1 Credit. 2 Periods.

Form of Hatha Yoga using various props such as belts, blocks, and straps used to focus on precise body alignment. Prerequisites: None.

### **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.

### PED101YP

## **Power Yoga**

1 Credit. 2 Periods.

Yoga postures performed in a dynamic series designed to gain strength, add flexibility, release toxins, This is a vigorous, athletic form of yoga. Prerequisites: None.

# 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.

#### **PED102**

### **Physical Activities: Intermediate**

1 Credit. 2 Periods.

Individual, dual, or team sports activities at the intermediate level. Prerequisites: None. Prior experience recommended.

### PED102AF

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### **Physical Activities: Aerobics**

1 Credit. 2 Periods.

Individual, dual, or team sports activities as listed in the schedule of classes. Prerequisites: None.

#### PED102AO

#### **Water Exercise**

1 Credit. 2 Periods.

Individual, dual, or team sports activities as listed in the schedule of classes. Prerequisites: None.

### PED102BP

## **Backpacking**

1 Credit. 2 Periods.

Covers basic skills and techniques of backpacking and the application of these to wilderness travel. Includes outdoor survival and evacuation techniques under a variety of environmental conditions. Prerequisites: None.

### PED102KB

### **Kickboxing - Intermediate**

1 Credit. 2 Periods.

Intermediate level kickboxing techniques to increase muscular endurance and strength, enhance flexibility and increase body awareness and self- confidence. Not recommended for the beginner. Prerequisites: None. Prior experience recommended.

### PED102PC

# Physical Conditioning:

**Intermediate** 

1 Credit. 2 Periods.

Intermediate level exercise program with access to free weights, strength machines and cardio equipment. Not recommended for the beginner. Prerequisites: None. Prior experience recommended.

### PED102PS

### **Pilates - Intermediate**

1 Credit. 2 Periods.

Intermediate level Mat-based exercise system focused on improving flexibility and strength for the total body. Teaches core control and stabilization while improving postural alignment. May be repeated for credit. Prerequisites: None. Prior experience recommended.

### PED102SA

### Salsa - Intermediate

1 Credit. 2 Periods.

Learn the intermediate dance moves for Salsa. Not recommended for the beginning Salsa dancer. Prerequisites: None. Prior experience recommended.

### PED102SL

### **Physical Activities: Scuba Diving**

1.50 Credit. 2.50 Periods.

Individual, dual, or team sports activities

as listed in the schedule of classes. May be repeated for credit. Prerequisites: None.

#### PED102WT

### **Weight Training - Intermediate**

1 Credit. 2 Periods.

Increase knowledge and training with a qualified instructor on the use of Olympic and Free Weights. May be repeated for credit. Prerequisites: None. Prior experience recommended...

#### **PED113**

### **Weight Training**

1.5 Credits 3 Periods

Weight training 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. Prerequisites: None.

### **PED114**

### Fitness

1.5 Credits 3 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 for credit. Prerequisites: None.

### **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.

### **PED118**

### **Aerobics for Seniors**

1.5 Credits. 3 Periods.

Formatted for older adults with music and class tempo appropriate for those over age 55. Includes flexibility exercises, cardiovascular conditioning, and strengthening and toning exercises. 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.

# **Physical Geography**

### **GPH212**

### Introduction to Meteorology I

3 Credits. 3 Periods.

Atmospheric processes and elements. General and local circulation, heat exchange and atmospheric moisture. Prerequisites: None.

### **GPH214**

# Introduction to Meteorology Laboratory I

1 Credits. 3 Periods.

Basic meteorological and climatological measurements. Prerequisites: None. Corequisites: GPH212.

# **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 satisfactory score on Math Placement exam. Course Note: Students may receive credit for only one of the following: PHY101 or PHY101AA.

# PHY105 Basic Physics

LEC 4 Credits. 3 Periods. LAB 0 Credits. 3 Periods.

Survey of Newtonian mechanics to help students acquire a problem solving ability in physics generally. Primarily for students with either no physics background or a limited physics background who intend to take PHY115 and PHY116. Prerequisites: MAT152 and MAT182, or MAT187 or permission of instructor.

# **PHY111**

# **General Physics I**

LEC 4 Credits. 3 Periods. LAB 0 Credits. 3 Periods.

Includes motion, energy, and properties of matter. Prerequisites: MAT182, or MAT 187, or one year high school Trigonometry with a grade of C or better, or permission of Department or Division. Course Note: PHY111 is recommended for preprofessional and suggested for certain other majors. Students may receive credit for only one of the following: PHY111 or PHY111AA.

# PHY112

# **General Physics II**

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**

### **University Physics I: Mechanics**

LEC 4 Credits. 3 Periods. LAB 0 Credits. 3 Periods.

Kinematics, Newton's laws, work, energy, momentum, conservation laws, dynamics of particles, solids, fluids, mechanical waves, and sound. Prerequisites: MAT220, or MAT221, or permission of Department or Division. One year of High School physics or PHY111 and PHY112 suggested but not required.

### **PHY131**

# University Physics II: Electricity and Magnetism

LEC 4 Credits. 3 Periods. LAB 0 Credits. 3 Periods.

Electric charge and current, electric and magnetic fields in vacuum and in materials, and induction. AC circuits, displacement current, and electromagnetic waves.

Prerequisites: MAT230, or MAT231, or permission of Department or Division, and PHY121. Corequisites: MAT241 or permission of Department or Division.

#### PHY252

### 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.

# **Political Science**

### **POS099**

# United States Citizenship Preparation

1 Credit. 1 Period.

Introduction to American history, constitution, and political institutions as required for the Naturalization (admission to US citizenship) exam. Prerequisites: None.

#### **POS110**

### **American National Government**

3 Credits.
3 Periods.

Study of the historical backgrounds, governing principles, and institutions, of the national government of the United States. Prerequisites: None.

#### **POS115**

### **Issues in American Politics**

3 Credits. 3 Periods.

Examination of major issues in current affairs in the fields of politics, economics, social relations, foreign affairs, aesthetics, and others through the reading and viewing of secondary information sources. Prerequisites: ENG101 or ENG107 or equivalent.

### **POS125**

#### **Issues in World Politics**

3 Credits. 3 Periods.

Contemporary issues and factors in international relations. Stress conditions in civil order, trade, and international institutions. May be repeated for a total of six (6) credit hours. Prerequisites: None.

#### **POS130**

### **State and Local Government**

3 Credits. 3 Periods.

Survey of state and local government in the United States. Special attention on Arizona State government. Prerequisites: None.

### **POS220**

### **U.S. and Arizona Constitution**

3 Credits. 3 Periods.

Examination of the United States Constitution and the constitution and government of the state of Arizona. Prerequisites: None.

### **POS221**

### **Arizona Constitution**

1 Credit. 1 Period.

Examination of the Constitution of the State of Arizona. Equivalent to the second part of POS220. May not enroll in POS220 and POS221 concurrently. Prerequisites: None.

### **POS222**

### **U.S. Constitution**

2 Credits. 2 Periods.

Examination of the United States Constitution. Equivalent to the first part of POS220. May not enroll in POS220 and POS222 concurrently. Prerequisites: None.

### POS223 Civil Rights

3 Credits. 3 Periods.

The historic background and current status of major civil rights issues in the United States. Prerequisites: None.

# Power Plant Technology

#### **PPT101**

### **Hand and Power Tools**

1 Credits. 1 Periods.

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

### PPT102

# **Introduction to Electricity**

3 Credits. 3 Periods.

Basic electrical terminology and concepts. Fundamentals of electrical theory. 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

### **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.

### PPT17

### **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. Onhands 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.

### **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.

# 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 pulsafeeder 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**

### **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.

#### **PSY123**

### **Psychology of Parenting**

3 Credits. 3 Periods.

The demonstration and application of psychological principles to the development and guidance of children and adolescents. 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.

#### **PSY156**

### **Understanding Death and Dying**

3 Credits. 3 Periods.

Designed to give the student an understanding of the research and theories of death, dying and the bereavement process. Prerequisites: None.

### **PSY210**

### **Educational Psychology**

3 Credits. 3 Periods.

Scientific research and psychological principles as they apply to teaching and learning. The role of psychology in educational settings, human diversity, theories of learning, intelligence, memory, creativity, assessment, and factors influencing effective instruction and learning. Prerequisites: PSY101 with a grade of "C" or better or permission of instructor.

#### **PSY215**

## **Introduction to Sport Psychology**

3 Credits. 3 Periods.

Application of the physiological, behavioral, social, cognitive, and humanistic perspectives in psychology to sport. Includes topics such as optimal performance, correlation, motivation, co-action effect, self-actualization, psychobehavioral techniques, self-efficacy, and the general health benefits of sport participation. Prerequisites: PSY101 with a grade of "C" or better or permission of instructor.

#### **PSY218**

### **Health Psychology**

3 Credits. 3 Periods.

Behavioral and mental foundations of health, wellness, illness, and disease, and psychological dimensions of medical intervention. Prerequisites: PSY101 with a grade of "C" or better, or permission of instructor.

#### **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. 2Periods. (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.

#### **PSY250**

### **Social Psychology**

3 Credits. 3 Periods.

The scientific study of how people's thoughts, feelings, and behaviors are influenced by other people and situations. Includes how we think about ourselves and others, persuasion and influence, sexual and romantic attraction, friendship, and helping others, aggression and prejudice. Prerequisites: PSY101 with a grade of "C" or better or permission of the instructor.

### **PSY260**

### **Personality Development**

3 Credits. 3 Periods.

Introduction to theories of personality with emphasis upon application of specific theories towards the understanding of individuals. Prerequisites: PSY101 with a grade of "C" or better or permission of instructor.

### **PSY266**

## **Abnormal Psychology**

3 Credits. 3 Periods.

Distinguishes between normal behavior and psychological disorders. Subjects may include stress disorders, problems with anxiety and depression, unusual and abnormal sexual behavior, schizophrenia and addictive behaviors. Causes and treatments of psychological problems and disorders are discussed. Prerequisites: PSY101 with a grade of "C" or better, or permission of instructor.

### **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.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.

### **PAD201**

# Techniques of Municipal Administration

3 Credits. 3 Periods.

City administration management. Covers techniques, practices and responsibilities of city staff including forces of change, administrative techniques and leadership. Prerequisites: PAD101 or PAD103 or permission of 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 offnormal) within radiological environments. Prerequisites or Corequisites: RPT233 or permission of instructor.

## **RPT253**

## **Radiation Protection**

3 Credits. 3 Periods.

Practical application of radiation protection principles and sources of radiation such as nuclear power plant, medical, and industrial operations. Prerequisites: RPT243 or permission of instructor.

## **RPT290**

## **Radiation Protection Internship**

5 Credits. 25 Periods.

Provides approximately 320 hours with an industry, governmental, or educational institution that uses radioactive materials to allow students an opportunity for a hands-on practical application of radiation protection principles. Prerequisites: RPT233, or permission of instructor.

# Reading English as a Second Language

## 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.

## **RDG031**

## Advanced Vocabulary for ESL Speakers (Non-native Speakers)

3 Credits. 3 Periods.

Designed to expand and improve reading vocabulary skills. Emphasis on understanding advanced vocabulary in both context and isolation through practice and review. Vocabulary building strategies which will aid in on-going study of words. Emphasis on both learning and using more advanced vocabulary effectively. Prerequisites: RDG020 with grade of C or better, or permission of instructor. Course Note: Recommended for reading students at ESL Levels III and IV.

## **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.

## **Reading Education**

## RDG071 Basic Readin

3 Credits. 3 Periods.

Provide opportunities for practice and application of basic reading skills. Includes phonic analysis, word recognition, structural analysis, use of context clues, and use of dictionary, reinforced through practical application. Development of vocabulary required for success in content area courses. Emphasis on literal comprehension and development of inferential interpretation. Prerequisites: Prerequisites: Appropriate reading placement test score, or grade of "C" or better in RDG040.

## **RDG081**

## **Reading Improvement**

3 Credits. 3 Periods.

Designed to improve basic reading skills. Includes word recognition, 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.

## Recreation

## REC155AA

## Canyoneering

1 Credit. 2 Periods.

Basic canyoneering skills. Includes hydrology, navigation, safety systems, climbing and hiking skills, wading/swimming techniques and flood/weather identification. Prerequisites: None.

## REC155AB

## **Caving**

1 Credit. 2 Periods.

Basic caving skills. Includes cave ecology, navigation, safety systems, lighting systems and equipment selection. Prerequisites: None.

## REC155AC

## **Outdoor Rock Climbing**

1 Credit. 2 Periods.

Basic outdoor rock climbing skills. Includes belaying, climbing techniques, rope systems and anchor systems. Prerequisites: None.

## REC155AE

## **Indoor Rock Climbing**

1 Credit. 2 Periods.

Basic indoor rock climbing skills. Includes belaying, climbing techniques, rope systems, anchor systems and safety. Prerequisites: None.

## **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.

## **REL210**

### Introduction to Judaism

3 Credits. 3 Periods.

Introduction to the history, scriptures, practices and impact of Judaism. Prerequisites: Grade of "C" or better in ENG101, or ENG107, or permission of Department or Division..

#### **REL243**

## **World Religions**

3 Credits. 3 Periods.

The development of various religions from the prehistoric to modern times. Political, economic, social and geographic relationships among world religions. Consideration of both Eastern and Western religions. Prerequisites: None

### **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.

### **SLG103**

## **Introduction to Deafness**

1 Credit. I Period.

History and development of American Sign Language (A.S.L.) and English codes. Overview of education for Deaf and Hard of Hearing children. Legal rights and common adaptive devices used by Deaf and Hard of Hearing individuals. Prerequisites: None.

## **SLG201**

## American Sign Language III

4 Credits. 4 Periods.

Linguistics of American Sign Language (A.S.L.) including non-manual behaviors and signing English idioms with conceptual accuracy. Emphasis on practical application of A.S.L. skills, expanded vocabulary, and cross-cultural communication. Prerequisites: SLG102, with a grade of "C" or better, or permission of department/division. Suggested but not required: (ENG101 or ENG107) and, (CRE101 or CRE111 or exemption by score on the reading placement test (ASSET)).

### **SLG202**

## American Sign Language IV

4 Credits. 4 Periods.Advanced American Sign Language skills including continued vocabulary. Emphasis on conversational techniques in a cross-cultural framework. Continued work on conceptual accurate signing of English idioms and words with multiple meanings. Prerequisites: SLG201 with C or better, or permission of Department or Division. ENG101, SLG200, and (CRE101, or CRE111, or exemption by score on the reading placement test) suggested but not required.

## **Society & Business**

## **SBU200**

## **Society and Business**

3 Credits. 3 Periods.

The study and scientific inquiry of issues and demands placed on business enterprise by owners, customers, government, employees and society. Included are social, ethical and public issues and analysis of the social impact of business responses. Prerequisites: None.

## Sociology

## **SOC101**

## **Introduction to Sociology**

3 Credits. 3 Periods.

Fundamental concepts of social organization, culture, socialization, social institutions and social change. Prerequisites: None.

