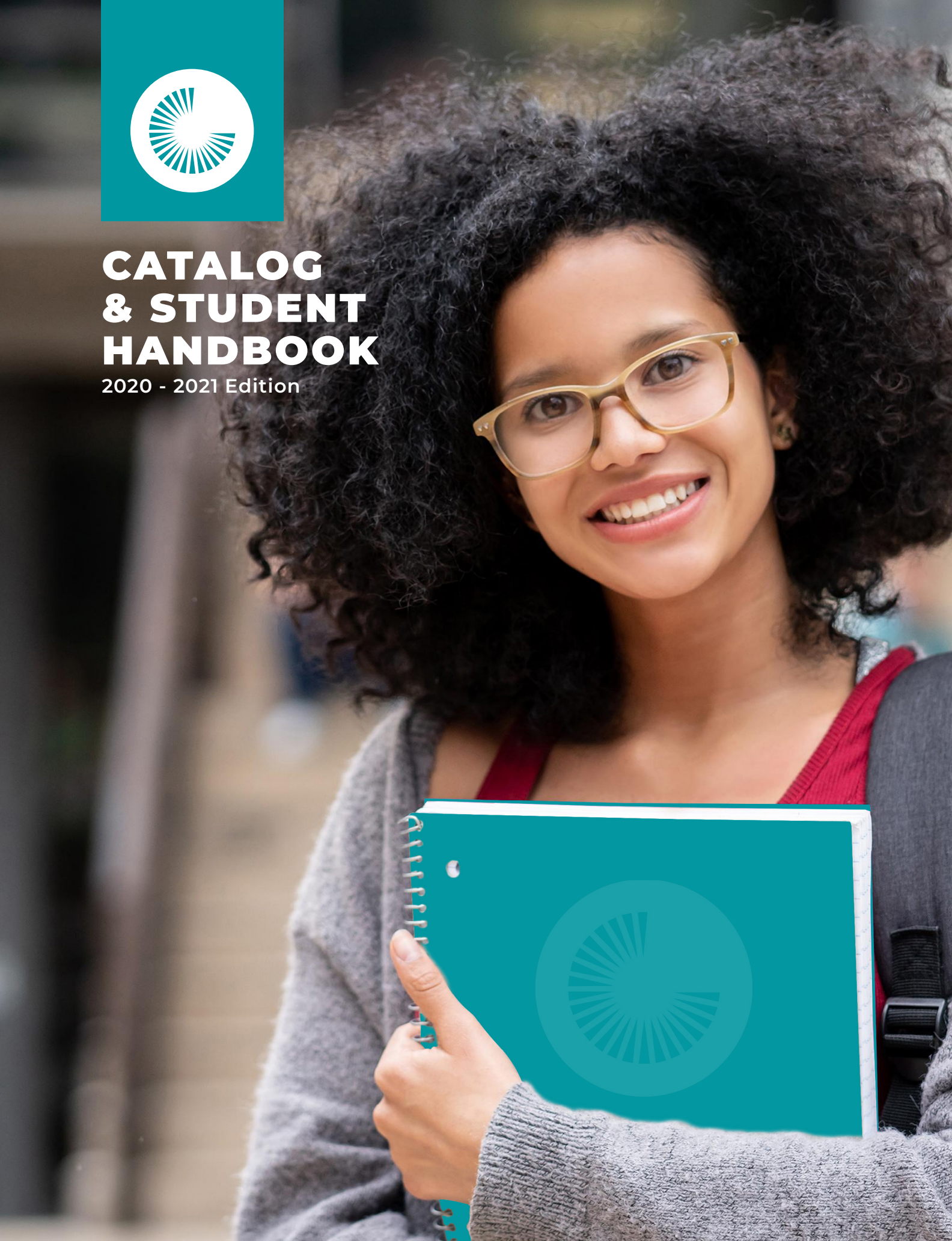
CATALOG & STUDENT HANDBOOK

2020 - 2021 Edition



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2020-2021 ACADEMIC CALENDAR

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

Summer Semester 2020

Tuesday, May 26	Summer Semester Begins
Thursday, July 2	Observance of Independence Day
Thursday, July 30	Summer Semester Ends

Fall Semester 2020

Sat, Aug 22	Classes Begin
Mon, Sep 7	Observance of Labor Day
Mon, Sep 21	Find a Class Opens for Spring
Mon, Oct 5	Spring 2021 Priority Registration for Currently Enrolled Students
Sat, Oct 10	+ Last Day for Withdrawal without Instructor's Signature
Mon, Oct 12	++ Student Withdrawal with Instructors Signature Begins
	Spring 2021 Open Registration Begins
	* Application for December 2020 Graduation
Wed, Nov 11	Observance of Veterans Day
Thur-Sun, Nov 26-29	Thanksgiving Holiday (Campus Closed)
Sun Dec 13	Last Day of Classes
Mon-Thur Dec 14-17	** Final Exams
Fri, Dec 18	Mid-Year Recess Begins for Students
Fri, Dec 18	Fall Semester Ends
Fri-Sun, Dec 25-Jan 3	Mid-Year Recess (Campus Closed)

Spring Semester 2021

Fri ,Jan 1	Observance of New Year's Day
Sat, Jan 16	Classes Begin
Mon, Jan 18	Observance of Martin Luther King, Jr. Holiday
Mon, Feb 15	Observance of Presidents' Day
Tue, Feb 16	Find a Class Opens for Summer/Fall 2021
Mon, Mar 1	Summer/Fall 2021 Priority Registration for Currently Enrolled Students
	* Application for May 2021 Graduation
Sat, Mar 6	+ Last Day for Withdrawal without Instructor's Signature
Mon, Mar 8	++ Student Withdrawal with Instructors Signature Begins
Mon-Sun, Mar 15-21	Spring Break
Mon, Mar 15	Summer/Fall 2021 Open Registration Begins
Sun, May 9	Last Day of Classes
Mon-Thur, May 10-13	** Final Exams
Thur-Fri, May 13 or 14	Commencement
Fri, May 14	Spring Semester Ends
Mon, May 31	Observance of Memorial Day

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

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

+ Through the 7th week, student may initiate an official withdrawal from course(s) without instructor signature (see Appendix S-7 in Catalog Common Pages).

++ After the 7th week, student must initiate an official withdrawal request from instructor and obtain their signature (see Appendix S-7 in Catalog Common Pages)

President's Message

Greg Peterson, President

Congratulations on your decision to pursue your education at Chandler-Gilbert Community College! Whether you plan on earning a degree or a certificate, you are preparing to transfer to a four-year university, or you are looking to further develop in your career or personal life, CGCC can provide the path for you to reach your goals. With 68 associate degree and certificate programs, as well as transfer partnerships with over 40 universities---including Arizona State University, Northern Arizona University, and the University of Arizona—you'll find your fit at CGCC.

Since its founding in 1985, Chandler-Gilbert Community College has served thousands of students in the East Valley at it Pecos and Williams campuses, Sun Lakes Center, and Communiversity at Queen Creek. We pride ourselves on the excellence of our innovative faculty and staff, on our state-of-the-art facilities, on our broad array of campus life and events, and on our commitment to inclusion and diversity. At CGCC, you belong, and we are here to help you succeed!

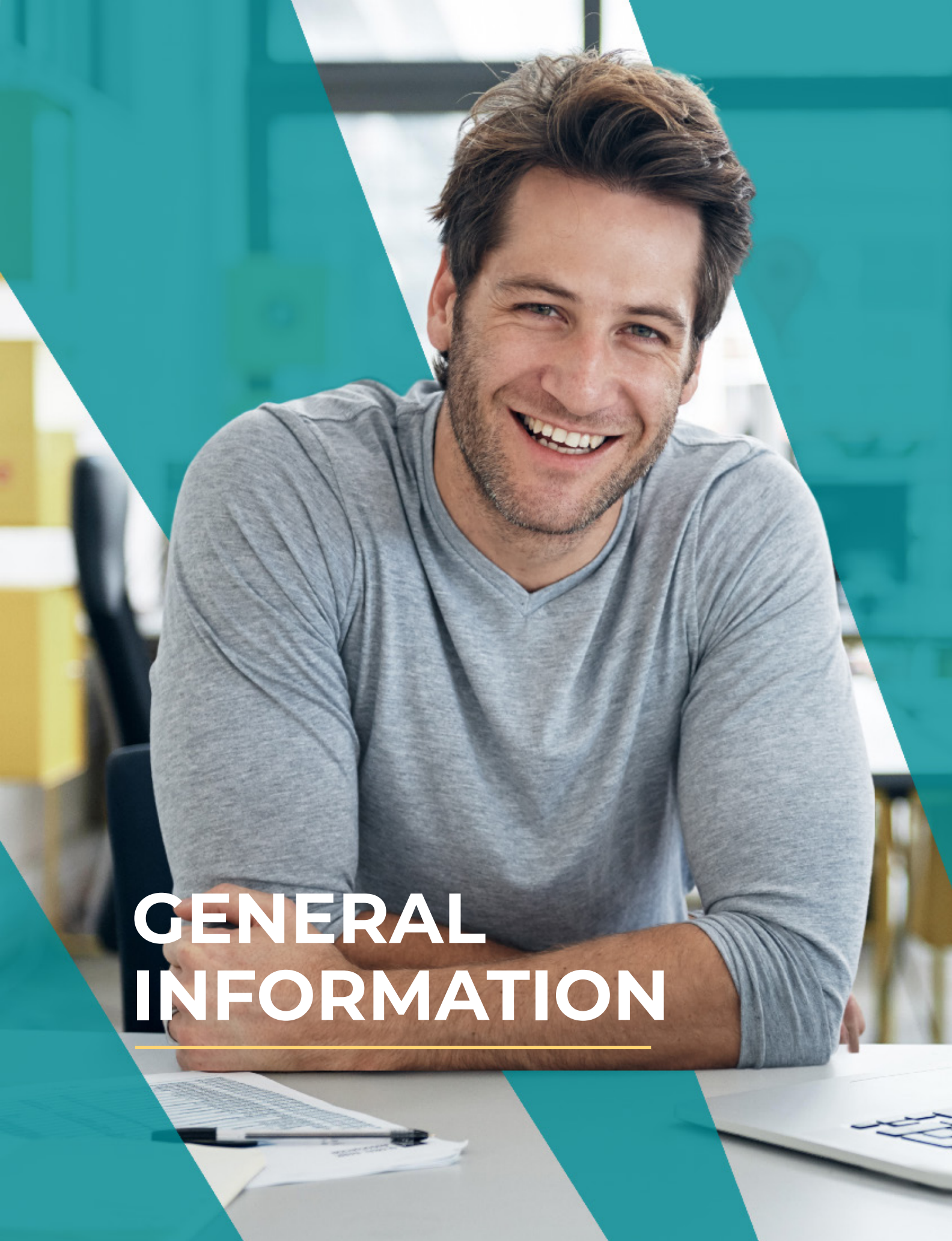
The Catalog and Student Handbook is an important resource for you and contains the information you need as you begin your college experience. I recommend that you check out the 2020-2021 Academic Calendar, the Educational Programs, and the Student Rights and Responsibilities sections. Please feel free to contact me and any of our faculty and staff if there is anything we can do to help you. I look forward to seeing you on campus!

Welcome to Chandler-Gilbert Community College!

Greg Peterson, Ed.D.

Greg Peterson

President



GENERAL INFORMATION

Vision

Our students are prepared to lead us into a promising and sustainable future.

Mission

We are a student-centered college that creates learning experiences and growth opportunities designed for our diverse communities.

Values

- Innovation through exploration
- Learning through experiences
- Growth through service
- Sustainability through engagement

Student Development Philosophy

The goal of Chandler-Gilbert Community College is to assure student success. Success is defined as the accomplishment of, or the continued opportunity to accomplish, students' individual goals. The success of our students will be determined not only by their acquisition of knowledge and skills, but also by their personal growth and development. This would include intellectual development, multicultural awareness, aesthetic appreciation, physical wellness, emotional well-being, community responsibility, and values clarification.

Chandler-Gilbert Community College will provide the environment in which students can identify and pursue their goals. The following general institutional practices are necessary to ensure student success:

1. To provide programs that assure student competence in specified academic and skill areas;
2. To provide a full range and schedule of services to permit students to benefit from college programs;
3. To provide simplified and clearly defined processes for admitting students, monitoring their progress and maintaining accurate academic records;
4. To provide activities that encourage students to effectively interrelate with others in their college and communities;
5. To provide opportunities for the development of self-esteem, personal identity, independence and self-direction;
6. To provide coordination with secondary and postsecondary schools, and business and industry;
7. To provide delivery of instructional services through alternative systems which prepare students to function in an increasingly technological and informational-based society; and
8. To develop and implement a comprehensive staff development program to educate the staff in student development philosophy and practices.

Chandler-Gilbert Community College will assist students in initiating their own paths to success. The college recognizes that all students are unique and capable adults, responsible for directing their own development throughout life, and that the major responsibility for a student's development rests with the student. All faculty, administrators and staff members of CGCC will support and contribute to the implementation of this student development philosophy.

Courses, programs, and requirements described in this catalog may be suspended, deleted, restricted, supplemented, or changed in any other manner at any time at the sole discretion of the college and the Maricopa Community College District Governing Board. This catalog does not establish a contractual relationship, but summarizes total requirements that the student must presently meet before qualifying for a faculty recommendation to the Governing Board to award a degree or certificate.

The Maricopa Community College District reserves the right to change, without notice, any of the materials—information, requirements, regulations—published in the catalog.

Partnerships

The Maricopa Community Colleges have partnerships with the Arizona public universities (Arizona State University, Northern Arizona University, and the University of Arizona), and more than 40 other institutions — nationally and internationally. These transfer partnerships assist students in making a smooth transition from one institution to the next by maximizing your Maricopa credits. In addition, many university partners offer Maricopa graduates dedicated advisement as well as financial incentives such as tuition and transfer scholarships, waiver of application fees, textbook waivers, and special tuition incentives for military personnel. Visit maricopa.edu/transfer for more details.

Affiliations & Associations

Accreditation Commission for Education in Nursing

The Nursing Program at Chandler-Gilbert Community College is approved by the Arizona State Board of Nursing and accredited by the Accreditation Commission for Education in Nursing (ACEN), 3343 Peachtree Road NE, Suite 850, Atlanta, GA, 30326, 404-975-5000.

American Board of Funeral Service Education (ABFSE)

The Associate of Applied Science degree in Mortuary Science at Chandler-Gilbert Community College is accredited by the American Board of Funeral Service Education (ABFSE), 992 Mantua Pike, Suite 108, Woodbury Heights, NJ 08097, 816-233-3747, www.abfse.org

Higher Learning Commission, North Central Association

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

Federal Aviation Administration

The Aircraft Maintenance Technology Programs, designed to prepare students for licensure as certified airframe and powerplant (A&P) mechanics, are certified by the Federal Aviation Administration (FAA), Part 147.

The Aircraft Flight Technology Programs, designed to prepare students to apply technical knowledge and skills to prepare them for Commercial Pilot Certificate with Single Engine Airplane Land Rating and Instrument Rating, and the Multiengine Rating are certified by the FAA, Part 141, through a partnership with the UND Aerospace Foundation. All aviation programs are housed in the Aviation and Technology Center at the Williams Campus, 7360 East Tahoe Avenue, Mesa, AZ 85212-0908.

Delta Leasing, Inc. dba Quantum Helicopters

CGCC and Quantum Helicopters in Chandler, Arizona have partnered to establish a joint flight training program at the Williams Campus and the Chandler Municipal Airport. The program supports the helicopter flight track of the Associate in Applied Science degree in Airways Flight Science and provides expanded opportunities for students in aviation.

UND Aerospace Foundation

CGCC and the University of North Dakota Aerospace Foundation have partnered to establish a joint flight training program at the Williams Campus. The University of North Dakota program is an internationally recognized leader in aviation education. CGCC's partnership with UND Aerospace presents a tremendous opportunity for students desiring a career in aviation flight.

Pecos Campus

2626 East Pecos Road
Chandler, AZ 85225-2499
480-732-7000

The Pecos Campus of CGCC is located on Pecos Road between Cooper and Gilbert Roads in Chandler. CGCC's original campus opened in 1987 and is home to numerous associate degrees, university transfer, general studies, occupational, and special interest courses and programs.

Williams Campus

7360 East Tahoe Avenue
Mesa, AZ 85212-0908
480-988-8000

The Williams Campus of CGCC is near the Phoenix-Mesa Gateway Airport on Sossaman between Ray and Williams Field roads. Opened in 1995 on the former Williams Air Force Base, the Williams Campus is a comprehensive campus offering associate degrees, certificates and a wide array of general studies and university transfer courses. The campus neighbors ASU Polytechnic for the benefit of students interested in completing their four-year degree in one location. Housing is available.

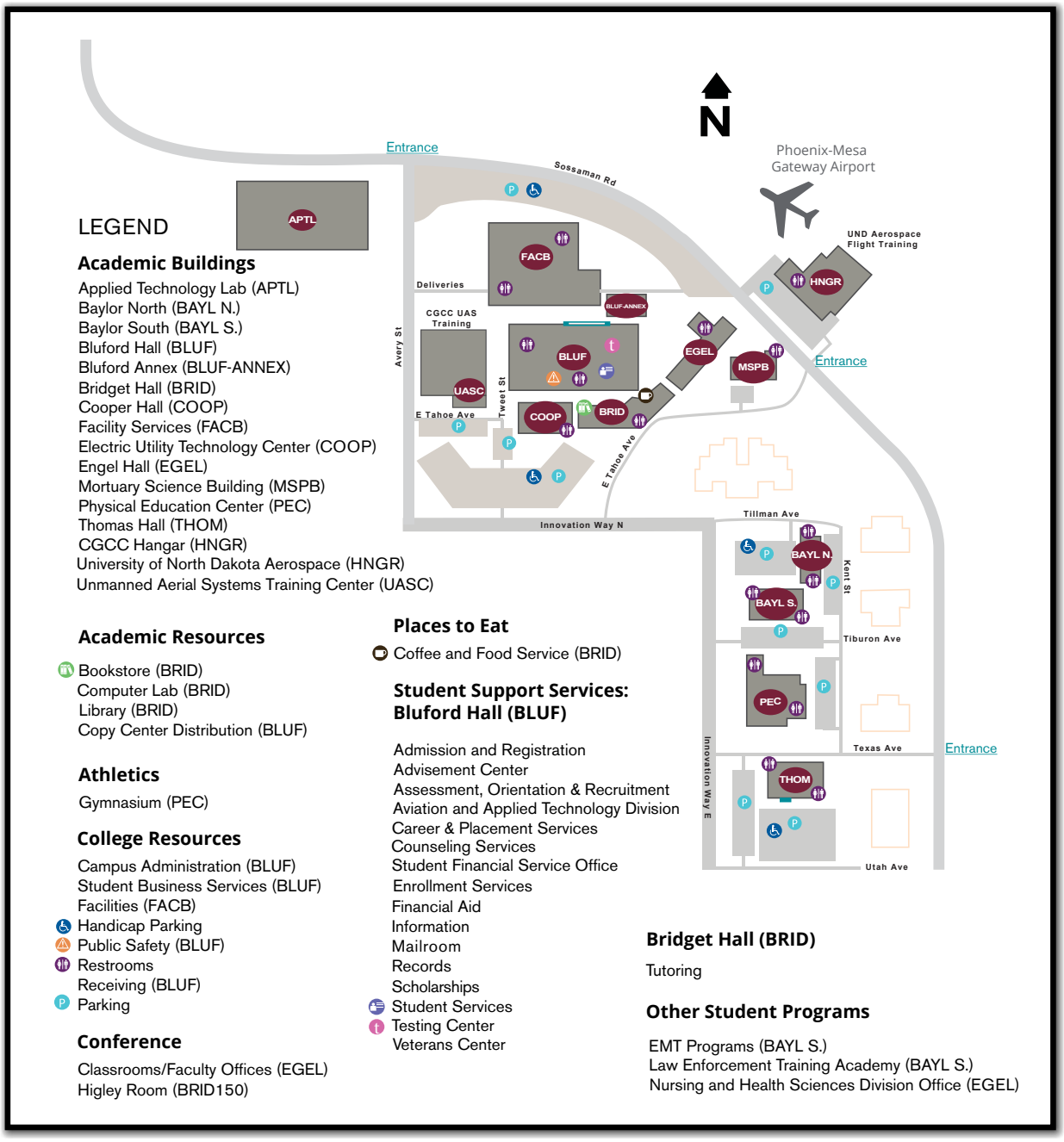
CHANDLER-GILBERT COMMUNITY COLLEGE
A MARICOPA COMMUNITY COLLEGE

Pecos Campus Map
2626 East Pecos Road
Chandler, Arizona 85225-2449
(480) 732-7000

Directions: The Pecos Campus is located just north of the San Tan freeway (Loop 202 south) between the Cooper and Gilbert road exits.

CHANDLER-GILBERT COMMUNITY COLLEGE
A MARICOPA COMMUNITY COLLEGE

Williams Campus Map
7360 East Tahoe Avenue
Mesa, AZ 85212-0908
(480) 988-8000



LEGEND

Academic Buildings

Applied Technology Lab (APTL)
Baylor North (BAYL N.)
Baylor South (BAYL S.)
Bluford Hall (BLUF)
Bluford Annex (BLUF-ANNEX)
Bridget Hall (BRID)
Cooper Hall (COOP)
Facility Services (FACB)
Electric Utility Technology Center (COOP)
Engel Hall (EGEL)
Mortuary Science Building (MSPB)
Physical Education Center (PEC)
Thomas Hall (THOM)
CGCC Hangar (HNGR)
University of North Dakota Aerospace (HNGR)
Unmanned Aerial Systems Training Center (UASC)

Academic Resources

Bookstore (BRID)
Computer Lab (BRID)
Library (BRID)
Copy Center Distribution (BLUF)

Athletics

Gymnasium (PEC)

College Resources

Campus Administration (BLUF)
Student Business Services (BLUF)
Facilities (FACB)
Handicap Parking
Public Safety (BLUF)
Restrooms
Receiving (BLUF)
Parking

Conference

Classrooms/Faculty Offices (EGEL)
Higley Room (BRID150)

Places to Eat

Coffee and Food Service (BRID)

Student Support Services: Bluford Hall (BLUF)

Admission and Registration
Advisement Center
Assessment, Orientation & Recruitment
Aviation and Applied Technology Division
Career & Placement Services
Counseling Services
Student Financial Service Office
Enrollment Services
Financial Aid
Information
Mailroom
Records
Scholarships
Student Services
Testing Center
Veterans Center

Bridget Hall (BRID)

Tutoring

Other Student Programs

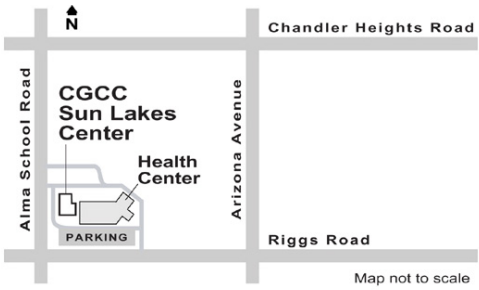
EMT Programs (BAYL S.)
Law Enforcement Training Academy (BAYL S.)
Nursing and Health Sciences Division Office (EGEL)

Directions: The Williams Campus is located just west of the Phoenix-Mesa Gateway Airport between Power and Sossaman roads.

Sun Lakes Center

25105 South Alma School Road
Sun Lakes, AZ 85248-6101
480-857-5500

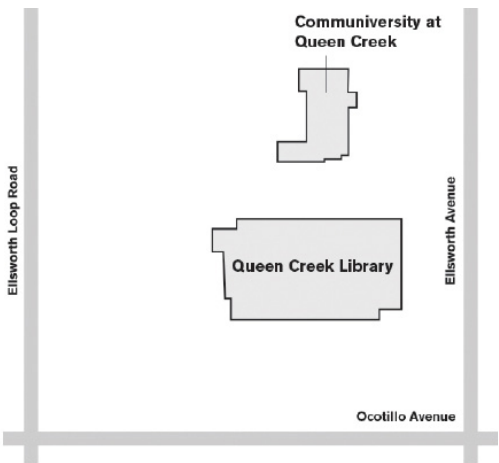
The Sun Lakes Center of CGCC is located at the northeast corner of Alma School and Riggs in Sun Lakes. The Center focuses on the lifelong learning needs of the mature adult population in the Southeast Valley.



Communiversity at Queen Creek

21740 South Ellsworth Road
Queen Creek, AZ 85142
480-726-4182

Chandler-Gilbert Community College at Queen Creek is located at the intersection of Ocotillo and Ellsworth roads next to the Queen Creek Library. Students can enroll, receive advisement, register for any CGCC class and attend classes at this downtown location.



COLLEGE SERVICES & REGULATIONS

Admissions, Records, and Registration

Admissions, Records, and Registration services are located in the Coyote Center at the Pecos Campus and in Bluford Hall at the Williams Campus. The office provides the following services:

- Assists with information about accessing the my.maricopa.edu Online Student Center
- Processes admissions forms, class registrations, and withdrawals
- Evaluates transfer credit and other credit from prior learning
- Verifies credits for graduation
- Determines residency for tuition purposes
- Verifies athletic eligibility
- Processes official transcripts and enrollment verification requests
- Hears Admissions and Standards appeals, including refund issues (requests must be in writing)

For additional information, visit admissions or call 480-732-7320 at the Pecos Campus and 480-988-8000 at the Williams Campus.

Academic Advisement

Identify, develop, and plan your path to success and completion with an Academic Advisor! Academic Advising Services at CGCC provide students guidance and support to navigate college resources, program and degree requirements, and university transfer options.

All first-time college students attend Coyote Kickoff which provides initial advisement and new student orientation in one experience.

Continuing students are encouraged to meet individually with an academic advisor in subsequent semesters, to develop a collaborative relationship and shared responsibility for academic goal setting and achievement.

Academic Advising Services are available in the Coyote Center on the Pecos Campus, in Bluford Hall on the Williams Campus, and limited services are available at the Communiversity in Queen Creek and online at CGC.edu/Advisement.

Athletics

Chandler-Gilbert would like to welcome students to the Coyote athletic programs. CGCC is looking forward to another successful season of intercollegiate competition in the Arizona Community College Athletic Conference. CGCC student athletes not only distinguish themselves on the athletic fields, but also in the classroom, setting high standards for future CGCC athletes.

Volleyball and basketball games are played at the CGCC Coyote Center. Softball and baseball games and soccer matches are played on fields at the Pecos Campus.

For more information, visit athletics or call:

Women's Volleyball	480-732-7365
Men's Baseball	480-732-7364
Men's & Women's Golf	480-732-7073
Men's & Women's Soccer	480-732-7363
Women's Basketball	480-732-7357
Men's Basketball	480-732-7366
Softball	480-732-7168
Athletic Trainer	480-732-7003
Athletic Director	480-732-7177
Academic Advisement for Athletes	480-732-7364

Bookstore

Students are able to purchase books and supplies in-person through bookstores at the Pecos and Williams Campuses. The Pecos Campus bookstore building is located northwest of the Student Center (Building SC). The Williams Campus bookstore is located inside Bridget Hall.

Students may also purchase textbooks online and have them shipped directly to their homes at chandler.bkstr.com.

In addition to books and supplies, the bookstores also carry gifts, clothing, book bags, bus passes, graduation supplies, and other items for your convenience.

The Bookstore allows students to pay with cash, check, or major credit card. Complete payment and refund policies are posted at the Pecos and Williams Campus Bookstores.

Call 480-732-7352 for more information about the Pecos Campus Bookstore. Call 480-988-8106 for more information about the Williams Campus Bookstore.

Career Services

Discover your career path with Career Services. Take online career exploration assessments to understand how potential careers connect to your skills, interests, and values. Identify academic majors that relate to your intended career pathway. Develop techniques to confidently present yourself to employers and other industry professionals. Make sure to attend CGCC's career readiness workshops and campus career fairs. Come see us on the second floor of the Coyote Center Building, at the Pecos Campus and in Bluford Hall, at the Williams Campus or visit www.cgc.edu/careers

Career and Technical Education

Career and Technical Education (CTE) works collaboratively and responsively with our community to meet the needs of our diverse student population in preparing them for life, work, and careers. We provide quality resources and support to educators and students that enhance classroom learning. Additionally, we support campus and community activities that enhance academic achievement, technical skills, and productive citizenship to build stronger communities. To contact CTE or to find more information on how this area can assist you, please call 480-732-7361.

Computer Labs

Currently enrolled students who require computer resources to complete class assignments have access to open Computer Labs located on the Pecos Campus in Bradshaw Hall, room BRD123, and on the Williams Campus in Bridget Hall inside the library. Open Computer Labs feature self-paced learning environments in which students study course materials, complete assignments, and research information. Computer Lab learning associates and student assistants are available for general questions. Students who need assistance with assignments or materials related to a specific class should contact their instructors. Access to Computer Lab equipment is on a first-come, first-served basis. Hours of operation may vary each semester, with greatest usage occurring during early morning hours. Students should call 480-732-7221 or visit www.cgc.edu/cic for additional information.

Counseling

Counseling is a comprehensive academic and service program designed to promote student success and personal development at Chandler-Gilbert Community College. As a professional discipline, Counseling is based on values that include respecting the dignity of all people, celebrating the dimensions of personal identity that make us unique, recognizing and building on one's strengths and abilities, and empowering individuals to identify and pursue their own life goals. We appreciate that each student enters college with different life experiences, whether entering directly from high school or returning to school after years of work or military service. It is our goal to help students to overcome challenges they may be facing and help them achieve success in their academic, career, and personal goals.

On the Pecos campus, Counseling is located in the Bradshaw Hall, room BRD101. At Williams, we are located in Bluford Hall, room BLUF141. Find us online at www.cgc.edu/counseling for information about hours, maps, and current program offerings.

CPD Courses

One way in which we support students is through offering a range of Counseling & Personal Development (CPD) courses. The most popular of these courses is CPD150: Strategies for College Success, which provides students with a range of skills and knowledge to assist them in improving their academic performance, making progress with their career exploration and development process, and increasing awareness of campus resources here to support them through graduation or university transfer. Other courses we offer include: Educational and Career Planning (CPD150AC), Career Exploration (CPD102AB), Career & Personal Development (CPD104), Creating College Success (CPD115), and Introduction to Multiculturalism (CPD160).

CLASI Workshops

In addition to teaching CPD courses, our Counseling Faculty also offer a variety of CLASI (Classroom Academic Skill Integration) workshops each semester. These interactive workshops, which can be attended in person or taken as a series of online modules, offer

students the opportunity to learn about common academic challenges and techniques to overcome them. Topics offered include: Motivation & Procrastination, Time Management, Listening & Note-taking, Transition to College, and Test Anxiety.

Individual Student Support

Outside the classroom, students sometimes need additional support to manage specific concerns or issues that are hindering their best efforts to be successful. Our Counseling faculty provide free, appointments and consultations for enrolled students.

Academic Counseling

- Balancing life, work, and school demands
- Study strategies and time management
- Test anxiety

Career Counseling

- Interpretation of career assessments
- Exploring interests, values, and skills related to the world of work
- Exploring majors and career options
- Goal setting and decision-making

Personal Support

- Solution-focused problem solving
- Successful college adjustment
- Stress management and coping skills

Crisis Response

- Supporting students, faculty, and staff to promote the safety and well-being of the campus community

Referrals

- Provide referral information for students seeking mental health services, psychological assessments, and other community resources

Online Resources

- To help students manage and overcome life obstacles, we have gathered valuable resources both at CGCC and within the community.

These are located at www.cgc.edu/counseling under the Resources tab. They include the following areas and more: Suicide/Crisis Support, Food & Basic Need Assistance, Domestic & Dating Violence and Mental Health Resources. For more information, or to schedule an appointment, please refer to our website at www.cgc.edu/counseling, or call 480-732-7158 during normal business hours.

Disability Resources & Services

Please see Student Support and Disability Resources & Services.

Distance Learning

Distance learning courses, also referred to as e-learning courses, are taught via the Internet and may be entirely or partly online. Courses taught partly online are identified as hybrid in CGCC class schedules. E-learning courses cover the same material as courses taught in person. To be successful in e-learning courses students should possess a reasonable level of comfort with technology and have consistent access to a computer with a reliable Internet service provider. E-learning courses are for students who are self-motivated and are able to learn independently using online tutorials and assignments. Communication among students, and between students and instructors, is mediated by Canvas, the Learning Management System (LMS) used for online and hybrid courses. Each student is assigned a Maricopa email address, which is the official means of electronic communication between the College and students.

Dual Enrollment

Dual Enrollment provides an opportunity for eligible high school students to take college level courses at their high school. These courses allow students to earn both high school and college credit for the same class. Classes meet at the high school during the regular school day and are taught by college certified instructors using approved curriculum and texts. The credits earned may be used toward an Associate's degree, and most can transfer to universities. Dual Enrollment courses let students begin their college career in a convenient and affordable way. These courses enhance learning and promote higher level cognitive skills. Best of all, transition from high school to college begins early and occurs in a familiar and comfortable environment.

To learn more about Dual Enrollment offerings with our partner school districts please visit www.cgc.edu/dual or call 480-732-7006.

Early College

The Office of Early College provides programs for K-12 students. The office oversees the following programs:

ACE Program

The ACE Program (Achieving a College Education) is an early college, two-year tuition scholarship college preparation program for high school students. The mission of the ACE Program is to increase the college success rate of underrepresented, financially disadvantaged, and/or first-generation college-bound students. Students must demonstrate evidence of commitment to completing from the program while attending high school. Students may apply directly through this office at myaceadvisor@cgc.edu or through the ACE contact at their high school.

Hoop of Learning (Native American Students)

The Hoop of Learning program at CGCC is designed to provide educational opportunities for Native American students in high school grades 9 through 12 to earn college credits. Native American high school students can apply with CGCC or through their local high school counselor. For more information, please email the Early College Program at myaceadvisor@cgc.edu

Special Events

The Office of Early Outreach works with a variety of K-12 and community partners to create college-bound events for K-12 students. An example of our successful partnerships with the Chandler Unified School District is a program called Destination College. Destination College is a summer school program for 3rd, 4th, and 5th graders. Students learn about the importance of reaching their educational goals while they are still in elementary school. For more information, please call 480-732-7205.

Enrollment Services

Enrollment services, located on the Pecos Campus in the Coyote Center, and Bluford Hall at our Williams location, includes Academic Advisement; Admissions, Records, and Registration; Financial Aid; the Testing Center; New Student Orientation; and Recruitment Services. These departments help ensure student success by facilitating the advisement, registration and retention of students. See also: Admissions, Records and Registration on page 13 and Financial Aid page 17 and Veterans Services on page 26.

New Student Orientation

All new-to-college, degree & transfer-seeking students are required to attend Coyote Kickoff (Initial Advisement/New Student Orientation). This includes students who have earned college credit through ACE, Dual Enrollment, or Hoop of Learning programs and are now high school graduates.

At Coyote Kickoff, academic advisors and college staff assist you with registering for your first semester courses. You will learn how to access and navigate the online Student Center, discuss major and degree requirements, review important college policies, student resources, and prepare for a successful first semester at CGCC.