## **SOC140**

## **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.

## **SOC142**

## Sociology of the Chicano Community

3 Credits. 3 Periods.

Survey of the socioeconomic characteristics of the Chicano Community. The interrelationships of Chicano cultural groups and society as a whole. 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.

## **SOC212**

## **Gender and Society**

3 Credits. 3 Periods.

A study 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. Open to both men and women. 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.

## 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.

### **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.

## Social Work

## **SWU102**

## **Introduction to Social Work**

3 Credits. 3 Periods.

An introduction to the fields within the area of social work through a study of the disciplines of social case work, social group work, and community organization. Opportunities to experience the various techniques of practice within each discipline. Required for students enrolled in the associate degree program of the social work curriculum. Prerequisites: Eligibility for ENG101 and CRE101.

#### **SWU171**

### Introduction to Social Welfare

3 Credits. 3 Periods.

Analysis of contemporary social welfare services and professional social work. Prerequisites: None.

### **SWU258**

## 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: AJS/EMT/FSC258

## **SWU291**

## **Social Service Delivery Systems**

3 Credits. 3 Periods.

Purposes, structures, and delivery systems of human service agencies. Includes 40 hours of volunteer experience in local human service agencies. Prerequisites or Corequisites: SWU102, or SWU171, or permission of the department.

## **SWU292**

## Effective Helping in a Diverse World

3 Credits. 3 Periods.

Introduction to professional helper communication skills with respect to cross-cultural practice and diversity issues, in a social work setting. Prerequisites: None. (SOC101 and SWU102) or SWU171 suggested but not required.

## **Spanish**

### **SPA101**

## **Elementary Spanish I**

4 Credits. 4 Periods.

Basic grammar, pronunciation and vocabulary of the Spanish language. Includes the study of the Spanish-speaking cultures. Practice of listening, speaking, reading, and writing skills. Prerequisites: None.

## 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**

## **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: SPA101 or departmental approval.

## 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: SPA101 or departmental approval.

## **SPA115**

## **Beginning Spanish Conversation I**

3 Credits. 3 Periods.

Basic pronunciation, vocabulary, sentence structures, and cultural awareness, necessary to develop speaking and listening skills in Spanish. Prerequisites: None.

### 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.

### **SPA116**

## **Beginning Spanish Conversation II**

3 Credits. 3 Periods.

Continued study of basic pronunciation, vocabulary, sentence structures, and a cultural awareness necessary to develop speaking and listening skills in Spanish. Prerequisites: SPA115 or permission of department or division.

## SPA116AA

## **Beginning Spanish Conversation II**

3 Credits. 4 Periods.

Continued development of speaking and listening skills for effective communication in Spanish. Prerequisites: SPA115 or departmental approval.

#### **SPA117**

## **Health Care Spanish I**

3 Credits. 3 Periods.

Basic conversational Spanish for health care workers or students. Emphasis on basic sentence structure, pronunciation and vocabulary used in health care settings. Prerequisites: None.

## **SPA201**

## **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: SPA102, or SPA111, or permission of department.

#### **SPA202**

## **Intermediate Spanish II**

4 Credits. 4 Periods.

Review of grammar, continued development of Spanish language skills with continued study of the Spanish-speaking cultures.

Prerequisites: SPA201, or permission of Department or Division.

## **SPA225**

## **Intermediate Spanish Conversation I**

3 Credits. 3 Periods.

Continued study of vocabulary, sentence structures, and cultural awareness necessary to improve speaking and listening skills in Spanish. Emphasis on fluency and accuracy in spoken Spanish. Prerequisites: SPA116, or SPA102 or permission of department or division.

## 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 speechlanguage therapy. Provides opportunities to create lesson plans, implement therapy, record client performance and maintain appropriate documentation for a variety of speech-language disorders in a variety of therapeutic environments. A minimum of 50 hours in a therapeutic environment required. Prerequisites: SLP212, 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 speechlanguage 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 and overview about the type of client who may need AT/AAC as well as the professional team involved in that decision. Reviews use of computer hardware and software that has been adapted for disabled individuals as well as low-tech and high-tech assistive technology and augmentative/alternative communication systems. Prerequisites: 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

Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and 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

1 Period. (LAB)

or instructor.



**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

## STO282AC

## Volunteerism for Education: A Service Learning Experience

3 Credits. 3 Periods.

Service-learning field experience within educational systems, citizen advocacy groups, and human service organizations/ agency. 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. Prerequisites: Permission of instructor.

#### **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.

## **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.

## **Telecommunications**

## TCM255

## Filmmaking: Fusing Art and Technology

3 Credits. 3 Periods.

Study and application of the art of motion picture production from artistic conception through production, distribution, public exhibition, and critical response. Assessment of the effects of technical and non-technical cinematic elements and various social forces

on the success or failure of a film. Critical analysis of film content and execution. Prerequisites: Permission of Instructor.

## 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.

## 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.

## THP212 Acting II

3 Credits. 4 Periods.

Fundamental techniques of acting through script analysis, rehearsal, and performance. Prerequisites: THP112 or departmental approval.

# **Total Quality 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.

## 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.

## TQM201 Total Quality Concepts

2 Credits. 2 Periods.

Examines the concepts of quality as they relate to service, products and the employee. Focuses on the history, rationale and basic principles of Total Quality. Recognizes the scope and requirements for a Total Quality development effort. Prerequisites: None.

### **TQM204**

## **Team Roles and Dynamics**

3 Credits. 3 Periods.

Focuses on basic concepts and tools associated with quality improvement to help teams function effectively. Participants use theory and practice to work as a team, plan, and conduct good meetings, manage logistics and details, gather useful data, analyze the data, communicate clearly and persuasively ideas and results with confidence and impact, and implement change. Prerequisites: None.

## **TQM214**

## **Principles of Process Improvement**

2 Credits. 2 Periods.

Examines the concepts and tools of quality/continuous improvement. Includes mapping processes, statistical measurement, problemsolving tools and methods of presenting findings, evaluating, and implementing changes. Prerequisites: None. TQM201 is recommended.

### **TQM230**

## **Teamwork Dynamics**

2 Credits. 2 Periods.

Theory and practice of how team members and team leaders use listening, negotiating and interpersonal skills for the enhancement of team process. Included are concepts of team development and team problemsolving techniques. Prerequisites: None. TQM201 is recommended.

## **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

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.

## **Women Studies**

### **WST100**

## **Women and Society**

3 Credits. 3 Periods

Introduction to critical issues in women's studies. Prerequisites: None.

### **WST128**

## **Law and Violence Against Women**

3 Credits. 3 Periods.

Covers cases and materials on systems of oppression particularly as related to women in our society. Areas covered include battering, sexual harassment, sexual assault, prostitution, and pornography as exemplified in present-day society. Designed to give students the ability to identify problems of violence against women and participate in current societal discourse on various ways to resolve them. Prerequisites: None. Cross-References: AJS128

## **WST200**

## **Essential Feminist Writing**

3 Credits. 3 Periods.

Literary tracing of feminism from 18th century to present. Explores major issues related to women in the 20th century. Prerequisites: ENG101 or permission of instructor.

## **WST209**

## **Women and Films**

3 Credits. 3 Periods. Analysis of images of women in films from both historical and contemporary perspectives. Prerequisites: None.

## **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 <u>www.azsunsystem.com</u>







## **CATALOG COMMON PAGES 2011-2012**

### MARICOPA COUNTY COMMUNITY COLLEGE DISTRICT

Amended through the Administrative Regulations approval process on March 4, 2011

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 as "AR" followed by a regulation number, which corresponds with the regulations on the MCCCD web site: <a href="http://www.maricopa.edu/publicstewardship/governance/adminregs/adminregs/adminregs/adminregs/toc.php">http://www.maricopa.edu/publicstewardship/governance/adminregs/adminregs/adminregs/toc.php</a>

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

#### 1. GENERAL STATEMENT (AR 2.4.1)

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

## 2. NONDISCRIMINATION POLICY (AR 2.4.2)

It is the policy of the Maricopa Community Colleges (consisting of Chandler-Gilbert Community College, the District Office, Estrella Mountain Community College, GateWay Community College, Glendale Community College, Maricopa Skill Center, Southwest Skill Center, Mesa Community College, Paradise Valley Community College, Phoenix College, Rio Salado College, Scottsdale Community College, and South Mountain Community College) to promote equal employment opportunities through a positive continuing program. This means that Maricopa will not discriminate, nor tolerate discrimination, against any applicant or employee because of race, color, religion, gender, sexual orientation, national origin, citizenship status, age, disability, veteran status or genetic information. Additionally, it is the policy of the Maricopa Community Colleges to provide an environment for each 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, gender, sexual orientation, national origin, citizenship status, age, disability, veteran status or genetic information.

This nondiscrimination policy covers all aspects of the employment relationship and admission to, access to, and treatment of students in the Maricopa Community Colleges' programs and activities including vocational education. This policy also prohibits discrimination on the basis of sexual orientation in the admission and treatment of students in the Maricopa Community Colleges' programs and activities and in the hiring, treatment, promotion, evaluation, and termination of employees.

## 3. EQUAL OPPORTUNITY STATEMENT (AR 2.4.3)

It is the policy of the Maricopa Community Colleges to promote equal employment opportunities through a positive continuing program. This means that Maricopa will not discriminate, nor tolerate discrimination, against any applicant or employee because of race, color, religion, gender, sexual orientation, national origin, citizenship status, age, disability, veteran status or genetic information. Additionally, it is the policy of the Maricopa Community Colleges to provide an environment for each 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, gender, sexual orientation, national origin, citizenship status, age, disability, veteran status or genetic information.

## **AFFIRMATIVE ACTION STATEMENTS**

## 1. 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 Community College District will not discriminate, or tolerate discrimination, against any applicant or employee 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, gender, sexual orientation, national origin, citizenship status, 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.

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

In conformation 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, or tolerate discrimination, against any applicant or employee 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 disability or veteran status in all human resources section 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, gender, sexual orientation, national origin, citizenship status, 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, employees are protected from coercion, intimidation, interference, or discrimination for filing a complaint or assisting in an investigation under the Act.

## 3. Notice of Americans with Disabilities Act (ADA)/Section 504 of the Rehabilitation Act/Title IX Coordinator

\_\_\_\_\_\_\_(Name & Title), ADA/504/Title IX Coordinator (address and telephone number)
Under the ADA and Section 504, the District and its colleges recognize the obligation to provide overall program accessibility throughout its locations for persons with disabilities. The designated ADA/504/Title IX Coordinator at each college will provide information as to the existence and location of services, activities and facilities that are accessible to and usable by persons with disabilities. Requests for accommodation should be addressed to the coordinator. Likewise, under Title IX, there is an obligation to provide services and program accessibility in a gender-neutral manner.

Students with disabilities may request catalog information in an alternative format from the college ADA/504 Coordinator.

#### **DECLARACIÓNES DE ACCIÓN AFIRMATIVA**

#### 1. Póliza de No Descriminación

Es la póliza 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 positivo. Esto significa que Maricopa no descriminará o tolerará descriminación en contra de ningún aplicante o empleado debido a su raza, color, religión, genero, orientación sexual, origen nacional, ciudadania, edad, incapacidad, estado de veterano/a o información genesica. Así mismo, es la póliza de los Colegios Comunitarios proveer para cada aplicante y empleado un ambiente libre de acoso sexual como también de acoso intimidación referente a raza, color, religión, genero, orientación sexual, origen nacional, ciudadania, edad, incapacidad, estado de veterano/a o información genesica.

Esta póliza de no descriminación 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. Esta póliza también prohibe descriminación en base de orientación sexual en la admisión y tratamiento de estudiantes, en sus programas y actividades y en la contratación, tratamiento, promoción/ascensos, evaluación y despido de empleados.

## 2. Declaración de Igualdad de Oportunidad

Es la póliza de los Colegios Comunitarios del Condado de Maricopa proveer igualdad en las oportunidades de empleo mediante un programa continuo positivo. Esto significa que Maricopa no descriminará o tolerará descriminación en contra de ningún aplicante o empleado debido a su raza, color, religión, género, orientación sexual, origen nacional, ciudadania, edad, incapacidad, estado de veterano/a o información genésica. Agregando, es la póliza de los Colegios Comunitarios proveer para cada aplicante y empleado un ambiente libre de acoso sexual como también de acoso e intimidación referente a la raza, color, religión, género, orientación sexual, origen nacional, ciudadania, edad, incapacidad, estado de veterano/a o información genésica.

### 3. Declaración de Acción Afirmativa

Póliza y Declaración de Acción Afirmativa para Individuos con Incapacidades De acuerdo a lo que provee 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 descriminarán o tolerarán descriminación en contra ningún aplicante o empleado debido a su desabilidad/incapacitación física o mental referente a cualquier posición para la cuál el aplicante o empleado ha calificado. Maricopa promete tomar acción afirmativa para emplear, dar ascenso en empleo y tratar a dichos individuos con incapacidades sin hacer 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, recrutamiento, programas sociales/recreacionales y entrenamiento. Maricopa continuará llevando a cabo éstas prácticas de no descriminar

por razones de raza, color, religión, género, orientación sexual, origen nacional, **ciudadania**, edad, incapacidad, **estado de veterano/a o información genésica**. Asi mismo, todo los aplicantes y empleados estan protegidos en contra de coacción, intimidación, interferencia o descriminación por quejas o por ayudar en una investigación cubierta bajo éste Acto.

## 4. Declaración de Póliza 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 descriminará ni tolerará descriminación en contra de ningún aplicante o empleado veterano o veterano de la Era Vietnamita con desabilidad/incapacitación especial referente a cualquier posición la cual dicho aplicante o empleado califique. Maricopa promete aplicar acción afirmativa para emplear, ascender en empleo y tratar a dichos veteranos incapacitados y de la Era Vietnamita que califiquen sin descriminar base a su desabilidad/incapacitación o condición de veterano en todas las áreas de recursos humanos y decisiones como son las siguientes: anuncios, beneficios, compensación, disciplina (incluyendo período de prueba, suspensión, y/o despido por causa o paro forzoso), facilidades para empleados, evaluación de trabajo, recrutamiento, programas sociales/recreacionales y entrenamiento. Maricopa continuará llevando a cabo estas prácticas sin descriminar por razones de raza, color, religión, gènero, orientación sexual, origen nacional, ciudadania, edad, incapacidad, estado de veterano/a o información genésica. Maricopa promete anunciar todas las oportunidades de empleo disponibles en la oficina local del servicio de empleo del Estado donde el empleo esté disponible. Esto incluye empleo de tiempo completo, temporal de más de tres días de duración y empleo de tiempo medio. Finalmente, todos los aplicantes y empleados están protegidos en contra de coacción, intimidación, interferencia o descriminación por quejas o por ayudar en una investigación cubierta sobre este Acto.

5.	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 segun el género

Estudiantes incapacitados pueden solicitar información de catálogo en una forma diferente por medio del Coordinador designado por ADA/504 en cada colegio.