Office of Student Recruitment

The Office of Student Recruitment provides information to future students about various academic programs, services, and resources available at Chandler-Gilbert Community College. To schedule a campus tour or request information, call 480-732-7385, visit the web at www.cgc.edu/admissions/new-students or email recruitment@cgc.edu

Placement Testing

Our colleges now use multiple placement options to determine college course placement for students. Students planning to take English, Reading, and/or Math will be advised to register for the appropriate course(s) within the first two years of enrollment based on District-approved placement methods. You can find more information regarding placement at: https://www.maricopa.edu/future-students/assessment-placement

Facilities Services

The Facilities Services office is responsible for creating and maintaining a physical environment conducive to effective teaching and learning. To report issues with buildings or college grounds, call 480-732-7285.

Financial Aid and Scholarships

The Financial Aid Office, located in Coyote Center at the Pecos Campus and in Bluford Hall at the Williams Campus, is responsible for the following student services functions:

- Financial aid
- Scholarships
- Federal Work-Study

Financial Aid Answer Center telephone number is 855-622-2332 (toll free) and available 24 hours/7 days a week. See also: Enrollment Services on page 16.

Financial Aid

CGCC is committed to providing support to students with financial need. However, students are expected to share in the expenses of attending college. The purpose of the CGCC Financial Aid Office is to assist with this responsibility by determining students' financial need and awarding assistance to eligible students. This is accomplished by evaluating all aid applications through the use of a standard financial needs analysis system that determines how much students and/or their families can afford to contribute toward the college costs. Several types of federal financial aid are available. These include:

- Pell Grant-Supplemental Education Opportunity Grant (SEOG)
- Direct Parent Loan (PLUS)
- Work-Study – part-time employment on campus

Students must apply and qualify for financial aid each academic year. In order to be considered for assistance, students need to complete the Free Application for Federal Student Aid (FAFSA). Once the financial aid application has been completed and you are admitted to CGCC, your financial aid eligibility will be evaluated.

Some funds are awarded on a first-come, first-serve basis, so it is best to apply as early as possible before the semester of attendance. Students should complete an application online at www.fafsa.gov as soon as possible each year in order to be considered for all available fund programs. Students must be making satisfactory academic progress in order to receive financial aid. Contact the Financial Aid Answer Center for specific details: 855-622-2332 or visit the Financial Aid website at www.cgc.edu/aid

Scholarships for Students

Scholarships are available for prospective students as well as currently enrolled students. Because the applications and deadlines vary for each scholarship, applying early is critical. Completion of the federal financial aid application may be required for some scholarships. Visit www.cgc.edu/scholarships or contact the Financial Aid Office for applications and information.

Federal Work-Study

Federal Work-Study positions are coordinated through the Financial Aid Office and Career Services on the Pecos Campus. Visit www.cgc.edu/aid/workstudy for more information.

Food Services

CGCC has two full-service dining options: The Coyote Cafe is located in Bradshaw Hall, Room BRD133, at the Pecos Campus and the Roadrunner Cafe is located in Bridget Hall, BRID138, at the Williams Campus. Grounds for Thought, a coffee shop, is located near the Ironwood Courtyard at the Pecos Campus. Food service for the CGCC community is provided Monday-Friday, but hours of operation may vary. Food Services also provides catering for special events, banquets, and meetings. The manager is glad to hear students' comments and assist with catering arrangements by calling 480-732-7362.

Information Technology (IT)

Information Technology is located on the second floor of the Library at the Pecos campus and in Bluford Hall at the Williams Campus. IT plans, designs, and integrates various college technologies in support of Student Success. IT performs ongoing operational support for computing, network, application, and media services. This includes technical support in the following areas:

- Enterprise Systems and Infrastructure
- Client/Network Support
  Computer Hardware Repair
- Desktop Applications
- IP Telephony
- Business Process Automation
- Web-based Applications
- Photo and Videography
- Project Management

IT provides technical support at the Pecos Campus, Williams Campus, Sun Lakes Center, and the Communiversity at Queen Creek. CGCC's network design provides connectivity to a variety of environments including Internet and wireless, in support of a multitude of computing technologies. A dedicated and professional team delivers technical services, implementation, and support for instructional and administrative systems. For technical assistance, please call the Information Technology Helpdesk at 480-732-7025 or visit www.cgc.edu/IT.

Institutional Research

The Institutional Research office, located on the Pecos Campus in Mesquite Hall (MSQ), provides assistance to academic and student affairs by collecting and analyzing information used to improve the quality of education and services and ensure student success. The office accomplishes this task by coordinating the development and implementation of the Institutional Effectiveness Plan, providing administrative support to the Student Learning Outcomes Assessment Committee, and providing appropriate research support to faculty and staff to improve the delivery of products and services. Call 480-857-5118 or visit https://sites.google.com/cgc.edu/par/home

International Education Program

Program Contact 480-726-4236

iep@cgc.edu or www.cgc.edu/ss/intl

The International Education Program (IEP) aims to promote an environment that encourages global understanding, appreciation and citizenship by providing support services and programs that enhance academic, cultural and social international efforts of Chandler-Gilbert Community College and the community. IEP is committed to providing services and support for students, faculty, and staff who are interested in an international dimension to their learning, research or teaching. Student support services and activities include immigration counseling, admissions, orientation, ESL advisement, intercultural adjustment, and workshops. IEP also provides support for the Intercultural Exchange Club and organizes cultural activities to enhance cross-cultural understanding among domestic and international students on campus. IEP is located on the 2nd floor of the Coyote Center at the Pecos Campus.

Learning Center (Tutoring)

The Learning Center mission is to support students' academic learning by providing free tutoring and resources to reinforce and supplement classroom instruction and to assist students to achieve academic success. While the emphasis is on providing writing, mathematics, and science support, services are available for a wide range of academic courses at CGCC. Tutoring services are available on a drop-in basis for many courses, by appointment for select courses and online. Resources include workshops, software, and print materials. Students must be enrolled at CGCC in the class for which they are seeking assistance. For more information, visit www.cgc.edu/lc or call 480-732-7231.

Mathematics and Science Tutoring

The Math and Science Centers are valuable resources to assist CGCC students with a variety of math and science courses by offering tutoring and resources to supplement classroom instruction. The Math and Science tutoring program at the Pecos Campus is located on the second floor of the Library, rooms LIB227, LIB228 and LIB229. At the Williams Campus, tutoring takes place in Bridget Hall, room BRID115. A schedule of tutoring hours and services is posted at the beginning of each semester. The Math and Science tutoring program offers:

- Drop-in tutoring for math, chemistry, biology, physics, engineering, and statistics
- Trained tutors, including math and science faculty
- Computers with mathematics and science software
- Calculators and current textbooks
- Reference materials, handouts, science models and microscopes
- Interactive workshops focusing on a variety of mathematics and science topics

my.maricopa.edu

my.maricopa.edu is an online student center where students can do the following:

- Apply for admission
- Register for courses
- Check class schedule
- Add/drop courses
- Request official transcripts
- View unofficial transcripts
- Check holds
- Check fee balance and pay fees
- View financial aid
- Check student grades
- Update address/phone
- Check course availability

Writing Center

The Writing Center is a valuable resource to assist CGCC students with their writing needs in all of their college courses. The Writing Center helps students address a wide range of writing concerns, from how to determine whether they have a good thesis, to how to organize their work, revise more effectively, and document sources accurately. The Writing Center at the Pecos Campus is located on the second floor of the Library, room LIB230. Writing tutors are also available at the Williams Campus in Bridget Hall, room BRID114. A schedule of tutoring hours and services is posted at the beginning of each semester.

The Writing Center services include:

- Individual writing sessions with knowledgeable tutors
- Drop-in tutoring (no appointment needed)
- Reference materials and handouts
- A comfortable, quiet study area for individual or small-group work
- Computers for academic use
- Interactive workshops focusing on a variety of writing topics

Library

Pecos

Monday-Thursday, 7:30am -9:00pm
Friday, 7:30am-2:00pm
Saturday, 8:00am-2:00pm
Sunday, closed
Circulation: 480-857-5102; Reference: 480-857-5100

Williams (Bridget Hall)

Monday-Thursday, 8:00am-8:00pm
Friday, 8:00am-2:00pm
Saturday & Sunday, closed
Circulation: 480-988-6611, Reference: 480-988-8275

Visit www.cgc.edu/library for the most up-to-date hours and holiday closure information.

The libraries at Chandler-Gilbert Community College offer a full-range of library services that support the academic mission of the College. The libraries provide access to a full-range of information in a variety of formats including web-based, traditional print and multimedia. Library faculty teach the identification, location, and critical evaluation of the dynamic information world. We also provide virtual and face-to-face reference assistance. Library staff assists patrons with interlibrary loan requests, course reserves, and study room reservations. The Library has 10 conference/study rooms; three library instruction classrooms; access to subscription databases; magazines, journals, and newspaper display and storage; and wireless Internet access.

Electronic Resources

Students, faculty, and staff will use their MEID to access the Library's electronic resources.

Student ID/Library Cards

See Student Identification Cards on page 23.

Parking

Students taking classes exclusively at the Pecos Campus are no longer required to obtain an MCCCD parking decal to park on campus property.

Students parking at the Williams Campus must obtain and display a current academic year CGCC Williams Campus parking permit. These may be obtained from College Safety in Bluford Hall. Permits will be issued only after the refund deadline has passed for a student's earliest-starting class. Current enrollment in Williams Campus class(es) will be verified prior to a permit being issued. Students are limited to one permit.

A new Williams Campus parking permit will need to be obtained each academic year (fall through the following spring and summer semesters).

CGCC students and employees choosing to park vehicles on Arizona State University Polytechnic campus property are required to register their vehicles and purchase and display ASU parking decals. ASU parking decals can be purchased from the ASU Polytechnic Campus Decal Sales office located in the ASU Student Affairs Complex.

CGCC students and employees are subject to ASU Polytechnic Campus parking and traffic regulations when parking on ASU Polytechnic Campus property and are also responsible for any citations and/or penalties resulting from parking violations.

Practical Instruction

Some courses and programs of study require students to participate in practical instruction, which may include internships, practicums, clinical placements, field experience or other types of hands-on demonstration by students of concepts or theories learned in instructional settings on campus or online. Practical instruction may require students to travel to approved sites throughout the Maricopa Community College District service area, and may also require students to meet eligibility requirements such as fingerprint clearance, background checks, drug testing, and operating various types of motor vehicles. Complete information on practical instruction can be found in recruitment materials and student handbooks for specific instructional programs.

Maricopa Community College Police Department

Maricopa Community Colleges Police Department are responsible for maintaining a safe, orderly, and peaceful atmosphere on campus to contribute to student development and success. It was formed with these objectives in mind, and is staffed by qualified safety personnel, including certified police officers. Maricopa Community Colleges Police are located in the Public Safety Building (PSB), at the Pecos Campus and in Bluford Hall at the Williams Campus. Students are encouraged to inform the on-duty officer about any situation that might warrant support for safety reasons (stalkers, potentially violent situations, orders of protection, etc.).

Services to students, faculty, and staff include:

- Providing safety escorts to and from parking lots upon request
- Assisting students, faculty, and staff in case of accident or injury on campus

- Providing minor assistance to motorists with disabled vehicles
- Delivering emergency messages from family to students in classes
- Enforcing parking regulations on campus
- Providing Lost and Found services
- Administering college vehicle use
- Patrolling campus
- Encouraging student, faculty, and staff participation in safety and crime prevention programs

For additional information, call 480-732-7280 at the Pecos Campus or 480-988-8888 at the Williams Campus. Information on crime prevention programs, safety policies, incident reports, and CGCC crime statistics for the previous three years can be found at www.cgc.edu/safety.

Emergencies

In the event of emergencies on campus, contact the Maricopa Community Colleges Police Department at 480-784-0911. Emergency telephones are located at the entrances to all parking lots of the Pecos Campus and ring directly into the Public Safety Department. Call 911 in the event of a life-threatening emergency.

Emergency Notification System

Chandler-Gilbert Community College uses a mass notification system (RAVE) in order to communicate with students and employees in the unlikely event of an emergency at the college. Student contact information (cell phone number, home phone, email address etc.) provided at the time of registration will automatically be used in the college notification system. Be assured, that students and staff will only be contacted for emergency purposes. The system will not be used for other purposes.

RAVE Guardian App

Students can download the RAVE Guardian App from the Apple App Store or Google Play. This app helps to improve:

- Safety
- Security
- Access to emergency numbers

CGCC students can authenticate their accounts with student email addresses, user names, passwords and personal profiles.

Student Identification Cards

Student identification (ID) cards are obtained from the Enrollment Services Office, located in the Coyote Center at the Pecos Campus or in Bluford Hall at the Williams Campus. The first card is free and can be obtained after payment of tuition and fees.

College Police Regulations

Identification

College Police personnel are authorized to ask any person on campus for proper identification, should the need arise. Students failing or refusing to identify themselves properly will be:

- Asked to leave the campus (if conduct or behavior warrants such action), and
- Reported to the Vice President of Student Affairs.

Weapons

All firearms, explosives, knives, or instruments that can be construed as dangerous weapons are prohibited on campus. All persons bringing firearms or other weapons for classroom demonstrations or any other academic reason are required to bring them to the Public Safety Department for examination.

Motor Vehicles

College regulations governing motor vehicles operated by CGCC students shall be under the jurisdiction of the college administration.

Vehicle Damage or Loss

Chandler-Gilbert Community College assumes no responsibility for damage to motor vehicles, or for any loss while vehicles are parked or operated on or near the campus.

Vehicle Registration

Williams campus students and all employees who drive motor vehicles on any CGCC campus are required to register the vehicles that may be used on college property with Enrollment Services. Individuals who subsequently purchase or trade their registered vehicles must register the new vehicles. Parking in Employee, Disabled, Carpool or other specially designated stalls requires the appropriate decal and or indicator be displayed. Violators will be subject to citations and associated fines. Designated Visitor parking is available to non-affiliates of the college who are conducting temporary business on college property.

College Traffic Regulations

The following college traffic regulations are applicable to all members of the college community, including students, faculty, staff, and visitors:

1. Maximum speed limit on campus is 15 m.p.h.
2. Students and employees who have been issued parking permit decals following vehicle registration with the Public Safety Department must display the decals in accordance with current regulations.
3. Drivers must observe and comply with stop signs, pavement arrows, right-turn-only signs, and other traffic control devices. All vehicles must stop at marked crosswalks to yield to pedestrian traffic within the crosswalks.
4. Persons driving on campus must follow directions given by Public Safety officers and furnish student or other identification when so required.
5. Students may park in any parking space except those marked Visitors, Handicapped, Maintenance, Employees, No Parking, or any area with a red or yellow curb.
6. Persons having a Handicapped designation on their vehicle may use any marked space on the campus, including those marked Handicapped, except those areas with red or yellow curbs.
7. No vehicle other than an emergency vehicle may be parked along red curbs or in striped areas. These are fire-hazard and safety zones, and violators will be towed away without warning at the owner's expense.
8. No vehicle may be parked in driveways, where signs indicate No Parking, or in areas not specifically marked for parking.
9. Visitors may use student zones on a temporary basis. Visitor permits may be obtained from the Public Safety Department.
10. In angled parking spaces, no vehicle may be parked in a direction opposite the normal direction of traffic.
11. Parking of motorcycles, mopeds and bicycles:
    - Students are urged to exercise care in securing their personal property, including motor vehicles, bicycles, mopeds, and motorcycles.
    - Motorcycles and mopeds may be parked only on crossbars. Bicycles must be parked in existing bike racks only. Mopeds, bicycles, and/or motorcycles that are found chained or affixed to trees, buildings, or light posts are subject to having their chains cut and being removed to the Public Safety Department. Owners will be responsible for the cost of the lock or cut chain.

Student Dress Code

Students are expected to dress appropriately and in good taste at all times while on campus, in the classroom, or in the Student Center. Students are required to wear some type of shirt in addition to other normal apparel. State Health Department laws and college policy require that all students wear shoes. If, in the opinion of the faculty or staff member, any student's dress, manner, appearance, or conduct distracts, disrupts or interferes in any way with the classroom procedures or the educational processes, the violator

may be asked to leave the classroom or the campus. The violator may not return until the condition is corrected or the case is reviewed by the Vice President of Student Affairs.

Student Financial Services

The Student Financial Services office manages financial operations for the college, including tuition and fee collections, and provides financial accountability to funding agencies and individuals. Trained and qualified staff members also provide student assistance during both day and evening hours in the Coyote Center at the Pecos Campus and in Bluford Hall at the Williams Campus. Students and parents who have questions about their accounts, outside of financial aid issues, should call 480-732-7312 or e-mail at askcashiers@cgc.edu. Students can also visit www.cgc.edu/fiscal for additional information.

Student Helpline

Support for student concerns, complaints and college wide issues in and out of the college classroom. Chandler-Gilbert Community College is committed to the development of our students. Students may need support to review and resolve complaints, concerns and issues that they face here at the college in and out of the classroom.

The following steps are recommended to any student who has a problem and need some guidance as to next steps. This support relates to any college issues related to classes, faculty, other students, college services, college staff and events and activities. We will also help direct students to personal and academic support. Our role is not to judge your complaint or concern but to help you resolve it in an appropriate manner.

If you need someone to help you figure out where to start with you complaint or concern, please follow the steps listed below.

1. Call 480-732-7322 for support. We will listen to your concern and help direct you through the appropriate process. We offer non-judgmental support to all CGCC students. This office serves as an advocate for any student issues at CGCC.
2. You can leave a recorded message on this line 24 hours a day. Please leave your name, your concern and a student advocate will return your call and help you with your issue, complaint or concerns.
3. Email student-helpline@cgc.edu directly. Please explain what is happening, your name and the best way to contact you. Emails are responded to on a daily basis.

The VFSA's Office provides information on all student services and the following MCCCD policies:

- Student Rights and Responsibilities
- Student Conduct and Grievances
- ADA Accommodations
- Sexual Harassment Issues
- 504 and Title IX

Student Housing

Student residential living is available at the Williams Campus for those students who meet eligibility and criteria. Two-, three-, four-, and five bedroom houses and residential hall rooms and suites are available for rent. Housing at the Williams Campus is open to any student enrolled in the minimum number of credit hours at one of the Maricopa Community Colleges.

Verification of Continuing Students and Good Standing: Student status and eligibility to remain in residential living will be verified each term. To remain in good standing and continue residing on the Williams Campus, students need to be enrolled throughout the term(s) and meet all requirements of the housing agreement. Contact the Williams Campus Housing Office at 480-727-1700 for specific information, or visit housing.asu.edu

Student Identification Cards

Student identification (ID) cards are obtained from the Enrollment Services Office, located in the Coyote Center at the Pecos Campus, or in Bluford Hall at the Williams Campus. The first card is free and can be obtained after enrolling in courses. The card is used to access many of the services on campus including the Library and Fitness Center and should be kept from

semester to semester. Replacement cards can be purchased for $5 at Student Financial Services, located in the Coyote Center, at the Pecos Campus, or Bluford Hall at the Williams Campus.

Student Immunization

Students who were born after January, 1957, and who were not immunized after 1968 are urged to seek immunization for measles/rubella to safeguard their health and to prevent illness that could interrupt their educational plans. Students transferring to one of the three state universities must have up-to-date immunization records. All Arizona state universities require immunization for admittance.

Student Insurance

More information is available here. Or please visit or contact the Office of the Vice President of Student Affairs in the Pecos Campus; 480-732-7322.

Student Life and Leadership

All students are encouraged to participate in programs and activities sponsored by the Office of Student Life and Leadership located in the Student Pavilion at the Pecos Campus and Bridget Hall at the Williams Campus. There are many opportunities to enhance classroom experience with co-curricular activities.

These include leadership development, community service programs, cultural events, and an opportunity to participate in one of the many student organizations. For additional information visit: www.cgc.edu/student/life. To participate in campus, community service programs, or Service-Learning call the Office of Student Life and Leadership at 480-732-7104.

Leadership Development

Getting Involved - Leadership Retreats and Leadership Activities Leadership retreats are organized to increase students' leadership skills during the fall and spring semesters. Interested students are encouraged to call the Office of Student Life and Leadership.

Community Service and Volunteer Opportunities

Students are encouraged to serve and volunteer on campus and in the community in a variety of ways. Some of the activities that students participate in include:

Coyote Cupboard

The Coyote Cupboard is a food pantry non-perishable and household items available to any CGCC student or employee. CGCC is in partnership with Matthew's Crossing Food Bank. See a staff member of Student Life for hours of operation during the week day. The pantry is available at the Pecos and Williams Campus.

Service-Learning

This is an exciting program designed to integrate community service into the classroom. This program benefits everyone involved: students, faculty members, and the community. Students interested in participating in Service-Learning events or wanting further information are encouraged to stop by or call the Office of Student Life and Leadership at the Pecos Campus at 480-732-7069.

Into the Streets

Each semester students are encouraged to participate in the Into the Streets program, which is designed to give students hands-on experience serving in some of CGCC's many community service agencies, such as the Boys and Girls Clubs, nursing homes, and homeless shelters.

Adopt-A-Family Program

This program assists CGCC students with necessary food, clothing, and related resources. During the holidays, meals and gifts are provided as well. Students must complete an application or be referred by college employees.

CGCC Student Organizations

The list of student organizations at CGCC grows each year. Listed below are the current, officially recognized groups. Student organizations may be formed for many purposes — social, service, athletic, professional, and religious. Current information is available in the Office of Student Life and Leadership. For more information

about student organizations visit or contact the Student Life office.

- APIC – Asian Pacific Islander Club
- Business Professionals
- Educators Rising
- Engineering Club
- HELP – Hands Enriching Life Program
- HSO – Hispanic Student Organization
- IEC – Inter-cultural Exchange Club
- Kairos – Christian Club
- MEN – Male Empowerment Network
- One Voice
- Pre-Health Professionals Club
- Psychology Club
- PTK – Phi Theta Kappa
- Student Veterans Organization
- Women Rising

How to Create a Student Organization

Student organizations can be created to meet the needs of a diverse student population. Students thinking of creating a new student organization should meet with the Director of Student Life and Leadership to learn the steps to take to have any group officially recognized at CGCC.

Co-Curricular and Multicultural Programs

Co-curricular programs are fairly new programs that refers to activities, programs, events, and learning experiences that compliment what students at Chandler-Gilbert Community College are learning in the classroom. These Co-curricular opportunities connect to or mirror the academic curriculum. The office of Student Life and Leadership values diversity and inclusion by providing multicultural opportunities for students to attend heritage events and learn about different cultures. Students interested in participating in Co-curricular or Multicultural events on campus are encouraged to stop by or call the Office of Student Life and Leadership.

College and Student Activities Budgets

CGCC allocates funds to a variety of college and students activities. These funds cover a host of special events, cultural celebrations, co-curricular activities, academic recognitions, service learning, and a variety of performing arts activities. Please contact the Vice President of Student Affairs' Office at 480-732-7322 for more information.

Voter Registration

Students and community members have the opportunity to register to vote in the Office of Student Life and Leadership at CGCC. Voter registration is also available online at www.azsos.gov or by calling 877-THE-VOTE [877-843-8683]. Contact the Office of Student Life and Leadership at 480-732-7104 or visit www.azsos.gov for registration deadlines and election dates.

Student Support and Disability Resources & Services

This department provides student-centered support services and programs for CGCC's diverse student population and those individuals with disabilities. The department is located on the Pecos campus in the Bradshaw building (BRD101). For more information, call 480-857-5188.

Disability Resources & Services (DRS)

DRS provides access and ongoing support services to students who have a documented disability according to The Americans with Disabilities Act (ADA), and Section 504 of the Rehabilitation Act. Students will apply for services and request academic adjustments through MCCCD's DRS CONNECT system. All registered students must provide appropriate and current documentation that complies with the MCCCD documentation policy and guidelines. DRS provides education and information regarding student rights and advocacy and academic adjustments that support student learning.

Travel by Students

Official college trips should be made in vehicles provided by the college or by commercial vehicles. College vehicles may be used for official college business only. See MCCCD policy on Operation and Insurance Coverage of District Owned and/or Leased Vehicles and Privately Owned Vehicular Usage for District Purposes. The college

president may require an advisor(s) for college-sponsored student trips that involve out-of-county travel. No approved college organization, association or club that is financed out of the appropriate revenue fund budget shall travel out of state more than three (3) times during one (1) school year. Exceptions may be made for student officers who hold offices in national or regional organizations and tournaments. For travel out of the country, Governing Board approval is required. If campus financial support is requested for attending tournaments or club functions, students must obtain campus approval prior to running for national or regional organizations and/or officer positions.

Trip Reduction Program

Full-time students are encouraged to participate in Maricopa County's Trip Reduction Program (TRP). Discounted bus passes, reserved carpool parking, free showers, and contests and prizes are available to qualified participants. Interested students should check with the Student Center information desk (SC100) or contact the college Trip Reduction Coordinator for details. Complete information about the program is available at www.cgc.edu/trip

Veterans Services

CGCC recognizes and honors the sacrifices of all those who have served our country in the U.S. Armed Forces. The Veterans Services Office is located in Coyote Center at the Pecos Campus and in Bluford Hall at the Williams Campus, and provides the following services:

- GI Bill® benefits counseling and processing
- Referrals for personal, career, academic counseling, enrollment services, and financial aid
- Assistance with family and transition support
- Student Veterans Organization (SVO)

Students applying for veterans benefits for the first time should allow four to six weeks before receiving benefits. The amount of benefits awarded is based on the number of credit hours attending and chapter of benefits. Those students receiving benefits must be following the Veterans Administration (VA) academic progress policy to continue to receive benefits.

Veterans Chapters Served

- Chapter 30 – Montgomery GI Bill®
- Chapter 31 – Vocational Rehabilitation (separately served through local VA Vocational Rehabilitation offices)
- Chapter 33 – Post 9/11 GI Bill®
- Chapter 35 – Survivors and Dependents of Deceased/100% Disabled Veterans
- Chapter 1606 – Selected Reserve GI Bill®

For additional information, contact the Veterans Services Office at 480-726-4122 at the Pecos Campus and 480-988-8177 at the Williams Campus. Information is also available at www.cgc.edu/veterans.

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

Approved VA Funding

Airway Science Technology, Flight Emphasis (Track I and III)

Approved Funding for VA Flight Training for 2020-2021
Flight Standards District Office (FSDO)
Approved Minimum Times Per Part 141 Training Course Outlines

Costs are calculated according to the following hourly rates:

Hourly Rates and Instruction Rates				
Aircraft Rate	**Solo Rate**	**Dual Rate**	**Aircraft Training Device (ATD)**	**Rate**
Cessna 172/P Archer	$144.00	$210.00	Single Engine ATD (Dual Only)	$151.00
Seminole	NA	$350.00	Mentor ATD (Dual Only)	$166.00

Instructor Rate: $66.00

“Dual” includes Instructor cost

Commercial Instrument Pilot Airplane Single and Multi-Engine Land (SMEL) Course (Part 141)

This course is made up of three individual flight courses. The total flight time requirement is 155 hours of the combined courses. It is imperative that you meet each course requirement to satisfy the total time requirement.

AET210 - Instrument Commercial Flight I	59.5
AET220 - Instrument Commercial Flight II	70.5
AET240 - Multi-Engine Airplane Pilot Flight	25.0
	155.0

The above estimates represent minimum flight hours to meet Federal Aviation Administration requirements. Students may need additional flight hours to demonstrate competency.

The following rates and flight hours have been approved for VA funding at the UND Aerospace FTC located at Mesa, AZ. VA will only fund these minimum training requirements and students are required to cover additional costs. VA will only cover costs listed for each specific time requirement.

AET210 - Instrument Commercial Flight I (Lessons 1-36)		$9,991.40
Dual Cessna 172	25.5	$5,355.00
Solo Cessna 172	10	$1,440.00
Dual ATD	14	$2,114.00
Ground	6.5	$429.00
Pre/Post	9.9	$653.40

AET220 - Instrument Commercial Flight II (Lessons 37-68)		$13,263.40
Dual Cessna 172	43.7	$9,177.00
Solo Cessna 172	10	$1,440.00
Dual ATD	5.2	$785.20
Ground	16	$1,056.00
Pre/Post	12.2	$805.20

AET240 - Multi-Engine Systems & Procedures (Lessons 69-94)		$7,718.50
Dual Seminole	15	$5,250.00
Dual ATD	10	$1,660.00
Ground	6	$396.00
Pre/Post	6.25	$412.50

AET230 - Certified Flight Instructor		$7,616.50
Dual Cessna 172	24	$5,040.00
Dual Single Engine ATD	1	$151.00
Ground	30.5	$2,013.00
Pre/Post	6.25	$412.50

FSDO-approved minimum times per part 141 training course outlines.

Total: $38,589.80

2020-2021 Projected Individual Flight Training Costs

These are the projected costs for flight courses for the 2020-2021 school year based on anticipated rates (*). Course costs are based on the average number of hours it takes a student to complete the course, and may vary from student to student according to their capability and motivation. Financial aid may be available to assist with these costs, but applying for aid must be done well in advance. Flight costs are in addition to tuition.

Private Pilot

AET110 - Private Pilot Certification	$13,381.00
Instructor Time	83 hrs
S.E. Simulator	3 hrs
Piper Archer	52 hrs
FAA Written**	(1) hr

AET112 - Private Pilot Test Course	$2,892.00
Instructor Time	22 hrs
Piper Archer	10 hrs
AET112 - Requires Private Pilot certificate prior to initiating training with CGCC	

Instrument, Commercial and Multi-Engine

AET210 - Instrument Commercial Flight I (Lessons 1-36)	$12,231.00
Instructor Time	70 hrs
S.E. Simulator	15 hrs
Piper Archer	44 hrs

AET220 - Instrument Commercial Flight II (Lessons 37-68)	$14,476.00
Instructor Time	82 hrs
S.E. Simulator	8 hrs
Piper Archer	56 hrs
FAA Written**	(2) hrs

AET240 - Multi-Engine Systems & Procedures (Lessons 69-94)	$12,390.00
Instructor Time	65 hrs
M.E. Simulator	10 hrs
Seminole	25 hrs

Flight Instructor

AET230 - Certified Flight Instructor Certification	$8,151.00
Instructor Time	65 hrs
Piper Archer	24 hrs
S.E. Simulator	1 hr
FAA Written**	(2) hrs

Associate Degree program total flight cost: $60,629.00.

*Does not include AET270 CFII **FAA written price of $160.00 included in the budgeted total for each applicable course. ***Students using veterans' educational benefits will only be certified for the actual cost and required flight hours of the program as identified on page 28.****AET110 - Private Pilot Certification is a prerequisite.

MARICOPA COUNTY COMMUNITY COLLEGE DISTRICT

COMMON POLICIES

Maricopa County Community College District Common Policies

The Catalog Common Pages are MCCCD Administrative Regulations and Appendix items specifically relevant to students.

The Catalog Common Pages are reviewed and updated annually by the Common Pages Committee and coordinated by the Center for Curriculum and Transfer Articulation and the Associate Vice Chancellor for Academic and Student Affairs. The Catalog Common Pages are a compiled list of Board Policies, Administrative Regulations, and program information directed toward student services support areas at the colleges. For more information, please contact:

Bettina Celis — Associate Vice Chancellor for Academic Affairs
(480) 731-8016 | bettina.celis@domail.maricopa.edu

Felicia Ganther, JD — Associate Vice Chancellor for Student Affairs
(480) 731-8824 | felicia.ganther@domail.maricopa.edu

Pending Governing Board Approval, 8/25/20. For the most current information regarding common policies, log on to https://district.maricopa.edu/stewardship/maricopa-governance/common-pages/student-regulations

DEGREE REQUIREMENTS

Maricopa Community Colleges (MCCCD) 2020-2021 Graduation/General Education Policies

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

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

   Students not continuously enrolled, as outlined in the Catalog under Which a Student Graduates Policy, must satisfy current graduation requirements.

2. Have earned a minimum of 12 semester credit units toward the degree or certificate at the district college granting the degree or certificate. The 12 hours in the AAS degree curricula must be in the Required Courses area and/or Restricted Electives courses. Courses from the General Education Core and Distribution area are excluded. In cases where the certificate requires fewer than 12 credit units, a minimum of six credit units must be completed at the college awarding the certificate. The minimum of six credit hours in the certificate or degree curricula must be in the Required Courses area and/or the Restricted Electives. Courses from the General Education Core and Distribution areas are excluded.

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

   A shared program requires a minimum of six credit hours from the total program requirements to be completed with a grade of “C” or better at the college awarding the certificate or degree. The minimum of six credit hours in the certificate or degree curricula may be in the Required Courses area and/or the Restricted Electives. (The exception is the Nursing program; Nursing students must apply for graduation from the college where they have successfully completed Block 4 of the Associate in Applied Science in Nursing.) Courses from the General Education Core and Distribution areas are excluded. For those shared programs with less than six credit hours, the total hours for the program must be completed at the college awarding the certificate.

3. Have filed an application for the degree or certificate with the Admissions and Records Office/Office of Student Enrollment Services on the date determined by the college/center.

4. Have a minimum cumulative grade point average of 2.000 at the college granting the degree.

5. Have a minimum cumulative grade point average of 2.000 in all courses used to fulfill degree requirements
   Some specific programs have higher grade requirements. It is the student’s responsibility to be aware of these program requirements.

For the most current information regarding common policies degree requirements, log on to https://curriculum.maricopa.edu/curriculum/degrees-certificates/associate-degrees/academic-policies

6. Have removed, thirty (30) days after the anticipated graduation date, all deficiencies on the record to use those courses toward program completion.

7. Have removed any indebtedness to any MCCCD college/center.

8. Have paid graduation ceremony fee, if participating in ceremony. See fee schedule for charges. See Graduation with Honors for information on honors designation.

Certificates/Degrees

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

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

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

Licensure Disclaimer

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

MCCCD General Education Statement

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

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

- Build self-awareness, self-respect, and self-confidence

For the most current information regarding common policies degree requirements, log on to https://curriculum.maricopa.edu/curriculum/degrees-certificates/associate-degrees/academic-policies

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

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

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

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

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

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

Maricopa Community Colleges (MCCCD) 2020-2021 General Academic Policies for Associate Degrees Designed for University Transfer

Description

The following academic policies govern the associate degrees designed for university transfer Associate in Arts (AA); Associate in Arts, Elementary Education (AAEE); Associate in Arts, Fine Arts (AAFA); Associate in Business-General Requirements (ABUS-GR); Associate in Business-Special Requirements (ABUS-SR); and Associate in Science (AS).

For the most current information regarding common policies degree requirements, log on to https://curriculum.maricopa.edu/curriculum/degrees-certificates/associate-degrees/academic-policies

Note that academic policies that govern the Associate in General Studies (AGS) and Associate in Applied Science (AAS) degrees are listed separately, with the requirements for each of those degrees.

- The graduation policies within the general catalog must be satisfied (administrative regulation 2.3.9).
- Minimum semester credits for completion vary slightly by degree and specific emphasis (when applicable). Refer to the Program (Degree) Search at https://curriculum.maricopa.edu/ for credit minimums for individual degree programs.
- Credits completed toward these minimums must be in courses numbered 100 or above with a grade of "C" or better. These credits must include a minimum of 35* in satisfaction of the requirements of the Arizona General Education Curriculum (AGEC) along with a maximum of 6 credits towards MCCCD's Additional Requirements.
- Detailed degree requirements are maintained by the Center for Curriculum and Transfer Articulation (CCTA); refer to the program search at https://curriculum.maricopa.edu/

General Education Requirements

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

Core

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

Awareness Areas

- Cultural Diversity in the U.S. [C]
- Global [G] or Historical [H] Awareness

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

Coursework beyond General Education

- For some degree types, the additional coursework required to complete the degree is specified while others offer the student more latitude. See degree checksheets for more complete description. Consultation with an academic

For the most current information regarding common policies degree requirements, log on to https://curriculum.maricopa.edu/curriculum/degrees-certificates/associate-degrees/academic-policies

advisor about course selection is always recommended.

- Oral Communication and Critical Reading are MCCCD Additional Requirements required for Associate in Arts and Associate in Science degrees. Refer to the Program (Degree) Search at curriculum.maricopa.edu for acceptable options to meet these requirements for individual degree programs.
- Within the Restricted Electives, course recommendations are made for specific transfer institutions. Students should select a transfer plan (group of courses) based on their intended transfer institution. However, not all transfer institutions are reflected in these recommendations. Therefore, students may instead meet the minimum number of Restricted Elective credits using a combination of courses from the transfer plans listed. Restricted Electives should be selected in consultation with an academic, faculty, or program advisor.
- General Electives may need to be selected to meet the minimum total credits required for the degree. All courses numbered 100-or-higher may be applied as General Electives. Students are encouraged to select courses that align with their goals.
- Note that some majors require up to a 4th semester proficiency (202-course level) in a non-English language. Students should consult with an academic advisor to discuss options to complete these requirements.
- Maricopa courses and external courses evaluated as Maricopa equivalents, departmental electives, (e.g., HISELC for a history elective), or general electives (GENELC) that are numbered 100 level or higher, and completed with a grade of "C" or higher, may be applied in the elective area, regardless of potential transferability to other institutions. It is recommended, however, that students planning to transfer to a baccalaureate-granting institution meet these general elective requirements with courses that are transferable and applicable to their intended university degree. Transfer advisement information is accessible on the following websites: aztransfer.com, curriculum.maricopa.edu, as well as those of individual universities. For appropriate course selection, students should consult with an academic advisor.
- Any course cross-referenced under another prefix(es) (for example ENH291/EDU291-Children's Literature) covers identical content and its credits can only be counted once toward requirements.

Transfer Credit from Institutions Outside of MCCCD

- Credits transferred from outside of MCCCD must be at a grade of "C" (2.0 on a 4.0 scale) or better.
- External courses evaluated either as equivalent to an MCCCD course or as elective credit may be applied toward the minimum credits for degree completion.
- Transfer credit graded pass/fail or pass/no credit may be used to satisfy AGEC requirements if documentation collected by the community college indicates that this was the only grading option available and that the Pass grade ("P") is equivalent to a "C" or better.
- The AGEC (Arizona General Education Curriculum) designations of courses completed at other Arizona public colleges or universities will be applied as listed on AZTransfer's Course Equivalency Guide (CEG) for the semester(s) in which the course(s) were completed. If a transcript evaluation determines there is no MCCCD direct equivalency to a course from another Arizona public college or university, applicability to AGEC and/or associate degree requirements will be based on the source institution's AGEC designation for the semester in which the course was completed.
- Courses from private, out-of-state, and/or online institutions (i.e., outside of the Arizona Transfer System comprised of Arizona's public community colleges, tribal colleges and universities) will be applied toward AGEC and/or associate degree requirements based on the courses' evaluated MCCCD equivalence. If courses are not directly equivalent, the credit may be articulated as a departmental elective, and if deemed appropriate, may have a general education designation applied to the course.
- Credit awarded at a Maricopa Community College for prior learning is transferable to the other colleges in the district but is not necessarily transferable to other colleges and universities. No more than 20 such assessed semester credit hours may be applied toward AGEC, and no more than 30 credits (including up to 20 toward AGEC) may be applied toward a degree.

For the most current information regarding common policies degree requirements, log on to https://curriculum.maricopa.edu/curriculum/degrees-certificates/associate-degrees/academic-policies

Completion and Transfer

- Completion of the AGEC with a minimum Grade Point Average of at least 2.0 on a 4.0 scale for Arizona residents and 2.50 for non-residents meets Arizona public university general admission requirements. It does not ensure admission to specific university majors or programs with selective admission processes and/or limited enrollment.
- While MCCCD's associate degrees are designed to facilitate a seamless transfer to other Arizona institutions, courses may be transferable and/or meet associate degree requirements, but may not necessarily meet the specific requirements of a particular degree, major, or area of emphasis at another institution.
- Students planning to transfer to another college or university are urged to refer to university requirements and academic advisors from both institutions to be certain that all their selected coursework is applicable to the requirements of their intended transfer degree and within their allowed transferable credit limit. For some majors, the statewide Common Course matrix and AZTransfer Major Guides at aztransfer.com and/or university transfer guides can also provide some guidance. For appropriate course selection, students should consult with an academic advisor.

Maricopa Community Colleges (MCCCD) 2020-2021 Catalog Under Which A Student Graduates

Description

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

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

EXAMPLE A:		
Admitted & Earned Course Credit at a Public Community College or University	Fall '18	(Active)
Continued at a Public Community College	Spring '19, Fall '19	(Active)
Transferred to a University	Spring '20	(2018 or Any Subsequent Catalog)

EXAMPLE B:		
Admitted & Earned Course Credit at a Public Community College or University	Fall '18	(Active)
Enrolled But Earned All Ws, Zs, or Fs	Spring '19	(Inactive)
Enrolled in Audit Courses Only	Fall '19	(Inactive)
Nonattendance	Spring '20	(Inactive)
Transferrd to a University	Fall '20	(2020 or Any Subsequent Catalog)

2. Students who do not meet the minimum enrollment standard stipulated in No. 1 during three consecutive semesters (fall/spring/fall or spring/fall/spring) and the intervening summer term* at any public Arizona community college or university are no longer considered continuously enrolled, and must meet requirements of the public Arizona community

For the most current information regarding common policies degree requirements, log on to https://curriculum.maricopa.edu/curriculum/degrees-certificates/associate-degrees/academic-policies

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 '18	(Active)
Nonattendance	Spring '19, Fall '19, Spring '20	(Inactive)
Readmitted & Earned Course Credit at a Public Community College	Fall '20	(Active)
Transferrd to a University	Spring '21	(2020 or Any Subsequent Catalog)

EXAMPLE B:		
Admitted & Earned Course Credit at a Public Community College or University	Fall '18	(Active)
Nonattendance	Spring '19	(Inactive)
Readmitted & Earned Course Credit at a Public Community College	Summer '19	(Active)
Nonattendance	Fall '19. Spring '20	(Inactive)
Transferred to a University	Fall '20	(2018 or Any Subsequent Catalog)

*Students are not obligated to enroll and earn course credit during summer terms, but summer enrollment may be used to maintain continuous enrollment status.

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

EXAMPLE		
Admitted & Earned Course Credit at a Public Community College or University	Summer '18	(Active)
Continued at a Public Community College	Fall '18, Spring '19	(Active)
Nonattendance	Fall '19	(Inactive)
Readmitted & Earned Course Credit at a Public Community College	Spring '20	(Active)
Transferred to a University	Summer '20	(2018 or Any Susequent 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.

For the most current information regarding common policies degree requirements, log on to https://curriculum.maricopa.edu/curriculum/degrees-certificates/associate-degrees/academic-policies

Maricopa Community Colleges (MCCCD) 2020-2021 Arizona General Education Curriculum (AGEC) – A, B, S

Description

The Maricopa County Community College District Arizona General Education Curriculum (MCCCD AGEC) is a general education certificate that fulfills lower-division general education requirements for students planning to transfer to any Arizona public community college or university. Generally, the MCCCD AGEC transfers as a block without loss of credit. The AGEC-A and AGEC-B require a minimum of 35* credit hours, and the AGEC-S requires a minimum of 36* credit hours.

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

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

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

Purpose of the AGECs

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

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

For the most current information regarding common policies degree requirements, log on to https://curriculum.maricopa.edu/curriculum/degrees-certificates/associate-degrees/academic-policies

Academic Policies that Govern the AGEC A, B, S

- Requires completion of at least 35 credit hours* (AGEC-A, AGEC-B) and 36 credit hours* (AGEC-S) in courses numbered 100 and above and that a minimum of 12 of those credits be taken at one or any combination of the MCCCD colleges. See First Year Composition [FYC] notes in the following AGEC descriptions and footer for credit minimum exceptions.*
- All courses applied to the AGEC must be completed with a grade of "C" or better.
- A single course can simultaneously count toward a Core Area and one or more Awareness Areas. For example, a course in world geography can be used to satisfy [SB] and [G] requirements. While multiple requirements can be met with a single course, the credits for that course are only counted one time toward the required minimum total for the AGEC. Except as detailed below for the AGEC-S, a single course cannot be used to satisfy more than one AGEC Core Area.
- The AGEC-A and AGEC-B require a minimum of 35* credits and the AGEC-S requires a minimum of 36* credits, however, the AGEC credit count within the total credits for a degree may be lower than these minimums if courses are also applied toward Required Courses or Restricted Electives and the credits are counted in those areas. Awareness Areas and MCCCD's Additional Requirements may also be shared with AGEC Core Areas. Optimizing credits in this way is often recommended because some programs and universities limit transferable credits at 64.

Transfer Credit from Institutions Outside of MCCCD

- Credits transferred from outside of MCCCD must be a grade of "C" (2.0 on a 4.0 scale) or better.
- External courses evaluated either as equivalent to an MCCCD course or as elective credit may be applied toward the minimum credits for degree completion.
- Transfer credit graded pass/fail or pass/no credit may be used to satisfy AGEC requirements if documentation collected by the community college indicates that this was the only grading option available and that the Pass grade ("P") is equivalent to a "C" or better.
- The AGEC (Arizona General Education Curriculum) designations of courses completed at other Arizona public colleges or universities will be applied as listed on AZTransfer's Course Equivalency Guide (CEG) for the semester(s) in which the course(s) were completed. If a transcript evaluation determines there is no MCCCD direct equivalency to a course from another Arizona public college or university, applicability to AGEC and/or associate degree requirements will be based on the source institution's AGEC designation for the semester in which the course was completed.
- Courses from private, out-of-state, and/or online institutions (i.e., outside of the Arizona Transfer System comprised of Arizona's public community colleges, tribal colleges and universities) will be applied toward AGEC and/or associate degree requirements based on the courses' evaluated MCCCD equivalence. If courses are not directly equivalent, the credit may be articulated as a departmental elective, and if deemed appropriate, may have a general education designation applied to the course.
- Credit awarded at a Maricopa Community College for prior learning in non-traditional setting is transferable to the other colleges in the MCCC district but is not necessarily transferable to other colleges and universities. No more than 20 such assessed semester credit hours may be applied toward AGEC.

Completion and Transfer

- Completion of the AGEC with a minimum grade point average of at least 2.0 on a 4.0 scale for Arizona residents and 2.50 for non-residents meets Arizona public university general admission requirements. It does not ensure admission to specific university majors or programs with selective admission processes and/or limited enrollment.
- Students planning to transfer to another college or university are urged to refer to university requirements and academic advisors from both institutions to be certain that all their selected coursework is applicable to the requirements of their intended transfer degree. For some majors, the statewide Common Course matrix, AZTransfer Pathway Guides and/or

For the most current information regarding common policies degree requirements, log on to https://curriculum.maricopa.edu/curriculum/degrees-certificates/associate-degrees/academic-policies

University Transfer Guides posted on the AZTransfer website can also provide some guidance. For appropriate course selection, students should consult with an academic advisor.

AGEC Requirements

Descriptions and definitions of the requirements for each of the three AGECs follow. The following website identifies the courses that apply to the different General Education Core and Awareness Areas within each AGEC: AGEC matrix Courses available for both Areas during a current or upcoming semester can also be found using the "Find a Class" tool on maricopa.edu and on each MCCCD college's website.

*Note that for students pursuing an associate degree with a specific emphasis (for example: Associate in Arts, Emphasis in History, Associate in Arts, Fine Arts, Emphasis in Theatre, Associate in Science, Emphasis in Physics), the AGEC course requirements are usually more prescriptive. Students pursuing a major-specific pathway should consult the Program (Degree) Search at curriculum.maricopa.edu for specific degree and AGEC requirements. Consultation with an academic advisor about course selection is always recommended.

Arizona General Education Curriculum-Arts (AGEC-A) Requirements — Credits

35 (min)*

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

A. Core Areas

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

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

   Requires a course in college mathematics (MAT140, MAT141, MAT142, MAT145, MAT146) or college algebra (MAT150, MAT151, MAT152, MAT155, MAT156) or pre calculus (MAT187) or higher [MA]-approved general education course.
4. Computer/Statistics/Quantitative Applications [CS] . . . **3**
5. Humanities, Arts and Design [HU] . . . **6**

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

   Students are encouraged to choose course work from more than one discipline.
7. Natural Sciences [SQ/SG] . . . **8**

   The lecture courses selected for Natural Sciences must include or be accompanied by the corresponding laboratory courses for a total of four credits each. Credits for lecture and lab components may be combined or each may carry separate credit. At least four credits must be designated as SQ-Science Quantitative. Eight credits of SG-Science General will not satisfy this requirement.

B. Awareness Areas: . . . **0-6**

Some courses may be used to satisfy both a Core Area and one or more Awareness Area(s).

For the most current information regarding common policies degree requirements, log on to https://curriculum.maricopa.edu/curriculum/degrees-certificates/associate-degrees/academic-policies

(See AGEC matrix for current course values.)

a. Cultural Diversity in the United States [C] . . . . . (0-3)

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

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

36* (min)

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

A. Core Areas . . . . .

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

1. First-Year Composition (FYC) **6***

   ENG101 or ENG107 AND . . . . . (3)*

   ENG102 OR ENG108 . . . . . (3)*

2. Literacy and Critical Inquiry [L] **3**

3. Mathematical Applications [MA] . . . . . **(3-5)**

   MAT212 Brief Calculus OR (3)

   MAT213 Brief Calculus OR (4)

   Higher [MA] designated course (3-5)

4. Computer/Statistics/Quantitative Applications [CS] **3**

   CIS105 Survey of Computer Information Systems

5. Humanities, Arts and Design [HU] **6**

   Students are encouraged to choose course work from more than one discipline.

6. Social-Behavioral Sciences [SB] **6**

   ECN211 Macroeconomics AND ECN212 Microeconomics

7. Natural Sciences [SQ/SG] **8**

   The lecture courses selected for Natural Sciences must include or be accompanied by the corresponding laboratory courses for a total of four credits each. Credits for lecture and lab components may be combined or each may carry separate credit. At least four credits must be designated as SQ-Science Quantitative. Eight credits of SG-Science General will not satisfy this requirement.

B. Awareness Areas **0-6**

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

a. Cultural Diversity in the United States [C] . . . . . (0-3)

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

Arizona General Education Curriculum-Science (AGEC-S) Requirements Credits

36 (min)

The AGEC-S requires a minimum of 36 credits (33 if FYC is met by single transfer course)*, however, the AGEC credit count within the total credits for a degree may be lower if courses are also applied toward Required Courses or

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Restricted Electives and the credits are counted in those areas. Credits count once toward the total for the degree. Therefore, the AGEC-S may be met with fewer than 36 credits (fewer than 33 if FYC is met by single transfer course)* within an associate degree provided that all requirements listed below are completed.

A. Core Areas

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

1. First-Year Composition (FYC) . . . **6**

   ENG101 or ENG107 AND . . . (3*)

   ENG102 OR ENG108 . . . (3)*

2. Literacy and Critical Inquiry [L] . . . **(0-3) (0 only if shared with [HU] or [SB])**

   Students are strongly encouraged to choose an [L] course that also has [HU] or [SB] designation or to use CRE101 or COM225 from the Maricopa Additional Requirements Area to satisfy the [L] requirement. It may also have been approved to satisfy one or more Awareness Areas ([C], [G], [H]). (AGEC designations are subject to change. See AGEC matrix for each course's value(s) in the semester it is taken.

3. Mathematical Applications [MA] . . . **4-5**

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

4. Humanities, Arts and Design [HU] . . . **6**

   For the AGEC-S, a single course with both [HU] and [L] designations may satisfy both Areas. Note that some of these courses also have Awareness Areas designations and can be used to satisfy [C], [G] and/or [H] requirement(s) as well as their respective Core Area(s). (AGEC designations are subject to change. See AGEC matrix for each course's value(s) in the semester it is taken.)

5. Social-Behavioral Sciences [SB] . . . **6**

   For the AGEC-S, a single course with both [SB] and [L] designations may satisfy both Areas. Note that some of these courses also have Awareness Areas designations and can be used to satisfy [C], [G] and/or [H] requirement(s) as well as their respective Core Area(s). (AGEC designations are subject to change. See AGEC matrix for each course's value(s) in the semester it is taken.)

6. Natural Sciences [SQ/SG] . . . **8**

   Students must complete eight (8) credits of General Chemistry, University Physics or General Biology for Majors. Consult specific requirements of university transfer major for guidance.

   - [(CHM150 or CHM151) & CHM151LL] OR
   - [CHM150AA or CHM151AA General Chemistry I AND
   - [CHM152 & CHM152LL] or CHM152AA General Chemistry II OR
   - PHY115 or PHY121 University Physics I AND
   - PHY116 or PHY131 University Physics II OR
   - BIO181 OR BIO181XT General Biology (Majors) I & BIO182 or BIO182XT General Biology (Majors) II

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

   Refer to transfer resources, including academic advisement and transfer guides, to select six (6)-ten (10) additional math and/or science credits that meet requirements for selected major.

   - Select Mathematics course(s) [MAT] above Calculus I and/or
   - Computer Science course(s) [CSC] and/or

For the most current information regarding common policies degree requirements, log on to https://curriculum.maricopa.edu/curriculum/degrees-certificates/associate-degrees/academic-policies

- Science courses from the following disciplines: Astronomy, Biology, Botany, Chemistry, Engineering, Environmental Science, Geology, Physical Geography, Physics, Zoology (MCCCD prefixes AST, BIO (except BIO174), CHM, ECE, EEE, ENV, GLG, GPH, and/or PHY)

B. Awareness Areas: **0-6**

Some courses may be used to satisfy both a Core Area and one or more Awareness Area(s).

(See AGEC matrix for current course values.)

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

AGEC-Area Requirements Descriptions/Definitions

First-Year Composition (FYC)

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

Literacy and Critical Inquiry [L]

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

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

Mathematical Studies [MA]

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

Computer/Statistics/Quantitative Applications [CS]

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

Humanities, Arts and Design [HU]

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

Social-Behavioral Sciences [SB]

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

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Natural Sciences [SQ/SG]

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

Awareness Areas

Students must satisfy two Awareness areas: Cultural Diversity in U.S. and either Global Awareness or Historical Awareness. Courses can satisfy a Core area and one or two Awareness areas simultaneously. Therefore, no additional semester credits are required to satisfy the two Awareness areas.

Cultural Diversity in the United States [C]

The contemporary "culture" of the United States involves the complex interplay of many different cultures that exist side by side in various states of harmony and conflict. U.S. history involves the experiences not only of different groups of European immigrants and their descendants, but also of diverse groups of American Indians, Hispanic Americans, African Americans and Asian Americans--all of whom played significant roles in the development of contemporary culture and together shape the future of the United States. At the same time, the recognition that gender, class, and religious differences cut across all distinctions of race and ethnicity offers an even richer variety of perspectives from which to view one. Awareness of cultural diversity and its multiple sources can illuminate the collective past, present, and future and can help to foster greater mutual understanding and respect.

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

Global Awareness [G]

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

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

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

Historical Awareness [H]

The Historical Awareness Area option in the requirements aims to develop a knowledge of the past that can be useful

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

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

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

Maricopa Community Colleges (MCCCD) 2020-2021 Associate in Arts (AA) Degree

Description

The Maricopa County Community College District Associate in Arts (AA) degree requires a minimum of 60 semester credits for the program of study; minimum total credits vary by specific emphasis (for example, Associate in Arts, Emphasis in Psychology). Refer to the Program (Degree) Search at curriculum.maricopa.edu for credit minimums for individual degree programs by emphasis. A minimum grade point average of 2.0 and grades of "C" or higher are required to earn the degree. The AA degree is governed by the MCCCD General Academic Policies for Transfer Degrees. The Associate in Arts degree includes the following components:

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

Purpose of the Degree

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

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

Degree Requirements

The requirements for the Associate in Arts (AA) follow. No versions of the Associate in Arts require fewer than a minimum of 60 credits; however, minimum credits for the AA vary by specific emphasis. Refer to the Program (Degree) Search at curriculum.maricopa.edu for credit minimums by emphasis. The following websites identify the courses that

For the most current information regarding common policies degree requirements, log on to https://curriculum.maricopa.edu/curriculum/degrees-certificates/associate-degrees/academic-policies

apply to the different General Education Core and Awareness Areas: AGEC-A and the AGEC matrix. Courses available for both Areas during a current or upcoming semester can also be found using the "Find a Class" tool on maricopa.edu and on each MCCCD college's website.

Degree Requirements **Credits**

I. Program Prerequisites . . . . . Number Varies

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

II. Required Courses . . . . . **Number Varies**

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

III. Restricted Electives . . . . . **Number Varies**

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

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

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

A. Core Areas: . . . . .

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

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

Requires a course in college mathematics (MAT140, MAT141, MAT142, MAT145, MAT146) or college algebra (MAT150, MAT151, MAT152, MAT155, MAT156) or pre calculus (MAT187) or higher [MA]-approved general education course.

4. Computer/Statistics/Quantitative Applications [CS] **3**
5. Humanities, Arts and Design [HU] **6**

Students are encouraged to choose course work from more than one discipline

6. Social-Behavioral Sciences [SB] **6**

Students are encouraged to choose course work from more than one discipline

7. Natural Sciences [SQ/SG] **8**

The lecture courses selected for Natural Sciences must include or be accompanied by the corresponding laboratory courses for a total of four credits each. Credits for lecture and lab components may be combined or each may carry

For the most current information regarding common policies degree requirements, log on to https://curriculum.maricopa.edu/curriculum/degrees-certificates/associate-degrees/academic-policies

separate credit. At least four credits must be designated as SQ-Science Quantitative. Eight credits of SG-Science General will not satisfy this requirement.

B. Awareness Areas **0-6**

Some courses may be used to satisfy both a Core Area and one or more Awareness Area(s).

(See AGEC matrix for current course values.)

a. Cultural Diversity in the United States [C] . . . . . (0-3)

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

V. MCCCD Additional Requirements **0-6**

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

A. Oral Communication. . . . . (0-3)

COM100 [SB] Introduction to Human Communication OR
COM110 [SB] Interpersonal Communication OR
COM225 [L] Public Speaking OR
COM230 [SB] Small Group Communication (3 credits) OR
COM100AA & COM100AB & COM100AC [SB] (3 credits) OR
COM110AA & COM110AB & COM110AC [SB] (3 credits)

B. Critical Reading . . . . . (0-3)

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

VI. General Electives **0-25**

Select courses 100-level or higher if needed to complete a minimum of 60 semester credits but no more than a total of 64 semester credits, which is the maximum number of credits accepted toward most degree programs at Arizona's public universities. Ideally, students should select courses that meet requirements for their major/area of interest and transfer institution. See General Associate Degree Academic Policies for further details, limitations, and guidelines.

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

Associate in Arts Total Credits: 60-64*

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

For the most current information regarding common policies degree requirements, log on to https://curriculum.maricopa.edu/curriculum/degrees-certificates/associate-degrees/academic-policies

Maricopa Community Colleges (MCCCD) 2020-2021 Associate in Arts, Elementary Education Degree (AAEE)

Description

The Maricopa County Community College District Associate in Arts, Elementary Education (AAEE) degree requires a minimum of 60 semester credits for the program of study. A minimum grade point average of 2.0 and grades of "C" or higher are required to earn the degree. The AAEE degree is governed by the MCCCD General Academic Policies for Transfer Degrees.

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

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

Purpose of the Degree

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

Degree Requirements

The requirements for the Associate in Arts in Elementary Education follow. The following websites identify the courses that apply to the different General Education Core and Awareness Areas: AGEC-A and the AGEC matrix. Courses available for both Areas during a current or upcoming semester can also be found using the "Find a Class" tool on maricopa.edu and on each MCCCD college's website.

Degree Requirements	**Credits**
I. Required Courses	**17**
EDU2221 Introduction to Education	(3)
EDU222 Introduction to the Exceptional Learner	(3)
EDU230 Cultural Diversity in Education	(3)
MAT256 Investigating Quantity: Number, Operations, and Numeration Systems	(4)
MAT257 Investigating Geometry, Probability, and Statistics	(4)
II. Restricted Electives.	**8**

A total of 8 semester credits is required to satisfy the Electives for Arizona Professional Teacher Standards: 3 credits in an additional Education course and 5 credits in Content Area Electives, as outlined below.

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.

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

Recommended:

- EDU110 Education in Film
- EDU220 Introduction to Serving English Language Learners (ELL)

For the most current information regarding common policies degree requirements, log on to https://curriculum.maricopa.edu/curriculum/degrees-certificates/associate-degrees/academic-policies

- EDU236 Classroom Relationships
- EDU/HUM/STO292 The Art of Storytelling

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

Content Area Electives: Select 5 credits from the following . . . . . (5)

- AAA/CPD115 Creating College Success
- ARH+++ Any ARH Art Humanities course(s)
- ART+++ Any ART Art course(s)
- CFS/ECH176 Child Development
- CFS205 Human Development
- CIS+++ Any CIS Computer Information Systems course(s)
- ECN+++ Any ECN Economics course(s)
- BPC+++ Any BPC Business-Personal Computers course(s)
- EED215 Early Learning: Health, Safety, Nutrition and Fitness
- EDU+++ Any EDU Education course(s) (except EDU221, EDU222, EDU230, and EDU250)
- ENG+++ Any ENG English course(s)
- ENH+++ Any ENH English Humanities course(s)
- GCU+++ Any GCU Cultural Geography course(s)
- GPH+++ Any GPH Physical Geography course(s)
- HIS+++ Any HIS History course(s)
- MAT+++ Any MAT Mathematics course(s) 140 or higher (except MAT256 and MAT257)
- MHL+++ Any MHL Music: History/Literature course(s)
- MTC+++ Any MTC Music: Theory/Composition course(s)
- POS+++ Any POS Political Science course(s)
- THE+++ Any THE Theatre course(s)
- THF+++ Any THF Theatre and Film course(s)
- THP+++ Any THP Theatre Performance/Production course(s)
- Any Foreign Language course(s)
- Any Natural Science course(s)

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

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

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

1. First-Year Composition (FYC) **6***
   ENG101 OR ENG107 AND . . . . . (3)*
   ENG102 OR ENG108 . . . . . (3)*
2. Literacy and Critical Inquiry [L]-COM225 Public Speaking **3**

For the most current information regarding common policies degree requirements, log on to https://curriculum.maricopa.edu/curriculum/degrees-certificates/associate-degrees/academic-policies

3. Mathematical Applications [MA] **3-6**

   Requires a course in college mathematics (MAT140, MAT141, MAT142, MAT145, MAT146) or college algebra (MAT150, MAT151, MAT152, MAT155, MAT156) or pre calculus (MAT187) or any other [MA] designated course for which college algebra is a pre-requisite. (Note that MAT256, MAT257, MAT182, and MAT206 are excluded)

4. Computer/Statistics/Quantitative Applications [CS] 3

   BPC110 Computer Usage and Applications OR

   CIS105 Survey of Computer Information Systems

5. Humanities, Arts and Design [HU] **6**

   *NOTE that some of these courses also have Awareness Areas designations (see section 2 below) and can be used to satisfy [G] and/or [H] requirement as well as [HU]. (AGEC designations are subject to change. See AGEC matrix for each course's value(s) in the semester it is taken.)

1) Select one of the following ARH, DAH, MHL or THE courses (3)
   - ARH100 Introduction to Art OR
   - ARH101 Prehistoric through Gothic Art OR
   - ARH102 Renaissance through Contemporary Art OR
   - DAH100 Introduction to Dance OR
   - DAH201 World Dance Studies OR
   - DAH250 Dance in Popular Culture OR
   - MHL140 Survey of Music History OR
   - MHL145 American Jazz and Popular Music OR
   - MHL146 Survey of Broadway Musicals OR
   - MHL153 Rock Music and Culture OR
   - THE111 Introduction to Theatre OR
   - THE220 Modern Drama

AND

1) Select one of the following EDU, ENH or HUM courses (3)
   - EDU/ENH291 Children's Literature (Recommended) OR
   - ENH110 Introduction to Literature OR
   - ENH241 American Literature Before 1860 OR
   - ENH242 American Literature After 1860 OR
   - HUM250 Ideas and Values in the Humanities OR
   - HUM251 Ideas and Values in the Humanities

6. Social-Behavioral Sciences [SB] 6

   Note that some of these courses also have Awareness Areas designations (see section 2 below) and can be used to satisfy [G] and/or [H] requirement as well as [SB]. (AGEC designations are subject to change. See AGEC matrix for each course's value(s) in the semester it is taken.)

1) Select one of the following US History/Government courses* (3)

   These courses satisfy the United States Constitution requirement for state teacher certification.
   - HIS103 United States History to 1865 OR
   - POS110 American National Government OR
   - GCU/POS113 United States and Arizona Social Studies

2) Select one of the following CFS, ECH, GCU, ECN, HIS or PSY courses (3)
   - CFS205 Human Development OR
   - ECH/CFS176 Child Development OR
   - GCU121 World Geography I: Eastern Hemisphere OR
   - GCU122 World Geography II: Western Hemisphere OR

For the most current information regarding common policies degree requirements, log on to https://curriculum.maricopa.edu/curriculum/degrees-certificates/associate-degrees/academic-policies

- ECN211 Macroeconomic Principles OR
- ECN212 Microeconomic Principles OR
- HIS104 United States History 1865 to Present OR
- PSY101 Introduction to Psychology

7. Natural Sciences [SQ, SG] 8

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

1) Life Sciences: Select four (4) credits of SQ in Biology (BIO) from the following courses. (4)
   - BIO100 Biology Concepts
   - BIO101 Introduction to Human Genetics for Non-Majors
   - BIO102 Cells to Systems: An Introduction to Biology for Non-Majors
   - BIO105 Environmental Biology
   - BIO107 Introduction to Biotechnology
   - BIO108 Plants and Society
   - BIO156 Introductory Biology for Allied Health
   - BIO156XT Introductory Biology for Allied Health
   - BIO181 General Biology (Majors) I
   - BIO241 Human Genetics AND
2) Physical Sciences or Earth/Space Sciences: Select four (4) credits of SQ or SG from one of the following prefixes(4
   - AGS, ASM, AST, CHM, GPH, GLG, PHS, or PHY

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

B. Awareness Areas 0-3

a. Cultural Diversity in the United States [C] . . . . . (0)

Met by EDU222 and EDU230 in Required Courses

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

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

IV. MCCCD Additional Requirements 0-3

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

A. Oral Communication . . . . . (0)

Met by COM225 in Required Courses.

B. Critical Reading . . . . . .(0-3)

Students may demonstrate proficiency through assessment.

CRE101 [L] Critical Reading OR equivalent as indicated by assessment

Total: 60-68*

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

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

For the most current information regarding common policies degree requirements, log on to https://curriculum.maricopa.edu/curriculum/degrees-certificates/associate-degrees/academic-policies

Maricopa Community Colleges (MCCCD) 2020-2021 Associate in Arts, Fine Arts (AAFA)-Art, Dance, Music, Theatre

Description

The Maricopa County Community College District Associate in Arts, Fine Arts (AAFA) degree requires a minimum of 60 semester credits for the program of study; however, minimum total credits for the AAFA vary by specific emphasis (Art, Dance, Music, Musical Theatre, Theatre). Refer to the Program (Degree) Search at curriculum.maricopa.edu for credit minimums for individual degree programs by emphasis. A minimum grade point average of 2.0 and grades of "C" or higher are required to earn the degree. The AA-FA degree is governed by the MCCCD General Academic Policies for Transfer Degrees.

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

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

Purpose of the Degree

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

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

Degree Requirements

The requirements for the Associate in Arts, Fine Arts (AAFA) follow. No versions of the AAFA require fewer than a minimum of 60 credits; however, minimum total credits for the AAFA vary by specific emphasis (Art, Dance, Music, Musical Theatre, Theatre). Refer to the Program (Degree) Search at curriculum.maricopa.edu for credit minimums by emphasis. The following websites identify the courses that apply to the different General Education Core and Awareness Areas: AGEC-A and the AGEC matrix. Courses available for both Areas during a current or upcoming semester can also be found using the "Find a Class" tool on maricopa.edu and on each MCCCD college's website.

Degree Requirements **Credits**

I. Program Prerequisites . . . . . Number Varies

Program prerequisites for the Associate in Arts, Fine Arts degree vary by specific emphasis (Art, Dance, Music, Musical Theatre, Theatre). Refer to the Program (Degree) Search at curriculum.maricopa.edu for specific courses and credit minimums by emphasis.

II. Required Courses . . . . . Number Varies

Required (major-specific) courses for the Associate in Arts, Fine Arts degree vary by specific emphasis (Art, Dance,

For the most current information regarding common policies degree requirements, log on to https://curriculum.maricopa.edu/curriculum/degrees-certificates/associate-degrees/academic-policies

Music, Musical Theatre, Theatre). Refer to the Program (Degree) Search at curriculum.maricopa.edu for specific courses and credit minimums by emphasis.

III. Restricted Electives. . . . . Number Varies

Restricted electives for the Associate in Arts, Fine Arts degree vary by specific emphasis (Art, Dance, Music, Musical Theatre, Theatre). Refer to the Program (Degree) Search at curriculum.maricopa.edu for specific courses and credit minimums by emphasis.

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

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

A. Core Areas: . . . . .

Courses required to meet Core Areas vary by emphasis (Art, Dance, Music, Musical Theatre, Theatre). Refer to the Program (Degree) Search at curriculum.maricopa.edu for specific course requirements.

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

1. First-Year Composition [FYC] **6***
   ENG101 OR ENG107 . . . . . (3)*
   AND ENG102 OR ENG108 . . . . . (3)*
2. Literacy and Critical Inquiry [L] **3**
3. Mathematical Applications [MA] **3-6**
   Requires a course in college mathematics (MAT140, MAT141, MAT142, MAT145, MAT146) or college algebra (MAT150, MAT151, MAT152, MAT155, MAT156) or pre calculus (MAT187) or higher [MA]-approved general education course.
4. Computer/Statistics/Quantitative Applications [CS] **3**
5. Humanities, Arts and Design [HU] **6**
   Major specific pathways for the AAFA will specify courses to be taken to fulfill the Humanities, Arts and Design area. Students should refer to their specific pathway for courses to meet this requirement.
6. Social-Behavioral Sciences [SB] **6**
   Students are encouraged to choose course work from more than one discipline.
7. Natural Sciences [SQ/SG] **8**
   The lecture courses selected for Natural Sciences must include or be accompanied by the corresponding laboratory courses for a total of four credits each. Credits for lecture and lab components may be combined or each may carry separate credit. At least four credits must be designated as SQ-Science Quantitative. Eight credits of SG-Science General will not satisfy this requirement.