### 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.

#### 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

## 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.

### **GENERAL REGULATION (AR 2.1)**

#### 1. General Statement

Compliance with Policies, Rules and Regulations

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

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

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

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

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

## 2. Outcomes Assessment

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

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

## ADMISSION/ REGISTRATION/ENROLLMENT

#### **ADMISSION POLICY (AR 2.2.1)**

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).
  - 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/Enrollment Services of the college may accept other proof of English language proficiency for admission purposes, such as the ASSET, ACCUPLACER, COMPASS or CELSA tests.

### B. Admission to an Intensive English Program

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

- i. At least six years of English language instruction as shown by the applicant's school transcript(s);
- ii. A minimum TOEFL score of 400 (on the paper-based TOEFL) or 23 (on the internet-based test);
- ii. 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.
- 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 <u>(1)</u>
Living Expenses	10,140(2)
Books	1,200 <u>(3)</u>
Health Insurance	1,000 <u>(4)</u>
Total	\$20,030 <u>(5)</u>

## 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.

## **ADMISSION INFORMATION (AR 2.2.2)**

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

## 1. Student Status

- A. Freshman—A student who has completed fewer than 30 credit hours 100-level courses and above.
- B. Sophomore—A student who has completed 30 credit hours or more in 100-level courses and above.
- C. Unclassified—A student who has an associate degree or higher.

#### 2. Student Identification Number

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

## 3. Residency for Tuition Purposes (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)
- D. Unclassified, Out-of-County/Out-of-State (1-6 credit hours system-wide)

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

- "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 country residency for those moving from other states. Refer to section C for guidelines.
- iv. "Domicile" means a person's true, fixed, and permanent home and place of habitation. It is the place where he or she intends to remain and to which he or she expects to return when he or she leaves without intending to establish a new domicile elsewhere.
- v. "Emancipated person" means a person who is neither under a legal duty of service to his parent nor entitled to the support of such parent under the laws of this state.
- vi. "Full-time student" means one who registers for at least twelve (12) credit hours per semester.
- vii. "Part-time student" means one who registers for fewer than twelve (12) credit hours per semester.
- viii. "Parent" means a person's father, or mother, or if one parent has custody, that parent, or if there is no surviving parent or the whereabouts of the parents are unknown, then a guardian of an unemancipated person if there are not circumstances indicating that such guardianship was created primarily for the purpose of conferring the status of an in-state student on such unemancipated person.

#### C. Criteria for Determining Residency

- i. In-State Student Status
  - 1. Except as otherwise provided in this article, no person having a domicile elsewhere than in this state is eligible for classification as an in-state student for tuition purposes.
  - 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 instate 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 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 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
- 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
  - 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 determined. Documentation must be provided prior to the end of the term in which residency classification is being requested. Documentation received after the end of the 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 U.S. Citizen, Fiancé or Child of Fiancé of U.S. Citizen
  - L Intracompany Transferee, or Spouse or Child
  - N6 NATO-6
  - V Spouses and Dependent Children of Lawful Permanent Residents
- 4. Students who hold visas as listed in section 3 above, or who were issued a visa of a type other than those listed in section 3 above and have submitted an I-485 to Citizenship and Immigration Services (CIS), may establish residency if other domicile requirements have been met. Residency eligibility for I-485 applicants may be considered one year after the date on the CIS Notice of Action letter (I-797) confirming application for permanent resident status. Students must provide required residency documentation in addition to the Notice of Action for residency consideration. In establishing domicile, the alien must be in a status that does not prohibit establishing domicile in this state for at least one year immediately preceding the official starting date of the semester. 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
  - An affidavit signed by the student must be filed with the person responsible for verifying residency.
  - o. 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
    - 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

- 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:
  - . 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

## 4. 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.

#### **OTHER ADMISSION INFORMATION (AR 2.2.3)**

#### 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—Classifications

Federal guidelines require that students without a high school diploma or certificate of equivalency who are applying for financial aid must demonstrate the ability to benefit. Evaluation during the admission process results in the student being admitted to the college with the status of Regular, Regular with Provisional Requirements or Special.

- A. "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 or has a GED certificate. 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 or be in an eligible program.
- B. "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, and is beyond the age of compulsory high school attendance but has been assessed to benefit from college instruction requiring developmental/remedial coursework and is pursuing a degree/certificate or be in an eligible program.
- C. "**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)

## **CREDIT FOR PRIOR LEARNING (AR 2.2.4)**

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 <a href="Council for Adult and Experiential">Council for Adult and Experiential</a> Learning (CAEL) and the American Council on Education (ACE):

- Articulated Programs
- Credit By Evaluation
- College-Level Equivalency Examinations.

Credit awarded for prior learning does not count as hours in residence for graduation requirements. Exceptions may be granted at some MCCD colleges for specially approved programs. No more than 20 credit hours may be applied to AGEC. Credit received through Prior Learning Assessment is transferable within the Maricopa Community Colleges but is not necessarily transferable to other colleges and universities. Therefore, students are strongly advised to meet with a program advisor or contact the college or university they plan to attend. For further information on Prior Learning Assessment, contact the Admissions and Records Office/Office of Student Enrollment Services.

### 1. Credit by Evaluation

The Maricopa Community Colleges offer credit by evaluation. The American Council on Education (ACE) evaluates military training and experiences as well as non-collegiate sponsored training programs and recommends credit awards based on this evaluation. The numbers 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 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:

Exam	Score	Credit Hours/Equivalency	
English-Language and Composition	5 or 4	6 credit hrs/ENG 101, ENG 100, AA, AC, AD, eligible for Honors ENG 102	
English-Literature and Composition	5 or 4	6 credit hrs/ENG 101 ENH 110 eligible for Honors ENG 102	

#### Math AP Recommendation:

Exam	Score	Credit Hours/Equivalency
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.

- 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 <u>Assessment Center at Rio Salado College</u> is a national test site. For additional information on registering for DANTES examinations, call (480) 517-8560.

- D. American College Testing Proficiency Examination Program
  - The Maricopa Community Colleges may award credit for the American College Testing Proficiency Examination Program (ACT-PEP) based on the scores earned.
- E. Departmental Credit By Examination
  - Students may apply for Departmental Credit By Examination in certain courses by obtaining the appropriate form in the Admissions and Records Office/Office of Student Enrollment Services, paying the required fee, and completing the examination and other requirements of the college. See fee schedule for appropriate fees.

### Students may not request:

- i. To challenge a course a second time;
- ii. To challenge a course while currently enrolled in the course;
- iii. To establish credit in a previously completed course; and
- iv. To establish credit for a lower level of a course in which credit has been received.
  - Exceptions may be granted at some MCCCD colleges for their unique programs of study.
  - Certain departments may have additional requirements that must be met before credit may be granted through departmental credit by examination.
  - Only grades of A, B, C, D or P earned as a result of this examination will be recorded on the student's transcript. Fees are not refundable after the examination has been administered, regardless of results.
  - When credit is granted as outlined above, a notation of "credit by examination," a grade and the number of
    credits will appear on the student's transcript. The grade is used in computing the grade point average.

## College Level Examination Program (CLEP)

NOTE: 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.

## Table Revised August 2010

Examination	MCCCD				
General	Score	Sem. Hrs.	Equivalency		
English Composition (Replaced by College Composition)	50 (July 1, 2001- June 30, 2010), 600 (1986 version), 500 (1978 version)	3	With essay qualifies for ENG101		
Humanities	50 (July 1, 2001 or later), 500 (prior to July 1, 2001)	6	Elective Credit		
Mathematics	50 (July 1, 2001 or later), 500 (prior to July 1, 2001)	3	MAT122		
Natural Sciences	50 (July 1, 2001 or later), 500 (prior to July 1, 2001)	8	Elective Credit*		
Social Sciences & History	50 (July 1, 2001 or later), 500 (prior to July 1, 2001)	5	Elective Credit		
Subject					
Accounting, Principles of	ACE Score	6	ACC Elective Credit		
American Government	ACE Score	3	POS110		
American Literature	ACE Score	6	ENH241, 242		
Analyzing & 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	ACE Score	9	CHM Elective Credit*		
College Algebra (1993) (Replaces College Algebra [1979])	ACE Score	3	MAT152		

College Algebra – Trigonometry	ACE Score	3	MAT152
College Composition (Replaces English Composition with Essay)	ACE Score	3	With essay qualifies for ENG101
English Literature	ACE Score	3	Elective Credit
French Language, Level 1	50-54	4	FRE101
(Previously French Language)	55-61	8	FRE101, 102
French Language, Level 2	62-65	12	FRE101, 102, 201
(Previously French Language)	66-80	16	FRE101, 102, 201, 202
Freshman College Composition	ACE Score	3	With Essay ENG101
German Language, Level 1	39-45	4	GER101
(Previously German Language)	46-50	8	GER101, 102
German Language, Level 2	51-59	12	GER101, 102, 201
(Previously German Language)	60-80	16	GER101, 102, 201, 202
Human Growth & Development	ACE Score	0	No Credit
Information Systems & Computer Applications	ACE Score	3	CIS Elective Credit
Intro to Educational Psychology	ACE Score	3	EDU Elective Credit
Introductory Business Law	ACE Score	3	GBS Elective Credit
Introductory Psychology	ACE Score	3	PSY101
Introductory Sociology	ACE Score	3	SOC101
Mathematics, College	ACE Score	3	MAT142
Macroeconomics, Principles of (Replaces Introductory Macroeconomics)	ACE Score	3	ECN211
Management, Principles of	ACE Score	3	MGT Elective Credit
Marketing, Principles of	ACE Score	3	MKT271
Microeconomics, Principles of (Replaces Introductory Microeconomics)	ACE Score	3	ECN212
Spanish Language, Level 1	50-54	4	SPA101
(Previously Spanish Language)	55-65	8	SPA101, 102
Spanish Language, Level 2	66-67	12	SPA101, 102, 201
(Previously Spanish Language)	68-80	16	SPA101, 102, 201, 202
Trigonometry	ACE Score	3	MAT182
U.S. History I – Early Colonization to 1877	ACE Score	6	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 science	ces (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 August 2010

Examination	Score	MCCCD	Sem. Hrs.
Aut. History	5 or 4	ARH101, 102	6
Art – History	3	ARH101 or 102	3
Art—Studio Art (2-D Design)	5	ART111, 112	6
(Previously Art – Studio – General)	4	ART112	3
Art—Studio Art (Drawing)	5	ART111, 112	6
(Previously Art – Studio – Drawing)	4	ART111	3
Diology	5 or 4	BIO181, 182	8
Biology	3	BIO100 or Equivalent	4

Chemistry	5 or 4	CHM151/151LL and CHM152/152LL or CHM154/154LL	8 or 9
,	3	CHM151, 151LL	4
Calculus AB (Previously Mathematics – Calculus AB)	5, 4, or 3	MAT220 or MAT221	4 or 5
Calculus DC	5 or 4	MAT220 or MAT221 and MAT 230 or MAT231	8 to 10
Calculus BC (Previously Mathematics – Calculus BC)	3	upon completion of MAT241 MAT220 or MAT221	4 or 5
Comparative Government and Politics (Previously Political Science – Comparative	5 or 4	POS140	3
Government and Politics)	3 01 1	1 331 10	
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 & Composition	5 or 4	ENG100AA, AC, AD and ENG101	6
English – Literature & Composition	5 or 4	ENG101 and ENH110	6
Environmental Science	5 or 4	No Credit	3
European History	5 or 4	HIS101, HIS102	6
(Previously History – European)	3	HIS101	3
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
	5	JPN101, 102, 201 and 202	20
Japanese Language and Culture	4	JPN101, 102 and 201	15
(Previously Japanese – Language)	3	JPN101 and 102	10
Latin, Vorgil	5	LAT101, 102, 201, 202	16
Latin: Vergil (Previously Latin – Language)	4	LAT101, 102, 201	12
(Freviously Latin — Language)	3	LAT101, 102	8
Music Theory (Previously Music)	5 or 4	MTC105	3
Physics B	5 or 4	PHY111, PHY112	8
r Hysics D	3	PHY111	4
Physics C – Electricity & Magnetism	5,4 or 3	PHY112 with laboratory course work	4
Physics C – Mechanics	5,4 or 3	PHY111 with laboratory course work	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.

## International Baccalaureate Diploma/Certificate Credit

Table Revised August 2010

Examination	Score	Sem. Hrs.	MCCCD Equivalency
Dialogy	7, 6, or 5	8	BIO181, 182
Biology	4	4	BIO182
Chamista.	7, 6, or 5	9	CHM151, 152
Chemistry	4	4	CHM151
Economics	7, 6, or 5	6	ECN211, 212
Economics	4	3	ECN211
English A	7, 6, or 5	6	ENG101, ENG100AB, AC, AD
English A	4	3	ENG100AB, AC, AD
English B	No Credit		None
Equation Lawrence A and B	7, 6, or 5	8	Foreign Language 101, 102
Foreign Language A or B	4	4	Foreign Language 101
History	7.6.0	6	HIS103, 104
(Previously History –	7, 6, or 5 4	3	HIS103
American)	4	3	HI2103
History	7, 6, or 5	6	HIS101, 102
(Previously History –	7, 0, 01 3 4	3	HIS101
European)		3	1113101
Geography			
(Previously Human	5, 4, or 3	3	GCU102
Geography)			
Mathematics HL			
Mathematics SL			
Mathematical Studies SL	7, 6, 5, or 4	4	MAT221
Further Mathematics SL			
(Previously Mathematics)			
Physics	7, 6, or 5	8	PHY111, 112
·	4	4	PHY111
Visual Arts	7, 6, or 5	6	ART111, 112
(Previously Art/Design)	4	3	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 <a href="mailto:ican@domail.maricopa.edu">ican@domail.maricopa.edu</a>. Website: <a href="http://healthcare.maricopa.edu/healthcarecourses.php">http://healthcare.maricopa.edu/healthcarecourses.php</a> 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 <a href="http://healthcare.maricopa.edu/healthcarecourses.php">http://healthcare.maricopa.edu/healthcarecourses.php</a> Credit by Examination in the HCIES is determined through the use of HCIES Competency Assessment Tests (CATs) and/or Skills Demonstration Assessment under the direction of the HCIES Integrated Competency Assessment Network (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," "Credit by Evaluation," or "Credit by Skills Demonstration," and the number of credits will appear on the student's transcript. If a grade is assigned, it will be used in computing the grade point average.

### 4. Transfer Credit

### A. Transfer Credit into MCCCD

A student enrolling into one of the Maricopa Community Colleges after having attended another post-secondary institution can have course work evaluated for transfer credit. To be eligible for evaluation, course work must appear on an official transcript from the institution that offered the course work. The official transcript must be mailed directly from the source institution to the Admissions and Records/Enrollment Services Office of the receiving institution. The Admissions and Records/Enrollment Services Office at the receiving institution will complete a course-by-course evaluation for all submitted transcripts upon student request. 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. In addition, the age of credit may be considered in applying credit towards degrees and certificate programs. Transfer credit that may be applied to meet associate's degree and certificate requirements at a Maricopa Community College is not necessarily transferable to other colleges and universities. The processes and policies that govern the award of transfer credit are as follows:

- Inter-Institutional: Acceptance of courses that fulfill requirements other than general education is determined by individual Maricopa Community Colleges. Credits accepted in transfer from other Maricopa Community Colleges do not necessarily apply to all Maricopa degree and certificate programs.
- ii. Maricopa Skill Center and the Southwest Skill Center: The Maricopa Community Colleges have 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/Enrollment Services Office for specific items related to these agreements.
- iii. Arizona Public Community Colleges and Universities: A course that meets general education requirements at any Arizona public community college district or university will be accepted in transfer to meet comparable general education requirements at any of the Maricopa Community Colleges provided the course was completed with a grade of C or higher (2.0 on a 4.0 scale). On an exception basis, P-grades may be allowed in the Arizona General Education Curriculum (AGEC) for credit transferred if documentation collected by the community college indicates that the P-grade is a C or better. The P-grade exception does not apply to credits awarded by AGEC granting/receiving institutions.
  - Acceptance of courses that fulfill requirements other than general education is determined by individual Maricopa Community Colleges.
- iv. **Domestic Institutions (U.S.):** The evaluation and award of community college transfer credit for course work originating at U.S. institutions that are regionally accredited will be based on official transcripts from all institutions previously attended. Regionally accredited institutions of higher education are those that are fully accredited by 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. Courses from institutions that have earned candidate status from a regional accrediting association will be reviewed on a case-by-case basis.
  - The Admissions and Records/Enrollment Services Office at the receiving institution will complete a course-by-course evaluation for all submitted transcripts upon student request, and will determine the acceptance and applicability of transfer credit toward associate's degree and certificate requirements.
- v. **Foreign Institutions:** Credits from foreign institutions will be reviewed for acceptance. It is the student's responsibility to have all transcripts translated into English and evaluated by an international Credential Evaluation Service before submitting them to the college.
- vi. **Limitations on the Award of Transfer Credit:** Generally, the Maricopa Community Colleges will not award credit for courses completed at institutions not regionally accredited.

#### B. Transfer Credit from MCCCD

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. The processes and policies that govern the transfer of credit are as follows:

- i. Inter-Institutional: Students who transfer from one Maricopa Community College to another must have transcripts sent to the receiving institution for evaluation. Transcript evaluation will be conducted upon student request. Acceptance of courses that fulfill requirements other than general education is determined by individual Maricopa Community Colleges. Credits transferred from one Maricopa Community College to another may not necessarily apply to all Maricopa degree or certificate programs.
- ii. Arizona Public Community Colleges and Universities: Maricopa is a participant in the Arizona statewide transfer system. The <a href="aztransfer.com">aztransfer.com</a> 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 the <a href="aztransfer.com">aztransfer.com</a> site is the course equivalency guide (CEG), which shows how courses transfer 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 how the course will apply to meet requirements for specific bachelor's degrees.

  <a href="https://www.aztransfer.com/cgi-bin/webobjects/admin.ceg">https://www.aztransfer.com/cgi-bin/webobjects/admin.ceg</a>
- iii. **Domestic Institutions (U.S):** The Maricopa Community Colleges have transfer agreements with U.S. universities and colleges that are regionally accredited. These partnerships are formalized through district-wide articulation agreements and are designed to help students make a smooth transition when transferring from one of the Maricopa Community Colleges to a four-year college or university. To access a list of institutions with which Maricopa has established an articulation agreement, visit: <a href="http://www.maricopa.edu/academic/ccta/artic/partner-list.php">http://www.maricopa.edu/academic/ccta/artic/partner-list.php</a>
- iv. **Foreign Institutions:** The Maricopa Community Colleges have agreements with colleges and universities outside the United States that are approved by the Ministry of Education or other appropriate governmental agency. To access a list of international agreements, visit: <a href="http://www.maricopa.edu/academic/ccta/artic/partner-list.php">http://www.maricopa.edu/academic/ccta/artic/partner-list.php</a>
- v. **Limitations on the Transfer of Credit:** Generally, the following types of courses are not intended for transfer. See an advisor for specific information.
  - Remedial/developmental courses or courses numbered below 100
  - Arizona government university courses
  - Cooperative education
  - Experimental courses
  - Post baccalaureate courses
  - Contractual training for business, industry, and government
  - Some forms of credit for prior learning
  - Non-credit courses
- vi. **Time Limit for Transfer Coursework**: Students should be aware that the receiving institution may have age of 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.

## 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.

## **ACADEMIC ADVISING (AR 2.2.6)**

- 1. 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.
- 2. 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.
- 3. 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.

4. 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

## STUDENT COURSE PLACEMENT PROCESS (AR 2.2.7)

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:
  - 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.
  - ii. 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.
- 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.

### **REGISTRATION (AR 2.2.8)**

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.

### **TUITION AND FEES (AR 2.2.9)**

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)
- 4. Unclassified, Out-of-County, Out-of-State (1-6 credit hours system-wide)

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

Students attending more than one Maricopa Community College will be assessed fees for their enrollment at each of the Maricopa Community colleges/centers. (Students who are considered to be out-of-state residents for tuition and fees purposes should refer to the Concurrent Enrollment in Arizona Public Institutions of Higher Education policy under the Residency section of this publication.)

## 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.

Tuition and Fees Schedule (Effective July 1, 2011 for fall, spring and summer Sessions)
 Current information can be found at <a href="http://www.maricopa.edu/publicstewardship/governance/adminregs/appendices/S-4.htm">http://www.maricopa.edu/publicstewardship/governance/adminregs/appendices/S-4.htm</a>.

The following is the tuition and fees schedule for 2011-2012 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. <u>See Appendix S-4</u>

## Appendix S4: Tuition and Fees Student Status

2011-2012	Maricopa County Resident (In County)	Out of County Resident* (Apache or Greenlee County Resident without Out-of-County Residence Affidavit)	Non-Resident Living in Arizona	Non-Resident Living in Another State/ Country	Western Undergraduate Exchange (WUE)
		IN-STATE	OUT-OF-STATE C** D*** E		
Credit Hours	A	В	C**	D***	E
1	76.00	300.00	317.00	317.00	114.00
2	152.00	600.00	634.00	634.00	228.00
3	228.00	900.00	951.00	951.00	342.00
4	304.00	1,200.00	1,268.00	1,268.00	456.00
5	380.00	1,500.00	1,585.00	1,585.00	570.00
6	456.00	1,800.00	1,902.00	1,902.00	684.00
7	532.00	2,100.00	2,219.00	2,219.00	798.00
8	608.00	2,400.00	2,536.00	2,536.00	912.00
9	684.00	2,700.00	2,853.00	2,853.00	1,026.00
10	760.00	3,000.00	3,170.00	3,170.00	1,140.00
11	836.00	3,300.00	3,487.00	3,487.00	1,254.00
12	912.00	3,600.00	3,804.00	3,804.00	1,368.00
13	988.00	3,900.00	4,121.00	4,121.00	1,482.00
14	1,064.00	4,200.00	4,438.00	4,438.00	1,596.00
15	1,140.00	4,500.00	4,755.00	4,755.00	1,710.00
16	1,216.00	4,800.00	5,072.00	5,072.00	1,824.00
17	1,292.00	5,100.00	5,389.00	5,389.00	1,938.00
18	1,368.00	5,400.00	5,706.00	5,706.00	2,052.00

<sup>\*</sup> 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 and Greenlee counties without an Out-of-County Residence Affidavit.

## 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
  - i. 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.
  - ii. There may also be additional course fees for classes, please refer to the college schedule for course fees.
  - iii. If you choose to audit a class, add an additional fee of \$25 per credit hour.

<sup>\*\*</sup> 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.

<sup>\*\*\*</sup> 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.

iv. 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.

## D. 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:
  - 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.

## **REFUND POLICY (AR 2.2.10)**

## 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
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

<sup>\*</sup>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 inlaws 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.

## STUDENT FINANCIAL ASSISTANCE (AR 2.2.11 & Appendix S-5)

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 <u>Appendix S-5</u>.

## Appendix S-5: Student Financial Assistance

The Maricopa Community Colleges provide students financial assistance to enable access to higher education. Student financial assistance shall be awarded on the basis of demonstrated financial need except where funds are specified for recognition of special talents and achievements. Only

those with a lawful presence in the United States may qualify for federal financial aid or Maricopa County Community College District (MCCCD) scholarships. Under Arizona law, any information the student provides about his or her legal status when applying for financial aid or publicly funded scholarships may be subject to mandatory reporting to federal immigration authorities. This does not apply to applications for the private scholarship funds held in and distributed by the Maricopa Community Colleges Foundation.

### 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 <a href="http://www.fafsa.ed.gov/">http://www.fafsa.ed.gov/</a>. 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 <a href="https://www.maricopa.edu/resdev/scholarships/apply.php">www.maricopa.edu/resdev/scholarships/apply.php</a> 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.

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

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

## **Evaluation Period**

Standards of Satisfactory Academic Progress (SAP) will be evaluated at the end of each semester; fall, spring and summer. Programs less than one year in length will be evaluated at the midpoint of the program. Non-standard sessions will be evaluated at the completion of the session.

### **Standards of Satisfactory Academic Progress**

Standards of Satisfactory Academic Progress (SAP) are evaluated on each of the three measurements outlined below. Failure to meet any of these standards will result in suspension of eligibility for financial aid.

**Note:** Grades of F,I,N,W,X,Y,Z, and courses not yet graded are considered attempted but not meeting progress standards for the purposes of financial aid.

## • Grade Point Measurement

Students must meet the following credit hour/cumulative grade point average (CGPA).

Total Credits Attempted*	Min CGPA
<u>≤</u> 15.75	1.60
16-30.75	1.75
31-45.75	1.90
46 +	2.00

<sup>\*</sup>for which grade points are computed

## • Semester Progress Measurement

Students must successfully complete 2/3 (66.67%) of all attempted course work during the semester.

### • 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

#### Course work included in the Maximum Time Frame evaluation:

- All of those included in the semester evaluation
- All evaluated transfer credits
- Any Associates degree or higher earned will be considered to have exhausted maximum timeframe eligibility

#### 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)
- Academic Renewal

### **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 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, P, W, X, Y, or Z is received.
- 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 Warning** "A status assigned to a student who fails to make satisfactory academic progress at an institution that evaluates academic progress at the end of each payment period" (semester).
- 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, please contact the college Financial Aid Office.

### **Refunds and Repayments**

In accordance with federal regulations (CFR 668.22), a student may be required to repay federal financial aid funds if they completely withdraw, are withdrawn, or fail to earn a passing grade from all classes during a semester. Further information is available at the college Office of Student Financial Aid. This could affect a student's ability to receive Financial Aid in the future at any school. For a student receiving Financial Aid, also see <u>Appendix S-7</u> for Withdrawal procedures.

### **Award Amount and Level of Enrollment**

Award amount is determined, in part, on the level of enrollment. 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.

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

### Treatment of Title IV Aid When a Student Withdraws

The law specifies how your school must determine the amount of Title IV program assistance that you earn if you withdraw from school. The Title IV programs that are covered by this law are: Federal Pell Grants, Academic Competitiveness Grants, National SMART grants, TEACH Grants, Stafford Loans, PLUS Loans, Federal Supplemental Educational Opportunity Grants (FSEOGs), and Federal Perkins Loans.

When you withdraw during your payment period or period of enrollment (you may contact the Financial Aid office to define these for you and tell you which one applies) the amount of Title IV program assistance that you have earned up to that point is determined by a specific formula. If you received (or your school or parent received on your behalf) less assistance than the amount that you earned, you may be able to receive those additional funds. If you received more assistance than you earned, the excess funds must be returned by the school and/or you.

The amount of assistance that you have earned is determined on a pro-rata basis. For example, if you completed 30% of your payment period or period of enrollment, you earn 30% of the assistance you were originally scheduled to receive. Once you have completed more than 60% of the payment period or period of enrollment, you earn all the assistance that you were scheduled to receive for that period.

If you did not receive all of the funds that you earned, you may be due a post-withdrawal disbursement. If your post-withdrawal disbursement includes loan funds, your school must get your permission before it can disburse them. You may choose to decline some or all of the loan funds so that you don't incur additional debt. Your school may automatically use all or a portion of your post-withdrawal disbursement of grant funds for tuition, fees, and room and board charges (as contracted with the school). The school needs your permission to use the post-withdrawal grant disbursement for all other school charges. If you do not give your permission, you will be offered the funds. However, it may be in your best interest to allow the school to keep the funds to reduce your debt at the school.

There are some Title IV funds that you were scheduled to receive that cannot be disbursed to you once you withdraw because of other eligibility requirements. For example, if you are a first-time, first-year undergraduate student and you have not completed the first 30 days of your program before you withdraw, you will not receive any FFEL or Direct loan funds that you would have received had you remained enrolled past the 30th day. If you receive (or your school or parent receives on your behalf) excess Title IV program funds that must be returned, your school must return a portion of the excess equal to the lesser of:

- 1. your institutional charges multiplied by the unearned percentage of your funds, OR
- 2. the entire amount of excess funds. The school must return this amount even if it didn't keep this amount of your Title IV program funds.

If your school is not required to return all of the excess funds, you must return the remaining amount. Any loan funds that you must return, you (or your parent for a PLUS Loan) repay in accordance with the terms of the promissory note. That is, you make scheduled payments to the holder of the loan over a period of time. Any amount of unearned grant funds that you must return is called an overpayment. The maximum amount of a grant overpayment that you must repay is half of the grant funds you received or were scheduled to receive. You must make arrangements with your school or the Department of Education to return the unearned grant funds.

The requirements for Title IV program funds when you withdraw are separate from any refund policy that your school may have. Therefore, you may still owe funds to the school to cover unpaid institutional charges. Your school may also charge you for any Title IV program funds that the

school was required to return. You can view the tuition refund policy and requirements and procedures for withdrawing from school at www.maricopa.edu/publicstewardship/governance/adminregs/students/2 2.php

## **VETERANS SERVICES (AR 2.9)**

The Maricopa Community Colleges' veterans' services offices act as liaisons with the Department of Veterans Affairs. Each program must be approved by the State of Arizona Department of Veterans' Services. 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 35 Survivors and dependents of deceased/100% disabled veterans
- Chapter 1606 Montgomery GI Bill, Selected Reserve

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**

## **ACADEMIC LOAD (AR 2.3.1)**

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).

## ATTENDANCE (AR 2.3.2)

- Only persons who are registered for a class at any of the Maricopa Community Colleges may attend that class. Attendance requirements are determined by the course instructor. Students who do not meet the attendance requirement as determined by the course instructor may be withdrawn.
- Students who fail to attend the first scheduled class meeting, or to contact the instructor regarding absence before the first scheduled
  class meeting may, at the option of the instructor, be withdrawn.
- At the beginning of each course, each faculty member will provide students with written attendance requirements. It is the student's
  responsibility to consult with the instructor regarding official or unofficial absences. Absences begin to accumulate with the first
  scheduled class meeting.
- Students bear the responsibility of notifying the Admissions and Records Office/Office of Student Enrollment Services when they discontinue studies in a course or at the college. Please refer to <a href="Appendix S-7">Appendix S-7</a> 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.