B. Awareness Areas **0-6**

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

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

V. MCCCD Additional Requirements. 0-6

For the most current information regarding common policies degree requirements, log on to https://curriculum.maricopa.edu/curriculum/degrees-certificates/associate-degrees/academic-policies

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

A. Oral Communication . . . . . (0-3)

- **Refer to emphasis area (Art, Dance, Music, Musical Theatre, Theatre) for specific COM course required from the following:** COM100 [SB] Introduction to Human Communication OR
- COM110 [SB] Interpersonal Communication OR
- COM225 [L] Public Speaking OR
- COM230 [SB] Small Group Communication (3 credits) OR
- COM100AA & COM100AB & COM100AC [SB] (3 credits) OR
- COM110AA & COM110AB & COM110AC [SB] (3 credits)

B. Critical Reading . . . . . (0-3)

Students may demonstrate proficiency through assessment.

CRE101 [L] Critical Reading OR equivalent as indicated by assessment

VI. General Electives 0-25

Select courses 100-level or higher if needed to complete a minimum of 60 semester credits but no more than a total of 64 semester credits, which is the maximum number of credits accepted toward most degree programs at Arizona's public universities. Ideally, students should select courses that meet requirements for their major/area of interest and transfer institution. See General Associate Degree Academic Policies for further details, limitations, and guidelines.

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

MINIMUM TOTAL CREDITS REQUIRED*

AAFA, Emphasis in Art.....60
AAFA, Emphasis in Dance.....62
AAFA, Emphasis in Music.....64
AAFA, Emphasis in Musical Theatre.....65
AAFA, Emphasis in Theatre.....60

Total: 60-64*

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

Maricopa Community Colleges (MCCCD) 2020-2021 Associate in Science, (AS) Degree

Description

The Maricopa County Community College District Associate in Science (AS) degree requires a minimum of 60 semester credits for the program of study; minimum total credits for vary by specific emphasis (for example, Associate in Science, Emphasis in Physics). Refer to the Program (Degree) Search at curriculum.maricopa.edu for credit minimums for individual degree programs by emphasis. A minimum grade point average of 2.0 is required to earn the degree. The AS degree is governed by the MCCCD General Academic Policies for Transfer Degrees.

For the most current information regarding common policies degree requirements, log on to https://curriculum.maricopa.edu/curriculum/degrees-certificates/associate-degrees/academic-policies

The Associate in Arts degree includes the following components:

I. Program Prerequisites (if applicable, for versions with an emphasis only)
II. Required Courses (for versions with an emphasis only)
III. Restricted Electives (for versions with an emphasis only)
IV. Arizona General Education Curriculum for Science (AGEC-S)
V. MCCCD Additional Requirements (Oral Communication and Critical Reading)
VI. General Electives (if needed to reach minimum credits for degree)

Purpose of the Degree

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

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

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

Special Academic Policies that Govern the Associate in Science Degree

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

Degree Requirements

The requirements for the Associate in Science follow. All versions of the Associate in Science require at least 60 credits; for major-specific pathways within the degree, prescribed courses and minimum credits for categories within the degree, as well as the total, vary. Refer to the Program (Degree) Search at curriculum.maricopa.edu for credit minimums for major-specific pathways within the degree. The following websites identify the courses that apply to the different General Education Core and Awareness Areas: AGEC-S and the AGEC Matrix. Courses available for both Areas during a current or upcoming semester can also be found using the "Find a Class" tool on each MCCCD college's website.

Degree Requirements **Credits**

I. Program Prerequisites. . . . . . Number varies

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

II. Required Courses. . . . . . **Number varies**

Required (major-specific) courses for the Associate in Science degree vary by specific emphasis, and are not

For the most current information regarding common policies degree requirements, log on to https://curriculum.maricopa.edu/curriculum/degrees-certificates/associate-degrees/academic-policies

required for theversion of the degree without a specific emphasis. Refer to the Program (Degree) Search at curriculum.maricopa.edu for specific courses and credit minimums by emphasis.

III. Restricted Electives. . . . . Number varies

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

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

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

A. Core Areas:

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

1. First-Year Composition [FYC] **6***
   ENG101 OR ENG107 . . . . . .(3)*
   AND ENG102 OR ENG108 . . . . . .(3)*
2. Literacy and Critical Inquiry [L] . . . . . **0-3** (0 only if shared with HU or SB)

   Students are strongly encouraged to choose an [L] course that also has [HU] or [SB] designation or to use CRE101 or COM225 from the Maricopa Additional Requirements Area to satisfy the [L] requirement. It may also have been approved to satisfy one or more Awareness Areas ([C], [G], [H]). (AGEC designations are subject to change. See AGEC matrix for each course's value(s) in the semester it is taken.)
3. Mathematical Applications [MA] **4-5**

   Requires the first semester of calculus courses designed for scientists and engineers (MAT220 or MAT221) or any other [MA] designated course for which Calculus I is a pre-requisite
4. Humanities, Arts and Design [HU] **6**

   For the AGEC-S, a single course with both [HU] and [L] designations may satisfy both Areas. Note that some of these courses also have Awareness Areas designations and can be used to satisfy C], [G] and/or [H] requirement(s) as well as their respective Core Area(s). (AGEC designations are subject to change. See AGEC matrix for each course's value(s) in the semester it is taken.)
5. Social-Behavioral Sciences [SB] **6**

   For the AGEC-S, a single course with both [SB] and [L] designations may satisfy both Areas. Note that some of these courses also have Awareness Areas designations and can be used to satisfy [C], [G] and/or [H] requirement(s) as well as their respective Core Area(s). (AGEC designations are subject to change. See AGEC matrix for each course's value(s) in the semester it is taken.)
6. Natural Sciences [SQ/SG] **8**

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

For the most current information regarding common policies degree requirements, log on to https://curriculum.maricopa.edu/curriculum/degrees-certificates/associate-degrees/academic-policies

PHY115 or PHY121 University Physics I AND
PHY116 or PHY131 University Physics II OR
BIO181 or BIO181XT General Biology (Majors) I AND
BIO182 or BIO182XT General Biology (Majors) II

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

Refer to transfer resources, including academic advisement and transfer guides, to select six (6)-ten (10) additional math and/or science credits that meet requirements for selected major.

Select Mathematics course(s) [MAT] above Calculus I and/or

Computer Science course(s) [CSC] and/or

Science courses from the following disciplines: Astronomy, Biology, Botany, Chemistry, Engineering, Environmental Science, Geology, Physical Geography, Physics, Zoology (MCCCD prefixes AST, BIO (except BIO174), CHM, ECE, EEE, ENV, GLG, GPH, and/or PHY)

B. Awareness Areas **0-6**

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

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

V. MCCCD Additional Requirements. 0-6

As noted below, courses in this area may be used to satisfy both an MCCCD requirement and an AGEC-S Core Area requirement.

A. Oral Communication . . . . . (0-3)

- COM100 [SB] Introduction to Human Communication OR
- COM110 [SB] Interpersonal Communication OR
- COM225 [L] Public Speaking OR
- COM230 [SB] Small Group Communication (3 credits) OR
- COM100AA & COM100AB & COM100AC [SB] (3 credits) OR
- COM110AA & COM110AB & COM110AC [SB] (3 credits)

B. Critical Reading . . . . . (0-3)

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

VI. General Electives 0-28

Select courses 100-level or higher if needed to complete a minimum of 60 semester credits but no more than a total of 64 semester credits, which is the maximum number of credits accepted toward most degree programs at Arizona's public universities. Ideally, students should select courses that meet requirements for their major/area of interest and transfer institution. See General Associate Degree Academic Policies for further details, limitations, and guidelines.

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

For the most current information regarding common policies degree requirements, log on to https://curriculum.maricopa.edu/curriculum/degrees-certificates/associate-degrees/academic-policies

aztransfer.com, maricopa.edu/transfer/partners, as well as those of individual universities. For appropriate course selection, students should consult with an academic advisor.

Total: 60-64*

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

Maricopa Community Colleges (MCCCD) 2020-2021 Associate in Business, General Requirements (ABUS-GR) Degree

Description

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

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

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

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

Purpose of the Degree

The Associate in Business General Requirements (ABUS-GR) degree is designed for students who plan to transfer to four-year colleges and universities. In general, the components of this degree meet requirements for the various business majors (except Computer Information Systems) at Arizona's public universities. Computer Information Systems majors should follow the Associate in Business Special Requirements (ABUS-SR) pathway instead. Generally, the degree transfers as a block without loss of credit to Arizona's public universities and other institutions with district-wide articulation agreements.

Special Academic Policies that Govern the ABUS-GR Degree

- The ABUS-GR does not include any MCCCD Special Requirements for Oral Communication and/or Critical Reading like the other Associate degrees. (However, some university programs have a speech requirement; consult your academic advisor or transfer guide to verify the specifics for your program.)
- A single course can be used to satisfy multiple areas within the degree simultaneously simultaneously (AGEC-B Core Area and/or Awareness Area(s), Required Courses (Common Lower Division Requirements), and/or Restricted Electives (Business Electives)). Credits are counted once toward the total for the degree.

For the most current information regarding common policies degree requirements, log on to https://curriculum.maricopa.edu/curriculum/degrees-certificates/associate-degrees/academic-policies

Degree Requirements

The 62-72 semester credits required for the Associate in Business General Requirements follow. The following websites identify the courses that apply to the different General Education Core and Awareness Areas: AGEC-B and the AGEC Matrix. Courses available for both Areas during a current or upcoming semester can also be found using the "Find A Class" tool on each MCCCD college's website.

Degree Requirements **Credits**

I. Required Courses 21-25

Accounting . . . . . (6-9)

- ACC111 Accounting Principles AND
- ACC230 Uses of Accounting Information I AND
- ACC240 Uses of Accounting Information II OR
- ACC211 Financial Accounting AND
- ACC212 Managerial Accounting OR
- ACC111 Accounting Principles I AND
- ACC112 Accounting Principles II AND
- ACC212 Managerial Accounting

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

- ECN211 [SB] Macroeconomic Principles.....(3)
- ECN212 [SB] Microeconomic Principles.....(3)
- GBS205 Legal, Ethical, and Regulatory Issues in Business.....(3)
- GBS221 Business Statistics..... (3)
- Quantitative Methods..... (3-4)

  GBS220 Quantitative Methods in Business OR

  MAT217 or MAT218 Mathematical Analysis for Business

NOTE: Students planning to attend ASU W. P. Carey School of Business will be required to take MAT217 or MAT218

II. Restricted Electives 0-6

Select two courses (6 credits) from the following options:

Some courses may be used to satisfy both Restricted Elective and Arizona General Education Curriculum (AGEC) requirements, as indicated in [brackets] below, but two courses must be completed. AGEC designations are subject to change. See AGEC matrix for each course's value(s) in the semester it is taken.

- GBS151 Introduction to Business (Recommended).....(3)
- CIS114DE Excel Spreadsheet.....(3)
- CIS133DA Internet/Web Development Level I.....(3)
- CIS162AD C#: Level I.....(3)
- GBS110 Human Relations in Business and Industry OR
- MGT251 Human Relations in Business.....(3)
- GBS233 **[L]** Business Communication.....(3)
- GBS220 Quantitative Methods in Business (If course used to satisfy Required Courses, it can not be used to satisfy Restricted Electives.)
- IBS101 **[G]** Introduction to International Business.....(3)
- MGT253 Owning and Operating a Small Business.....(3)
- REA179 Real Estate Principles I.....(3)
- REA180 Real Estate Principles II.....(3)

For the most current information regarding common policies degree requirements, log on to https://curriculum.maricopa.edu/curriculum/degrees-certificates/associate-degrees/academic-policies

- MKT271 Principles of Marketing.....(3)
- PAD100 21st Century Public Policy and Service.....(3)
- SBU200 **[SB,G]** Society and Business.....(3)

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

The AGEC-B requires a minimum of 35 credits (32 if FYC is met by single transfer course)*, however, Required and Restricted elective courses may also meet AGEC-B requirements and credits count once toward the total for the degree. Therefore, the AGEC-B may be met with fewer than 35 (fewer than 32 if FYC is met by single transfer course)* credits as long as all requirements listed in this section (III) are completed.

A. Core Areas:

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

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

(Note: Students planning to attend ASU W.P. Carey will be required to take COM225.)

3. Mathematical Applications [MA] . . . . . **(3-5)**
   MAT212 Brief Calculus OR (3)
   MAT213 Brief Calculus OR (4)
   Higher [MA] designated course (3-5)
4. Computer/Statistics/Quantitative Applications [CS] **3**
   CIS105 Survey of Computer Information Systems
5. Humanities, Arts and Design [HU] **6**
   Students are encouraged to choose course work from more than one discipline.
6. Social-Behavioral Sciences [SB] **0**
   Met by Required Courses ECN211 AND ECN212
7. Natural Sciences [SQ/SG] **8**

   The lecture courses selected for Natural Sciences must include or be accompanied by the corresponding laboratory courses for a total of four credits each. Credits for lecture and lab components may be combined or each may carry separate credit. At least four credits must be designated as SQ-Science Quantitative. Eight credits of SG-Science General will not satisfy this requirement.

B. Awareness Areas **0-6**

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

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

Note: Students transferring to ASU in Accountancy should take two of the following courses: Sociology with [SB] value, Psychology with [SB] value, and COM230 or COM225. If students do not take these prior to transfer, they may need to take additional hours to meet ASU requirements.

For the most current information regarding common policies degree requirements, log on to https://curriculum.maricopa.edu/curriculum/degrees-certificates/associate-degrees/academic-policies

IV. General Electives 0-12

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

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

Total: 62-72*

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

Maricopa Community Colleges (MCCCD) 2020-2021 Associate in Business, Special Requirements (ABUS-SR) Degree

Description

The Maricopa County Community College District Associate in Business, Special Requirements (ABUS-SR) degree requires a minimum of 62 semester credits for the program of study. A minimum grade point average of 2.0 and grades of "C" or higher are required to earn the degree. This degree provides the first two years of a four-year curriculum for students who wish to pursue Computer Information Systems majors at Arizona`s public universities. With a bachelor's degree, students may pursue a number of careers, including but not limited to accountancy, business administration, business data analytics, computer information systems, economics, entrepreneurship, finance, marketing, management, retail management, and supply chain management. The Associate in Business-Special Requirements degree is governed by the MCCCD General Academic Policies for Transfer Degrees.

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

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

Purpose of the Degree

The Associate in Business Special Requirements (ABUS-SR) degree is designed for students who plan to transfer to four-year colleges and universities. In general, the components of this degree meet requirements for Business' Computer Information Systems majors at Arizona's public universities.. Other Business majors should follow the Associate in Business General Requirements (ABUS-GR) pathway instead. Generally, the degree transfers as a block without loss of credit to Arizona's public universities and other institutions with district-wide articulation agreements.

For the most current information regarding common policies degree requirements, log on to https://curriculum.maricopa.edu/curriculum/degrees-certificates/associate-degrees/academic-policies

Special Academic Policies that Govern the ABUS-SR Degree

- The ABUS-SR does not include any MCCCD Special Requirements for Oral Communication and/or Critical Reading like the other associate degrees. (However, some university programs have a speech requirement; consult your academic advisor or transfer guide to verify the specifics for your program.)
- A single course can be used to satisfy multiple areas within the degree simultaneously (AGEC-B Core Area and/or Awareness Area(s), Required Courses (Common Lower Division Requirements), and/or Restricted Electives (Business Electives)). Credits are counted once toward the total for the degree.

Degree Requirements

The 62-71 semester credits required for the Associate in Business Special Requirements follow. The following websites identify the courses that apply to the different General Education Core and Awareness Areas: AGEC-B and the AGEC Matrix. Courses available for both Areas during a current or upcoming semester can also be found using the "Find A Class" tool on each MCCCD college's website.

Degree Requirements **Credits**

I. Required Courses 27-31

Accounting . . . . . (6-9)

- ACC111 Accounting Principles AND
- ACC230 Uses of Accounting Information I AND
- ACC240 Uses of Accounting Information IImOR
- ACC211 Financial Accounting AND
- ACC212 Managerial Accounting OR
- ACC111 Accounting Principles I AND
- ACC112 Accounting Principles II AND
- ACC212 Managerial Accounting

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

- ECN211 [SB] Macroeconomic Principles.....(3)
- ECN212 [SB] Microeconomic Principles.....(3)
- GBS205 Legal, Ethical, and Regulatory Issues in Business.....(3)
- GBS221 Business Statistics.....(3)
- CIS162AD C#: Level 1.....(3)
- CIS250 Management of Information Systems.....(3)
- Quantitative Methods.....(3-4)
  - GBS220 Quantitative Methods in Business OR
  - MAT217 or MAT218 Mathematical Analysis for Business

Note: Students planning to attend ASU W. P. Carey School of Business will be required to take MAT217 or MAT218

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

The AGEC-B requires a minimum of 35 credits (32 if FYC is met by single transfer course)*, however, Required and Restricted elective courses may also meet AGEC-B requirements and credits count once toward the total for the degree. Therefore, the AGEC-B may be met with fewer than 35 credits (fewer than 32 if FYC is met by single transfer course)* as long as all requirements listed in this section (II) are completed.

For the most current information regarding common policies degree requirements, log on to https://curriculum.maricopa.edu/curriculum/degrees-certificates/associate-degrees/academic-policies

A. Core Areas . . . . .

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

1. First-Year Composition [FYC] **6***

   ENG101 OR ENG107 . . . . . (3)*

   AND ENG102 OR ENG108 . . . . . (3)*

2. Literacy and Critical Inquiry [L] **3**

(Note: Students planning to attend ASU W.P. Carey will be reqiured to take COM225.)

3. Mathematical Applications [MA] **3-5**

   MAT212 Brief Calculus OR (3)

   MAT213 Brief Calculus OR (4)

   Higher [MA] designated course (3-5)

4. Computer/Statistics/Quantitative Applications [CS] **3**

   CIS105 Survey of Computer Information Systems

5. Humanities, Arts and Design [HU] 6

   Students are encouraged to choose course work from more than one discipline.

6. Social-Behavioral Sciences [SB] 0

   Met by Required Courses ECN211 AND ECN212

7. Natural Sciences [SQ/SG] **8**

   The lecture courses selected for Natural Sciences must include or be accompanied by the corresponding laboratory courses for a total of four credits each. Credits for lecture and lab components may be combined or each may carry separate credit. At least four credits must be designated as SQ-Science Quantitative. Eight credits of SG-Science General will not satisfy this requirement.

B. Awareness Areas **0-6**

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

a. Cultural Diversity in the United States [C] . . . . . (0-3)

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

Note: Students transferring to ASU in Accountancy should take two of the following courses: Sociology with [SB] value, Psychology with [SB] value, and COM230 or COM225. If students do not take these prior to transfer, they may need to take additional hours to meet ASU requirements.

III. General Electives 0-6

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

Maricopa courses and external courses evaluated as Maricopa equivalents, departmental electives (e.g., HISELC for a history elective), or general electives (GENELC) that are numbered 100 level or higher, and completed with a grade of "C" or higher, may be applied in the elective area, regardless of potential transferability to other institutions. It is

For the most current information regarding common policies degree requirements, log on to https://curriculum.maricopa.edu/curriculum/degrees-certificates/associate-degrees/academic-policies

recommended, however, that students planning to transfer to a baccalaureate-granting institution meet these general elective requirements with courses that are transferable and applicable to their intended university degree. Transfer advisement information is accessible on the following websites: aztransfer.com, curriculum.maricopa.edu, as well as those of individual universities. For appropriate course selection, students should consult with an academic advisor.

Total: 62-71*

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

Maricopa Community Colleges (MCCCD) 2020-2021 Associate in General Studies (AGS) Degree and General Education Requirements

Description

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

I. General Education (minimum of 38 credits)
   Core curriculum (requires a grade of "C" or better)
   Distribution courses (requires a grade of "D" or better)
II. General Electives (enough additional courses numbered 100 or above, passed with a grade of "D" or better, to bring total credits to at least 60)

Purpose of the Degree

The Associate in General Studies (AGS) degree is recommended for students whose educational goals require flexibility. The AGS allows students to apply any course numbered 100 or above, including some that are not transferable to a state university, toward the credits required for the degree. Therefore, for students who intend to transfer to another college or university in the future to pursue a bachelor's degree, this degree may be less appropriate than other Associate degrees offered (Associate in Arts, Associate in Business, Associate in Science, and all major-specific pathway map versions of these degrees) by the Maricopa Community Colleges.

Academic Policies that Govern the Associate in General Studies Degree:

- The graduation policies within the general catalog must be satisfied.
- A single course can simultaneously count towards a Core Area and a Distribution requirement. Courses that meet this criterion are bold print and underscored in the Core areas and Distribution areas (on the course list at the conclusion of this document). For example, CRE101 may be used to satisfy both the Literacy and Critical Inquiry requirement [L] of Distribution area and the Core Curriculum's Critical Reading area. While multiple requirements can be met with a single course, the credits are only counted one time toward the required minimum for the degree. A course cannot satisfy more than one Core area, even if it is approved for more than one Core area. A course cannot satisfy more than one Distribution area, even if it is approved for more than one Distribution area.
- Credits transferred from outside of MCCCD must be at a grade of "C" (2.0 on a 4.0 scale) or better. Transfer credit graded pass/fail or pass/no credit may be transferred if documentation collected by the community college indicates that this was the only grading option available to the student and that the Pass grade ("P") is equivalent to a "C" or better.
- Completion of the AGS with a minimum Grade Point Average of at least 2.0 on a 4.0 scale for Arizona residents and 2.50 for non-residents meets Arizona public university general admission requirements. However, meeting all AGS minimums does not ensure admission to specific university majors or programs with selective admission processes and/or limited

For the most current information regarding common policies degree requirements, log on to https://curriculum.maricopa.edu/curriculum/degrees-certificates/associate-degrees/academic-policies

enrollment. Furthermore, because the AGS is not designed to align with the requirements for bachelors degrees, not all credits may be transferable and students may have deficiencies in lower division (100- and 200-level) courses for a particular major.

Summary of Degree Requirements:

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

I. MCCCD General Education **34-47***

A. **Core Areas**. 12-18

1. First-Year Composition (FYC) 6*

ENG101 or ENG107 AND

ENG102 OR ENG108

2. Mathematics 3-6

3. Computer Usage 1

4. Oral Communication. 3

- **COM100** Introduction to Human Communication OR
- **COM110** Interpersonal Communication OR
- **COM225** Public Speaking OR
- **COM230** Small Group Communication (3 credits) OR
- **COM100AA & COM100AB & COM100AC** (3 credits) OR
- **COM110AA & COM110AB & COM110AC** (3 credits)

5. Critical Reading 0-3

Students may demonstrate proficiency through assessment. **CRE101** Critical Reading OR equivalent as indicated by assessment.

Distribution Area **22-29**

1. Humanities, Arts and Design 9

Students are encouraged to choose course work from more than one discipline.

2. Social-Behavioral Sciences 6-9

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

3. Natural Sciences 7-8

Two lecture courses and one corresponding laboratory course are to be selected. Credits for lecture and lab components may be combined or each may carry separate credit. For appropriate course selection students should consult with an academic advisor.

4. Literarcy and Critical Inquiry 0-3

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

II. General Electives **13-26**

Select additional courses 100-level or higher to complete a minimum of 60 semester credits but no more than a total of 64 semester credits.

For the most current information regarding common policies degree requirements, log on to https://curriculum.maricopa.edu/curriculum/degrees-certificates/associate-degrees/academic-policies

Associate in General Studies Total Credits: **60-64**

All courses listed meet AGS requirements as specified. Courses in *Purple Italic Underline* also meet Arizona General Education Curriculum AGEC requirements. Courses in **bold print and underscored** simultaneously count towards a Core Area and a Distribution requirement.

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* or Equivalent as indicated by assessment

Mathematics (3 credits)

MAT Mathematics 112, 114, 115, 120, 121, 122, 126, *140, 141, 142, 145, 146, 150, 150 & 182, 151, 151 & 182, 152, 152 & 182, 155, 155 & 182, 156, 156 & 182, 172, 187,* 206, *212, 213, 217, 218, 220, 221, 225, 227, 230, 231, 240, 241,* 256, 257, *261, 262, 276, 277,* Equivalent course/Satisfactory completion of a higher level Mathematics course.

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, 175, 177, 183, 283, 283AA, 289

AJS Administration of Justice Studies 205

AMS Automated Manufacturing System *150*

ARC Architecture 243, 244, 245

ART Art 100, 169, 170, 173, 175, 177, 179, any 180++ course, 183, 283, 289

BIO Biology *283*

BPC Business-Personal Computers Any BPC Course(s), including *110*

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

CSC Computer Science Any CSC Course(s), including *100AA, 100AB, 110, 110AA, 110AB, 120, 150, 150AA, 180, 180AA, 180AB, 181, 181AA, 181AB, 182, 182AA, 205, 205AA, 205AB, 205AC, 205AD, 283* (and except 200, 200AA, 200AB, 210, 210AA, 210AB)

CTR Court Reporting 101, 102

DFT Drafting Technology *105AA***,* 251, 254AA, 256AA ***Must be taken with CSC100AA or AB to meet AGEC value*

ECH Early Childhood Education 238

EEE Electrical Engineering *120*

For the most current information regarding common policies degree requirements, log on to https://curriculum.maricopa.edu/curriculum/degrees-certificates/associate-degrees/academic-policies

ELE Electronic 131, 181, 241, 243, 245

ELT Electronic Technology 131, *241,* 243

ENG English 100AE

FON Food & Nutrition 100

GBS General Business *221*

GIS Geographic Information Science *205, 211*

GPH Physical Geography *220*

HRM Hotel Restaurant Management 126

JRN Journalism 133

LAS Paralegal Studies 229

MAT Mathematics *206*

MET Manufacturing Technology 264

MTC Music Theory/Compositio *180,* 191

NET Networking Technology 181

OAS Office Automation Systems 111AA /111AB /113 /119 /130DK

PSY Psychology *230*

SBS Small Business 211

SWU Social Work *225*

TVL Travel Agent Technology 203

VPT Video Production Technology 106

GENERAL EDUCATION DISTRIBUTION AREAS (28-29 credits)

Humanities, Arts and Design (9 credits)

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

AHU Arabic Humanities *245*

AIS American Indian Studies *213*

AJS Administration of Justice Studies *123*

ARH Art Humanities Any ARH Course(s), including *100, 101, 102,* 109, 110, 112, *115, 118, 131, 145, 201, 203, 204, 217,* 216, 240, 250

ASB Anthropology *211, 214, 220, 222, 223, 253*

CCS Chicana and Chicano Studies *101*

COM Communication *241*

CON Construction *101 (formerly CNS101)*

DAH Dance Humanities *100, 101, 201, 250, 255*

For the most current information regarding common policies degree requirements, log on to https://curriculum.maricopa.edu/curriculum/degrees-certificates/associate-degrees/academic-policies

EDU Education *291, 292, 294*

ENG English *200, 213, 218*

ENH English Humanities Any ENH Course(s), including *110*, 111, *112, 113, 114,* 117, 130, *140AA, 190, 201, 202, 204, 206, 214, 221, 222, 230, 231, 232, 235, 241, 242, 245, 251, 252,* 253, *254, 255, 256, 259, 260, 275,* 277, 277AA-AK, *280, 284, 285, 291, 294, 295* (and except 250)

FRE French *265*

GST Game Studies 202

HCR Health Care Related *210*

HIS History *101, 102, 103, 108, 110, 111, 113, 114, 203, 212, 251, 241,* 253, 254, *252, 275*

HON Honors *190*

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

INT Interior Design *115, 120*

LAT Latin *201, 202*

MHL Music: History/Literature *140, 143, 145, 146, 153, 155, 194, 204, 241, 242, 295*

PHI Philosophy Any PHI Course(s), including *101, 102, 103, 104, 105,* 106, 113, *201, 212, 213*, 214, 215, 233AC, *216, 218, 224, 233AA, 233AB, 234AC, 244, 245,* 250, *251,* 282AA-AC

REL Religious Studies Any REL Course(s), *100, 101, 151, 200, 202, 203, 205, 206, 207, 210*, 211, *212,* 213, 214, 218, 223, *225,* 230, *240, 244,* 245, 248, *250, 251, 271,* 277, 292, 294, 295, 282AA-AC, *290, 291*

SLC Studies in Language & Culture *201, 202*

SPA Spanish *241, 242, 265, 266*

SPH Spanish Humanities *241, 245*

SSH Sustainability/Social Sciences and Humanities *111*

STO Storytelling *292, 294*

SWU Social Work *183*

TCM Telecommunications *107*

TEC Textiles and Clothing *105*

THE Theater *111, 220*

THF Theatre and Film *205, 206, 210*

THP Theater/Performance/Production *241*

WST Women's Studies *209, 284, 285, 290*

For the most current information regarding common policies degree requirements, log on to https://curriculum.maricopa.edu/curriculum/degrees-certificates/associate-degrees/academic-policies

Social-Behavioral Sciences (6-9 credits)

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

AFR African American Studies *202, 203, 204*

AIS American Indian Studies *101, 140, 141,* 160

AJS Administration of Justice Studies *101,* 119, *200, 225,* 258, 259, *270*

ASB Anthropology *100, 102, 202, 211, 222, 223, 226, 230, 235, 252*

ASM Anthropology *104, 275*

BHS Behavioral Health Services Technology *150*

CCS Ethnic Relations *202*

CFS Child/Family Studies *112, 157, 159, 176, 205, 235, 259*

COM Communication *100, 100AA & 100AB & 100AC, 110, 110AA & 110AB & 110AC, 163, 230, 250, 263*

ECH Early Childhood Education *176*

ECN Economics *160, 211, 212, 213, 250*

EDU Education *221, 222*

EED Early Education *200, 205, 222*

EMT Emergency Medical Technology *258*

ENG English *213*

FOR Forensic Science *275*

FSC Fire Science Technology *258*

GCU Cultural Geography *102, 113, 121, 122, 141, 221*

HES Health Science *100*

HIS History any HIS Course(s), including *100, 101, 102, 103, 104, 105, 106, 108, 109, 113, 114, 140, 145, 173, 190, 201, 203, 204, 209,* 240, *241, 242, 273, 275, 277*, 282AA-AC (and except 111, 170, 251, 252, 253, 254)

HON Honors *201*

IBS International Business *109*

IFS Research in Global Society *201, 210*

MCO Mass Communications 120

MGT Management *229, 230*

PAD Public Administration *200*

POS Political Science Any POS course(s), including *100, 101, 110, 113, 114, 115, 120, 125, 130, 140*, 180, *210*, 212, 221, 222, *223,* 230, *270,* 281AB, 282AA-AC, *285*

For the most current information regarding common policies degree requirements, log on to https://curriculum.maricopa.edu/curriculum/degrees-certificates/associate-degrees/academic-policies

PSY Psychology *101,* 123, *132,* 156, *157, 215, 218, 225, 235, 240, 241, 243, 250, 260, 266, 277, 280, 292*

REC Recreation *120*

SBU Society and Business *200*

SLC Studies in Language & Culture *201*

SOC Sociology Any SOC course(s), including *101, 110, 130, 141, 157, 180, 212, 220, 241 251, 266, 270* (and except 143, 245, 253, 265)

SSH Sustainability/Social Sciences and Humanities *111*

SUS Sustainability/Natural Sciences *110*

SWU Social Work *102, 171, 182, 250, 258, 295*

TEC Textiles and Clothing *105*

WED Wellness Education *110*

WST Women's Studies *100, 161*

YAQ Yaqui Indian History and Culture *100*

Natural Sciences (7-8 credits)

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

AGS Agricultural Science *164, 260*

ASB Anthropology *231*

ASM Anthropology *104, 265, 275*

AST Astronomy *101, 106, 111, 112*

BIO Biology *100, 101, 102, 105, 107, 108, 109, 111, 145*, 149AF, 149AH, 149AK, 149AL, 149AM, 149AN, *156, 156XT, 160, 181, 181XT, 182, 182XT, 201, 201XT, 202, 205, 241,* 245

CHM Chemistry *107 & 107LL, 130 & 130LL, 130AA, 150 & 151LL, 150AA, 151 & 151LL, 151AA, 152 & 152LL, 152AA, 154 & 154LL, 230 & 230LL*

CON Construction *106 (formerly CNS106)*

ENV Environmental Sciences *101*

FON Food and Nutrition *241 & 241LL*

FOR Forensic Science *105, 106, 275*

GLG Geology *101 & 103, 101IN, 102 & 104, 102IN, 105, 106, 110 & 111, 110IN,* 121, 140, 229AB-AC, 230AA-AC, 231AA-AD, 280, 281, 282AA

GPH Physical Geography *111, 112 & 113, 211, 212 & 214, 213 & 215*

PHS Physical Science *110, 120*

PHY Physics *101, 101AA, 111, 111AA, 112, 115, 116, 121, 131*

PSY Psychology *275, 290AB, 290AC*

For the most current information regarding common policies degree requirements, log on to https://curriculum.maricopa.edu/curriculum/degrees-certificates/associate-degrees/academic-policies

Literacy and Critical Inquiry (0-3 credits)

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

AIS American Indian Studies *203, 213*

COM Communication *222, 225, 241*

CPD Counseling and Personal Development *160*

CRE Critical Reading *101, 201*

CUL Culinary Arts *223*

DAH Dance Humanities *255*

EDU Education *282AC*

ENG English *111, 200, 215, 216, 217, 218*

ENH English Humanities *241, 254, 255*

EXS Exercise Science *290*

GBS General Business *233*

GPH Physical Geography *267*

HUM Humanities *225, 250, 251*

IFS Information Studies *201*

JRN Journalism *201, 215, 234*

MCO Mass Communications *220*

MHL Music: History/Literature *204*

PHI Philosophy *103, 106, 218, 224, 244*

POS Political Science *115*

PSY Psychology *290AB, 290AC*

REL Religious Studies *203, 205, 207, 244*

SLC Studies in Language & Culture *202*

THE Theatre *220*

THP Theatre Performance/Production *241*

Elective Courses (15-22 credits)

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

For the most current information regarding common policies degree requirements, log on to https://curriculum.maricopa.edu/curriculum/degrees-certificates/associate-degrees/academic-policies

Maricopa Community Colleges (MCCCD) 2020-2021 Associate in Applied Science (AAS) Degree and General Education Requirements

Description

The Associate in Applied Science (AAS) degree requires at least 60 credits in its program of study. The exact number of credits for a specific degree is identified as part of the presentation of its requirements on the web or in the college catalog.