## **GRADING (AR 2.3.3)**

## 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**

А	Excellent	4 grade points per credit hour
В	Above Average	3 grade points per credit hour
С	Average	2 grade points per credit hour
D	Passing	1 grade point per credit hour
F	Failure	0 grade points per credit hour
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 <u>*</u>	Credit	Not computed in grade point average
W	Withdrawn, passing	Not computed in grade point average
Υ	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.
- 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. <u>Important Deadlines for Students</u>

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Class Length	Deadline for Students to Withdraw with Guaranteed Grade of W	Deadline for Students to Withdraw From a Course (Instructor Signature Required)	Deadline for Students to Request Complete Withdrawal	Deadline to Change Type of Grading (A-F to P/Z, or P/Z to A-F)	Deadline to Change from Audit Grade to Credit Grade	Deadline to Change from Credit Grade to Audit Grade
One Week or less (1 to 7 days)	1st Day of Class	1st Day of Class or Prior to the Last Day of Class	1st Day of Class or Prior to the Last Day of Class	1st Day of Class	1st Day of Class	1st Day of Class
Two Weeks (8 to 14 days)	3 <sup>rd</sup> Calendar Day	6th Calendar Day	6th Calendar Day	1st Day of Class	1st Day of Class	3rd Calendar Day
Three Weeks (15 to 21 Days)	6th Calendar Day	12th Calendar Day	12th Calendar Day	2nd Calendar Day	1st Day of Class	5th Calendar Day
Four Weeks (22 to 28 days)	9th Calendar Day	17 <sup>th</sup> Calendar Day	17th Calendar Day	3rd Calendar Day	2nd Calendar Day	7th Calendar Day
Five Weeks (29 to 35 days)	12th Calendar Day	23rd Calendar Day	23rd Calendar Day	4th Calendar Day	2nd Calendar Day	9th Calendar Day
Six Weeks (36 to 42 days)	14th Calendar Day	29th Calendar Day	29th Calendar Day	5th Calendar Day	3rd Calendar Day	11th Calendar Day
Seven Weeks (43 to 49 days)	17th Calendar Day	35th Calendar Day	35th Calendar Day	5th Calendar Day	3rd Calendar Day	12th Calendar Day
Eight Weeks (50 to 56 days)	20th Calendar Day	41st Calendar Day	41st Calendar Day	6th Calendar Day	3rd Calendar Day	15th Calendar Day
Nine Weeks (57 to 63 days)	23rd Calendar Day	46th Calendar Day	46th Calendar Day	7th Calendar Day	4th Calendar Day	17th Calendar Day
Ten Weeks (64 to 70 days)	26th Calendar Day	52nd Calendar Day	52nd Calendar Day	8th Calendar Day	4th Calendar Day	19th Calendar Day
Eleven Weeks (71 to 77 days)	29th Calendar Day	58th Calendar Day	58th Calendar Day	9th Calendar Day	5th Calendar Day	21st Calendar Day
Twelve Weeks (78 to 84 days)	32nd Calendar Day	63rd Calendar Day	63rd Calendar Day	10th Calendar Day	5th Calendar Day	23rd Calendar Day
Thirteen Weeks (85 to 91 days)	35th Calendar Day	70th Calendar Day	70th Calendar Day	10th Calendar Day	5th Calendar Day	25th Calendar Day
Fourteen Weeks (92 to 98 days)	38th Calendar Day	76th Calendar Day	76th Calendar Day	11th Calendar Day	6th Calendar Day	27th Calendar Day
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Fifteen Weeks (99 to 105 days)	41st Calendar Day	82nd Calendar Day	82nd Calendar Day	12th Calendar Day	6th Calendar Day	28th Calendar Day
Sixteen Weeks or more (106 or more days)	End of the seventh week	Two weeks before the last class period	Two weeks before the last class period	Within 14 days including the first class period	Within first week of class	Within first five weeks

Deadlines are based on calendar days and begin with the first day of class. Deadlines that fall on a weekend or holiday advance to the next college work day.

## **ACADEMIC PROBATION (PROGRESS) (AR 2.3.4)**

#### 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.

## **INSTRUCTIONAL GRIEVANCE PROCESS (AR 2.3.5 & Appendix S-6)**

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.

Steps for students to follow:

- I. 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.

## WITHDRAWAL (AR 2.3.6)

To withdraw from a course or courses from the college, students must follow approved procedures (See <u>Appendix S-7</u>). 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.

## STUDENT AND FACULTY WITHDRAWAL PROCEDURES (Appendix S-7)

#### **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 <u>Appendix S-6</u>.

\*The prescribed time limits are for full semester classes. Time limits for classes which meet fewer than sixteen (16) weeks are adjusted accordingly. See <u>Important Deadlines for Students</u>. 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 <u>refund period</u>.

## 2. Complete Withdrawal from College

Students electing to withdraw from the college must contact the Admissions and Records 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 <u>Important Deadlines for Students</u>. 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 <u>refund period</u>.

## C. 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 <u>Important Deadlines for Students</u>. 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.

## **ACADEMIC RENEWAL (AR 2.3.7)**

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.

## **HONORS PROGRAM (AR 2.3.8)**

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.

#### **GENERAL GRADUATION REQUIREMENTS (AR 2.3.9)**

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:

- 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).

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

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

## Licensure Disclaimer

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

#### **MCCCD General Education Statement**

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

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

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

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

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

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

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

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

## **CATALOG UNDER WHICH A STUDENT GRADUATES (AR 2.2.5)**

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.

 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 Fall '05 (Active)

or University

Continued at a Public Community Spring '06, Fall '06 (Active)

College Transferred to a University Spring '07 (2005 or Any Subsequent Catalog)

**EXAMPLE B** 

Admitted & Earned Course Credit at a Public Community College Fall '02 (Active)

or University

Enrolled But Earned All Ws, Zs, or Fs

Enrolled in Audit Courses Only

Nonattendance

Spring '03 (Inactive)
Fall '03 (Inactive)
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 Fall '02 (Active)

University

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 Fall '02 (Active)

University

Nonattendance Spring '03 (Inactive)
Readmitted & Earned Course Credit at a Public Community College Summer '03 (Active)

Nonattendance

Transferred to a University

Fall '03, Spring '04 (Inactive)

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 Summer '04 (Active)

University

Continued at a Public Community College Fall '04, Spring '05 (Active)

Nonattendance Fall '05 (Inactive)
Readmitted & Earned Course Credit at a Public Community College Spring '06 (Active)

Transferred to a University Summer '06 (2004 or Any Subsequent Catalog)

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

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

## TRANSCRIPTS FOR TRANSFER (AR 2.3.10)

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**

## **SEXUAL HARASSMENT POLICY (AR 2.4.4 & 5.1.8-5.1.16)**

## SEXUAL HARASSMENT POLICY FOR EMPLOYEES AND STUDENTS (AR 2.4.4)

See the EEO/AA Section of the Administrative Regulations (AR 5.1.8).

## SEXUAL HARASSMENT POLICY FOR EMPLOYEES AND STUDENTS (AR 5.1.8)

The policy of the Maricopa County Community College District (MCCCD) is to provide an educational, employment, and business environment free of unwelcome sexual advances, requests for sexual favors, and other verbal and/or physical conduct or communications constituting sexual harassment as defined and otherwise prohibited by state and federal law.

Sexual harassment by and between, employees; students; employees and students; and campus visitors and students or employees, is prohibited by this policy.

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 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.

#### **EXAMPLES OF POLICY VIOLATIONS (AR 5.1.9)**

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. Which creates an intimidating, hostile or offensive work or academic environment;
- 5. Commit any act of sexual assault or public sexual indecency against any employee or student whether on MCCCD property or in connection with any MCCCD-sponsored activity;
- 6. Continue to express sexual interest in another employee, student or campus visitor after being informed or on notice that the interest is unwelcome (reciprocal attraction is not considered sexual harassment);
- 7. Engage in other sexually harassing conduct in the workplace or academic environment, whether physical or verbal, including, but not limited to, commentary about an individual's body (or body parts), sexually degrading words to describe an individual, sexually offensive comments, sexually suggestive language or jokes, innuendoes, and sexually suggestive objects, books, magazines, computer software, photographs, cartoons or pictures.

## **ADDITIONAL POLICY VIOLATIONS (AR 5.1.10)**

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.

#### **RESPONSIBILITY FOR POLICY ENFORCEMENT (AR 5.1.11)**

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.

## **COMPLAINTS (AR 5.1.12)**

## 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 in the academic environment (by a faculty member, administrator, campus visitor or other student) are urged to report such conduct to the vice president of student affairs or designee at each individual campus. A student may also contact the MCCCD EEO/AA Office to obtain the name and phone number of the college official designated to respond to sexual harassment complaints.

## 3. General - Applicable to Both Employees and Students

Complaints will be investigated according to procedures established by the MCCCD EEO/AA Office. Copies of these procedures may be obtained in the college president's office, Office of the Vice President of Student Affairs and the MCCCD EEO/AA Office.

The college/center/MCCCD will investigate all complaints as professionally and expeditiously as possible.

Where investigation confirms the allegations, appropriate responsive action will be taken by the college/center/MCCCD.

## **CONFIDENTIALITY (AR 5.1.13)**

Records will be maintained in a confidential manner to the extent permitted by law and insofar as they do not interfere with MCCCD's legal obligation to investigate and resolve issues of sexual harassment.

### **VIOLATIONS OF LAW (AR 5.1.14)**

An employee or student may be accountable for sexual harassment under applicable local, state, and/or federal law, as well as under MCCCD policy. Disciplinary action by MCCCD may proceed while criminal proceedings are pending and will not be subject to challenge on the grounds that criminal charges involving the same incident have been dismissed or reduced.

## **FALSE STATEMENTS PROHIBITED (AR 5.1.15)**

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.

## **RETALIATION PROHIBITED (AR 5.1.16)**

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.

## **EMISSIONS CONTROL COMPLIANCE (AR 2.4.6)**

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.

#### **PETITION SIGNATURE SOLICITATION (AR 2.4.8)**

- 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.

## **SOLICITATION (AR 2.4.9)**

- 1. Definitions
  - A. A "solicitor" is any non-MCCCD-affiliated entity that would, on the premises of any Maricopa Community College or Center, purport to sell or promote any product, service, or idea, but does not include such an entity that would enter the premises for the purposes of promoting, opposing, or soliciting petition signatures in connection with any political candidate or initiative, or referendum ballot.
  - B. A "special event" is a college-sponsored event conducted on college premises for the benefit of students that is based on a particular theme, and for which the college has deemed it essential to invite the participation of solicitors whose products, services or ideas are pertinent to the special event's theme.

## Requirements

- A. A solicitor must obtain prior approval for solicitation from the designated official at each college or center. A solicitor who would purport to sell any product or service is responsible for obtaining any necessary tax licenses and must submit to the designated official a certificate of commercial liability insurance and pay to the college or center, in consideration for the opportunity for solicitation, a fee in the amount of \$50 per day or \$125 per full week.
- B. Campus restrictions regarding location, time, date, and use of amplification may apply. All requests for space shall be granted on a first-come, first-served basis only upon completion of the requirements contained in this regulation.
- C. All solicitation must take place at tables in designated areas. Standard space will be one or two tables and chairs. Solicitors may be limited to no more than fifty (50) hours of solicitation activity per semester at each college or center.
- D. By requesting the opportunity for solicitation on the premises of a college or center, a solicitor warrants that it may lawfully sell or promote its product, service or idea and that such activity does not violate any law, and does not violate any trademark, copyright, or similar proprietary interest. The activity of any solicitor may not violate any existing Maricopa contract.
- E. The president of every college or center shall establish for such location restrictions governing the activities of solicitors. Such restrictions shall supplement, but shall not replace or waive, this regulation.
- F. A college may waive the fee prescribed in this regulation for any solicitor's participation in a special event if the college determines that such participation will be of particular educational benefit to the interests of that college's students (i.e., non-profits/501(C)3, the armed forces and educational institutions offering transfer information); the participation is sponsored by a club, organization, or academic division; and the participation is approved by the college's Student Life and Leadership department. A college may waive both the fee and the insurance certificate requirements prescribed in this regulation for a student purporting to sell or promote a product or service at a special event, provided that:
  - Such product or service presents low risk of harm to a potential user;
  - ii. The product or service is not food or food-related and;

- iii. The student is soliciting solely on his or her own behalf and not pursuant to any sales agreement, commission agreement, or similar affiliation or contractual relationship with another entity.
- G. Any solicitor who violates this regulation may be deemed a trespasser on college or center premises, and therefore subject to appropriate prosecution within the discretion of the College Safety department and other responsible officials at the college or center. The Maricopa County Community College District, its colleges and centers, assume no responsibility financial or otherwise for the acts or omissions of any vendor whose presence on college premises pursuant to this regulation is approved by any college official.

Specific procedures on how to implement the Solicitation regulation can be found in Appendix S-15.

## **CHILDREN ON CAMPUS (AR 2.4.10)**

- 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.

## **CRIME AWARENESS AND CAMPUS SECURITY ACT (AR 2.4.11)**

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.

## **WORKPLACE VIOLENCE PREVENTION (AR 2.4.12)**

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.

## **STUDENT RIGHT TO KNOW (AR 2.4.13)**

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

## **COPYRIGHT ACT COMPLIANCE (AR 2.4.5)**

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.

## **COPYRIGHT REGULATION (AR 3.2)**

- 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.

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.

To learn more about copyright, click "Intellectual Property." While you're there, you should read the Maricopa Community Colleges' Copyright Guidelines. You should also review the complete text of the Computing Resource Standards that can be found under the "Information Technology" link. The Standards also appear in college catalogs and student handbooks.

## **TAPING OF FACULTY LECTURES (AR 3.4)**

MCCCD acknowledges that faculty members are, by law, afforded copyright protection in their classroom lectures and, therefore, may limit the circumstances under which students may tape (audio/visual) their classes.

Each faculty member shall inform his/her students within the first week of classes to his/her policy with regard to taping. Failure to do so will accord students the right to tape lectures.

Students with disabilities that render them unable to take adequate lecture notes are entitled to reasonable accommodation to remedy this inability. Accommodation may require a faculty member to exempt a student from his/her taping policy.

## **TECHNOLOGY RESOURCE STANDARDS (AR 4.4)**

## Introduction

The Maricopa County Community College District (MCCCD) provides its students and employees access to information resources and technologies. Maricopa 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 to its employees and students.

At Maricopa, technological resources are shared by its users; misuse of these resources by some users infringes upon the opportunities of all the rest. As Maricopa is a public institution of higher education, however, the proper use of those resources is all the more important. Accordingly, Maricopa requires users to observe Constitutional and other lawful mandates whose aims are to safeguard and appropriately utilize technology resources that are acquired and maintained with public funds.

## **General Responsibilities**

Technology resources (including, but not limited to, desktop and laptop systems, printers, central computing facilities, District-wide or college-wide networks, local-area networks, telephones, facsimile machines, scanners, access to the Internet, electronic mail and similar electronic information) of the Maricopa County Community College District are available only to authorized users, and any use of those resources is subject to these Standards. All users of Maricopa's technology resources are presumed to have read and understood the Standards. While the Standards govern use of technology resources District-wide, an individual community college or center may establish guidelines for technology resource usage that supplement, but do not replace or waive, these Standards.

## **Acceptable Use**

Use of Maricopa's technology resources, including websites created by employees and students, is limited to educational, research, service, operational, and management purposes of the Maricopa County Community College District and its member institutions. Likewise, data, voice, images and links to external sites posted on or transmitted via Maricopa's technology resources are limited to the same purposes.

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. A 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.

Frequently, access to Maricopa's technology resources can be obtained only through use of a password known exclusively to the user. It is the user's responsibility to keep a password confidential. While Maricopa takes reasonable measures to ensure network security, it cannot be held accountable for unauthorized access to its technology resources by other users, both within and outside the Maricopa community. Moreover, it cannot guarantee users protection against loss due to system failure, fire, etc.

#### **Incidental Computer Usage**

Limited incidental personal use of information resources by employees of MCCCD is permitted, except as described in item 16 under prohibited conduct. Faculty and staff are responsible for exercising good judgment about personal use in accordance with regulations, local colleges' existing policies and ethical standards for employees. Personal use refers to activities which only affect or impact the individual. 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.

#### **Incidental Telephone Usage**

Limited incidental personal use of information resources by employees of MCCCD is permitted, except as described in item 16 under prohibited conduct. Faculty and staff are responsible for exercising good judgment about personal use in accordance with regulations, local colleges' existing policies and ethical standards for employees. Personal use refers to activities which only affect or impact the individual. 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 Telephone Usage for the Maricopa Community Colleges.

## **Prohibited Conduct**

The following is prohibited conduct in the use of Maricopa's technology resources:

- Posting to the network, downloading or transporting any material that would constitute a violation of Maricopa County Community College
  District contracts
- 2. Unauthorized attempts to monitor another user's password protected data or electronic communication, or delete another user's password protected data, electronic communications or software, without that person's permission
- 3. Installing or running on any system a program that is intended to or is likely to result in eventual damage to a file or computer system
- 4. Performing acts that would unfairly monopolize technology resources to the exclusion of other users, including (but not limited to) unauthorized installation of server system software
- 5. Hosting an unauthorized website that violates the .EDU domain request.
- 6. Use of technology resources for non-Maricopa 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.
- Activities that would constitute a violation of any policy of Maricopa's Governing Board, including, but not limited to, Maricopa's nondiscrimination 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 Maricopa's 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 email account copies all outgoing and incoming messages to the MCCCD hosted account.

## **Exceptions:**

- A. A permissible exception would include faculty to student communications that are FERPA protected and otherwise not subject to public disclosure. Employees who create administrative or operational messages on alternative devices should be mindful that the duty to retain records according to the approved retention schedule exists regardless of the communications tool that is being used.
- B. If an employee has a business need to receive e-mail messages that are larger than the established limit on the MCCCD system, or that contain file types that are normally prohibited because of the potential security risks, the employee should open a help desk ticket to request changes to their e-mail account in order to accommodate their business need.

## Review and Approval of Alternate E-Mail Account Systems

The prior review and approval by the Vice Chancellor of Information Technology Services 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.
- 2. All information within the e-mail system must be e-discoverable, per law.
- 3. Any proposed changes to the college e-mail system with e-discovery implications must be submitted to District ITS for approval.
- 4. District ITS must always have full and complete access to ensure the ability to provide any information necessary for e-discovery, local or remote, in a timely and secure manner.

#### Disclaimer

The home page of a 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, Maricopa may unilaterally delete any violative content and terminate the user's access to Maricopa'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 Maricopa's grievance procedures or resolution of controversy.

## **HAZING PREVENTION REGULATION (AR 2.6)**

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 Maricopa Community Colleges' 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 the Maricopa Community Colleges 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 Maricopa Community Colleges; and,
  - B. The act contributes to a substantial risk of potential physical injury, mental harm or personal degradation, or causes physical injury, mental harm or personal degradation.
- 3. Any solicitation to engage in hazing is prohibited.
- 4. Aiding and abetting another person who is engaged in hazing is prohibited.
- 5. Victim consent is not a defense for violation of the Maricopa Community Colleges Hazing Prevention Regulation.
- 6. All students, faculty and staff must take reasonable measures within the scope of their individual authority to prevent violations of the Maricopa Community Colleges Hazing Prevention Regulation.
- 7. Hazing activities and situations include, but are not limited to, the following:
  - A. Pre-pledging, illegal pledging or underground activities.
  - B. Acts of mental and physical abuse, including, but not limited to: paddling, slapping, kicking, pushing, yelling, biting, duck-walking, line-ups, tuck-ins, belittling, excessive exercise, beating or physical abuse of any kind, and the potentially forced consumption of any food or beverage that contributes to or causes physical injury, mental harm or personal degradation.
  - C. Sleep deprivation (activities that deprive prospective and/or current students and/or members of the opportunity of a minimum of six hours sufficient sleep each day).
  - D. Encouraging or forcing use of alcohol or drugs.
  - E. Any type of student club/organization scavenger hunt, quest, road trip or 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 Maricopa Community Colleges policies, and local and state laws. Alleged violations of the Maricopa Community Colleges 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 Maricopa Community Colleges 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 Maricopa Community Colleges policies, and local and state laws. Any Maricopa Community Colleges faculty or staff member who knowingly permitted, authorized or condoned the alleged hazing activity is subject to disciplinary action in accordance with college and Maricopa Community Colleges policies, and local and state laws.
- 10. If the vice president of student affairs' office receives a report or complaint of an alleged hazing activity involving physical injury, threats of physical injury, intimidation, harassment or property damage, or any other conduct that appears to violate Arizona state law, the college will report such conduct to the appropriate college safety office. The said college safety office will investigate, respond to and report on the alleged hazing activity in accordance with all college, District, local, state and federal guidelines, policies and laws.
- 11. Should the proceedings outlined above substantiate an occurrence of hazing activity—where students or student organizations knowingly permitted, authorized or condoned the hazing activity—the college can recommend the following sanctions against student clubs/organizations:
  - A. Censure: Censure can include the required completion of a program designed with the intent of eliminating the hazing activity. The programs will be devised with the cooperation of all involved parties and monitored by the vice president of student affairs' office.
  - B. Probation: The student club(s)/organization(s) will be placed on probation for a specified period of time. Conditions of probation will be determined by the vice president of student affairs' office and outlined in writing to the student club(s)/organization(s). The probationary term will be monitored by the vice president of student affairs' office.
  - 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 Maricopa Community Colleges hazing prevention regulation is not intended to prohibit or sanction the following conduct:

- A. Customary athletic events, contests or competitions that are sponsored by any of the Maricopa Community Colleges.
- 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 Maricopa Community Colleges hazing prevention regulation: "Organization" is defined as an athletic team, association, order, society, corps, cooperative, club or other similar group that is affiliated with Maricopa Community Colleges, whose membership consists primarily of students enrolled at Maricopa Community Colleges and that may also be classroom-related or co-curricular in nature.

#### **ABUSE-FREE ENVIRONMENT (AR 2.4.7)**

See the Auxiliary Services Section of the Administrative Regulations for Tobacco-Free Environment.

## 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:

- 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:

- 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 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)

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)

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)

Special sentencing provisions for possession of crack cocaine (21 United States Code §844):

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.

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)

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))

Civil fine of up to \$10,000 (pending adoption of final regulations). (21 United States Code §884(a))

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)

Ineligible to receive or purchase a firearm. (21 United States Code §922(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.

- 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)
- 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. Use of Alcoholic Beverages (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 8.
- 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 3 and 7.
- C. Service at District Events on District-owned Property. The Chancellor has the sole authority to approve the service, but not the sale or other distribution, of wine or beer at District events on district-owned property that the Chancellor either sponsors or approves. The only District employees authorized to request the Chancellor's approval are the College Presidents and the Vice Chancellors. Additionally, the law strictly limits the service of wine or beer by the District on District-owned property, and those restrictions are specified in Paragraph 5. 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: <u>AS-6 Notice of Intent to Serve Beer and Wine</u>. 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. The MCCCD Risk Manager will forward copies of the forms to the Arizona Department of Liquor Licenses and Control.

- E. **Service restrictions required by law.** An event approved under Paragraph 4 must, by law, comply with the all of the following restrictions:
  - 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 6. 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 5. 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 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 <u>AS-7 Request to Serve Beer and Wine Third Party</u>. And provides it to the Chancellor for approval along with a copy of the liquor license no later than 60 days before the event;
  - The entity provides a certificate of insurance demonstrating that it has liquor liability coverage and that it adds the District as an additional insured;
  - iv. The entity agrees in writing to indemnify the District from any claims of any kind arising out of the event;
  - v. Beer and wine are the only alcoholic beverages served and only served through a beverage service contractor whose liquor license with the state of Arizona is in good standing;
  - vi. The contractor provides all of the beverages served and well as the servers or bartenders;
  - vii. Before the event, the contractor provides a certificate of insurance that meets the requirements of the District's Risk Manager and that adds the District as an additional insured; and
  - viii. The contractor agrees in writing to indemnify the District regarding the service of the beverages.
- H. Receipt of beverages; storage. It is not permissible to store wine or beer on premises owned, leased or rented by MCCCD, except as provided in this paragraph. Alcoholic beverages purchased for use in cooking in District culinary courses must be stored in such a way that it is inaccessible to anyone except the Director or designee of the culinary program. For wine and beer to be used for receptions at the district's culinary institutes, as authorized by this administrative regulation, the following storage requirements apply:
  - i. Wine and beer to be served may only be brought to MCCCD property no sooner than four hours prior to the event, and remain there no longer than four hours after the event; and
  - ii. Once the wine and beer arrives on MCCCD property, the Director the culinary program shall assign an MCCCD employee to ensure that it is not stolen or that it is not opened until ready to be served.
- 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.

## DISABILITY RESOURCES & SERVICES—ELIGIBILITY FOR ACCOMMODATIONS & REQUIRED DISABILITY DOCUMENTATION (AR 2.8.1)

#### Purpose

To specify the disability documentation requirements that will qualify (i.e., support current and essential needs) Maricopa County Community College District students for reasonable and appropriate accommodations through each college's disability services office or designated professional. This regulation is implemented in accordance with the American's with Disabilities Act (42 U.S.C. Chapter 126).

## **General Eligibility Requirements**

Each applicant with a disability must meet MCCCD-admissions requirements, or be enrolled as an MCCCD student, and must provide disability resource services (DRS) with required documentation verifying the nature and extent of the disability prior to receiving any accommodation. The disability services office coordinator/program advisor is responsible for evaluating documentation and determining accommodation eligibility.

#### **Specific Eligibility Requirements**

## Physical Disabilities—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:

- 1. Orthopedic Disability
- 2. Blind or Visual Impairment
- 3. Deaf or Hard-of-Hearing
- 4. Traumatic Brain Injury
- 5. Other Health-Related/Systemic Disabilities

## The Written Diagnostic Report Must Include:

- 1. A clear disability diagnosis, including a clinical history that establishes the date of diagnosis, last contact with the student, and any secondary conditions that might be present.
- 2. The procedures used to diagnose the disability.
- 3. A description of any medical and/or behavioral symptoms associated with the disability.

- 4. A discussion of medications, dosage, frequency, and any adverse side effects attributable to their use that the, student has experienced.
- 5. A clear statement specifying functional manifestations (i.e., substantial limitations to one or more major life activities and degree of severity) due to the disability and/or medications for which the student may require accommodations.
- 6. A recommendation for accommodation, including rationale. If the accommodation recommendations are specific to limitations in learning (e.g., reading, mathematics, written expression), an appropriate psycho-educational or neuropsychological evaluation must be administered to document ability/achievement discrepancies.

## Specific Learning Disabilities—Required Documentation

The student shall submit a written diagnostic report of specific learning disabilities that is based on current 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:

- 1. Aptitude (the evaluation must contain a complete intellectual assessment, with all sub-tests and standard scores reported).
- Academic achievement (the 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 areas, such as reading (decoding and
  comprehension), mathematics, and oral and written expression.
- 3. Information processing (the 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 Measures**

- a. Wechsler Adult Intelligence Scale-Revised (WAIS-R)
- b. Wechsler Adult Intelligence Scale-Third Edition
- c. Stanford Binet Intelligence Scale-Fourth Edition
- d. Woodcock-Johnson Psycho-Educational Battery-Revised: Tests Of Cognitive Ability
- e. Kaufman Adolescent And Adult Intelligence Test

## Achievement

- a. Wechsler Individual Achievement Tests (WIAT)
- b. Woodcock-Johnson Psycho-Educational Battery-Revised: Tests Of Achievement (W-Jr)
- c. Stanford Test of Academic Skills (TASK)
- d. Scholastic Abilities Test for Adults (SATA)

## Information Processing

- a. Subtests of The Wais-R Or Wais-Third Edition
- b. Subtests on The Woodcock-Johnson Psycho-Educational Battery-Revised: Tests Of Cognitive Ability

## **Diagnostic Report**

The diagnostic report must include the following information:

- 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.
- 2. A list of all instruments used in the test battery.
- 3. Discussion of test behavior and specific test results.
- 4. A diagnostic summary statement with the following information:
  - A. 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.
  - B. A clear statement specifying the substantial limitations to one or more major life activities.
  - C. A psychometric summary of scores.
  - D. A recommendation for accommodations, including rationale.

Diagnosis of specific learning disabilities that do not contain psycho-educational measures may not be used for determining eligibility for academic accommodations. For example, school plans such as individualized education plans (IEPS) or 504 plans are not adequate documentation; however,

they can be included with the required evaluation. DRS reserves the right to request reassessment when questions regarding previous assessment or previous service provision arise.

## Attention Deficit Hyperactivity Disorder (ADHD) / Attention Deficit Disorder (ADD)—Required Documentation

The student shall submit a current diagnosis of attention deficit hyperactivity disorder (ADHD)/attention deficit disorder (ADD) that is based on appropriate diagnostic evaluations administered by trained and qualified (i.e., certified or licensed) professionals (e.g., psychiatrists, psychologists, or neuropsychologists).

## The Diagnostic Report Must Include:

- 1. A diagnostic interview addressing relevant historical information, past and current academic achievement, age at initial diagnosis, discussion of medication, and history and effectiveness of accommodations in past educational settings.
- 2. The procedures used to diagnose the disability (including a list of all instruments used in the assessment).
- 3. Discussion of the testing results and behavior, including the symptoms that meet the criteria diagnosis. If the student was evaluated while on medication, the effect this may have had on performance must be noted.
- 4. DSM-IV diagnosis (including all five axes)
- 5. A diagnostic summary statement that includes the following information:
  - A. A clear statement that ADHD/ADD does or does not exist, including a rule-out of alternative explanations for behaviors. Terms such as "appears," "suggests," or "has problems with" used in the diagnostic summary statement do not support a conclusive diagnosis.
  - B. A clear statement specifying the substantial limitations to one or more major life activities and the degree of severity. If the limitations are in learning (e.g., reading, mathematics, and written expression), an appropriate psycho-educational evaluation must be administered to document ability/achievement discrepancies.
  - C. A recommendation regarding medications or medical evaluation(s).
  - D. A recommendation for accommodations, including rationale.