Purpose of the Degree

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

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;
- All courses must be completed with a grade of C or higher; any additional requirements such as grades of B or higher or minimum grade point average requirements are listed on individual degrees and certificates;
- 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. Students must apply for graduation from the college where they have successfully completed Block 4 of the Associate in Applied Science in Nursing).
- The minimum of six credit hours in the 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;
- 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

(12-15 credits)* Demonstrate college-level skills in the following areas:

For the most current information regarding common policies degree requirements, log on to https://curriculum.maricopa.edu/curriculum/degrees-certificates/associate-degrees/academic-policies

First-Year Composition (6 credits)*

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

Oral Communication (3 credits)

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

Critical Reading (3 credits)

CRE Critical Reading 101 or Equivalent as indicated by assessment

Mathematics (3 credits)

MAT Mathematics 1112/114/115/120/121/122/126/140/141/142/145/146/150/MAT150&182/151/MAT151&182/152/152&182/155/155&182/156/156&182/172/187/206/212/213/217/218/220/221/225/227/230/231/240/241/256/257/261/262/276/277/equivalent course/ Satisfactory completion of a higher level mathematics course

GENERAL EDUCATION DISTRIBUTION AREAS (9-10 credits)

Humanities, Arts and Design (2-3 credits)

AIS American Indian Studies 213

AJS Administration of Justice Studies 123

ARH Art Humanities Any ARH Course(s)

ART Art 131

ASB Anthropology 211/214/220/222/223/253

CCS Chicana and Chicano Studies 101

COM Communication 241

CON Construction 101 (formerly CNS 101)

DAH Dance Humanities 100/101/201/250/255

EDU Education 291/292/294

ENG English 200/213/218

ENH English Humanities Any ENH Course(s) (except 250)

FRE French 265

GST Game Studies 202

HCR Health Care Related 210

HIS History 101/102/103/108/110/111/113/114/203/212/251/252/275

HON Honors 190

HUM Humanities Any HUM course(s) (except 120, 225)

INT Interior Design 115/120

LAT Latin 201/202

MHL Music: History/Literature 140/143/145/146/153/155/194/204/241/242/295

PHI Philosophy Any PHI Course(s)

REL Religious Studies Any REL Course(s)

SLC Studies in Language & Culture 201/202

For the most current information regarding common policies degree requirements, log on to https://curriculum.maricopa.edu/curriculum/degrees-certificates/associate-degrees/academic-policies

SPA Spanish 241/242/265/266

SPH Spanish Humanities 241, 245

SSH Sustainability/Social Sciences and Humanities 111

STO Storytelling 292/294

SWU Social Work 183

TCM Telecommunications 107

TEC Textiles and Clothing 105

THE Theatre 111/220

THF Theatre and Film 205/206/210

THP Theatre Performance/Production 241

WST Women's Studies 209/284/285/290

Social-Behavioral Sciences (3 credits)

AFR African American Studies 202/203/204

AIS American Indian Studies 101/140/141/160

AJS Administration of Justice Studies 101/200/ 225/258/259/270

ASB Anthropology 100/102/202/211/222/223/226/230/235/252

ASM Anthropology 104/275

BHS Behavioral Health Services Technology 150

CCS Chicana and Chicano Studies 202

CFS Child/Family Studies 112/157/159/176/205/235/259

COM Communications 100/100AA&100AB&100AC/110/110AA&110AB & 110AC/ 163/230/250/263

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

GCU Cultural Geography 102/113/121/122/141/221

HES Health Science 100

HIS History Any HIS course(s) (except 111,170, 251, 252, 253, 254)

HON Honors 201

IBS International Business 109

For the most current information regarding common policies degree requirements, log on to https://curriculum.maricopa.edu/curriculum/degrees-certificates/associate-degrees/academic-policies

IFS Information Studies 201, 210

MCO Mass Communications 120

MGT Management 229/230

PAD Public Administration 200

POS Political Science Any POS course(s)

PSY Psychology 101/123/132/156/157/215/218/ 225/235/240/241/243/250/260/266/277/280/292

REC Recreation 120

SBU Society and Business 200

SLC Studies in Language & Culture 201

SOC Sociology Any SOC course(s) (except 143, 245, 253, 265)

SSH Sustainability/Social Sciences and Humanities 111

SUS Sustainability/Natural Sciences 110

SWU Social Work 171/182/250/258/295

TEC Textiles and Clothing 105

WED Wellness Education 110

WST Women's Studies 100/161

YAQ Yaqui Indian History and Culture 100

Natural Sciences (4 credits)

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

AGS Agricultural Science 164, 260

ASB Anthropology (Soc/Behv. Science) 231

ASM Anthropology (Science/Math) 104/265/275

AST Astronomy 101/106/111/112

BIO Biology 100/101/102/105/107/108/109/111/145/149AN/156/156XT/160/181/181XT/182/182XT/201/201XT/202/205/241/245

CHM Chemistry 107&107LL/130&130LL/130AA/150AA/150&151LL/151AA/151&151LL/152AA/152&152LL/154&154LL/230&230LL

CON Construction 106 (formerly CNS106)

ENV Environmental Sciences 101

FON Food and Nutrition 241&241LL

FOR Forensic Science 105/106/275

GLG Geology Any GLG course(s)

GPH Physical Geography 111&112/113/211/212&214/213&215

PHS Physical Science 110/120

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PHY Physics 101/101AA/111/111AA/112/115/116/121/131

PSY Psychology 275/290AB/290AC

Maricopa Community Colleges (MCCCD) 2020-2021 Academic Certificate (AC)

Purpose of the Academic Certificate

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

Academic Policies that Govern the Academic Certificate

- Although, the program of study for an Academic Certificate (AC) does not have a mandated minimum number of credit hours, most ACs require approximately 12-39 credit hours in courses numbered 100 and above;
- Requires a cumulative GPA of 2.0 or better in required courses for completion;
- Follows the graduation policies listed in the college's general catalog for the appropriate catalog year;
- Any course cross-referenced under another prefix(es) (for example ENH291/EDU291-Children's Literature) covers identical content and its credits can only be counted once toward certificate requirements;
- Although ACs may include a subset of coursework required in particular transfer degrees, the intent of an AC is not to align with any specific university major. There is no presumption of block transfer to another college or university;
- May have admission criteria established by the college if and when appropriate;
- Generally offered at a limited number of colleges. For a listing of all ACs available in the district and their affiliated college(s) see the CCTA website.

Maricopa Community Colleges (MCCCD) Allied Health or Nursing Program (S-13)

Allied Health or Nursing Assumption of Risk/Release of Liability

Most of the allied health or nursing program pathways include a program of study in a clinical training environment that may contain exposures to risks inherent in patient-oriented educational experiences (such as but not limited to bodily injury or communicable and infectious diseases). Students enrolling in clinical educational courses will be asked to sign a statement assuming all risks inherent in their coursework.

Use of Confidential Information

Students enrolled in allied health or nursing program pathways will have learning experiences in a health care setting where they will have access to confidential information. Prior to beginning any clinical studies, the students will be asked to sign an agreement to adhere to the requirements of those clinical sites and applicable law, including the Health Insurance Portability and Accountability Act of 1996 (HIPAA).

For the most current information regarding common policies degree requirements, log on to https://curriculum.maricopa.edu/curriculum/degrees-certificates/associate-degrees/academic-policies

MCCCD Required Background Checks

Students enrolled in an MCCCD allied health or nursing program are required to complete and pass clinical learning experiences, working with children, elderly persons, and other vulnerable populations. MCCCD's major clinical agency partners now mandate that any college students assigned to them for clinical experiences submit to a comprehensive background clearance prior to entering such learning experiences. Because the clinical experience portion of the programs is critical to completing a program of study, MCCCD has instituted two specific background check requirements in order for a student to enroll in a program. First, the student must obtain, at his or her own cost, a Level I Fingerprint Clearance Card from the Arizona Department of Public Safety. Precluding offenses for a Level I card can be found in Arizona Revised Statute § 41-1758.07 (https://www.azleg.gov/viewdocument/?docName=https://www.azleg.gov/ars/41/01758-07.htm). Additionally, students must also obtain a "pass" status on a MCCCD supplemental background check from MCCCD's authorized background check contractor. The student must also pay for this background check. The supplemental check will be based on the most stringent standards of MCCCD's clinical experience partners.

The sole program for which the background check requirements are different is the Emergency Medical Technician program. For that program, students must have obtained a Level 1 Fingerprint Clearance Card from the Arizona Department of Public Safety. They are also required, at the time of their clinical assignments, to submit to, pay for and pass any additional background check requirements of the clinical agencies to which their EMT program places students.

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

The MCCCD supplemental background check review may include searches of the following databases and information but MCCCD reserves the right to change the search criteria and the program background check requirements at any time without notice:

1. National Federal Health Care and Abuse Databases
2. Social Security Verification
3. Residency History
4. Arizona Statewide Criminal Records
5. Nationwide Criminal Databases Catalog Common Pages 2020-2021 Updated 7/6/20 104
6. Nationwide Sexual Offender Registry
7. Homeland Security Search

Examples of background information that will result in a "fail" status on the supplemental background check include:

1. Social Security number does not belong to the applicant
2. Any inclusion on any registered sex offender database
3. Any inclusion on any of the Federal exclusion lists or Homeland Security watch lists
4. Any conviction of a felony no matter what age of the convictions
5. Any warrant any state
6. Any misdemeanor conviction for the following no matter how long ago:
   - A. Violent crimes
   - B. Sex crime of any kind including non consensual sexual crimes and sexual assault
   - C. Murder, attempted murder
   - D. Abduction

For the most current information regarding common policies degree requirements, log on to https://curriculum.maricopa.edu/curriculum/degrees-certificates/associate-degrees/academic-policies

E. Assault
F. Robbery
G. Arson
H. Extortion
I. Burglary
J. Pandering
K. Any crime against minors, children, vulnerable adults including abuse, neglect, exploitation
L. Any abuse or neglect
M. Any fraud
N. Illegal drugs
O. Aggravated DUI

7. Any misdemeanor controlled substance conviction in last 7 years
8. Any other misdemeanor conviction within last 3 years

EXCEPTIONS: Any misdemeanor traffic (DUI is not considered traffic).
The information that MCCCD uses for the "pass/fail" background check is subject to change at any time without notice.

MCCCD recommends that students carry proof of the background clearance at all times during any clinical agency learning experience.

Duty to Report Changes; Removal

Students have an obligation to immediately report to the director of their program any change in the information that they supplied on forms submitted to initiate background checks relating to the allied health or nursing program. That includes information provided to the Arizona Department of Public Safety and MCCCD's supplemental background check vendor, as well as that related to the background check required by a clinical agency. Failure to do so will result in removal from the program. Additionally, any change in background check status that would affect the student's clearance under either MCCCD's or a clinical agency's standards will result in removal from a program.

Additional Clinical Agency Background Check

Some clinical agencies require that students assigned to their sites submit to a criminal background check covering other offenses, as well as to a drug screening. Students are required to pay for the additional agency clinical background check. A clinical agency that requires this additional background check may refuse to place a student due to information the clinical agency obtains in its background check even though that student possess a valid Level I Fingerprint Clearance Card and has obtained a "pass" status on the MCCCD supplemental background check. Some conditions that have resulted in students being denied placement at clinical agencies include pending criminal charges, outstanding warrants, unfinished terms of a sentence (such as unpaid fines), pattern of repeated types of arrests/convictions, and failure to disclose all past arrests/convictions when asked to do so on any background check application.

Inability to Place

MCCCD has no obligation to make repeated attempts to place a student when the reason for MCCCD's inability to place the student is due to background check issues. Since clinical agency assignments are mandatory requirements for completion of a program, a student's inability to complete required clinical experience due to his or her background check issues will result in removal from the program.

For the most current information regarding common policies degree requirements, log on to https://curriculum.maricopa.edu/curriculum/degrees-certificates/associate-degrees/academic-policies

Changes to Admission or Background Check Requirements

MCCCD may change its program admission requirements or background check requirements without notice at any time.

No Guarantee of Receipt of Licensure/Certificate

Many of the nursing and allied health programs prepare graduates for application for State or National certificates or licenses. In some professions, such licensure and certification is required prior to employment or practice in the profession. Graduation from a nursing and allied health program does not guarantee the receipt of a license or certificate to practice in the field of study.

AMENDED by Direct Chancellor Approval, June 1, 2017

Fields of Interest Matrix

The Maricopa County Community College Field of Interest Matrix identifies all programs currently available for offering within the ten (10) community colleges and skill centers of the district. The programs are grouped under Field of Interest as requested by the colleges. For specific information regarding individual programs, contact the college(s) listed as participating institutions.

College Key

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

Applied Technology

Air Conditioning and Electrical Accessories..... GW
Air Conditioning/Refrigeration/Facilities..... GW
Aircraft Maintenance Technology.....CG
Airway Science Technology, Flight Emphasis.....CG
Applied Electrical Technologies..... RS
Architectural and Civil CAD Technology ..... GC
Architectural Technology ..... SC
Automated Industrial Technology.....EM, MC
Automated Industrial Technology I.....EM, MC
Automated Industrial Technology II .....EM, MC
Automotive Automatic
Transmission and Transaxle.....GC, GW, MC
Automotive Brake Systems.....GC, GW, MC
Automotive Chassis.....GC, GW, MC
Automotive Drive Train.....GC, GW, MC
Automotive Electrical, Heating, Ventilation and Air
Conditioning Systems.....GC, GW, MC
Automotive Electronic/Electrical Systems.....GC, GW, MC
Automotive Engine Performance.....GC, GW, MC
Automotive Engine Repair.....GC, GW, MC
Automotive Engine Repair and Performance...GC, GW, MC
Automotive Heating, Ventilation
and Air Conditioning Systems.....GC, GW, MC
Automotive Maintenance and Light Repair .....GC, GW, MC
Automotive Manual Drive Train and Axles.....GC, GW, MC

For the most current information regarding common policies degree requirements, log on to https://curriculum.maricopa.edu/curriculum/degrees-certificates/associate-degrees/academic-policies

Automotive Service ..... GC, GW, MC
Automotive Steering and Suspension ..... GC, GW, MC
Basic Automotive Maintenance ..... RS
Brakes, Alignment, Suspension and Steering ..... MC
Building Inspection ..... MC
CAD Application ..... GC
CAD Fundamentals ..... GC
Caterpillar Technician Training ..... MC
Certified Flight Instructor Instrument Airplane Rating ..... CG
CNC Machine Operator ..... GW, MC
CNC Machine Operator (Day) ..... GW
CNC Machine Operator (Night) ..... GW
CNC Machining I ..... GW, MC
CNC Machining I (Day) ..... GW
CNC Machining I (Night) ..... GW
CNC Machining II ..... GW, MC
CNC Machinist (Day) ..... GW
CNC Machinist (Night) ..... GW
Collision Repair Technician (Day) ..... GW
Collision Repair Technician (Night) ..... GW
Computer Aided Drafting ..... MC
Construction Building Codes ..... MC
Construction Management ..... MC
Construction Safety OSHA 30 ..... MC
Construction Technology ..... MC, SM
Construction Trades - Mechanical Trades: Pipefitting ..... GW
Construction Trades - Mechanical Trades: Plumbing ..... GW
Construction Trades - Mechanical Trades: Sheet Metal ..... GW
Construction Trades: Electrical ..... MC, SM
Construction Trades: Electrical (Day) ..... GW
Construction Trades: Electrical (Night) ..... GW
Construction Trades: Carpentry ..... RS
Construction Trades: Carpentry, Commercial and Residential ..... MC, RS, SM
Construction Trades: Carpentry, Commercial and Residential (Day) ..... GW
Construction Trades: Construction Management ..... GW, MC
Construction Trades: Electrical, Commercial and Residential ..... MC, RS, SM
Construction Trades: Electrical, Commercial and Residential (Day) ..... GW
Construction Trades: Electrical, Commercial and Residential (Night) ..... GW
Construction Trades: Electricity ..... GW
Construction Trades: Heat and Frost Insulation ..... GW
Construction Trades: Ironworking ..... GW
Construction Trades: Millwrighting ..... GW
Construction Trades: Painting and Drywalling ..... GW
Construction Trades: Plumbing ..... GW, MC, RS, SM
Construction Trades: Plumbing, Commercial and Residential ..... GW, MC, RS, SM
Construction Trades: Pre-Apprenticeship ..... GW
Drafting and Design Technology ..... MC
Electric Utility Technology ..... CG
Electrical Installer (Day) ..... GW
Electrical Installer (Night) ..... GW
Electrical Systems Technology ..... EM
Electrical Technician (Day) ..... GW
Electrical Technician (Night) ..... GW
Electrical Technology ..... GW
Electrical Technology - Commercial Wiring ..... GW
Electrical Technology - Industrial Wiring ..... GW
Electrical Technology - Residential Wiring ..... GW
Energy and Industrial Technology ..... EM
Engine Performance and Diagnosis ..... GW
Environmental Science and Water Resources Technologies ..... GW
Environmental Science Technology ..... GW
HVAC Residential Installation and Service Technician (Day) ..... GW
HVAC Residential Installation and Service Technician (Night) ..... GW
HVAC Technician (Day) ..... GW
HVAC Technician (Night) ..... GW
Industrial Design Technology ..... GW
Industrial Design Technology: Design Specialist ..... GW
Industrial Robotics and Automation Technology ..... MC
Instrumentation Systems Technology ..... EM
International Residential Code ..... MC
Lineman Technology Level I ..... RS
Lineman Technology Level II ..... RS
Lineman Technology Level III ..... RS
Lineman Technology Level IV ..... RS
Maintenance Technician: Apartments ..... GW
Manufacturing Production Technology ..... GW, MC
Mechanical Drafting ..... MC
Mechanical Systems Technology ..... EM
Nuclear Power Technology ..... EM
Power Systems Technology ..... EM
Production Technology: Quality Assurance ..... GW
Residential and Light Commercial Air Conditioning ..... GW
Salt River Project Relay Apprentice ..... MC
Unmanned Aircraft Systems ..... CG
Water and Wastewater Treatment ..... GW

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Welding....MC
Welding: Combination (Day)....GW
Welding: Combination (Night)....GW
Welding: Fundamentals....MC
Welding: Fundamentals (Day)....GW
Welding: Fundamentals (Night)....GW
Welding: Gas Metal / Flux Cored Arc Welding (GMAW)/(FCAW)....MC, RS
Welding: Gas Tungsten Arc Welding (GTAW) Ferrous....MC
Welding: Gas Tungsten Arc Welding (GTAW) Ferrous and Non-Ferrous (Day)....GW
Welding: Gas Tungsten Arc Welding (GTAW) Ferrous and Non-Ferrous (Night)....GW
Welding: Gas Tungsten Arc Welding (GTAW) Non-Ferrous....MC
Welding: Pipe and Plate (Day)....GW
Welding: Pipe and Plate (Night)....GW
Welding: Shielded Metal Arc Welding (SMAW) (Day)....GW
Welding: Shielded Metal Arc Welding (SMAW) (Night) .GW
Welding: Shielded Metal Arc Welding (SMAW) Pipe....MC
Welding: Shielded Metal Arc Welding (SMAW) Pipe (Day)....GW
Welding: Shielded Metal Arc Welding (SMAW) Pipe (Night)....GW
Welding: Shielded Metal Arc Welding (SMAW) Plate....MC, RS
Welding: TIG (GTAW) (Day)....GW
Welding: TIG (GTAW) (Night)....GW
Workforce Development: Carpentry Level I....RS
Workforce Development: Carpentry Level II....RS
Workforce Development: Electrical Level I....RS
Workforce Development: Electrical Level II....RS
Workforce Development: Furniture Construction/ Refinishing Level I....RS
Workforce Development: Furniture Construction/ Refinishing Level II....RS
Workforce Development: Trim Plumbing....RS

Behavioral Science and Human Services

Addictions and Substance Use Disorders....RS
Addictions and Substance Use Disorders Level I....RS
Addictions and Substance Use Disorders Level II....RS
Administration of Justice....CG, EM, GC, MC, PC, PV, RS, SC, SM
Administration of Justice Studies....CG, EM, GC, MC, PC, PV, RS, SC, SM
Adolescent Studies....PC
Advanced Behavioral Health Sciences....GC, SM
Advanced Corrections and Detention....RS
Advanced Juvenile Corrections....RS
Associate in Arts, Emphasis in Counseling and Applied Psychological Science....CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Associate in Arts, Emphasis in Family Life Education....CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Associate in Arts, Emphasis in Political Science....CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Associate in Arts, Emphasis in Psychology....CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Associate in Arts, Emphasis in Social Work....CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Basic Behavioral Health Sciences....GC, SM
Basic Corrections....RS
Basic Detention....RS
Behavioral Sciences....GC, SM
Child and Family Organizations Management and Administration....GC, RS
Community Emergency Response Team (CERT): Level I PC
Corrections....CG, EM, GC, MC, PC, V, RS, SC, SM
Corrections and Detention....RS
Crime Scene Investigation....CG, GC, MC, PC, PV, SC, SM
Deaf Studies....PC
Developmental Disabilities Specialist....GC
Driver Operator....GC, MC, PC, PV
Emergency Communications....RS
Emergency Communications and Deployment....PC
Emergency Management....GC, MC, PC, PV
Fingerprint Identification and Photography....CG, GC, MC, PC, PV, SC, SM
Fire Science....GC, MC, PC, PV
Fire Service Management....GC, MC, PC, PV
Firefighter Operations....GC, MC, PC, PV
Forensic Science....CG, GC, MC, PC, PV, SC, SM
Hazardous Materials Response....PC
Homeland Security....CG, GC, GW, MC, PC, PV, RS, SM
Human Services - Specialist: Customer Service....RS
Human Services - Unemployment Insurance: Customer Service....RS
Human Services-Assistance: Public Assistance Eligibility....RS
Interpreter Preparation....PC
Juvenile Corrections....RS

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Law Enforcement ..... CG, EM, GC, MC, PC, PV, RS, SC, SM
Law Enforcement Field Training ..... RS
Law Enforcement Investigator ..... GC, RS
Law Enforcement Training ..... CG, GC, MC, RS
Law Enforcement Training Academy ..... CG, GC, MC, RS
Leadership Development, Level I ..... PV
Leadership Development, Level II ..... PV
Leadership in Public Safety Organizations .. CG, GC, MC, PC
Legal Studies ..... CG, EM, GC, MC, PC, PV, RS, SM
Non-Sworn Fire Service Professional ..... GC, MC, PC, PV
Paralegal ..... RS
Paralegal Studies ..... PC
Professional Addictions Counseling ..... RS
Public Administration ..... RS
Public Administration: Legal Services ..... RS
Public Safety Leadership ..... RS
Public Safety Technology ..... RS
Victimology ..... CG, GC, MC, PC, PV, RS, SM
Workforce Development and Community Re-Entry ..... RS
Workforce Development: Foundations in Addictions and Substance Use Disorders ..... RS

Business, Entrepreneurialism, and Management

Accounting ..... CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Administrative Professional ..... CG, EM, GC, GW, MC, PC, PV, SM
Airline Operations ..... RS
Airline Operations: Reservations and Ticketing Services. RS
Apprentice Meat Cutter ..... GW
Associate in Business, General Requirements ... CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Associate in Business, Special Requirements .... CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Automobile Insurance Claims: Customer Service ..... RS
Automobile Insurance: Customer Service ..... RS
Automobile Insurance: Policy Services ..... RS
Bank Account Management: Customer Service ..... RS
Banking and Finance ..... GW, PC
Beauty and Wellness ..... GW, MC
Broadband Telecommunications ..... RS
Broadband Telecommunications: Field Operations ..... RS
Business Administration Fastrack ..... CG, GC, MC, PC, SC
Business Technology Specialist ..... GW
Commercial Baking and Pastry ..... EM, PC, SC
Court Reporting: Judicial ..... GW
Credit Counseling: Customer Service ..... RS
Culinary Arts ..... EM, SC
Culinary Arts I ..... EM, SC
Culinary Arts II ..... EM, SC
Culinary Fundamentals ..... SC, SM
Debt Resolution: Customer Service ..... RS
Enrolled Agent ..... CG, GC, GW, MC, PC, PV, RS, SC, SM
Entrepreneurial Studies Level I ..... GC, GW, MC, PC, PV, RS, SC, SM
Entrepreneurial Studies Level II ..... GC, GW, MC, PC, PV, RS, SC, SM
Fashion Merchandising ..... MC, PC
General Business ... CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Health Care Insurance: Customer Service ..... RS
Hospitality: Golf Management ..... SC
Hospitality: Hotel Management ..... SC
Hospitality: Meeting and Event Management ..... SC
Hospitality: Restaurant Management ..... SC
Hospitality: Spa and Wellness Center Management ..... SC
Hospitality: Tourism Development and Management ..... SC
Human Resources Management ... CG, GC, GW, MC, PC, RS, SC, SM
Insurance: Customer Service ..... RS
Interior Design Kitchen and Bath ..... MC, PC, SC
Interior Design Professional ..... MC, SC
Interior Design Technology ..... MC, PC, SC
Interior Design Upholstery and Soft Goods Production .. PC
Interior Merchandising and Home Staging EM, MC, PC, SC
Licensed Residential Appraiser ..... MC
Management ..... CG, GC, GW, MC, PC, PV, RS, SC, SM
Marketing ..... GC, GW, MC, PC, PV, SC, SM
Marketing and Sales ..... GC, GW, MC, PC, PV, SC
Motor Vehicle: Customer Service ..... RS
Organizational Leadership ..... CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Organizational Management ..... CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Personal Loans: Customer Service ..... RS
Project Management ..... MC
Property Insurance: Customer Service ..... RS
Public Relations ..... MC
Quality Customer Service ..... RS
Real Estate: Prelicense ..... GC, MC, PV, SC, SM
Residential Appraisal Trainee ..... MC
Retail Management ..... CG, EM, GC, GW, MC, PC, RS, SC, SM
Retail Pharmacy: Customer Service ..... RS
Risk Management and Insurance .. CG, GC, GW, MC, RS, SC

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Small Business Management Level I.....CG, EM, GC, GW, MC, PC, RS, SM
Small Business Management Level II ..... CG, GC, GW, MC, PC, RS, SM
Small Business Start-Up.....PV
Social Media Marketing ..... CG, EM, GC, GW, MC, PC, PV, SC, SM
Utilities: Customer Service..... RS
Water Services: Customer Service..... RS

Computer and Information Technology

Adobe Foundations: Animation and Graphics Production..... CG, GC, MC, PV, SM
Adobe Foundations: Audio and Video Production... MC, SM
Amazon Web Services Practitioner .....CG, EM, GC, GW, MC, PC, PV, SC, SM
Android App Development..... CG, GW, MC, PC, PV, RS, SM
Associate in Science, Emphasis in Computer Science.... CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Cisco Certified Network Professional: Enterprise.....CG, EM, GC, GW, MC, PV, SC, SM
Cisco Certified Network Professional: Enterprise Advanced Routing and Services.... CG, EM, GC, GW, MC, PV, SC, SM
Cisco Certified Network Professional: Enterprise Core..... CG, EM, GC, GW, MC, PV, SC, SM
Cisco Network Administration and Security ..... CG, EM, GC, GW, PV, SC, SM
Cisco Network Administration: CCNA.CG, EM, GC, GW, MC, PV, SC, SM
Cisco Network Administration: CCNP.. CG, EM, GC, GW, PV, RS, SC, SM
CompTIA A+ Certification Prep.....GW
CompTIA Security+ Certification Prep .....GW
Computer Support Specialist (Day).....GW
Computer Support Specialist (Night).....GW
Computer System Configuration and Support .....CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Computer System Configuration and Support, Linux..... CG, EM, GC, GW, MC, PC, PV, SC, SM
Computer System Configuration and Support, Network.....CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Computer System Configuration and Support, Security.....CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Cross-Platform App Development. GW, MC, PC, PV, RS, SM
Cyber Engineering..... CG, EM, GC, MC, PC, PV, RS, SC, SM
Cyber Operations.....CG, EM, GC, GW, MC, PV, SM
Cybersecurity.....CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Cybersecurity Fundamentals .....CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Data Analytics..... EM, MC, PV, SC
Database Development ..... EM, MC, SC
Desktop Support....CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Foundations of Mobile App Development ..... MC, PC, PV, RS, SM
Information Security..... GC
Information Security Technology..... GC
Information Technology.....CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
iOS App Development..... CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
IT and Power Systems Security ..... EM
IT Security Associate ..... EM
Linux Associate..... CG, EM, GC, GW, MC, PC, PV, SC, SM
Linux System Administration .....CG, EM, GC, GW, MC, PC, PV, SC, SM
Microsoft Desktop Associate.....CG, EM, GC, GW, MC, PC, PV, SC, SM
Microsoft Office Professional .....CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Microsoft Office Specialist .....CG, EM, GC, GW, MC, PV, RS, SC, SM
Microsoft System Administration .....CG, EM, GC, GW, MC, PC, PV, RS
Mobile App Development..... MC, PC, PV, RS, SC, SM
Native Mobile App Development.... GW, MC, PC, PV, RS, SM
Network and Systems Administration .....CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Network Specialist (Day).....GW
Network Specialist (Night).....GW
Network Support Specialist.....GW
Network Support Technician .....GW
Oracle Database Operations.....CG
Power Systems Security.....EM, GC
Programming ..... EM, RS, SM
Programming and Systems Analysis.... CG, EM, GC, MC, PC, PV, RS, SC
Programming and Systems Analysis Level I..... CG, EM, GC, MC, PC, PV, RS, SC
Programming and Systems Analysis Level II ..... CG, EM, GC, MC, PC, PV, RS, SC
Red Hat Linux Administrator .....CG, EM, GC, GW, MC, PC, PV, SC, SM

For the most current information regarding common policies degree requirements, log on to https://curriculum.maricopa.edu/curriculum/degrees-certificates/associate-degrees/academic-policies

Red Hat Linux Engineer.....CG, EM, GC, GW, MC, PC, PV, SC, SM
Security Specialist.....GW
Video Game Production.....GC, MC, PV
Video Game Production: Audio and Sound.....GC, MC, PV
Video Game Production: Coding and Scripting.GC, MC, PV
Video Game Production: Game Art.....GC, MC, PV
Video Game Production: Game Narrative.....GC, MC, PV
VMware Foundations.....CG, EM, GC, GW, MC, PC, PV, SC
VMware Network Administrator.....CG, EM, GC, MC, PV
VMware Systems Administrator....CG, EM, GC, GW, MC, PC, PV, SC
Web App Development.....CG, GC, GW, MC, PC, PV, RS, SC, SM
Web Design.....CG, EM, GC, MC, PV, RS, SC, SM
Web Design/Development.....CG, EM, GC, MC, PC, PV, RS, SC, SM
Web Development.....CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Web Foundations.....CG, EM, GC, MC, PC, PV, RS, SC, SM
Windows App Development.....GW, MC, PC, PV, RS, SM

Culture and Society

African-American Studies.....MC
American Indian Studies.....MC, PC, SC
Applied Storytelling.....EM, SM
Associate in Arts, Emphasis in American Indian Studies..CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Associate in Arts, Emphasis in Anthropology.....CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Associate in Arts, Emphasis in Communication.....CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Associate in Arts, Emphasis in Economics.....CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Associate in Arts, Emphasis in English (Creative Writing)....CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Associate in Arts, Emphasis in English (Literature)..CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Associate in Arts, Emphasis in History.....CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Associate in Arts, Emphasis in Information Studies and eSociety.....CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Associate in Arts, Emphasis in Japanese....CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Associate in Arts, Emphasis in Philosophy.....CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Associate in Arts, Emphasis in Religious Studies.....CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Associate in Arts, Emphasis in Sociology....CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Associate in Arts, Emphasis in Spanish.....CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Associate in Arts, Emphasis in Women and Gender Studies.....CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Chicana and Chicano Studies.....GC, PC
Communication Competence in the Workplace.....GC, MC
Communication Skills for Non-Native English Speakers.....GC, MC
Creative Writing.....CG, EM, GC, MC, PC, PV, RS, SC
Foundations of Storytelling.....EM, SM
Global Citizenship.....MC
International Studies.....PC
Journalism and New Media Studies.....GC, MC
Language and Literary Culture of the USA.....RS
Language Studies.....GC, MC, RS
Oral Communication Fluency for Non-Native English Speakers.....GC, MC
Southwest Studies.....PC
Spanish Language and Culture.....MC, RS
Sustaining and Advancing Indigenous Nations.....SC
Traditional and Fact-Based Storytelling.....EM, SM
Women and Gender Studies.....CG, MC

Education

Adult Learning and Development.....RS
Associate in Arts, Elementary Education.....CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Associate in Arts, Emphasis in Early Childhood Education.....CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Associate in Arts, Emphasis in Educational Studies Early Childhood.....CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Associate in Arts, Emphasis in Secondary Education.....CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Associate in Science, Emphasis in Secondary Education.....CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Early Childhood Education.....CG, EM, GC, MC, PC, PV, RS, SM
Foundations of Early Childhood Education.....CG, EM, GC, MC, PC, PV, RS, SM
Gifted Education.....EM
Instructional Assistance.....MC, SM

For the most current information regarding common policies degree requirements, log on to https://curriculum.maricopa.edu/curriculum/degrees-certificates/associate-degrees/academic-policies

K-12 eLearning Design ..... RS
K-12 Online Teaching ..... RS

Health Sciences

Aesthetician (20 Hours Per Week) ..... GW
Aesthetician (24 Hours Per Week) ..... GW
Aesthetics Instructor ..... GW
Associate in Arts, Emphasis in Exercise Science: Pre-Physical Therapy ..... CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Associate in Arts, Emphasis in Nutritional Science ..... CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Community Dental Health Coordination ..... RS
Community Health Paramedicine ..... GC, MC, PC, PV
Computed Tomography ..... GW
Cosmetologist (20 Hours Per Week) ..... GW
Cosmetologist (32 Hours Per Week) ..... GW
Cosmetologist (High School) ..... GW
Cosmetology Instructor ..... GW
Critical Care Paramedicine ..... GC, MC, PC, PV
Dental Assisting ..... PC
Dental Hygiene ..... MC, PC, RS
Diagnostic Medical Sonography ..... GW
Diagnostic Medical Sonography: Vascular Technology ..... GW
Dietetic Technology ..... PV
Electrocardiogram (ECG) Technician ..... GW
Electroneurodiagnostic (END) Technology ..... GW
Emergency Medical Services and Fire Preparatory Academy ..... GW
Emergency Medical Technology ..... CG, GC, MC, PC, PV
Emergency Medical Technology (EMT) ..... GW
Emergency Medical Technology Comprehensive ..... CG, GC, MC, PC, PV
Exercise Science: Health, Fitness and Sports Performance CG, GC, MC, PV, SC, SM
Fast Track Practical Nursing ..... GW
Foundations of Sports Medicine ..... RS
Group Fitness Instructor ..... MC
Hair Stylist (20 Hours Per Week) ..... GW
Hair Stylist (32 Hours Per Week) ..... GW
Health Information Technology ..... PC
Health Information: Long Term Care Settings ..... PC
Health Services Management ..... GW
Health Unit Coordinating/Patient Care Associate ..... GW
Healthcare Regulatory Compliance ..... GW
Healthcare Technology Systems ..... GC, PV
Histologic Technology ..... PC
Hospital Central Service Technology ..... GW
Integrated Public Health ..... PV
Integrated Public Health: Health Administration ..... PV
Integrated Public Health: Health Education ..... PV
Integrated Public Health: Health Navigation ..... PV
Integrated Public Health: Mobile Integrated Health ..... PV
Laboratory Assisting ..... PC
Magnetic Resonance Imaging ..... GW
Massage Therapy ..... PC
Massage Therapy (20 Hours Per Week) ..... GW
Massage Therapy (24 Hours Per Week) ..... GW
Medical Administrative Assisting ..... PC
Medical Assisting ..... GW, PC
Medical Assisting (16 hours per week) ..... GW
Medical Assisting (20 hours per week) ..... GW
Medical Billing and Coding: Physician Based ..... GW
Medical Billing and Coding: Physician-Based ..... PC
Medical Coding: Hospital-Based ..... PC
Medical Interpreter - Spanish (12 Hours Per Week) ..... GW
Medical Interpreter - Spanish (6 Hours Per Week) ..... GW
Medical Laboratory Science ..... PC
Musculoskeletal Sonography ..... GW
Nail Technician ..... GW
Nuclear Medicine Technology ..... GW
Nurse Assisting ..... EM, GC, GW, MC, PV
Nursing ..... CG, EM, GC, GW, MC, PC, PV, SC
Nursing Refresher ..... GW, MC
Nutrition for Personal Trainers and Coaches ..... SC
Occupational Therapy Assistant ..... GW
Operating Room Nursing ..... GW
Ophthalmic Medical Assistant ..... GW
Paramedicine ..... GC, MC, PC, PV
Personal Trainer ..... CG, GC, MC, PV, SC, SM
Personal Trainer: Advanced ..... CG, GC, MC, PV, SC, SM
Pharmacy Technician ..... GW
Phlebotomy ..... PC
Phlebotomy (Day) ..... GW
Phlebotomy (Night) ..... GW
Physical Therapist Assisting ..... GW
Polysomnographic Technology ..... GW
Practical Nursing ..... CG, EM, GC, GW, MC, PC, PV, SC
Radiologic Technology ..... GW
Recreation Management ..... SC
Respiratory Care ..... GW
Spanish Interpreting for Healthcare Professionals ..... GW
Speech Language Pathology Assistant ..... EM