## Psychological Disabilities—Required Documentation

If the diagnostic report is more than one year old, a letter from a qualified professional that provides an update of the diagnosis with a description of the individual's current level of functioning during the past year, and a rationale for the requested accommodations must be submitted.

## The Diagnostic Report Must Include The Following:

- 1. A clinical interview, relevant historical information, age at initial diagnosis, duration and severity of the disorder.
- 2. Discussion of medications review of past and current academic achievement, and history of disability accommodations and their effectiveness.
- 3. The procedures used to diagnose the disability (include a list of all instruments used in the assessment and test scores as applicable).
- 4. Discussion of the assessment results.
- 5. DSM-IV diagnosis (include all five axes).
- 6. A diagnostic summary statement that includes the following:
  - A. A clear statement that a disability does or does not exist. Terms such as "appears," "probable," and "suggests" used in the diagnostic summary statement do not support a conclusive diagnosis.
  - B. A clear statement specifying the substantial limitations to one or more major life activities. If the limitations are in learning (e.g., reading, mathematics, and written expression), an appropriate psycho-educational evaluation must be administered to document ability/achievement discrepancies.
  - C. A discussion of medications and their possible impact on academic functioning (e.g., concentration, attention, sedation)
  - D. A recommendation for essential accommodations relative to the diagnosed disability, including rationale.
  - E. The duration for which these accommodations should be provided based on the current assessment.
  - F. A recommendation regarding reevaluation to determine ongoing need for disability accommodations (e.g., one semester, one year, two years).

## **Temporary Impairments**

Some disabilities are temporary and may require accommodations for a limited time. Each case is considered individually. The following documentation is required:

- 1. Written correspondence on letterhead from a qualified professional stating diagnosis, functional limitations necessitating the accommodation, and the estimated length of time services will be needed.
- 2. Services may be provided for ten (10) working days pending receipt of documentation. If documentation is not received by that time, services will be cancelled.

## **Special Considerations**

A requirement for documentation prescribed in this regulation may be considered at the discretion of each college's disability services office or

designated professional if, in the professional opinion of the responsible college's disability services office or designated professional, such consideration is in the best interest of the student and will neither undermine the integrity of any college offering nor violate any mandate under state or federal law. All situations shall be considered on an individual, case-by-case basis.

Reasonable accommodation is required for students with known disabilities. MCCCD will make every attempt to provide "preferred" accommodations, however, "the most effective and reasonable" accommodation may be determined to meet sufficient accessibility needs.

## **ELIGIBILITY OF STUDENTS TAKING REDUCED COURSE LOADS (AR 2.8.2)**

Although any student may register for fewer than twelve credit hours, a student with a disability may request a reduced academic load as a reasonable and appropriate accommodation. A college Disability Resource Services (DRS) professional may certify that a student who is afforded a reduced academic load as an accommodation for a disability shall nevertheless be deemed a full-time student. Such certification shall be solely to enable the student to seek eligibility for health insurance benefits and to seek eligibility to comply with mandates of the National Junior College Athletic Association. The college DRS professional will certify that a student may be deemed a full-time student as provided under this regulation only on a semester-by-semester basis.

The appropriate college offices will receive documentation of the DRS professional's certification from the professional or the student. An incoming student may apply for such certification upon acceptance to the college. Requests for certification must be made prior to the beginning of each semester. Every attempt will be made to accommodate these requests.

The following criteria also apply:

- Students taking a reduced course load must register for at least 6 credit hours (based on DRS approval) during the regular fall and spring semesters. It is recommended that students register for at least three (3) credit hours during the summer to offset the impact of academic eligibility.
- 2. Students taking a reduced course load must maintain satisfactory academic progress standards as defined by the College catalog.
- 3. The reduced credit load may result in an adjusted financial aid package. There may be additional ramifications including, but not limited to, extra time to complete college, insurance coverage, Vocational Rehabilitation funding, etc.
- 4. Eligibility for Federal Stafford Loans may be reduced according to the total number of credit hours taken in the full academic year. A student, taking a reduced course load, must be at least half time in a semester (6 credits) in order to receive a Stafford Loan.
- 5. The amount of Federal Financial Aid (Title IV) awarded is based on the actual number of credit hours taken.
- 6. Requirements for continuation of funding through Vocational Rehabilitation may differ. The student must contact his/her VR counselor to determine how a reduced course load will impact their funding.
- 7. The National Junior College Athletic Association (NJCAA) has published standards in regard to the designation of Certified Disabled Student-Athlete in Article V Section J of the NJCAA bylaws. This procedure addresses the NJCAA criteria for reduced course loads.

## **Application Process**

- 1. Applications for reduced course loads must be submitted to the Disability & Services professional with supporting documentation. Requests must be made prior to the beginning of each semester.
- 2. Supporting documentation must include a diagnostic evaluation from an appropriate professional. The documentation must meet the guidelines set forth by the Maricopa Community College District's Documentation Policy in order to evaluate the current impact of the disability in regards to the request. Students are required to complete an application form for this status every semester, but do not need to re-submit their documentation. Continuation of this status is not automatic. Each case will be re-evaluated at the end of the semester to determine if this accommodation is still appropriate.
- 3. Students requesting a reduced course load should consult with their academic advisor regarding the consequences of this status for making progress toward graduation requirements and eligibility for various academic distinctions and designations.
- 4. Students registered in occupational and/or academic programs that have specific block formats will not be considered for reduced course loads.
- 5. Students who are approved for a reduced course load will be required to sign the Reduced Course Load Approval Form (see <u>Appendix S-10</u>), which includes a statement acknowledging that he or she has reviewed the consequences that go with reduced load status and accepts them.
- When a reduced course load status is granted by the Disability Resources & Services professional, a copy of the Reduced Course Load
  Approval Form will be sent to the appropriate individuals

## **ACADEMIC MISCONDUCT (AR 2.3.11)**

## 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 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)

#### **DISCIPLINARY STANDARDS**

#### **DISCIPLINARY STANDARDS (AR 2.5.1)**

## 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
- 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 <u>Technology Resource Standards (AR 4.4)</u> 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.

## **STUDENT CONDUCT CODE (AR 2.5.2)**

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:

"Accused student" means any student accused of violating this Student Conduct Code.

- 2. "Appellate boards" means any person or persons authorized by the college president to consider an appeal from a Student Conduct Board's determination that a student has violated this Student Conduct Code or from the sanctions imposed by the Student Conduct Administrator. The college president may act as the appellate board.
- 3. "College" means a Maricopa Community College or center.
- 4. "College premises" means all land, buildings, facilities and other property in the possession of or owned, used or controlled by the college or District
- 5. "College official" means any person employed by the college or District, performing assigned administrative or professional responsibilities pursuant to this Student Conduct Code. The college president shall designate the college or center official to be responsible for the administration of the Student Conduct Code.
- 6. "Complainant" means any person who submits a charge alleging that a student violated this Student Conduct Code. When a student believes that s/he has been a victim of another student's misconduct, the student who believes s/he has been a victim will have the same rights under this Student Conduct Code as are provided to the complainant, even if another member of the college community submitted the charge itself.
- 7. "Day" means calendar day at a time when college is in session, and shall exclude weekends and holidays.
- 8. "Disruptive behavior" means conduct that materially and substantially interferes with or obstructs the teaching or learning process in the context of a classroom or educational setting.
- 9. "District" means the Maricopa County Community College District.
- 10. "Faculty member" means any person hired by the college or District to conduct classroom or teaching activities or who is otherwise considered by the college to be a member of faculty.
- 11. "May" is used in the permissive sense.
- 12. "Member of the college community" means any person who is a student, faculty member, college official or any other person employed by the college or center. A person's status in a particular situation shall be determined by the college president.
- 13. "Organization" means any number of persons who have complied with the formal requirements for college recognition.
- 14. "Policy" is defined as the written regulations of the college and/or District as found in, but not limited to, this Student Conduct Code and Governing Board policy.
- 15. "Shall" is used in the imperative sense.
- 16. "Student" means any person taking courses at the college whether full-time or part-time. Persons who are not officially enrolled for a particular term but who have a continuing relationship with the college are considered "students".
- 17. "Student Conduct Administrator" means a college official authorized on a case by case basis by the college official responsible for administration of the Student Conduct Code to impose sanctions upon students found to have violated this Student Conduct Code. A Student Conduct Administrator may serve simultaneously as a Student Conduct Administrator and the sole member or one of the members of a Student Conduct Board. The college official responsible for administration of the Student Conduct Code may authorize the same Student Conduct Administrator to impose sanctions in all cases.
- 18. "Student Conduct Board" means any person or persons authorized by the college president to determine whether a student has violated this Student Conduct Code and to recommend sanctions that may be imposed when a violation has been committed.
- 19. "Threatening behavior" means any written or oral statement, communication, conduct or gesture directed toward any member of the college community, which causes a reasonable apprehension of physical harm to self, others or property. It does not matter whether the person communicating the threat has the ability to carry it out, or whether the threat is made on a present, conditional or future basis.

### **Article II: Judicial Authority**

- 1. The college official responsible for administration of the Student Conduct Code shall determine the composition of Student Conduct Board and determine which Student Conduct Administrator, Student Conduct Board, and appellate board shall be authorized to hear each case.
- 2. The college official responsible for administration of the Student Conduct Code shall develop procedures for the administration of the judicial program and rules for the conduct of hearings that are consistent with provisions of this Student Conduct Code.
- 3. Decisions made by a Student Conduct Board and/or Student Conduct Administrator shall be final, pending the normal appeal process.

## **Article III: Prohibited Conduct**

## 1. Jurisdiction of the College

The Student Conduct Code shall apply to conduct that occurs on college or District premises, or at college- or District-sponsored activities that adversely affects the college community and/or the pursuit of its objectives. Each student shall be responsible for his/her conduct from the time of admission through the actual awarding of a degree, certificate, or similar indicator of completion of a course of study, even though conduct may occur before classes begin or after classes end, as well as during the academic year and during periods between terms of actual enrollment (and even if their conduct is not discovered until after a degree is awarded). The Student Conduct Code shall apply to a student's conduct even if the student withdraws from school while a disciplinary matter is pending.

#### 2. Temporary Removal of Student

Disruptive behavior includes conduct that distracts or intimidates others in a manner that interferes with instructional activities, fails to adhere to a faculty member's appropriate classroom rules or instructions, or interferes with the normal operations of the college.

Students who engage in disruptive behavior or threatening behavior may be directed by the faculty member to leave the classroom or by the college official responsible for administration of the Student Conduct Code to leave the college premises. If the student refuses to leave after being requested to do so, college safety may be summoned. For involuntary removal from more than one class period, the faculty member should invoke the procedures prescribed in the Student Conduct Code.

## 3. Conduct - Rules and Regulations

Any student found to have committed the following misconduct is subject to the disciplinary sanctions outlined in Article IV:

- A. Acts of dishonesty, including but not limited to the following:
  - i. Furnishing false information to any college official or office.
  - ii. Forgery, alteration or misuse of any college document, record or instrument of identification.
  - iii. Tampering with the election of any college- recognized student organization.
- B. Obstruction of teaching, research, administration, disciplinary proceedings or other college activities, including its public service functions on campus, in clinical settings or other authorized non-college activities, when the conduct occurs on college premises a faculty member may remove a student from a class meeting for disciplinary reasons. If a faculty member removes a student for more than one class period, the faculty member shall notify the college official responsible for administration of the Student Conduct Code in writing of the problem, action taken by the faculty member, and the faculty member's recommendation. If a resolution of the problem is not reached, the student may be removed permanently pursuant to appropriate due process procedures.
- 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.
- Attempted or actual theft of and/or damage to property of the college or property of a member of the college community or other personal or public property.
- E. Failure to comply with direction of college officials or law enforcement officers in the performance of their duties and/or failure to identify oneself to these persons when requested to do so.
- F. Unauthorized possession, duplication or use of keys to any college premises, or unauthorized entry to or use of college premises.
- G. Violation of any college or District policy, rule or regulation published in hard copy such as a college catalog, handbook, etc. or available electronically on the college's or District's website.
- H. Violation of federal, state or local law.
- I. Use, possession, manufacturing or distribution of illegal or other controlled substances except as expressly permitted by law.
- J. Illegal use, possession, manufacturing or distribution of alcoholic beverages or public intoxication.
- K. Illegal or unauthorized possession of firearms, explosives, other weapons, or dangerous chemicals on college premises, or use of any such item, even if legally possessed, in a manner that harms, threatens, or causes fear to others, or property damage.
- L. Participation in a demonstration, riot or activity that disrupts the normal operations of the college and infringes on the rights of other members of the college community; leading or inciting others to disrupt scheduled and/or normal activities within any college building or area.
- M. Obstruction of the free flow of pedestrian or vehicular traffic on college premises or at college-sponsored or supervised functions.
- N. Conduct that is disorderly, lewd or indecent; breach of the peace; or aiding, abetting or procuring another person to breach the peace on college premises or at functions sponsored by or participated in by the college or members of the academic community. Disorderly conduct includes but is not limited to: any unauthorized use of electronic or other devices or to make an audio or video record of any person while on college or District premises without his/her prior knowledge, or without his/her effective consent or when such a recording is likely to cause injury or distress. This includes, but is not limited to, secretly taking pictures of another person in a gym, locker room, or restroom.
- O. Attempted or actual theft or other abuse of technology facilities or resources, including but not limited to:
  - i. Unauthorized entry into a file, to use, read or change the contents or for any other purpose
  - ii. Unauthorized transfer of a file
  - iii. Unauthorized use of another individual's identification and/or password
  - iv. Use of technology facilities or resources to interfere with the work of another student, faculty member or college official
  - v. Use of technology facilities or resources to send obscene or abusive messages
  - vi. Use of technology facilities or resources to interfere with normal operation of the college technology system or network
  - vii. Use of technology facilities or resources in violation of copyright laws
  - viii. Any violation of the District's technology resource standards
  - ix. Use of technology facilities or resources to illegally download files
- P. Abuse of the Student Conduct system, including but not limited to:
  - i. Falsification, distortion or misrepresentation of information before a Student Conduct Board.
  - ii. Disruption or interference with the orderly conduct of a Student Conduct Board proceeding.

- iii. Invoking a Student Conduct Code proceeding with malicious intent or under false pretenses
- iv. Attempting to discourage an individual's proper participation in, or use of, the Student Conduct system
- v. Attempting to influence the impartiality of the member of a judicial body prior to, and/or during the course of, the Student Conduct Board proceeding
- vi. Harassment, either verbal or physical, and/or intimidation of a member of a Student Conduct Board prior to, during and/or after a Student Conduct Board proceeding
- vii. Failure to comply with the sanctions imposed under this Student Conduct Code
- viii. Influence or attempting to influence another person to commit an abuse of the Student Conduct Code system
- ix. Failure to obey the notice from a Student Conduct Board or college official to appear for a meeting or hearing as part of the Student Conduct system.
- Q. Engaging in irresponsible social conduct.
- R. Attempt to bribe a college or District employee.
- Stalking behavior, which occurs if a student intentionally or knowingly maintains visual or physical proximity toward another person on two or more occasions over a period of time and such conduct would cause a reasonable person to fear for his or her safety.