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Sports Management ..... PV
Surgical Technology ..... GW
Sustainable Food Systems ..... RS
Tactical Emergency Casualty Care ..... GC, MC, PC, PV
Yoga Instruction ..... SC
Yoga Therapy ..... SC

Science, Technology, Engineering and Mathematics

Aircraft Maintenance Technology-Airframe ..... CG
Aircraft Maintenance Technology-Powerplant ..... CG
Associate in Arts, Emphasis in Food Science and Technology ..... CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Associate in Arts, Emphasis in Geography ..... CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Associate in Arts, Emphasis in Mathematics ..... CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Associate in Arts, Emphasis in Sustainability and Environmental Studies ..... CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Associate in Science, Emphasis in Astronomy ..... CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Associate in Science, Emphasis in Biochemistry ..... CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Associate in Science, Emphasis in Biological Sciences .. CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Associate in Science, Emphasis in Chemistry .... CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Associate in Science, Emphasis in Engineering CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Associate in Science, Emphasis in Geography Meteorology CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Associate in Science, Emphasis in Geology ..... CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Associate in Science, Emphasis in Physics ..... CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Biomedical Equipment Technology ..... GC, MC
Biotechnology and Molecular Biosciences ..... GC
Electronics Engineering Technology ..... MC
Electronics Technology ..... MC
Engineering Technology ..... EM, GC, PV, SM
Environmental and Natural Resource Conservation ..... PC
Environmental and Natural Resource Stewardship ..... PC
Equine Science ..... SC
Food Science and Technology I ..... SM
Food Science and Technology II ..... SM
Geospatial Technologies ..... MC
Landscape Aide ..... MC
Landscape Horticulture ..... MC
Landscape Specialist ..... MC
Mortuary Science ..... CG
Nanotechnology ..... RS
Occupational Safety and Health Technology ..... GW
Sustainability ..... CG, GC, MC, PV, RS, SM
Sustainability and Ecological Literacy ..... EM, RS, SM
Sustainable Agriculture ..... MC
Veterinary Assisting ..... MC
Veterinary Technology ..... MC
Workforce Development: Introduction to Sustainable Food Systems ..... RS

Visual and Performing Arts

Alteration Specialist ..... MC, PC
Animation ..... GC, MC, PC
Animation and Time-Based Media ..... GC, MC, PC
Apparel Construction ..... MC, PC
Associate in Arts, Fine Arts, Emphasis in Art ..... CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Associate in Arts, Fine Arts, Emphasis in Dance ..... CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Associate in Arts, Fine Arts, Emphasis in Music ..... CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Associate in Arts, Fine Arts, Emphasis in Musical Theatre .... CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Associate in Arts, Fine Arts, Emphasis in Theatre ..... CG, EM, GC, GW, MC, PC, PV, RS, SC, SM
Audio Production Technologies ..... GC, MC, PC, PV, SC
Beginning Piano Pedagogy ..... MC
Ceramics ..... MC
Commercial Photography ..... GC, PC
Costume Design and Production, Level I ..... MC, PC
Costume Design and Production, Level II ..... PC
Dance Performance and Technology ..... SC
Digital Arts: Digital Photography ..... MC
Digital Media Arts ..... GC, PC
Disc Jockey Techniques ..... MC, SC
Disc Jockey Techniques I ..... MC, SC
Disc Jockey Techniques II ..... MC, SC
Documentary Film Production ..... GC
Drawing and Painting ..... MC
Editing ..... SC
Electronic Music ..... GC, MC, PC, SC
Fashion Design ..... MC, PC

For the most current information regarding common policies degree requirements, log on to https://curriculum.maricopa.edu/curriculum/degrees-certificates/associate-degrees/academic-policies

Fashion Design: Entrepreneur ..... PC
Fashion Design: Level I ..... MC, PC
Fashion Design: Level II ..... PC
Fashion Illustration ..... PC
Fashion Merchandising and Design ..... MC
Film and Media Production ..... GC
Graphic Design ..... MC, PC
Illustration ..... CG, MC, PC
Illustration and Sequential Art ..... CG, MC, PC
Image Consultant ..... MC
Interior Design ..... MC, PC, SC
Intermediate Piano Pedagogy ..... MC
Motion Picture Production ..... SC
Motion Picture, Television, and New Media Production ..... SC
Music ..... PC
Music Business I ..... CG, GC, MC, PC, PV, SC, SM
Music Business II ..... CG, GC, MC, PC, PV, SC, SM
Music Industries: Music Business ..... CG, GC, MC, PC, PV, SC, SM
Pattern Design, Level I ..... PC
Pattern Design, Level II ..... PC
Photography ..... CG, GC, MC, PC
Retail Sales Manager ..... MC
Screenwriting ..... SC
Sequential Art ..... CG, MC, PC
Technical Theatre ..... MC, PC, SC
Technical Theatre: Audio Technician ..... GC, MC, PC, PV
Technical Theatre: Cosplay I ..... MC
Technical Theatre: Cosplay II ..... MC
Technical Theatre: Costuming ..... GC, MC, PC, PV
Technical Theatre: Hair and Makeup ..... MC
Technical Theatre: Lighting ..... MC, PC, PV
Technical Theatre: Properties ..... MC, PC, PV, SC
Technical Theatre: Puppetry ..... MC, PC, PV
Technical Theatre: Set/Scenic Construction ..... MC, PC
Technical Theatre: Stage Crew Technician ..... GC, MC, PC PV, SC
Textile and Apparel: Fashion Stylist ..... MC
Time-Based Media ..... MC, PC
Visual Communication ..... SC
Visual Communication: Creative Branding ..... SC
Visual Communication: Design ..... SC
Visual Communication: Digital Process Management ..... SC

For the most current information regarding common policies degree requirements, log on to https://curriculum.maricopa.edu/curriculum/degrees-certificates/associate-degrees/academic-policies

ACADEMIC DIVISIONS

Academic Divisions

Courses offered at CGCC fall under one of the following academic divisions. They include:

Aviation & Applied Technology

Bashir Khalil, Division Chair

480-988-8112 | bashir.khalil@cgc.edu

Courses

AET - Aeronautics

AJS - Administration of Justice Studies

AMT - Aircraft Maintenance Technology

EUT - Electric Utility Technology

LET - Law Enforcement Technology

PPT - Power Plant Technology

Career Programs

Administration of Justice

Administration of Justice Studies

Aircraft Maintenance Technology

Aircraft Maintenance Technology-Airframe

Aircraft Maintenance Technology-Powerplant

Airway Science Technology, Flight Emphasis

Certified Flight Instructor Instrument Airplane Rating

Corrections

Crime Scene Investigation

Electric Utility Technology

Fingerprint Identification and Photography

Forensic Science

Homeland Security

Law Enforcement

Law Enforcement Training

Law Enforcement Training Academy

Leadership in Public Safety Organizations

Legal Studies

Unmanned Aircraft Systems

Victimology

Biological Sciences

Kimberley Patterson, Division Chair

480-732-7083 | kimberley.patterson@cgc.edu

Courses

BIO - Biology

SUS - Sustainability/Natural Sciences

SSH - Sustainability Social Sciences

Career Programs

Sustainability

Business & Computing Studies

Thomas Pearson, Division Chair

480-726-4131 | tom.pearson@cgc.edu

Courses

ACC - Accounting

BPC - Business-Personal Computers

CIS - Computer Information Systems

CNT - Cisco Network Technology

CSC - Computer Science

GBS - General Business

IBS - International Business

ITS - Information Technology Security

MGT - Management

MKT - Marketing

MST - Microsoft Technology

OAS - Office Automation Systems

PAD - Public Administration

SBS - Small Business Management

SBU - Society and Business

Career Programs

Accounting

Administrative Professional

Adobe Foundations: Animation and Graphics Production

Amazon Web Services Practitioner

Android App Development

Business Administration Fastrack

Cisco Certified Network Professional: Enterprise Advanced Routing and Services

Cisco Certified Network Professional Enterprise

Cisco Certified Network Professional: Enterprise Core

Cisco Network Administration and Security

Cisco Network Administration: CCNA

Cisco Network Administration: CCNP
Computer System Configuration and Support
Computer System Configuration and Support, Linux
Computer System Configuration and Support, Network
Computer System Configuration and Support, Security
Cyber Engineering
Cyber Operations
Cybersecurity
Cybersecurity Fundamentals
Desktop Support
Enrolled Agent
General Business
Human Resources Management
Information Technology
iOS App Development
Linux Associate
Linux System Administration
Management
Microsoft Desktop Associate
Microsoft Office Professional
Microsoft Office Specialist
Microsoft System Administration
Network and Systems Administration
Oracle Database Operations
Organizational Leadership
Organizational Management
Programming and Systems Analysis
Programming and Systems Analysis Level I
Programming and Systems Analysis Level II
Red Hat Linux Administrator
Red Hat Linux Engineer
Retail Management
Risk Management and Insurance
Social Media Marketing
VMware Network Administrator
Web App Development
Web Design
Web Design/Development
Web Development
Web Foundations

Communication & Fine Arts

Vanessa Sandoval, Division Chair

480-732-7267 | vanessa.sandoval@cgc.edu

Courses

ARH - Art Humanities
ART - Art
COM - Communication
DAH - Dance Humanities
DAN - Dance
MCO - Mass Communications
MHL - Music: History/Literature
MTC - Music: Theory/Composition
MUC - Music: Commercial/Business
MUE - Music: Education
MUP - Music: Performance
STO - Storytelling
THE - Theatre
THF - Theatre and Film
THP - Theater Performance/Production

Career Programs

Illustration
Illustration and Sequential Art
Music Business I
Music Business II
Music Industries: Music Business
Photography
Sequential Art

Composition, Creative Writing & Literature

Mary Zimmerer, Division Chair

480-857-5441 | mary.zimmerer@cgc.edu

Courses

CRE - Critical Reading
CRW - Creative Writing
ENG - English
ENH - English Humanities
HUM - Humanities
JRN - Journalism

RDG - Reading

WAC - Writing Across Curriculum

Career Programs

Creative Writing

Health Sciences

Kimberly McGee, Division Chair

480-726-4246 | kimberly.mcgee@cgc.edu

Courses

EMT - Emergency Medical Technology

EXS - Exercise Science

FON - Food and Nutrition

HES - Health Science

MSP - Mortuary Science

PED - Physical Education

REC - Recreation

WED - Wellness Education

Career Programs

Emergency Medical Technology

Emergency Medical Technology Comprehensive

Exercise Science: Health, Fitness and Sports Performance

Mortuary Science

Personal Trainer

Personal Trainer: Advanced

Library, Learning Center & Counseling

Christine Kilbridge, Division Chair

480-857-5138 | christine.kilbridge@cgc.edu

Courses

BHS - Behavioral Health Services Technology

CPD - Counseling and Personal Development

IFS - Information Studies

Mathematics

Linda Meng, Division Chair

480-857-5531 | linda.meng@cgc.edu

Courses

MAT - Mathematics

Modern Languages & Humanities

Paul Petrequin, Division Chair

480-857-5256 | paul.petrequin@cgc.edu

Courses

ASL - American Sign Language

CCS - Chicana and Chicano Studies

ESL - English as a Second Language

GER - German

HIS - History

NAV - Navajo

PHI - Philosophy

REL - Religious Studies

SPA - Spanish

SPH - Spanish Humanities

Nursing

Karen Flanigan, Division Chair

480-988-8881 | karen.flanigan@cgc.edu

Courses

HCC - Health Core Curriculum

HCR - Health Care Related

NCE - Nursing Continuing Education

NUR - Nursing Science: Basic

Career Programs

Nursing

Physical Sciences & Engineering

Brian Woodrum, Interim Division Chair

480-732-7359 | brian.woodrum@cgc.edu

Courses

AIM - Artificial Intelligence and Machine Learning

AST - Astronomy

CHM - Chemistry

ECE - Engineering Science

EEE - Electrical Engineering

ELE - Electronics

ELT - Electronics Technology

GLG - Geology

GPH - Physical Geography

PHY - Physics

Career Programs

Artificial Intelligence

Artificial Intelligence and Machine Learning

Engineering

Psychology

Karen Reeder, Department Lead

480-857-5226 | karen.reeder@cgc.edu

Courses

PSY - Psychology

Social & Behavioral Sciences

Linda Zehr, Interim Division Chair

480-857-5530 | linda.zehr@cgc.edu

Courses

AFR - African American Studies

AIS - American Indian Studies

ASB - Anthropology

ASM - Anthropology

CFS - Child/Family Studies

ECH - Early Childhood Education

ECN - Economics

EDU - Education

EED - Early Education

ETL - Excellence/Teaching/Learning

POS - Political Science

SOC - Sociology

WST - Women's Studies

Career Programs

Early Childhood Education

Foundations of Early Childhood Education

Women and Gender Studies

EDUCATIONAL PROGRAMS

Educational Programs

The Chandler-Gilbert Community College (CGCC) mission statement calls for serving "students and its diverse communities by providing quality life-long learning opportunities in a learner-centered environment through effective, accessible educational programs and activities." CGCC faculty, staff, and administration are committed to providing a "dynamic learning community reflecting collaboration, diversity, and student success through quality, enthusiastic teaching, learning, and serving." CGCC students have several choices of educational programs to pursue:

- Degrees offered by all Maricopa Community Colleges and found in the Degree Requirements section of this catalog:
  - — Associate in Arts; Associate in Arts in Elementary Education; Associate in Arts, Fine Arts in Art, Dance, and Theatre; Associate in Business; and Associate in Science degrees offered by all Maricopa Community Colleges and designed for students who may or may not know their majors but plan to transfer to one of Arizona's public universities.
  - — Associate in General Studies degree for students whose educational goals require flexibility and a broader choice of courses.
- Occupational programs offered at CGCC have several missions: preparing students for employment, upgrading students' existing job skills, and assisting students in career changes. Students can choose from several alternatives:

1. Associate in Applied Science degree programs – usually a two-year program of course work.
2. Certificate Programs – a series of courses designed for concentrated proficiency in specialized career fields.
3. Individual courses – designed to meet individual career or personal needs.

Because change is a constant factor in the employment picture, each occupational program has an advisory council. These councils are composed of local leaders in industry and provide valuable assistance to faculty as they continually adjust the courses and programs to meet community needs. With the support of the advisory councils, highly qualified faculty, and up-to-date facilities, students are assured quality instruction in their future career field.

Students who choose to transfer to four-year institutions will find that many credits are transferable and provide a beginning foundation for completing a baccalaureate degree. The AAS degrees transfer as a "block" to the Bachelor of Applied Science at Arizona State University (Polytechnic and West campuses), and Northern Arizona University.

- Academic Certificates for students who wish to gain additional expertise in an academic area.
- Special programs include:
  - — Continuing Education and Workforce Development
  - — English as a Second Language
  - — Fitness, Wellness, and Recreation
  - — Honors Program
  - — Performing Arts

OCCUPATIONAL PROGRAMS

Aviation & Applied Technology

Administration of Justice Studies

Associate in Applied Science: AAS 3181

60-69 Credits

Program Contact

Lisa Ruschak | 480-726-4078 | lisa.ruschak@cgc.edu

Program Description

The Associate in Applied Science (AAS) in Administration of Justice Studies is an interdisciplinary program designed to prepare students for various careers within the criminal justice system and/or transfer to a four year institution. The program also provides criminal justice practitioners with the opportunity to complete the Certificate of Completion (CCL) in Administration of Justice as well as one of four Certificates of Completion in Corrections, Law

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

Enforcement, Legal Studies, and Victimology, and/or a transfer option.

Program Notes

Students must earn a grade of "C" or better for all courses required within the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

++ indicates any suffixed courses.

Program Prerequisites: None

Required Courses: 27 Credits

AJS101	Introduction to Criminal Justice	3
AJS109	Substantive Criminal Law	3
AJS123	Ethics and the Administration of Justice	3
AJS200	Current Issues in Criminal Justice (3) OR AJS/EMT/	
FSC/SWU258	Victimology and Crisis Management (3)	3
AJS212	Juvenile Justice Procedures	3
AJS225	Criminology	3
AJS230	The Police Function	3
AJS240	The Corrections Function	3
AJS260	Procedural Criminal Law	3

Restricted Electives: 12-13 Credits

AJS113	Criminal Justice Crime Control Policies and Practices (Fulfills ASU transfer requirement)	3
AJS119	Computer Applications in Justice Studies (Fulfills NAU transfer requirement)	3
AJS162	Domestic Violence (Fulfills Victimology certificate requirement)	3
AJS201	Rules of Evidence (Fulfills Legal Studies certificate requirement)	3
AJS205	Effective Communication and Report Writing in Criminal Justice (3) OR (Fulfills Corrections, Law Enforcement and Legal Studies certificate requirement)	3
AJS210	Constitutional Law (Fulfills Legal Studies certificate requirement and NAU transfer requirement)	3
AJS255	Crime, Law, and Mental Health (Fulfills Corrections and Victimology certificate requirement)	3
AJS270	Community Relations (Fulfills GCU transfer requirement)	3
AJS275	Criminal Investigation I (Fulfills Corrections and Law Enforcement certificate requirement and GCU transfer requirement)	3
AJS290BN	Courtroom Testimony Seminar (Fulfills Legal Studies certificate requirement)	1
AJS+++++	Any AJS Administration of Justice Studies course not listed under Required Courses area (3) OR	
BPC110	Computer Usage and Applications (3) OR	
CIS105	Survey of Computer Information Systems (3)	3
(BPC110 or CIS105 fulfills transfer requirement)		
CIS114DE	Excel Spreadsheet (Fulfills NAU transfer requirement)	3
PSY101	Introduction to Psychology (3) OR	
SOC101	Introduction to Sociology (3) (Fulfills ASU transfer requirement)	3
REC120	Leisure and the Quality of Life (Fulfills ASU transfer requirement)	3
SWU171	Introduction to Social Welfare (Fulfills ASU transfer requirement)	3

Free Electives: 7-9 Credits

Recommend the following for transfer:

FOR105	Forensic Science: Physical Evidence (4) OR	
FOR106	Forensic Science: Biological Evidence (4)	
OR		
	any course with the [SQ] general education designation (4)	4

Recommend the following for transfer:

	any course with an [HU] and [G] general education designation or an [HU] and [H] general education designation	3-5

General Education: 12-22 Credits

Core: 12-18 Credits

First-Year Composition

+ENG101	First-Year Composition (3) AND	
+ENG102	First-Year Composition (3) OR	

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+ENG107	First-Year Composition for ESL (3) AND	
+ENG108	First-Year Composition for ESL (3)	6

Oral Communication

COM100	Introduction to Human Communication (3) OR	
COM110	Interpersonal Communication (3) OR	
+COM225	Public Speaking (3) OR	
COM230	Small Group Communication (3)	3

Recommend COM225 for students intending to transfer

Critical Reading

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

Mathematics

+MAT140	College Mathematics (5) OR	
+MAT141	College Mathematics (4) OR	
+MAT142	College Mathematics (3) OR	
MAT146	College Mathematics with Review (6) OR	
Any higher approved general education course in the Mathematics area (3-6)		3-6

Distribution: 0-4 Credits

Humanities, Arts and Design

Met by AJS123 in the Required Courses area 0

Social and Behavioral Sciences

Met by AJS200 or AJS/EMT/FSC/SWU258 Required Courses area 0

Natural Sciences

Any approved general education course from the Natural Sciences area.
May be met by FOR105 or FOR106 in Electives area. 0-4

Administration of Justice

Certificate of Completion: CCL 5007N

15 Credits

Program Contact

Lisa Ruschak | 480-726-4078 | lisa.ruschak@cgc.edu

Program Description

The Certificate of Completion (CCL) in the Administration of Justice program is designed to be interdisciplinary by nature and provides students with foundational knowledge of the criminal justice system and operational processes for addressing crime within society. This program also examines diverse populations and communities, and their effects on relationships with the criminal justice system. In addition, this program allows students to familiarize themselves with and evaluate various career opportunities in the criminal justice field and is one pathway to the Associate in Applied Science (AAS) in Administration of Justice.

Program Notes

This program is not eligible for Title IV Federal Financial Aid.

Students must earn a grade of "C" or better for all courses required within the program. Overall program minimum GPA = 2.00.

++ indicates any suffixed courses.

Program Prerequisites: None

Required Courses: 15 Credits

AJS101	Introduction to Criminal Justice	3
AJS109	Substantive Criminal Law (3) OR	
AJS260	Procedural Criminal Law (3)	3
AJS123	Ethics and the Administration of Justice	3
AJS230	The Police Function	3
AJS240	The Corrections Function	3

Aircraft Maintenance Technology

Associate in Applied Science: AAS 3670

87-112 Credits

Program Contact

Bashir Khalil | 480-988-8112 | bashir.khalil@cgc.edu

Program Description

The Associate in Applied Science (AAS) in Aircraft Maintenance Technology degree is designed to provide students with strong General Education skills in support of their aviation maintenance knowledge. This degree prepares students to enter careers in aircraft (fixed-wing and rotorcraft) and structural manufacturing and maintenance. Graduates can potentially work in general, corporate, commercial, or military sectors. Students who complete this program are eligible to apply for relevant Federal Aviation

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

Administration written, oral, and practical exams. A Certificate of Completion (CCL) in Aircraft Maintenance Technology is fully embedded in this AAS.

Program Notes

Students must earn a grade of "C" or better in all courses within the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

Admission Criteria

Students wishing to enroll in this Aircraft Maintenance Technology program must complete an application process before being officially accepted into the program.

Program Prerequisites: None

Required Courses: 65-84 Credits

+AMT124	Aircraft Forms and Regulations, Weight and Balance, Drawings, and Ground Operations (5)	
+AMT126	Fundamentals of Mathematics and Electricity (9)	
+AMT128	Fundamentals of Aviation Physics, Corrosion Control, Materials and Processes, Fluid Lines and Fittings (5) OR Hold a valid FAA Airframe or Powerplant Certificate (0)	0-19
+AMT220	Fundamentals of Aircraft Wood Structures, Covering and Finishing and Bonded Structures	3
+AMT222	Atmosphere Control, Fire Protection, Ice and Rain Protection Systems	4
+AMT224	Aircraft Sheet Metal	5
+AMT226	Aircraft Landing Gear, Hydraulic, Pneumatic, Fuel, Position and Warning Systems	7
+AMT228	Aircraft Electrical Systems, Instruments, Fuel Indicating, Communication and Navigation Systems	7
+AMT230	Airframe Assembly, Inspection and Welding	6
+AMT263	Aircraft Turbine Engines	5
+AMT264	Aircraft Reciprocating Engines	7
+AMT266	Engine Fuel Systems, Fuel Metering and Induction System	6
+AMT268	Engine Electrical, Ignition and Starter Systems	6
+AMT270	Engine Instruments, Fire Protection and Lubrication, Cooling and Exhaust Systems	5
+AMT272	Propeller Systems and Engine Inspections	4

General Education: 22-28 Credits

Core: 12-18 Credits

First-Year Composition

+ENG101	First-Year Composition (3) OR	
+ENG107	First-Year Composition for ESL (3) AND	
+ENG102	First-Year Composition (3) OR	
+ENG108	First-Year Composition for ESL (3)	6

Oral Communication

COM100	Introduction to Human Communication (3) OR	
COM110	Interpersonal Communication (3) OR	
+COM225	Public Speaking (3) OR	
COM230	Small Group Communication (3)	3

Critical Reading

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

Mathematics

+MAT120	Intermediate Algebra (5) OR	
+MAT121	Intermediate Algebra (4) OR	
+MAT122	Intermediate Algebra (3) OR	
+MAT126	Intermediate Algebra with Review (6)	3-6

Distribution: 10 Credits

Humanities, Arts and Design

Any approved general education course from the Humanities, Arts and Design area. 3

Social and Behavioral Sciences

Any approved general education course in the Social and Behavioral Sciences area. 3

Natural Sciences

+PHY101	Introduction to Physics	4

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

Aircraft Maintenance Technology

Certificate of Completion: CCL 5670

65-84 Credits

Program Contact

Bashir Khalil | 480-988-8112 | bashir.khalil@cgc.edu

Program Description

The Certificate of Completion (CCL) in Aircraft Maintenance Technology prepares students to enter careers in aircraft, fixed-wing and rotorcraft, and structural manufacturing and maintenance. Graduates can potentially work in general, corporate, commercial, manufacturing, and military sectors. Students who complete the certificate are eligible to apply for relevant Federal Aviation Administration (FAA) written, oral, and practical exams. This certificate is fully embedded in the Associate in Applied Science (AAS) in Aircraft Maintenance Technology.

Program Notes

Students must earn a grade of "C" or better in all courses within the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites

Admission Criteria

Students wishing to enroll in this certificate program must complete an application process before being officially accepted into the program.

Program Prerequisites: None

Required Courses: 65-84 Credits

+AMT124	Aircraft Forms and Regulations, Weight and Balance, Drawings, and Ground Operations (5)	
+AMT126	Fundamentals of Mathematics and Electricity (9)	
+AMT128	Fundamentals of Aviation Physics, Corrosion Control, Materials and Processes, Fluid Lines and Fittings (5) OR Hold a valid FAA Airframe or Powerplant Certificate (0)	0-19
+AMT220	Fundamentals of Aircraft Wood Structures, Covering and Finishing and Bonded Structures	3
+AMT222	Atmosphere Control, Fire Protection, Ice and Rain Protection Systems	4
+AMT224	Aircraft Sheet Metal	5
+AMT226	Aircraft Landing Gear, Hydraulic, Pneumatic, Fuel, Position and Warning Systems	7
+AMT228	Aircraft Electrical Systems, Instruments, Fuel Indicating, Communication and Navigation Systems	7
+AMT230	Airframe Assembly, Inspection and Welding	6
+AMT263	Aircraft Turbine Engines	5
+AMT264	Aircraft Reciprocating Engines	7
+AMT266	Engine Fuel Systems, Fuel Metering and Induction System	6
+AMT268	Engine Electrical, Ignition and Starter Systems	6
+AMT270	Engine Instruments, Fire Protection and Lubrication, Cooling and Exhaust Systems	5
+AMT272	Propeller Systems and Engine Inspections	4

Aircraft Maintenance Technology-Airframe

Associate in Applied Science: AAS 3668

73-79 Credits

Program Contact

Bashir Khalil | 480-988-8112 | bashir.khalil@cgc.edu

Program Description

The Associate in Applied Science (AAS) in Aircraft Maintenance Technology-Airframe degree is designed to provide students with strong General Education skills in support of their aviation maintenance knowledge. This degree prepares students to enter careers in aircraft and helicopter structural manufacturing and maintenance, where graduates can potentially work in general, corporate, commercial, or military sectors. Graduates are eligible to apply for relevant Federal Aviation Administration (FAA) written, oral, and practical exams. A Certificate of Completion (CCL) in Aircraft Maintenance Technology-Airframe is also available.

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

Program Notes

Students must earn a grade of "C" or better in all courses within the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

Admission Criteria

Students wishing to enroll in this Aircraft Maintenance Technology-Airframe program must complete an application process before being officially accepted into the program.

Program Prerequisites: None

Required Courses: 51 Credits

+AMT124	Aircraft Forms and Regulations, Weight and Balance, Drawings, and Ground Operations	5
+AMT126	Fundamentals of Mathematics and Electricity	9
+AMT128	Fundamentals of Aviation Physics, Corrosion Control, Materials and Processes, Fluid Lines and Fittings	5
+AMT220	Fundamentals of Aircraft Wood Structures, Covering and Finishing and Bonded Structures	3
+AMT222	Atmosphere Control, Fire Protection, Ice and Rain Protection Systems	4
+AMT224	Aircraft Sheet Metal	5
+AMT226	Aircraft Landing Gear, Hydraulic, Pneumatic, Fuel, Position and Warning Systems	7
+AMT228	Aircraft Electrical Systems, Instruments, Fuel Indicating, Communication and Navigation Systems	7
+AMT230	Airframe Assembly, Inspection and Welding	6

General Education: 22-28 Credits

Core: 12-18 Credits

First-Year Composition

+ENG101	First-Year Composition (3) OR	
+ENG107	First-Year Composition for ESL (3) AND	
+ENG102	First-Year Composition (3) OR	
+ENG108	First-Year Composition for ESL (3)	6

Oral Communication

COM100	Introduction to Human Communication (3) OR	
COM110	Interpersonal Communication (3) OR	
+COM225	Public Speaking (3) OR	
COM230	Small Group Communication (3)	3

Critical Reading

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

Mathematics

+MAT120	Intermediate Algebra (5) OR	
+MAT121	Intermediate Algebra (4) OR	
+MAT122	Intermediate Algebra (3) OR	
+MAT126	Intermediate Algebra with Review (6)	3-6

Distribution: 10 Credits

Humanities, Arts and Design

Any approved general education course from the Humanities, Arts and Design area. 3

Social and Behavioral Sciences

Any approved general education course in the Social and Behavioral Sciences area 3

Natural Sciences

+PHY101	Introduction to Physics	4

Aircraft Maintenance Technology-Airframe

Certificate of Completion: CCL 5668

32-51 Credits

Program Contact

Bashir Khalil | 480-988-8112 | bashir.khalil@cgc.edu

Program Description

The Certificate of Completion (CCL) in Aircraft Maintenance Technology-Airframe program is designed to prepare students to enter careers in aircraft (fixed-wing and rotorcraft) structural manufacturing and maintenance. Graduates can potentially work in general, corporate, commercial, manufacturing, and military sectors. Graduates are eligible to apply for the Federal Aviation Administration (FAA), Aviation Maintenance Technician--Airframe

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

exam. An Associates in Applied Science (AAS) in Aircraft Maintenance Technology-Airframe is also available.

Program Notes

Students must earn a grade of "C" or better for all courses required within the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

Admission Criteria

Students wishing to enroll in this certificate program must complete an application process before being officially accepted into the program.

Program Prerequisites: None

Required Courses: 32-51 Credits

+AMT124	Aircraft Forms and Regulations, Weight and Balance, Drawings, and Ground Operations (5)	
+AMT126	Fundamentals of Mathematics and Electricity (9)	
+AMT128	Fundamentals of Aviation Physics, Corrosion Control, Materials and Processes, Fluid Lines and Fittings (5) OR	
Hold a valid FAA Powerplant Certificate (0)		0-19
+AMT220	Fundamentals of Aircraft Wood Structures, Covering and Finishing and Bonded Structures	3
+AMT222	Atmosphere Control, Fire Protection, Ice and Rain Protection Systems	4
+AMT224	Aircraft Sheet Metal	5
+AMT226	Aircraft Landing Gear, Hydraulic, Pneumatic, Fuel, Position and Warning Systems	7
+AMT228	Aircraft Electrical Systems, Instruments, Fuel Indicating, Communication and Navigation Systems	7
+AMT230	Airframe Assembly, Inspection and Welding	6

Aircraft Maintenance Technology-Powerplant

Associate in Applied Science: AAS 3665

74-80 Credits

Program Contact

Bashir Khalil | 480-988-8112 | bashir.khalil@cgc.edu

Program Description

The Associate in Applied Science (AAS) in Aircraft Maintenance Technology-Powerplant degree is designed to provide students with strong General Education skills in support of their aviation maintenance knowledge. This degree prepares students to enter careers in aircraft (fixed-wing and rotorcraft), powerplant manufacturing and maintenance. Students who complete this degree can potentially work in general, corporate, commercial, manufacturing, and military sectors. Graduates are eligible to apply for relevant Federal Aviation Administration (FAA) written, oral, and practical exams. A Certificate of Completion (CCL) in Aircraft Maintenance Technology-Powerplant is also available.

Program Notes

Students must earn a grade of "C" or better in all courses within the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

Admission Criteria

Students wishing to enroll in this Aircraft Maintenance Technology-Powerplant program must complete an application process before being officially accepted into the program.

Program Prerequisites: None

Required Courses: 52 Credits

+AMT124	Aircraft Forms and Regulations, Weight and Balance, Drawings, and Ground Operations	5
+AMT126	Fundamentals of Mathematics and Electricity	9

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

+AMT128	Fundamentals of Aviation Physics, Corrosion Control, Materials and Processes, Fluid Lines and Fittings	5
+AMT263	Aircraft Turbine Engines	5
+AMT264	Aircraft Reciprocating Engines	7
+AMT266	Engine Fuel System, Fuel Metering and Induction System	6
+AMT268	Engine Electrical, Ignition and Starter Systems	6
+AMT270	Engine Instruments, Fire Protection and Lubrication, Cooling and Exhaust Systems	5
+AMT272	Propeller Systems and Engine Inspections	4

General Education: 22-28 Credits

Core: 12-18 Credits

First-Year Composition

+ENG101	First-Year Composition (3) OR	
+ENG107	First-Year Composition for ESL (3) AND	
+ENG102	First-Year Composition (3) OR	
+ENG108	First-Year Composition for ESL (3)	6

Oral Communication

COM100	Introduction to Human Communication (3) OR	
COM110	Interpersonal Communication (3) OR	
+COM225	Public Speaking (3) OR	
COM230	Small Group Communication (3)	3

Critical Reading

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

Mathematics

+MAT120	Intermediate Algebra (5) OR	
+MAT121	Intermediate Algebra (4) OR	
+MAT122	Intermediate Algebra (3) OR	
+MAT126	Intermediate Algebra with Review (6)	3-6

Distribution: 10 Credits

Humanities, Arts and Design

Any approved general education course from the Humanities, Arts and Design area. 3

Social and Behavioral Sciences

Any approved general education course in the Social and Behavioral Sciences area 3

Natural Sciences

+PHY101	Introduction to Physics	4

Aircraft Maintenance Technology-Powerplant

Certificate of Completion: CCL 5669

33-52 Credits

Program Contact

Bashir Khalil | 480-988-8112 | bashir.khalil@cgc.edu

Program Description

The Certificate of Completion (CCL) in Aircraft Maintenance Technology-Powerplant is designed to prepare students to enter careers in aircraft (fixed-wing and rotorcraft) powerplant manufacturing and maintenance. Graduates can potentially work in general, corporate, commercial, manufacturing, and military sectors. Students who complete the certificate are eligible to apply for relevant Federal Aviation Administration written, oral, and practical exams. An Associates in Applied Science (AAS) in Aircraft Maintenance Technology-Powerplant is also available.