## 4. Violation of Law and College Discipline

- A. Disciplinary proceedings may be instituted against a student charged with conduct that potentially violates both the criminal law and this Student Conduct Code (that is, if both possible violations result from the same factual situation) without regard to pending of civil or criminal litigation. Proceedings under this Student Conduct Code may be carried out prior to, simultaneously with, or following civil or criminal proceedings off campus at the discretion of the college official responsible for administration of the Student Conduct Code. Determinations made or sanctions imposed under this Student Conduct Code shall not be subject to change because criminal charges arising out of the same facts giving rise to violation of college rules were dismissed, reduced, or resolved in favor of or against the criminal law defendant.
- B. When a student is charged by federal, state or local authorities with a violation of law, the college will not request or agree to special consideration for that individual because of his or her status as a student. If the alleged offense is also being processed under this Student Conduct Code, however, the college may advise off campus authorities of the existence of this Student Conduct Code and of how such matters will be handled internally within the college community. The college will cooperate fully with the law enforcement and other agencies in the enforcement of criminal law on campus and in the conditions imposed by criminal courts for the rehabilitation of student violators. Individual students and faculty members, acting within their personal capacities, remain free to interact with governmental representatives as they deem appropriate.

## **Article IV: Student Conduct Code Procedures**

## 1. Charges and Student Conduct Board Hearings

- A. Any member of the college community may file charges against a student for violations of this Student Conduct Code. A charge shall be prepared in writing and directed to the Student Conduct Administrator. Any charge should be submitted as soon as possible after the event takes place, preferably within thirty (30) days following the incident.
- B. The Student Conduct Administrator may conduct an 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 may later serve in the same matter as the Student Conduct Board or a member thereof. If the student admits violating institutional rules, but sanctions are not agreed to, subsequent process, including a hearing if necessary, shall be limited to determining the appropriate sanction(s).
- C. All charges shall be presented to the accused student in written form. A time shall be set for a Student Conduct Board hearing, not less than five (5) nor more than fifteen (15) days after the student has been notified. Maximum time limits for scheduling of Student Conduct Board hearings may be extended at the discretion of the Student Conduct Administrator.
- Hearings shall be conducted by a Student Conduct Board according to the following guidelines, except as provided by Article IV
   1.G below:
  - i. Student Conduct Board hearings normally shall be conducted in private.
  - ii. The complainant, accused student and their advisors, if any, shall be allowed to attend the entire portion of the Student Conduct Board hearing at which information is received (excluding deliberations). Admission of any person to the hearing shall be at the discretion of the Student Conduct Board and/or its Student Conduct Administrator.
  - iii. In Student Conduct Board hearings involving more than one accused student, the Student Conduct Administrator, in his or her discretion, may permit the Student Conduct Board hearing concerning each student to be conducted either separately or jointly.
  - iv. The complainant and the accused shall have the right to be assisted by any advisor they choose, at their own expense. 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 college 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. Pertinent records, exhibits, and written statements may be accepted as information for consideration by a Student Conduct Board at the discretion of the chairperson.
- vii. All procedural questions are subject to the final decision of the chairperson of the Student Conduct Board.
- viii. 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.
- ix. 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.
  - 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.

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. Appeals

- 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.

## **STUDENT RECORDS (AR 2.5.3)**

### 1. Definitions

For the purposes of this policy, the Maricopa County Community College District has used the following definition of terms.

- A. "College" includes all colleges, educational centers, skill centers and District office.
- B. "Educational Records" are any record (in handwriting, print, tapes, film, or other media) maintained by the college or an agent of the college which is directly related to a student, except:
  - A personal record kept by a staff member, if it is kept in the personal possession of the individual who made the record, and information contained in the record has never been revealed or made available to any other person except the maker's temporary substitute

- 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 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 Ave., S.W. Washington, DC 20202-4605

## Student Directory

A Maricopa community college may release directory information about any student who has not specifically requested the withholding

of such information. Students who do not want directory information released may so indicate during the admissions process or notify the Office of Admissions and Records.

At any Maricopa community college, directory information is defined as a student's name, address, telephone number, major field of study, participation in officially recognized activities and sports, weight and height of members of athletic teams, degrees and awards received, dates of attendance, part-time or full-time status, most recent previous educational agency or institution attended by the student, college within the Maricopa Community Colleges where the student has been enrolled, photograph of student, and electronic mail address.

#### 6. 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.

#### HANDBOOK INFORMATION

## **STUDENT EMPLOYMENT (AR 2.5.4)**

## 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.
  - ii. 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)
- G. Student Employee Grievance Procedure

Part-time student employees working for one of the Maricopa Community Colleges may wish to file a grievance relating to certain working conditions or violation of student employment regulation. Please refer to the Non-Instructional Complaint Resolution Process (AR 2.3.12)

#### 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.
    - Selection of a student should not extend beyond one semester without the approval of the vice president of students affairs.
    - Selected student must undergo a special training program directed by the chief of security and approved by the vice president of students 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:
    - . Wearing of the uniform, general appearance, and demeanor
    - 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 students affairs.

## **STUDENT GOVERNANCE (AR 2.5.5)**

Student governing bodies derive their authority from the Maricopa County Community College District Governing Board that exists in accordance with Arizona Revised Statutes. The administration of the District is vested in the Chancellor who delegates responsibility for each college to the college president who serves in a management and policy implementation capacity having the ultimate responsibility for all activities of the college. The president shall designate the administrator(s) (i.e., directors of student leadership) at each college who will be charged with the responsibility for working with the college student governing body(ies) in the development of college student activities and programs.

A representative form of student governance may exist at each college/center as well as district wide to provide an effective means of communication among students, faculty, staff and administration and to provide student input in college and District matters. Eligibility requirements are to be met and spelled out in detail in each student governance constitution. These constitutions shall establish the minimum requirements for the elective/appointive officers. All student government constitutions shall be submitted to the Governing Board General Counsel to ensure compliance with federal and state laws, and the Maricopa Community Colleges Governing Board Administrative Regulations. Since Rio Salado Community College is a countywide non-campus college, the president shall ensure that opportunities exist for student involvement.

College student constitutions should be reviewed annually by student governance. The appropriate vice president or designee of each college shall be responsible for submitting any changes to the president of the college for transmittal to the Governing Board General Counsel.

## 1. Officers/Members

All reference in this document to positions will designate whether the position is an officer position or a member position.

Each student governance constitution shall define which of its elected positions (maximum of 5) within its structure shall be designated as officers. The persons filling those positions shall be referred to, in this document, as officers. Persons filling all other positions, elected or appointed, shall be referred to as members (excluding non-voting committee members).

All positions filled by election shall be considered as elected positions, even though the person filling the position may have been appointed to fill an unexpired term of another individual.

#### 2. Designation

Colleges with two (2) student governments shall designate the governments as "day" or "evening." Colleges with one (1) government shall be considered day students, for the purposes of this document.

#### 3. Eligibility for Office

All student governance constitutions shall prescribe that all persons elected or appointed as officers shall be enrolled in and maintain a minimum of six (6) credit hours for day student governments, three (3) credit hours for evening student governments. Officers shall have and maintain a minimum cumulative grade point average of 2.50 and be in good standing (not on probation) according to the written district policy. Convicted felons shall be ineligible for office (ARS § 13-904). The constitution may, however, set more rigid requirements, if so desired by college student governance.

## 4. Tenure of Position

Tenure in any student governance position shall be determined by the respective student governance constitutions. In no case shall any student be allowed to serve in any combination of officer/member positions beyond a total of ten (10) semesters. Tenure in any combination of officer positions shall be limited to four (4) semesters.

#### 5. Removal from Office

Provisions shall be made in all student governance constitutions for removal for cause of individuals from elected or appointed student governance positions.

## 6. Remuneration Limitations

- A. Student body officers may receive financial support and/or a letter grade in a leadership class during their terms of office as authorized in their respective student governance constitutions. Student body officers (maximum 5) may receive up to twenty (20) hours per week in financial support and/or up to six (6) credit hours in leadership classes per semester. Remuneration shall be for services rendered and not for merely holding the office.
- B. For qualifying students, Federal Work Study (FWS) funds may be used in accordance with Federal guidelines.
- C. The allowance for awarding honorariums or scholarships for executive student officers is a maximum of \$200.00.
- D. Compensation may be received for both honorariums/scholarships and college employment in the same semester.

## 7. Amending Student Constitutions

College student constitutions should be reviewed annually by student governance. The appropriate vice president or designee of each college shall be responsible for submitting any constitutional changes to the President of the college for transmittal to the Governing Board General Counsel.

#### 8. Student Governance Advisors

College organization advisors will be provided for in each student governance constitutions. Such advisors shall be full-time or part-time employees of the Maricopa Community Colleges.

Recommendations for appointment of an advisor may be submitted to the appropriate vice president or college president. Recommendations for dismissal of an advisor with just cause may be submitted to the appropriate vice president or college president.

## 9. Legal/Fiscal/Financial Matters

Authority and responsibility beyond the scope specifically covered in student policies, or interpretation of such matters within laws, board policies, etc. shall rest with the offices of General Counsel and Chancellor, respectively.

## 10. Final Authority

In the event of a complete breakdown of the governance body, the college president will serve as the final authority.

## **CONSENSUAL RELATIONSHIPS (AR 4.18)**

## 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

 Consensual relationships are defined as romantic, amorous and/or sexual relationships between consenting employees or between employees and adult (18 years or older) college students currently enrolled at one of the community colleges.

- ii. An **employee** is any individual who is employed by the Maricopa County Community College District (MCCCD). An employee includes an individual who is subject to an established employee job group policy manual, whether regular, full-time board approved, at-will, part-time, and/or temporary. An employee also includes a contract worker (special services employment, request for personnel services) working or serving as an agent or designee on behalf of the MCCCD.
- iii. A **student** is considered to be any person currently enrolled in a credit or non-credit class at one of the colleges or centers within the Maricopa County Community College District.
- iv. A vendor is someone who sells or can sell products or services to the Maricopa County Community College District.
- v. A recent consensual relationship is considered to be one that has taken place within the past 24 months.

#### B. Prohibited Conduct

- i. An employee shall not maintain, engage in or be involved in a consensual relationship with another employee who is subject to that individual's supervision or with a student that is currently enrolled in the individual's class, or a student whom the individual otherwise instructs, coaches, counsels or advises, or with a vendor if the employee manages that contract or otherwise exerts influence over the contract.
- ii. The Governing Board recognizes that the personal life of its employees is not a concern of the institution, and therefore, this regulation does not seek to prohibit romantic relationships that exist between parties where the context of power-authority between employees or between employees and students is not present; and provided that the relationship does not affect the employee's effectiveness in fulfilling his or her professional obligation. For these instances, appropriate measures should still be taken in order to avoid conflicts of interest from occurring. For relationships that may exist prior to the time that either a student or employee is placed in a situation of instruction or supervision that is considered to be a conflict of interest, the employee(s) involved shall disclose and take immediate measures to avoid the conflict or appearance of conflict.

#### 2. Procedures for Disclosure

Employees should first avoid allowing an inappropriate consensual, amorous or sexual relationship to develop with a supervisee or student.

- A. Where the employee is already in or has had a recent consensual relationship with a supervisee, the following procedures shall be followed:
  - i. Immediate disclosure by the employee of the relationship to their supervisor and to the appropriate Vice President or Vice Chancellor in order to ensure that any conflicts of interest have been adequately addressed.
  - ii. The respective administrator responsible for the department or division shall place the subordinate under alternate supervision when a supervisor under his/her direction has or has had a recent consensual relationship with the employee.
  - iii. The supervisor shall recuse himself or herself from any discussions or involvement with decisions related to evaluations, promotion, hiring, determination of salary, or continuation of contract or employment.
  - iv. The respective Vice President or Vice Chancellor shall prepare and retain a report that specifies the appropriate alternate arrangements that have been made to eliminate the conflict of interest. The EEO/AA Office shall be provided a copy of the report along with the employees involved in the relationship.
- B. Where the employee is already in or has had a recent consensual relationship with a student prior to enrollment in his or her class, the following procedures shall be followed:
  - i. The faculty member shall counsel and advise the student not to enroll in his or her course.
  - 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 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.







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Years of Service 2009-2014

## Mr. Doyle Burke, Secretary

Years of Service 2010-2012

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Years of Service 1983-2012

## Ms. Debra Pearson

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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 that 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**

Also known as placement or Assessment of Skills for Successful Entry and Transfer (ASSET) testing. Assessment is a way of evaluating students' present skills in English, reading and math so students may choose courses that match their skills. Assessment is based on scores on the ASSET course placement tests. Scores are used as a guide for proper course placement, which leads to greater success.

## **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. May be 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; 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**

Assession 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 for 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).

#### 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; that is, they may include all material covered during the semester. The schedule of final exam dates and times for each term is included in the Schedule of Classes.

#### **Fiscal Office**

Also known as the Cashier's Office. Students may pay tuition and fees, course fees, and other encumbrances owed the college at the Fiscal Office.

#### **Grade Point**

The numerical value of grade multiplied by the credit hours for a course (A=4 points; B=3 points; C=2 points; D=1 point). If, for example, a student earns an A in English 101 (3 credit hours), then the student earns 12 points: A=4 points x 3 (credit hours) = 12 points.

## **Grade Point Average**

Generally called GPA, grade point average is determined by dividing the total number of grade points earned by the total number of credit hours attempted. For example, 45 grade points divided by 15 credit hours earned = 3.0 GPA.

## Glossary of Terms

#### 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.

#### 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**

Not being allowed to enroll in the college for one semester. This is caused by 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, focusing 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 that clearly states a customer benefit that is valuable to the customer and that establishes 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 on which students list their course selections in order to determine which combination of courses and class times works best during a particular term.

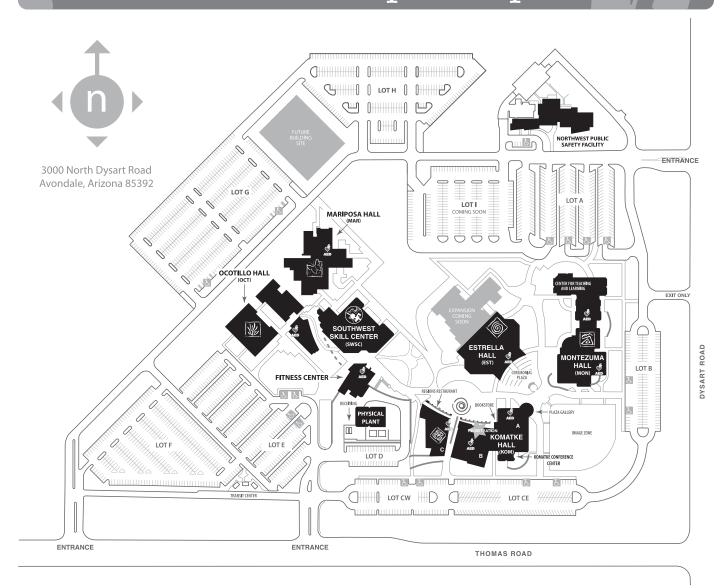
#### **Tuition and Fees**

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



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