Program Notes

Students must earn a grade of "C" or better for all courses required within the program. Overall program minimum GPA = 2.00

+ indicates course has prerequisites and/or corequisites.

Admission Criteria

Students wishing to enroll in this certificate program must complete an application process before being officially accepted into the program.

Program Prerequisites: None

Required Courses: 32-52 Credits

+AMT124	Aircraft Forms and Regulations, Weight and Balance, Drawings, and Ground Operations (5)
+AMT126	Fundamentals of Mathematics and Electricity (9)

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

+AMT128	Fundamentals of Aviation Physics, Corrosion Control, Materials and Processes, Fluid Lines and Fittings (5) OR Hold a valid FAA Airframe Certificate (0)	0-19
+AMT263	Aircraft Turbine Engines	5
+AMT264	Aircraft Reciprocating Engines	7
+AMT266	Engine Fuel Systems, Fuel Metering and Induction System	6
+AMT268	Engine Electrical, Ignition and Starter Systems	6
+AMT270	Engine Instruments, Fire Protection and Lubrication, Cooling and Exhaust Systems	5
+AMT272	Propeller Systems and Engine Inspections	4

Airway Science Technology - Flight Emphasis

Associate in Applied Science: AAS 3707

67-73 Credits

Program Contact

Bashir Khalil | 480-988-8112 | bashir.khalil@cgc.edu

Program Description

The Associate in Applied Science (AAS) in Airway Science Technology, Flight Emphasis program is designed to prepare students to apply technical knowledge and skills to the flying of commercial, corporate, or private aircraft. Program content includes private, instrument, commercial single-engine, commercial multi-engine, and flight instructor certifications. The program develops students` willingness to learn, critical thinking, organizational skills, initiative, reliability, accountability, communication, and resource management skills. During the program, students will be provided the resources and training required for Federal Aviation Administration (FAA) written and practical examinations.

Flight Policies

Flight and simulator training costs are the responsibility of the student. These include hourly costs for aircraft and flight instruction, tuition, fees, and other expenses. Once students have been accepted into the CGCC Airway Science, Flight Emphasis program, they will not receive college credit for flight instruction received at flight schools other than the school or schools with which Maricopa County Community College District has currently contracted for such instruction.

Transfer of Pilot Ratings

Students with a private pilot certificate obtained without college credit must complete the private pilot ground school and flight lessons contained in the private pilot test course before enrolling in any 200-level ground or flight courses.

Students holding commercial pilot, single-engine land certification must obtain division approval prior to enrollment in flight instructor certification.

Aviation and related courses from other colleges and universities will not automatically transfer to CGCC. All aviation transfer courses, flight or non-flight, are reviewed by the Aviation Division Chair for transferability. In all cases, it is the responsibility of the student to initiate the process.

Medical Certificates

A current medical certificate is required for all students planning to begin flight training. The physical examination must be performed by a medical doctor who is a designated Aviation Medical Examiner. Students are advised to obtain their medical certificates well in advance of beginning the flight program. This will ensure that medical problems or physical limitations that may alter career plans can be addressed before entering flight courses.

There are three types of medical certificates - Class III, Class II, and Class I. Students are advised to obtain a Class I certificate if they are planning a career in professional flight. Veteran students must have at least a Class II medical before beginning 200-level flight courses.

Program Notes

Students must earn a grade of “C” or better for all courses required within the program. Overall program minimum GPA = 2.50.

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

+ indicates course has prerequisites and/or corequisites.

Admission Criteria

Students must apply for acceptance into the Associate in Applied Science (AAS) in Airway Science Technology, Flight Emphasis program before enrolling in any 100-level courses by completing an application.

Program Prerequisites: None

Required Courses: 45 Credits

AET107	Private Pilot Ground School	5
AET110	Private Pilot Flight (1) OR	
AET112	Private Pilot Flight Test Course (1)	1
AET115	Aviation Meteorology	3
+AET203	Basic Airplane Systems	3
+AET207	Attitude Instruments and Navigation	3
+AET208	Aviation Safety	3
+AET210	Instrument Commercial Flight I	1
+AET213	Aerodynamics and Performance	3
+AET217	Instrument Procedures	3
+AET220	Instrument Commercial Flight II	1
+AET225	Advanced Aircraft Systems	4
+AET227	Certified Flight Instructor: Airplane, Single Engine Land Ground School	5
+AET229	Crew Resource Management	3
+AET230	Certified Flight Instructor: Airplane, Single Engine Land	1
+AET237	Multiengine Airplane Pilot Ground School	2
+AET240	Multiengine Airplane Pilot Flight	1
UAS107	Unmanned Aircraft Systems Operator Certification	3

General Education: 22-28 Credits

Core: 12-18 Credits

First-Year Composition

+ENG101	First-Year Composition (3) OR	
+ENG107	First-Year Composition for ESL (3) AND	
+ENG102	First-Year Composition (3) OR	
+ENG108	First-Year Composition for ESL (3)	6

Oral Communication

COM100	Introduction to Human Communication (3) OR	
COM110	Interpersonal Communication (3) OR	
+COM225	Public Speaking (3) OR	
COM230	Small Group Communication (3)	3

Critical Reading

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

Mathematics

+MAT120	Intermediate Algebra (5) OR	
+MAT121	Intermediate Algebra (4) OR	
+MAT122	Intermediate Algebra (3) OR	
MAT126	Intermediate Algebra with Review (6)	3-6

Distribution: 10 credits

Humanities, Arts and Design

Any approved general education course from the Humanities, Arts and Design area. 3

Social and Behavioral Sciences

Any approved general education course from the Social and Behavioral Sciences area. 3

Natural Sciences

+PHY101	Introduction to Physics	4

Certified Flight Instructor Instrument Airplane Rating

Certificate of Completion: CCL 5825N

4 Credits

Program Contact

Bashir Khalil | 480-988-8112 | bashir.khalil@cgc.edu

Program Description

The Certificate of Completion (CCL) in Certified Flight Instructor Instrument Airplane Rating program in Airway Science Technology, Flight Emphasis is designed to prepare students to apply technical knowledge and skills to the flying of airplanes as a Certified Flight Instructor-Instrument Rated, and to prepare students to sit for the Federal Aviation Administration (FAA) written and practical examinations.

Program Notes

This program is not eligible for Title IV Federal Financial Aid.

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

Students must earn a grade of "C" or better for all courses required within the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

Program Prerequisites: None

Required Courses: 4 Credits

+AET258	Certified Flight Instructor: Instrument Airplane Ground School	3
+AET270	Certified Flight Instructor: Instrument Airplane Flight	1

Corrections

Certificate of Completion: CCL 5776N

15 Credits

Program Contact

Lisa Ruschak | 480-726-4078 | lisa.ruschak@cgc.edu

Program Description

The Certificate of Completion (CCL) in the Corrections program is designed for students intending to pursue careers in various correctional components of the justice system, including parole, probation, jail, and prisons. Focus is broader learning about the correction function in the context of overall administration of justice system.

Program Notes

This program is not eligible for Title IV Federal Financial Aid.

Students must earn a grade of "C" or better for all courses required within the program. Overall program minimum GPA = 2.00.

Program Prerequisites: None

Required Courses: 15 Credits

AJS101	Introduction to Criminal Justice	3
AJS123	Ethics and the Administration of Justice (3) OR	
AJS255	Crime, Law, and Mental Health (3)	3
AJS212	Juvenile Justice Procedures	3
AJS240	The Correction Function	3
AJS205	Effective Communication and Report Writing in Criminal Justice (3) OR	
AJS275	Criminal Investigation (3)	3

Crime Scene Investigation

Certificate of Completion: CCL 5964

16-18 Credits

Program Contact

Lisa Ruschak | 480-726-4078 | lisa.ruschak@cgc.edu

Program Description

The Certificate of Completion (CCL) in Crime Scene Investigation is designed to develop knowledge and skills required to investigate and reconstruct crime scenes using scientific evidence and logical analysis. The program provides instruction in criminal investigation procedures, collection and preservation of physical and biological evidence, death investigation techniques, crime scene reconstruction methodology and presentation of testimony in court.

Program Notes

Students must earn a grade of "C" or better for all courses required within the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

Required Courses: 16-18 Credits

AJS213	Evidence Technology/Fingerprints (3) OR	
AJS243	Crime Scene Reconstruction (3)	3
AJS215	Criminalistics: Physical Evidence (3) OR	
AJS219	Crime Scene Technology: Physical Evidence (3) OR	
FOR105	Forensic Science: Physical Evidence (4)	3-4
AJS216	Criminalistics: Biological Evidence (3) OR	
FOR106	Forensic Science: Biological Evidence (4)	3-4
AJS214	Evidence Technology Photography	3
AJS275	Criminal Investigation I	3
AJS290BN	Courtroom Testimony Seminar	1

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

Electric Utility Technology

Associate in Applied Science: AAS 3855

64-70 Credits

Program Contact

Mark Weaver | 480-988-8255 | mark.weaver@cgc.edu

Program Description

The Associate in Applied Science (AAS) in Electric Utility Technology program is designed to prepare the student for the position of an apprentice-level line worker who is familiar with the use of tools, materials, and the equipment of the electric utility industry. Students will be trained in power line installation and maintenance, pole climbing and use of tools, truck and equipment operation, and overhead and underground distribution, construction, and maintenance of electrical lines. A Certificate of Completion (CCL) in Electric Utility Technology is fully embedded in this AAS.

Program Notes

Students must earn a grade of "C" or better in all courses within the program. Overall program minimum GPA = 2.00.

Students must obtain First Aid/Cardiopulmonary Resuscitation (CPR) certification by the completion of EUT215.

Student must provide an Arizona Department of Transportation Medical Certification to the Division Office of Aviation and Applied Technology prior to the first class period for EUT115.

Students must obtain a Commercial Drivers License from the State of Arizona and/or an interstate Commercial Drivers License Class A with no restrictions prior to completion of the Required Courses.

+ indicates course has prerequisites and/or corequisites.

Admission Criteria

Formal application and admission to the Electric Utility Technology program is required.

Program Prerequisites: None

Required Courses: 30-33 Credits

EUT103	Introduction to Rigging	2
EUT104	Equipment Safety and Operation	2
EUT110	Line Work I	2
+EUT112	Basic Electricity: AC and DC	4
+EUT115	Field Training I	4
+EUT210	Line Work II	2
+EUT211	Electrical Apparatus	4
+EUT215	Field Training II	4
+MAT120	Intermediate Algebra (5) OR	
+MAT121	Intermediate Algebra (4) OR	
+MAT122	Intermediate Algebra (3) OR	
MAT126	Intermediate Algebra with Review (6)	3-6
+PPT120	Energy Industry Fundamentals	3

Restricted Electives: 15 Credits

Selection must be from a minimum of 2 different course prefixes. Selected courses will not apply in both the Required and Restricted Electives areas.

ACC+++++	Any ACC Accounting courses
BPC+++++	Any BPC Business-Personal Computer courses
CAD+++++	Any CAD Computer-Aided Drafting courses
CIS+++++	Any CIS Computer-Information Systems courses
COM+++++	Any COM Communication courses
DFT+++++	Any DFT Drafting courses
ECE+++++	Any ECE Engineering Science courses
EEE+++++	Any EEE Electrical Engineering courses
ELE+++++	Any ELE Electronic courses
ELT+++++	Any ELT Electronics Technology
EMT+++++	Any EMT Emergency Medical Technology courses
HES+++++	Any HES Health Science courses
GBS+++++	Any GBS General Business courses
NET+++++	Any NET Networking Technology courses
PED+++++	Any PED Physical Education courses
PHY+++++	Any PHY Physics courses
PPT+++++	Any PPT Power Plant Technology courses
SPA+++++	Any SPA Spanish Courses
UAS+++++	Any UAS Unmanned Aircraft Systems courses

General Education: 19-22 Credits

Core: 9-12 Credits

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

First-Year Composition

+ENG101	First-Year Composition (3) OR	
+ENG107	First-Year Composition for ESL (3) AND	
+ENG102	First-Year Composition (3) OR	
+ENG108	First-Year Composition for ESL (3)	6

Oral Communication

COM100	Introduction to Human Communication (3) OR	
COM110	Interpersonal Communication (3) OR	
+COM225	Public Speaking (3) OR	
COM230	Small Group Communication (3)	3

Critical Reading

+CRE101	College Critical Reading and Critical Thinking (3) OR	
Equivalent by assessment.		0-3

Mathematics

Met by MAT12+ in Required Course area 0

Distribution: 10 Credits

Humanities, Arts and Design

Any approved general education course from the Humanities, Arts and Design area. 3

Social and Behavioral Sciences

Any approved general education course in the Social and Behavioral Sciences area. 3

Natural Sciences

Any approved general education course in the Natural Sciences area. 4

Electric Utility Technology

Certificate of Completion: CCL 5055

30-33 Credits

Program Contact

Mark Weaver | 480-988-8255 | mark.weaver@cgc.edu

Program Description

The Certificate of Completion (CCL) in Electric Utility Technology program is designed to prepare the student for the position of an apprentice-level line worker who is familiar with the use of tools, materials, and the equipment of the electric utility industry. Students will be trained in power line installation and maintenance, pole climbing and use of tools, truck and equipment operation and overhead and underground distribution, construction and maintenance of electrical lines. This certificate is fully embedded in the Associate in Applied Science (AAS) in Electric Utility Technology.

Program Notes

Students must earn a grade of "C" or better in all courses within the program. Overall program minimum GPA = 2.00

+ indicates course has prerequisites and/or corequisites.

Student must provide an Arizona Department of Transportation Medical Certification to the Division Office of Aviation and Applied Technology prior to the first class period for EUT115.

Students must obtain a Commercial Drivers™ License valid in the state of Arizona prior to completion of the Required Courses.

Students must obtain First Aid/Cardiopulmonary Resuscitation (CPR) certification by the completion of EUT215.

Admission Criteria

Formal application and admission to the Electric Utility Technology program is required.

Program Prerequisites: None

Required Courses: 30-33 Credits

EUT103	Introduction to Rigging	2
EUT104	Equipment Safety and Operation	2
EUT110	Line Work I	2
+EUT112	Basic Electricity: AC and DC	4
+EUT115	Field Training I	4
+EUT210	Line Work II	2
+EUT211	Electrical Apparatus	4
+EUT215	Field Training II	4
+MAT120	Intermediate Algebra (5) OR	
+MAT121	Intermediate Algebra (4) OR	
+MAT122	Intermediate Algebra (3) OR	
MAT126	Intermediate Algebra with Review (6)	3-6
PPT120	Energy Industry Fundamentals	3

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

Fingerprint Identification and Photography

Certificate of Completion: CCL 5010N

10 Credits

Program Contact

Lisa Ruschak | 480-726-4078 | lisa.ruschak@cgc.edu

Program Description

The Certificate of Completion (CCL) in Fingerprint Identification and Photography is designed to prepare students for entry level positions in the field of fingerprint classification and identification. It is one pathway to the Associate in Applied Science (AAS) in Forensic Science.

Program Notes

This program is not eligible for Title IV Federal Financial Aid.

Students must earn a grade of "C" or better for all courses required within the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites

Program Prerequisites: None

Required Courses: 10 Credits

AJS101	Introduction to Criminal Justice	3
AJS213	Evidence Technology/Fingerprints	3
AJS214	Evidence Technology/Photography	3
AJS290BN	Courtroom Testimony Seminar	1

Forensic Science

Associate in Applied Science AAS 3183

60-65 Credits

Program Contact

Lisa Ruschak | 480-726-4078 | lisa.ruschak@cgc.edu

Program Description

The Associate in Applied Science (AAS) in Forensic Science provides the student with a specialization in forensic investigation as it relates to crime. The curriculum presents a specialized scope of knowledge about photography, collection and preservation of evidence, and investigative strategies. The program provides students with an important knowledge base for investigative specialization in a wide range of disciplines and careers. This degree pathway also provides students with the opportunity to complete two Certificates of Completion (CCL) in Crime Scene Investigation, and Fingerprint Identification and Photography.

Program Notes

Students must earn a grade of "C" or better in all courses within the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

Program Prerequisites: None

Required Courses: 31-41 Credits

AJS101	Introduction to Criminal Justice	3
AJS123	Ethics and the Administration of Justice	3
AJS275	Criminal Investigation I	3
AJS290BN	Courtroom Testimony Seminar	1
AJS215	Criminalistics: Physical Evidence (3) OR	
AJS219	Crime Scene Technology: Physical Evidence (3) OR	
FOR105	Forensic Science: Physical Evidence (4)	3-4
AJS216	Criminalistics: Biological Evidence (3) OR	
FOR106	Forensic Science: Biological Evidence (4)	3-4

Students should select courses from one of the following emphases based on career goals.

Crime Scene (15 credits)

AJS109	Substantive Criminal Law	3
AJS210	Constitutional Law	3
AJS213	Evidence Technology/ Fingerprints	3
AJS214	Evidence Technology/Photography	3
AJS260	Procedural Criminal Law	3

Lab Science (23 credits)

ASM/FOR275	Forensic Anthropology	4
+CHM151	General Chemistry I	3
+CHM151LL	General Chemistry I Laboratory	1
+CHM152	General Chemistry II	3
+CHM152LL	General Chemistry II Laboratory	1
+PHY111	General Physics I	4
+PHY112	General Physics II	4

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

Any course with the HU, C and G general education designations (3) OR
Any course with the HU, C and H general education designations (3) 3

Restricted Electives: 3 Credits

Students must complete 3 credits of restricted electives.

Students interested in the Crime Scene Emphasis

CIS105	Survey of Computer Information Systems (3) OR	
BPC110	Computer Usage and Applications (3) OR	
AJS+++++	Any AJS Administration of Justice Studies course not listed in the required courses area (3)	3

Students interested in the Lab Science Emphasis

CIS105	Survey of Computer Information Systems (3) OR	
BPC110	Computer Usage and Applications (3)	3

Free Electives: 0-10 Credits

Students must choose zero (0) to ten (10) additional credits of general elective courses. Total number of general electives required will largely depend upon emphasis selected.

General Education Requirements: 12-24 Credits

General Education Core: 12-20 Credits

First Year Composition: 6 Credits

+ENG101	First-Year Composition (3) OR
+ENG107	First-Year Composition for ESL (3) AND
+ENG102	First-Year Composition (3) OR
+ENG108	First-Year Composition for ESL (3)

Oral Communication: 3 Credits

+COM225	Public Speaking	3

Critical Reading: 0-3 Credits

+CRE101	College Critical Reading and Critical Thinking (3) OR

Equivalent by assessment

Mathematics: 3-8 Credits

Crime Scene Emphasis

+MAT140	College Mathematics (5) OR
+MAT141	College Mathematics (4) OR
+MAT142	College Mathematics (3) OR

Higher course with an [MA] general education designation 3-5

Lab Science Emphasis

+MAT150	College Algebra/Functions (5) OR
+MAT151	College Algebra/Functions (4) OR
+MAT152	College Algebra/Functions (3) AND
+MAT182	Plane Trigonometry (3) OR
+MAT187	Precalculus (5) OR

Higher course with an [MA] general education designation 3-8

General Education Distribution: 0-4 Credits

Humanities, Arts and Design: 0 Credits

Met by AJS123 in Required Courses area

Social and Behavioral Sciences: 0 Credits

Met by AJS101 in Required Courses area

Natural Sciences: 0-4 Credits

Recommended Courses for Crime Scene Emphasis:

+CHM130	Fundamental Chemistry (3) AND	
+CHM130LL	Fundamental Chemistry Laboratory (1) OR	
+CHM151	General Chemistry I (3) AND	
+CHM151LL	General Chemistry I Laboratory (1) OR	
FOR105	Forensic Science: Physical Evidence (4) OR	
FOR106	Forensic Science: Biological Evidence (4)	0-4

Lab Science Emphasis met by CHM151 and CHM151LL

Forensic Science

Certificate of Completion: CCL 5326

18 Credits

Program Contact

Lisa Ruschak | 480-726-4078 | lisa.ruschak@cgc.edu

Program Description

The Certificate of Completion (CCL) in Forensic Science is designed to provide students with the technical skills and knowledge necessary to evaluate and process a crime scene for items of evidentiary value, document crime scene evidence, and collect and retain items consistent with forensic procedures.

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

Program Notes

Students must earn a grade of "C" or better in all courses required within the program. Overall program minimum GPA = 2.00.

Program Prerequisites: None

Required Courses: 18 Credits

AJS201	Rules of Evidence	3
AJS213	Evidence Technology/Fingerprints	3
AJS215	Criminalistics: Physical Evidence	3
AJS216	Criminalistics: Biological Evidence	3
AJS241	Police Photography	3
AJS275	Criminal Investigation I	3

Homeland Security

Certificate of Completion: CCL 5322N

15 Credits

Program Contact

Lisa Ruschak | 480-726-4078 | lisa.ruschak@cgc.edu

Program Description

The Certificate of Completion (CCL) in Homeland Security program is designed to provide students with the knowledge and skills needed to conduct a homeland security evaluation and to assess, investigate and respond to terrorism incidents. It also provides criminal justice practitioners with an opportunity for academic growth and the development of specialized skills in homeland security.

Program Notes

This program is not eligible for Title IV Federal Financial Aid.

Students must earn a grade of "C" or better in all courses required within the program. Overall program minimum GPA = 2.00.

Program Prerequisites: None

Required Courses: 15 Credits

AJS/DPR/ FSC139	Emergency Response to Terrorism	3
AJS/DPR/ FSC147	Emergency Preparedness	3
AJS/DPR/ FSC148	Fundamentals of Emergency Management	3
AJS/DPR/ FSC149	Hazard Mitigation	3
AJS195	International and Domestic Terrorism	3

Law Enforcement

Certificate of Completion: CCL 5987N

15 Credits

Program Contact

Lisa Ruschak | 480-726-4078 | lisa.ruschak@cgc.edu

Program Description

The Certificate of Completion (CCL) in Law Enforcement is designed for students who are interested in pursuing a course of study specifically focused on law enforcement. The certificate program specializes in training and education related to the duties of law enforcement. The program is designed for the student with no Arizona police academy experience and is one pathway to the Associate in Applied Science (AAS) in Administration of Justice.

Program Notes

This program is not eligible for Title IV Federal Financial Aid.

Students must earn a grade of "C" or better in all courses within the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

Program Prerequisites: None

Required Courses: 15 Credits

AJS101	Introduction to Criminal Justice	3
AJS123	Ethics and the Administration of Justice	3
AJS205	Effective Communication and Report Writing in Criminal Justice	3
AJS230	The Police Function	3
AJS275	Criminal Investigation I	3

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

Law Enforcement Training

Associate in Applied Science: AAS 3188

62-68 Credits

Program Contact

Jonathan Terpay | 480-988-8756 | jonathan.terpay@cgc.edu

Program Description

The Associate in Applied Science (AAS) in Law Enforcement Training is designed to provide students with up-to-date industry specific training that will enhance their professional opportunities. Courses are also designed to teach students how to handle the challenges of the law enforcement profession. A Certificate of Completion (CCL) in Law Enforcement Training Academy is also available.

Program Notes

Students must earn a grade of "C" or better for all courses within the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

Program Prerequisites: None

Admission Criteria

Must meet AzPOST minimum requirements for a law enforcement officer and meet any physical requirements by the Academy Director.

Required Courses: 40 Credits

Certificate of Completion in Law Enforcement Training Academy (5991)		40

General Education: 22-28 Credits

Core: 12-18 Credits

First-Year Composition

+ENG101	First-Year Composition (3) OR	
+ENG107	First-Year Composition for ESL (3) AND	
+ENG102	First-Year Composition (3) OR	
+ENG108	First-Year Composition for ESL (3) OR	
+ENG111	Technical and Professional Writing (3)	6

Oral Communication

COM100	Introduction to Human Communication (3) OR	
COM110	Interpersonal Communication (3) OR	
+COM225	Public Speaking (3) OR	
COM230	Small Group Communication (3)	3

Recommended: COM110 or COM230

Critical Reading

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

Mathematics

Any approved general education course in the Mathematics area 3-6

Recommend for transfer:

+MAT140	College Mathematics (5) OR
+MAT141	College Mathematics (4) OR
+MAT142	College Mathematics (3) OR

Any higher approved general education course in the Mathematical Applications [MA] area (3-6)

Distribution: 10 Credits

Humanities, Arts and Design

Any approved general education course in the Humanities, Arts and Design area 3

Recommended: AJS123 Ethics and the Administration of Justice (3)

Social and Behavioral Sciences

Any approved general education course in the Social and Behavioral Sciences area 3

Natural Sciences

Any approved general education course in the Natural Sciences area 4

Law Enforcement Training Academy

Certificate of Completion: CCL 5991N

40 Credits

Program Contact

Jonathan Terpay | 480-988-8756 | jonathan.terpay@cgc.edu

Program Description

The Certificate of Completion (CCL) in Law

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

Enforcement Training Academy is designed for students wishing to pursue a career as a law enforcement officer. The student will develop skills in eight functional areas: Introduction to Law Enforcement, Law and Legal Matters, Patrol Procedures, Traffic Control, Crime Scene Management, Community and Police Relations, Report Writing, and Police Proficiency Skills. At the conclusion of this program the student will have completed all requirements of the Arizona Peace Officer Standards and Training (AzPOST) Board standards established to certify police officers in the State of Arizona.

Program Notes

This program is not eligible for Title IV Federal Financial Aid.

Students must earn a grade of "C" or better for all courses required within the program. Overall program minimum GPA = 2.00.

This Certificate of Completion (CCL) is offered as an educational partnership at Mesa Community College and Rio Salado College. Students at these colleges are advised to meet with the program director, chair and/or faculty advisor. Given these are educational partnerships, they are not eligible for Title IV Federal Financial Aid.

+ indicates course has prerequisites and/or corequisites.

Admission Criteria

Must meet AzPOST minimum requirements for a law enforcement officer and meet any physical requirements by the Academy Director.

Program Prerequisites: None

Required Courses: 40 Credits

+AJS/LET280	Peace Officer Certification (40) OR +AJS/	
LET280AA	Peace Officer Certification I (20) AND +AJS/	
LET280AB	Peace Officer Certification II (20)	40

Leadership in Public Safety Organizations

Certificate of Completion: CCL 5211N

6 Credits

Program Contact

Jonathan Terpay | 480-988-8756 | jonathan.terpay@cgc.edu

Program Description

The Certificate of Completion (CCL) in Leadership in Public Safety Organizations program builds the industry knowledge and skills for individuals to transition to leadership positions in the field of public safety. This CCL will introduce students to the fundamental concepts and skills of professionalism, organizational culture and management, characteristics of effective teams, conflict resolution, motivation, systems-thinking, problem-solving, and leadership as applicable to public safety organizations. Students with the requisite experience in the field who complete this CCL can pursue employment in a variety of front-line leadership positions within the fields of public safety including law enforcement, fire service, and public safety support operations such as communication operators and property and records management.

Program Notes

This program is not eligible for Title IV Federal Financial Aid.

Students must earn a grade of C or better for all courses within the program.

+ indicates course has prerequisites and/or corequisites

Program Prerequisites: None

Required Courses: 6 Credits

LET173	Introduction to Leadership in Public Safety	2
+LET174	Organizational Culture and Leadership	3
+LET175	Public Safety Leadership Capstone	1

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

Legal Studies

Certificate of Completion: CCL 5966N

15 Credits

Program Contacts

Lisa Ruschak 480-726-4078 | lisa.ruschak@cgc.edu

Program Description

The Certificate of Completion (CCL) in Legal Studies is designed for students who are interested in pursuing a course of study specifically focused on legal studies. It is one pathway to the Associate of Applied Science (AAS) in Administration of Justice.

Program Notes

This program is not eligible for Title IV Federal Financial Aid.

Students must earn a grade of "C" or better for all courses within the program. Overall program minimum GPA = 2.00.

Program Prerequisites: None

Required Courses: 16 Credits

AJS109	Substantive Criminal Law	3
AJS201	Rules of Evidence	3
AJS123	Ethics and the Administration of Justice (3) OR	
AJS205	Effective Communication and Report Writing in Criminal Justice (3) OR	3
AJS210	Constitutional Law	3
AJS260	Procedural Criminal Law	3

Unmanned Aircraft Systems

Associate in Applied Science: AAS 3184

60-65 Credits

Program Contact

Charles Morgan | 480-988-8104 | charles.morgan@cgc.edu

Program Description

The Associate in Applied Science (AAS) in Unmanned Aircraft Systems (UAS) program prepares students for entry level positions in the UAS industry by providing foundational knowledge and skills in UAS mission planning, applications, maintenance, laws and regulations, data analytics, and project management using UAS platforms. Program content includes an introduction to UAS flight, history, avionics, sensors, communications systems and selectable paths including data analysis and applications such as emergency responders, geographic information systems, precision agriculture, and in commercial and government sectors. Students will prepare for and conduct unmanned flights similar to those commonly performed in the industry observing Federal Aviation Administration`s (FAA) regulations that govern sUAS operations. This program helps prepare students for the FAA Part 107 Certification.

Program Notes

Students must earn a grade of "C" or better for all courses required within the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

Admission Criteria

Students wishing to enroll in the Unmanned Aircraft Systems program must complete an application process before being officially accepted into the program.

Program Prerequisites: None

Required Courses: 38 Credits

+AET208	Aviation Safety	3
+PHY111	General Physics I	4
+UAS100	sUAS Batteries and Electronics	5
UAS101	Introduction to Unmanned Aircraft Systems Operation	3
UAS107	Unmanned Aircraft Systems Operator Certification	3
+UAS205	sUAS Instruments and Autopilot Programming and Uses	3
+UAS206	sUAS Instrument and Autopilot Flight Lab	2
+UAS207	sUAS Dynamics and Design	5
+UAS208	sUAS Dynamics and Design Lab	2
+UAS211	sUAS Ground Control Stations, Telemetry, and Comms	3
+UAS212	sUAS Maintenance Lab	2
+UAS215	sUAS Commercial Flight Training	3

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

General Education: 22-27 Credits

Core: 12-17 Credits

First-Year Composition

+ENG101	First-Year Composition (3) OR	
+ENG107	First-Year Composition for ESL (3) AND	
+ENG102	First-Year Composition (3) OR	
+ENG108	First-Year Composition for ESL (3)	6

Oral Communication

COM100	Introduction to Human Communication (3) OR	
COM110	Interpersonal Communication (3) OR	
+COM225	Public Speaking (3) OR	
COM230	Small Group Communication (3)	3

Critical Reading

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

Mathematics

+MAT187	Precalculus (5) OR	
Any approved general education course in the Mathematical Applications [MA] area for which MAT187 is a prerequisite. (3-5)		3-5

Distribution: 10 Credits

Humanities, Arts and Design

Any approved general education course from the Humanities, Arts and Design area. 3

Social and Behavioral Sciences

Any approved general education course from the Social and Behavioral Sciences area. 3

Natural Sciences

Any approved general education course from the Natural Sciences area. 4

Victimology

Certificate of Completion: CCL 5392N

15 Credits

Program Contacts

Lisa Ruschak | 480-726-4078 | lisa.ruschak@cgc.edu

Program Description

The Certificate of Completion (CCL) in Victimology is designed for students who are interested in pursuing a course of study specifically focused on crisis intervention, community services, and victim rights. It is one pathway to the Associate in Applied Science (AAS) in Administration of Justice.

Program Notes

This program is not eligible for Title IV Federal Financial Aid.

Students must earn a grade of "C" or better for all courses required within the program. Overall program minimum GPA = 2.00.

Program Prerequisites: None

Required Courses: 15 Credits

AJS101	Introduction to Criminal Justice	3
AJS162	Domestic Violence	3
AJS225	Criminology	3
AJS255	Crime, Law and Mental Health	3
AJS/EMT/FSC/ SWU258	Victimology and Crisis Management	3

Biological Sciences

Sustainability

Academic Certificate: AC 6240N

15-18 Credits

Program Contact

Kimberley Patterson | 480-732-7083 | kimberley.patterson@cgc.edu

Program Description

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

Program Notes

This program is not eligible for Title IV Federal Financial Aid.

Students must earn a grade of "C" or better for all

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

courses required within the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

Required Courses: 6 Credits

SSH111	Sustainable Cities	3
SUS110	Sustainable World	3

Restricted Electives: 9-12 Credits

Students must select three focus area classes

ASM104	Bones, Stones, and Human Evolution	4
BIO105	Environmental Biology	4
CHM107	Chemistry and Society (3) AND	
+CHM107LL	Chemistry and Society Laboratory (1)	4
COM263	Elements of Intercultural Communication	3
FON135	Sustainable Cooking	3
ECN212	Microeconomic Principles	3
EPS150	Introduction to Entrepreneurship	3
ENV101	Introduction to Environmental Science	4
GLG110	Geological Disasters and the Environment (3) AND	
GLG111	Geological Disasters and the Environment Lab (1)	4
GPH113	Introduction to Physical Geography	4
PHI216	Environmental Ethics	3
PSY132	Psychology and Culture	3
SBU200	Society and Business	3
SUS100	Introduction to Sustainability	3
SCT100	Introduction to Sustainable Built Environments	3

Business & Computing Studies

Accounting

Associate in Applied Science: AAS 3149

61-70 Credits

Program Contacts

Barbara Gonzalez | 602-243-8044 | barbara.gonzalez@cgc.edu

Program Description

The Associate in Applied Science (AAS) in Accounting program is designed to provide fundamental skills for individuals planning to enter the field of accounting. Possible entry-level jobs for this program include accounting clerk, accounts payable/receivable clerk, claims clerk, payroll clerk, credit clerk, bookkeeper, accounting intern, tax preparation or comparable positions. This program may prepare students for certification in Certified Bookkeeper (CB), Enrolled Agent (EA), and Certified Payroll Professional (CPP). Certificates of Completion (CCL) in Accounting and Enrolled Agent are available.

Program Notes

Students must earn a grade of "C" or better in all courses in the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.
++ indicates any suffixed courses.

Consultation with an academic advisor is recommended for course selection.

Program Prerequisites: None

Required Courses: 33-36 Credits

ACC111	Accounting Principles I (3) AND	
+ACC230	Uses of Accounting Information I (3) AND	
+ACC240	Uses of Accounting Information II (3) OR	
ACC111	Accounting Principles I (3) AND	
+ACC112	Accounting Principles II (3) AND	
+ACC212	Managerial Accounting (3) OR	
ACC211	Financial Accounting (3) AND	
+ACC212	Managerial Accounting (3)	6-9
ACC105	Payroll, Sales and Property Taxes (3) OR	
+ACC222	Payroll Accounting (3)	3
+ACC115	Computerized Accounting	3
ACC121	Income Tax Preparation (3) OR	
+ACC221	Tax Accounting (3)	3
+ACC219	Intermediate Accounting I	3
CIS114DE	Excel Spreadsheet	3
CIS105	Survey of Computer Information Systems	3
GBS151	Introduction to Business	3
GBS205	Legal, Ethical and Regulatory Issues in Business	3
GBS120	Workplace Communication Skills (3) OR	
+GBS233	Business Communication	3

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

Restricted Electives: 6 Credits

Students must select six (6) credits from the list below:

ACC+++++	Any ACC Accounting course(s) except courses used to satisfy Required Courses area	0-6
GBS131	Business Calculations	3
+GBS220	Quantitative Methods in Business	3
+GBS221	Business Statistics	3
GBS261	Investments I	3
MGT101	Techniques of Supervision (3) OR	
MGT175	Business Organization and Management (3) OR	
MGT229	Management and Leadership I (3)	3

General Education: 22-28 Credits

Core: 12-18 Credits

First-Year Composition

+ENG101	First-Year Composition (3) OR	
+ENG107	First-Year Composition for ESL (3) AND	
+ENG102	First-Year Composition (3) OR	
+ENG108	First-Year Composition for ESL (3)	6

Oral Communication

COM100	Introduction to Human Communication (3) OR	
COM110	Interpersonal Communication (3) OR	
+COM225	Public Speaking (3) OR	
COM230	Small Group Communication (3)	3

Critical Reading

+CRE101	College Critical Reading and Critical Thinking (3) OR	
	Equivalent by assessment	0-3

Mathematics

Any approved general education course from the Mathematics [MA] area 3-6

Distribution: 10 Credits

Humanities, Arts and Design

Any approved general education course in the Humanities, Arts and Design [HU] area 3

Social and Behavioral Sciences

ECN211	Macroeconomic Principles (3) OR	
ECN212	Microeconomic Principles (3) OR	
SBU200	Society and Business (3)	3

Natural Sciences

Any approved general education course in the Natural Sciences area 4

Accounting

Certificate of Completion: CCL 5665

23-26 Credits

Program Contact

Barbara Gonzalez | 602-243-8044 | barbara.gonzalez@cgc.edu

Program Description

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

Program Notes

Students must earn a grade of "C" or better in all courses in the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

Consultation with an academic advisor is recommended for course selection.

Program Prerequisites: None

Required Courses: 24-27 Credits

ACC111	Accounting Principles I (3) AND	
+ACC230	Uses of Accounting Information I (3) AND	
+ACC240	Uses of Accounting Information II (3) OR	
ACC111	Accounting Principles I (3) AND	
+ACC112	Accounting Principles II (3) AND	
+ACC212	Managerial Accounting (3) OR	
ACC211	Financial Accounting (3) AND	
+ACC212	Managerial Accounting (3)	6-9
ACC105	Payroll, Sales and Property Taxes (3) OR	
+ACC222	Payroll Accounting (3)	3

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

ACC121	Income Tax Preparation (3) OR	
+ACC221	Tax Accounting (3)	3
+ACC115	Computerized Accounting	3
CIS114DE	Excel Spreadsheet	3
CIS105	Survey of Computer Information Systems	3
GBS151	Introduction to Business	3

Administrative Professional

Associate in Applied Science : AAS 3680

61-67 Credits

Program Contact

Lana Short | 480-732-7191 | lana.short@cgc.edu

Program Description

The Associate in Applied Science (AAS) in the Administrative Professional degree is designed to provide training for various office positions. The curriculum incorporates people and technological skills essential for job success. Includes instruction in business communications, office procedures, public relations, accounting, records management, and report preparation. A Certificate of Completion (CCL) in Administrative Professional is also available.

Program Notes

Students must earn a grade of "C" or better in all courses required within the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

++ indicates any suffixed courses.

Program Prerequisites: None

Required Courses: 24 Credits

BPC110	Computer Usage and Applications (3) OR	
CIS105	Survey of Computer Information Systems (3)	3
+ACC115	Computerized Accounting	3
CIS113DE	Microsoft Word: Word Processing	3
CIS114DE	Excel Spreadsheet	3
GBS120	Workplace Communication Skills	3
GBS131	Business Calculations	3
GBS151	Introduction to Business	3

Select three (3) of the following courses:

BPC101AA	Introduction to Computers I	1
BPC/OAS111AA	Computer Keyboarding I	1
CIS121AE	Windows Operating System: Level I	1
CIS121AI	Mac Operating System	1
+CIS122AE	Windows Operating System: Level II	1
CIS133AA	Internet/Web Development Level I-A	1

Restricted Electives: 15 Credits

Students should select fifteen (15) credits from the following courses, except courses used to satisfy the Required Courses area, in consultation with a program advisor:

ACC+++	Any ACC Accounting prefixed course (except ACC115)	3
MGT251	Human Relations in Business	3
MGT126	Customer Service Skills and Strategies	3
CIS133DA	Internet/Web Development: Level I	3
+CIS214DE	Advanced Excel Spreadsheet: Level II	3
CIS103	Introduction to Social Media	3
MKT110	Marketing and Social Networking	3
CIS117DM	Microsoft Access: Database Management	3
GBS205	Legal, Ethical, and Regulatory Issues in Business	3
MKT271	Principles of Marketing	3

General Education: 22-28 Credits

Core: 12-18 Credits

First-Year Composition

+ENG101	First-Year Composition (3) OR	
+ENG107	First-Year Composition for ESL (3) AND	
+ENG102	First-Year Composition (3) OR	
+ENG108	First-Year Composition for ESL (3)	6

Oral Communication

COM100	Introduction to Human Communication (3) OR	
COM110	Interpersonal Communication (3) OR	
+COM225	Public Speaking (3) OR	
COM230	Small Group Communication (3)	3

Critical Reading

Any approved general education course from the Critical Reading area OR

Equivalent as indicated by assessment 0-3

Mathematics

Any approved general education course from the Mathematics area OR

Equivalent as indicated by assessment 3-6

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

Distribution: 10 Credits

Humanities, Arts and Design

Any approved general education course from the Humanities, Arts and Design area. 3

Social and Behavioral Sciences

SBU200	Society and Business	3

Natural Sciences

Any approved general education course from the Natural Sciences area. 4

Administrative Professional

Certificate of Completion: CCL 5677

18 Credits

Program Contact

Lana Short | 480-732-7191 | lana.short@cgc.edu

Program Description

The Certificate of Completion (CCL) in the Administrative Professional program is designed to provide students with basic office skills. This program is recommended for students with little or no office-related work experience or college experience. Includes instruction in business communications, office procedures, and report preparation. An Associate in Applied Science (AAS) in Administrative Professional is available.

Program Notes

The Certificate of Completion in Administrative Professional is currently not Title IV Federal Financial Aid eligible.

Students must earn a grade of "C" or better in all courses required within the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

Program Prerequisites: None

Required Courses: 18 Credits

BPC110 CIS105	Computer Usage and Applications (3) OR Survey of Computer Information Systems (3)	3
CIS113DE	Microsoft Word: Word Processing	3
GBS120	Workplace Communication Skills	3
GBS131	Business Calculations	3
GBS151	Introduction to Business	3

Select three (3) of the following courses:

BPC101AA	Introduction to Computers I	1
BPC/ OAS111AA	Computer Keyboarding I	1
CIS121AE	Windows Operating System: Level I	1
CIS121AI	Mac Operating System	1
+CIS122AE	Windows Operating System: Level II	1
CIS133AA	Internet/Web Development Level I-A	1

Adobe Foundations: Animation and Graphics Production

Certificate of Completion: CCL 5167N

9 Credits

Program Contact

Prema Rayappa | 480-732-7230 | prema.rayappa@cgc.edu

Program Description

The Certificate of Completion (CCL) in Adobe Foundations: Animation and Graphics Production program helps prepare students to create, edit, and enhance digital images, graphics, and animation for use in web, print, and video. A Certificate of Completion in Adobe Foundations: Video and Audio Production and an Associate in Applied Science (AAS) in Web Design and Development are also available.

Program Notes

This program is not eligible for Title IV Federal Financial Aid.

Students must earn a grade of "C" or better in all courses required within the program. Overall program minimum GPA = 2.00.

Program Prerequisites: None

Required Courses: 9 Credits

CIS120DB	Introduction to Adobe Illustrator	3
CIS120DC	Introduction to Adobe Animate	3
CIS120DF	Introduction to Adobe Photoshop	3

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

Amazon Web Services Practitioner

Certificate of Completion: CCL 5141N

2 Credits

Program Contact

Tom Pearson | 480-726-4131 | tom.pearson@cgc.edu

Program Description

The Certificate of Completion (CCL) in Amazon Web Services Practitioner builds the practical knowledge and skills of cloud computing. Cloud computing provides reliable, scalable, secure, and flexible technology solutions for personal and business use. This CCL will introduce students new to or interested in cloud computing to the fundamental concepts of cloud services as well as hands-on opportunities to apply these concepts to real-world applications. Students with the requisite experience in the field who complete this CCL can pursue employment in a variety of information technology jobs. This CCL also helps to prepare students for the AWS Cloud Practitioner certification, which is the first level of the AWS certifications.

Program Notes

This program is not eligible for Title IV Federal Financial Aid.

This Certificate of Completion (CCL) is intended for industry professionals with the requisite experience such as database, Linux, information security, networking, programming, and DevOps who are interested in expanding their knowledge in the area of cloud computing to enhance their employment opportunities. Speak to a program director for additional information.

Students must earn a grade of C"" or better for all courses required within the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

++ indicates any suffixed course.

Program Prerequisites: None

Required Courses: 2 Credits

CLD110	Amazon Web Services Academy Cloud Foundations	2

Android App Development

Certificate of Completion: CCL 5834N

9-12 Credits

Program Contact

Prema Rayappa | 480-732-7230 | prema.rayappa@cgc.edu

Program Description

The Certificate of Completion (CCL) in Android App Development prepares students for employment in entry-level coding, programming, and software development positions with an emphasis on Android mobile apps. This CCL will help prepare students to take the Associate Android Developer industry certification. Courses in this certificate can apply toward the Associate in Applied Science (AAS) in Mobile App Development and Certificate of Completion (CCL) in Mobile App Development, and Certificate of Completion (CCL) in Native Mobile App Development.

Program Notes

This program is not eligible for Title IV Federal Financial Aid.

Students must earn a grade of "C" or better in all courses within the program. Students should consult with a Department Advisor in arranging their schedules. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

Program Prerequisites: None

Required Courses: 9-12 Credits

CIS105	Survey of Computer Information Systems (3) OR	
Permission of Program Director, Department or Division Chair (0)		0-3
+CIS150	Programming Fundamentals (3) OR	
+CIS150AB	Object-Oriented Programming Fundamentals (3) OR	
+CIS156	Python Programming: Level I (3) OR	
+CIS159	Visual Basic Programming I (3) OR	

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

+CIS162AD	C# Level I (3) OR	
+CIS163AA	Java Programming: Level I (3)	3

CIS150 or CIS150AB recommended for students with no programming experience or who plan to complete the AAS 3099 or CCL 5193 in Mobile App Development.

+CIS165DA	Introduction to Android Application Development	3
+CIS265DA	Advanced Android Application Development	3

Business Administration Fastrack

Certificate of Completion: CCL 5152

27 Credits

Program Contact

Nicki Lynn | 480-732-7394 | nicki.lynn@cgc.edu

Program Description

The Certificate of Completion (CCL) in Business Administration Fastrack program provides opportunities for individuals to update, upgrade, or develop essential business skills. The program`s focus is preparing students for job advancement and career opportunities in today`s business environment as defined by industry practitioners. Each course includes learning activities and projects which may be offered in an accelerated five-week or eight-week format. Additional features of the program include: student directed learning stressing the dynamic business environment, communication skills, leadership development, and performing effectively within a team environment.

Program Notes

The Certificate of Completion in Business Administration Fastrack is currently not Title IV Federal Financial Aid eligible.

Students must earn a grade of "C" or better in all courses in the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

Program Prerequisites: None

Required Courses: 27 Credits

ACC110	Understanding and Using Accounting Systems (3) OR	
ACC111	Accounting Principles I (3)	3
BPC110	Computer Usage and Applications (3) OR	
CIS105	Survey of Computer Information Systems (3)	3
GBS120	Workplace Communication Skills	3
GBS151	Introduction to Business	3
GBS205	Legal, Ethical, and Regulatory Issues in Business	3
MGT126	Customer Service Skills and Strategies	3
MGT175	Business Organization and Management	3
MGT251	Human Relations in Business	3
MKT271	Principles of Marketing	3

Cisco Certified Network Professional: Enterprise Advanced Routing and Services

Certificate of Completion: CCL 5187N

8 Credits

Program Contact

Tom Pearson | 480-726-4131 | tom.pearson@cgc.edu

Program Description

The Certificate of Completion (CCL) in Cisco Certified Network Professional: Enterprise Advanced Routing and Services builds the advanced knowledge and skills needed for professional-level networking technologies and architecture. This CCL includes concepts of implementation and troubleshooting of advanced routing technologies and services including Layer 3 VPN services, infrastructure security, and infrastructure services, as well as hands-on opportunities to apply these concepts to real-world applications. Students with the requisite experience in the field who complete this CCL can pursue employment in a variety of information technology jobs. This CCL also helps to prepare students for the Implementing Cisco Enterprise Network Advanced Routing and Services (ENARSI) certification exam aligned with the CCNP Enterprise, Cisco Certified Specialist - Advanced Infrastructure Implementation certifications. Additional Certificates of Completion (CCLs) in Cisco Certified Network Security (CCNA Security), Cisco Certified

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

Network Professional: Enterprise Core, Cisco Certified Network Professional: Enterprise, Cisco Network Administration: CCNP, as well as an Associate in Applied Science (AAS) in Network and Systems Administration, are also available.

Program Notes

This program is not eligible for Title IV Federal Financial Aid.

Students must earn a grade of "C" or better for all courses required within the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

++ indicates any suffixed course.

This Certificate of Completion (CCL) is intended for industry professionals with the requisite skills aligned with the Cisco Certified Network Associate (CCNA) industry certification who are interested in expanding their knowledge in the area in professional-level networking or to enhance their employment opportunities. Speak to a program director for additional information.

All courses within the Required and Restricted elective areas are not applicable if taken more than five (5) years prior to the completion of the program. Consult with an academic advisor or program director for exceptions.

Program Prerequisites: None

Admission Criteria:

This Certificate of Completion (CCL) is intended for industry professionals with the requisite experience. To pursue this CCL, students must complete the following prerequisites to the courses within the Required Course area as follows with a C or better OR have a Cisco Certified Network Associate (CCNA) industry certification OR receive permission of the Program Director:

CNT140AB	Introduction to Networks	4
+CNT150AB	Switching, Routing, and Wireless Essentials	4
+CNT160AB	Enterprise Networking, Security, and Automation	4

Students also have the option to complete the full CCL in this program, Cisco Network Administration: CCNP (major code 5037), that includes the prerequisites and required courses.

Required Courses: 8 Credits

+CNT250	Cisco Certified Network Professional: Enterprise Advanced Routing and Services (8) OR	
+CNT250AA	Cisco Certified Network Professional: Enterprise Advanced Routing and Services I (4) AND	
+CNT250AB	Cisco Certified Network Professional: Enterprise Advanced Routing and Services II (4)	8

Cisco Certified Network Professional: Enterprise

Certificate of Completion: CCL 5190

16 Credits

Program Contact

Tom Pearson | 480-726-4131 | tom.pearson@cgc.edu

Program Description

The Certificate of Completion (CCL) in Cisco Certified Network Professional: Enterprise builds the advanced knowledge and skills needed for professional-level networking technologies and architecture. This CCL includes fundamental concepts of virtualization, network assurance, security, automation, and the implementation and troubleshooting of advanced routing technologies, as well as hands-on opportunities to apply these concepts to real-world applications. Students with the requisite experience in the field who complete this CCL can pursue employment in a variety of information technology jobs. This CCL also helps to prepare students for the Cisco Enterprise Network Core Technologies (ENCOR) certification and Implementing Cisco Enterprise Network Advanced Routing and Services (ENARSI) exams aligned with the CCNP Enterprise, CCIE Enterprise Infrastructure, CCIE Enterprise Wireless, and Cisco Certified Specialist - Enterprise core, CCNP Enterprise, Cisco Certified Specialist - Advanced Infrastructure Implementation certifications.

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

Additional Certificates of Completion (CCLs) in Cisco Certified Network Security (CCNA Security), Cisco Certified Network Professional: Enterprise Core, Cisco Certified Network Professional: Enterprise Advanced Routing and Services, Cisco Network Administration: CCNP, as well as an Associate in Applied Science (AAS) in Network and Systems Administration, are also available.

Program Notes

Currently not Title IV Federal Financial Aid eligible. This Certificate of Completion (CCL) is intended for industry professionals with the requisite skills aligned with the Cisco Certified Network Associate (CCNA) industry certification who are interested in expanding their knowledge in the area in professional-level networking or to enhance their employment opportunities. Speak to a program director for additional information.

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

+ indicates course has prerequisites and/or corequisites.

++ indicates any suffixed courses.

All courses within the Required and Restricted elective areas are not applicable if taken more than five (5) years prior to the completion of the program. Consult with an academic advisor or program director for exceptions.

Program Prerequisites: None

Required Courses: 16 Credits

+ CNT240	Cisco Certified Network Professional: Enterprise Core (8) OR	
+ CNT240AA	Cisco Certified Network Professional: Enterprise Core I (4) AND	
+ CNT240AB	Cisco Certified Network Professional: Enterprise Core II (4)	8
+ CNT250	Cisco Certified Network Professional: Enterprise Advanced Routing and Services (8) OR	
+ CNT250AA	Cisco Certified Network Professional: Enterprise Advanced Routing and Services I (4) AND	
+ CNT250AB	Cisco Certified Network Professional: Enterprise Advanced Routing and Services II (4)	8

Cisco Certified Network Professional: Enterprise Core

Certificate of Completion: CCL 5189N

8 Credits

Program Contact

Tom Pearson | 480-726-4131 | tom.pearson@cgc.edu

Program Description

The Certificate of Completion (CCL) in Cisco Certified Network Professional: Enterprise Core builds the knowledge and skills needed for professional-level networking technologies and architecture. This CCL includes the fundamental concepts of virtualization, network assurance, security, and automation, as well as hands-on opportunities to apply these concepts to real-world applications. Students with the requisite experience in the field who complete this CCL can pursue employment in a variety of information technology jobs. This CCL also helps to prepare students for the Cisco Enterprise Network Core Technologies (ENCOR) certification exam aligned with the CCNP Enterprise, CCIE Enterprise Infrastructure, CCIE Enterprise Wireless, and Cisco Certified Specialist - Enterprise core certifications.

Additional Certificates of Completion (CCLs) in Cisco Certified Network Security (CCNA Security), Cisco Certified Network Professional: Enterprise, Cisco Certified Network Professional: Enterprise Core and Advanced Routing and Services, Cisco Network Administration: CCNP, as well as an Associate in Applied Science (AAS) in Network and Systems Administration, are also available.

Program Notes

This program is not eligible for Title IV Federal Financial Aid.

Students must earn a grade of “C” or better for all courses required within the program. Overall program minimum GPA = 2.00.

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

+ indicates course has prerequisites and/or corequisites.
++ indicates any suffixed course.

This Certificate of Completion (CCL) is intended for industry professionals with the requisite skills aligned with the Cisco Certified Network Associate (CCNA) industry certification who are interested in expanding their knowledge in the area in professional-level networking or to enhance their employment opportunities. Speak to a program director for additional information.

All courses within the Required and Restricted elective areas are not applicable if taken more than five (5) years prior to the completion of the program. Consult with an academic advisor or program director for exceptions.

Program Prerequisites: None

Admission Criteria:

This Certificate of Completion (CCL) is intended for industry professionals with the requisite experience. To pursue this CCL, students must complete the following prerequisites to the courses within the Required Course area as follows with a C or better OR have a Cisco Certified Network Associate (CCNA) industry certification OR receive permission of the Program Director:

CNT140AB	Introduction to Networks	4
+CNT150AB	Switching, Routing, and Wireless Essentials	4
+CNT160AB	Enterprise Networking, Security, and Automation	4

Students also have the option to complete the full CCL in this program, Cisco Network Administration: CCNP (major code 5037), that includes the prerequisites and required courses.

Required Courses: 8 Credits

+CNT240	Cisco Certified Network Professional: Enterprise Core (8) OR	
+CNT240AA	Cisco Certified Network Professional: Enterprise Core I (4) AND	
+CNT240AB	Cisco Certified Network Professional: Enterprise Core II (4)	8

Cisco Network Administration and Security

Certificate of Completion: CCL 5036

16-19 Credits

Program Contact

Tom Pearson |480-726-4131 | tom.pearson@cgc.edu

Program Description

The Certificate of Completion (CCL) in Cisco Network Administration and Security provides training for those interested in working with Cisco network and Internet hardware with a particular emphasis on securing networks from threats and vulnerabilities. Knowledge and skills are developed to install, configure, and maintain Cisco routers and switches; configure routing protocols, and Local Area Networks (LANs); troubleshoot problems with various hardware and software configurations; perform administrative tasks in a network. Specific skills in maintaining integrity, accountability, and confidentiality of data are also developed. Taught by Cisco Certified professionals using the Cisco Network Academy program curriculum, courses are designed to help prepare students for the Cisco Certified Network Associate (CCNA) and Security examinations. Students who complete this program may seek employment in a variety of environments. An additional Certificate of Completion (CCL) in Cisco Certified Network Professional (CCNP), as well as an Associate in Applied Science (AAS) in Network and Systems Administration, are also available.

Program Notes

The Certificate of Completion in Cisco Network Administration and Security is currently not Title IV Federal Financial Aid eligible.

Students must earn a grade of “C” or better for all courses required within the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.
++ indicates any suffixed course.

Students who pursue this Certificate of Completion (CCL) should have a basic level of computer literacy

including navigating the internet and computer systems or take CIS105 as indicated in the required courses. Students with the requisite skills may have the CIS105 requirement waived by permission of the Program Director.

All courses within the Required and Restricted elective areas are not applicable if taken more than five (5) years prior to the completion of the program. Consult with an Academic Advisor or Program Director for exceptions.

Program Prerequisites: None

Required Courses: 16-19 Credits

CIS105	Survey of Computer Information Systems (3) OR	
Permission of the Program Director (0)		0-3
CNT140AB	Introduction to Networks	4
+CNT150AB	Switching, Routing, and Wireless Essentials	4
+CNT160AB	Enterprise Networking, Security, and Automation	4
+CNT202	Cisco Secure Firewall Appliance Configuration (4) OR	
+CNT205	Cisco Certified Network Associate Security (4)	4

Cisco Network Administration: CCNA

Certificate of Completion: CCL 5969N

12-15 Credits

Program Contact

Tom Pearson | 480-726-4131 | tom.pearson@cgc.edu

Program Description

The Certificate of Completion (CCL) in Cisco Network Administration: CCNA provides training for those interested in working with network and Internet hardware. Knowledge and skills are developed to install, configure, and maintain Cisco routers and switches; configure advanced routing protocols, and Local Area Networks (LANs); troubleshoot hardware and software configurations; perform administrative tasks in a network. Taught by Cisco Certified professionals using the Cisco Networking Academy program curriculum, courses are designed to help prepare students for the Cisco Certified Network Associate (CCNA) examination. Students who complete this program may seek employment in a variety of environments. Additional Certificates of Completion (CCLs) in Cisco Network Administration and Security and Cisco Network Administration: CCNP, as well as an Associate in Applied Science (AAS) in Network and Systems Administration, are available.

Program Notes

This program is not eligible for Title IV Federal Financial Aid.

Students must earn a grade of "C" or better for all courses required within the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

++ indicates any suffixed course.

Students who pursue this Certificate of Completion (CCL) should have a basic level of computer literacy including navigating the internet and computer systems or take CIS105 as indicated in the required courses. Students with the requisite skills may have the CIS105 requirement waived by permission of the Program Director.

All courses within the Required Courses area are not applicable if taken more than five (5) years prior to the completion of the program. Consult with an Academic Advisor or Program Director for exceptions.

Program Prerequisites: None

Required Courses: 12-15 Credits

CIS105	Survey of Computer Information Systems (3) OR	
Permission of Program Director (0)		0-3
CNT140AB	Introduction to Networks	4
+CNT150AB	Switching, Routing, and Wireless Essentials	4
+CNT160AB	Enterprise Networking, Security, and Automation	4

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

Cisco Network Administration: CCNP

Certificate of Completion: CCL 5037

20-23 Credits

Program Contact

Tom Pearson | 480-726-4131 | tom.pearson@cgc.edu

Program Description

The Certificate of Completion (CCL) in Network Administration: Cisco Network Professional (CCNP) provides students with advanced knowledge and skills to install, configure, and maintain Cisco routers and switches; configure advanced routing protocols, Local Area Networks (LANs), and Wide Area Networks (WANs); troubleshoot complex hardware and software configurations; and perform administrative tasks in a network at the professional level. Taught by Cisco Certified professionals using the Cisco Network Academy program curriculum, courses are designed to help prepare students for the Cisco Certified Network Associate (CCNA) and Cisco Certified Network Professional Certifications (CCNP) examinations. Students who complete this program may seek employment in a variety of environments. An additional Certificate of Completion (CCL) in Cisco Network Administration and Security, as well as an Associate in Applied Science (AAS) in Network and Systems Administration, are also available.

Program Notes

The Certificate of Completion in Cisco Network Administration: CCNP is currently not Title IV Federal Financial Aid eligible.

Students must earn a grade of "C" or better for all courses required within the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

++ indicates any suffixed course.

Students who pursue this Certificate of Completion (CCL) should have a basic level of computer literacy including navigating the internet and computer systems or take CIS105 as indicated in the required courses. Students with the requisite skills may have the CIS105 requirement waived by permission of the Program Director.

All courses within the Required and Restricted elective areas are not applicable if taken more than five (5) years prior to the completion of the program. Consult with an academic advisor or program director for exceptions.

Program Prerequisites: None

Required Courses: 20-30 Credits

CIS105	Survey of Computer Information Systems (3) OR	
Permission of program director (0)		0-3
CNT140AB	Introduction to Networks	4
+CNT150AB	Switching, Routing, and Wireless Essentials	4
+CNT160AB	Enterprise Networking, Security, and Automation	4
+CNT200	CCNP ROUTE: Implementing Cisco IP Routing	4
+CNT220	CCNP SWITCH: Implementing Cisco IP Switching	4

Computer System Configuration and Support

Certificate of Completion: CCL 5038N

6-9 Credits

Program Contact

Tom Pearson | 480-726-4131 | tom.pearson@cgc.edu

Program Description

The Certificate of Completion (CCL) in Computer System Configuration and Support program is designed to prepare students for entry-level computer maintenance, help desk, and network technician jobs. The classes focus on the development of knowledge and skills in computer technologies including system components, installation, system configuration, peripheral devices, and notebooks. Emphasis is placed on hardware installation, maintenance, mobile devices, hardware troubleshooting, proper use of tools, safety procedures, and professionalism. This program helps prepare students for the CompTIA A+ certification exams. Students who complete this program may seek employment in a variety of environments. Students can

also pursue additional Certificates of Completion (CCL) in a variety of specializations within the information technology field to deepen their knowledge and skills and help prepare them for multiple industry certification examinations. An Associate in Applied Science (AAS) in Network and Systems Administration is also available.

Program Notes

This program is not eligible for Title IV Federal Financial Aid.

Students must earn a grade of "C" or better for all courses required within the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

Students who pursue this Certificate of Completion (CCL) should have a basic level of computer literacy including navigating the internet and computer systems or take CIS105 as indicated in the required courses. Students with the requisite skills may have the CIS105 requirement waived by permission of the Program Director.

All courses within the Required areas are not applicable if taken more than five (5) years prior to the completion of the program. Consult with an academic advisor or program director for exceptions.

Program Prerequisites: None

Required Courses: 6-9 Credits

CIS105	Survey of Computer Information Systems (3) OR	
Permission of program director (0)		0-3
+BPC170	A+ Exam Prep: Computer Hardware Configuration and Support	3
+BPC270	A+ Exam Prep: Operating System Configuration and Support	3

Computer System Configuration and Support, Linux

Certificate of Completion: CCL 5039N

9-12 Credits

Program Contact

Tom Pearson | 480-726-4131 | tom.pearson@cgc.edu

Program Description

The Certificate of Completion (CCL) in Computer System Configuration and Support, Linux program is designed to prepare students for entry-level computer maintenance, help desk, and network technician jobs with an emphasis on Linux. The classes focus on the development of knowledge and skills in computer and network technologies including system components, installation, system configuration, peripheral devices, and notebooks. Emphasis is placed on the Linux Operating system including knowledge and skills required to install, configure and troubleshoot a Linux-based workstation. This program helps prepare students for the CompTIA A+ and Linux+ certification exams. Students who complete this program may seek employment in a variety of environments. Students can also pursue additional Certificates of Completion (CCLs) in a variety of specializations within the information technology field to deepen their knowledge and skills and help prepare them for multiple industry certification examinations. An Associate in Applied Science (AAS) in Network and Systems Administration is also available.

Program Notes

This program is not eligible for Title IV Federal Financial Aid.

Students must earn a grade of "C" or better in all courses within the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

Students who pursue this Certificate of Completion (CCL) should have a basic level of computer literacy including navigating the internet and computer systems or take CIS105 as indicated in the required courses. Students with the requisite skills may have the CIS105 requirement waived by permission of the Program Director.

All courses within the Required areas are not applicable if taken more than five (5) years prior to the completion of the program. Consult with an academic advisor or program director for exceptions.

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

Program Prerequisites: None

Required Courses: 9-12 Credits

CIS105	Survey of Computer Information Systems (3) OR	
Permission of program director (0)		0-3
+BPC170	A+ Exam Prep: Computer Hardware Configuration and Support	3
+BPC270	A+ Exam Prep: Operating System Configuration and Support	3
CIS126DL	Linux Operating System (3) OR	
CIS126RH	Red Hat System Administration I (3)	3

Computer System Configuration and Support, Network

Certificate of Completion: CCL 5044N

9-13 Credits

Program Contact

Tom Pearson | 480-726-4131 | tom.pearson@cgc.edu

Program Description

The Certificate of Completion (CCL) in Computer System Configuration and Support, Network program is designed to prepare students for entry-level computer maintenance, help desk, and network technician jobs with an emphasis on networking. The courses focus on the development of knowledge and skills in computer and network technologies including system components, installation, system configuration, peripheral devices, and notebooks. Emphasis is placed on elements of a data network, network components, and use of a network. This program helps prepare students for the CompTIA A+ and Network+ certification exams. Students who complete this program may seek employment in a variety of environments. Students can also pursue additional Certificates of Completion (CCLs) in a variety of specializations within the information technology field to deepen their knowledge and skills and help prepare them for multiple industry certification examinations. An Associate in Applied Science (AAS) in Network and Systems Administration is also available.

Program Notes

This program is not eligible for Title IV Federal Financial Aid.

Students must earn a grade of "C" or better in all courses within the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

Students who pursue this Certificate of Completion (CCL) should have a basic level of computer literacy including navigating the internet and computer systems or take CIS105 as indicated in the required courses. Students with the requisite skills may have the CIS105 requirement waived by permission of the Program Director.

All courses within the Required Courses and Restricted Electives areas are not applicable if taken more than five (5) years prior to the completion of the program. Consult with an Academic Advisor or Program Director for exceptions.

Program Prerequisites: None

Required Courses: 9-13 Credits

CIS105	Survey of Computer Information Systems (3) OR	
Permission of program director (0)		0-3
+BPC170	A+ Exam Prep: Computer Hardware Configuration and Support	3
+BPC270	A+ Exam Prep: Operating System Configuration and Support	3
+CIS190	Introduction to Networking (3) OR	
CNT140AB	Introduction to Networks (4)	3-4

Computer System Configuration and Support, Security

Certificate of Completion: CCL 5040N

9-19 Credits

Program Contact

Tom Pearson | 480-726-4131 | tom.pearson@cgc.edu

Program Description

The Certificate of Completion (CCL) in Computer System Configuration and Support, Security program is designed to prepare students for entry-level computer maintenance, help desk, and network technician jobs with an emphasis on security. The courses focus on the development of knowledge and skills in computer and

security technologies including system components, installation, system configuration, peripheral devices, and notebooks. Emphasis is placed on preventing, identifying, and mitigating threats to the security of information systems and utilizing the basic tools for information security. This program helps prepare participants for the CompTIA A+, Security+, and certification exams. Students who complete this program may seek employment in a variety of environments. Students can also pursue additional Certificates of Completion (CCLs) in a variety of specializations within the information technology field to deepen their knowledge and skills and help prepare them for multiple industry certification examinations. An Associate in Applied Science (AAS) in Network and Systems Administration is also available.

Program Notes

This program is not eligible for Title IV Federal Financial Aid.

Students must earn a grade of "C" or better for all courses within the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

Students who pursue this Certificate of Completion (CCL) should have a basic level of computer literacy including navigating the internet and computer systems or take CIS105 as indicated in the required courses. Students with the requisite skills may have the CIS105 requirement waived by permission of the Program Director.

All courses within the Required Courses area are not applicable if taken more than five (5) years prior to the completion of the program. Consult with an academic advisor or program director for exceptions.

Program Prerequisites: None

Required Courses: 9-19 Credits

CIS105	Survey of Computer Information Systems (3) OR	
Permission of Program Director (0)		0-3
+BPC170	A+ Exam Prep: Computer Hardware Configuration and Support	3
+BPC270	A+ Exam Prep: Operating System Configuration and Support	3

Select from one of the following areas of specialization.

Specialization I: Credits 3-6		
+CIS270	Essentials of Network and Information Security (3) OR	
+ITS110	Information Security Fundamentals (3) AND	
CIS126DL	Linux Operating System (3) OR	
CIS126RH	Red Hat System Administration I (3)	3-6
Specialization 2: Credits 9-10		
CNT140AB	Introduction to Networks (4) OR	
CIS190	Introduction to Networking (3)	3-4
CIS250	Management of Information Systems	3
+CIS271DB	Information Security Essentials	3

Cyber Engineering

Certificate of Completion: CCL 5149

42-46 Credits

Program Contact

Tom Pearson | 480-726-4131 | tom.pearson@cgc.edu

Program Description

The Certificate of Completion (CCL) in Cyber Engineering program is designed to focus on the necessary skills required to secure, protect and identify vulnerabilities in a network, including various operating systems and network devices. Emphasis is placed on developing the theoretical, legal, ethical and practical skills needed to maintain security on mission-critical networking and server systems. The program is designed to meet the training needs of government and industry employees. The program covers a variety of information security technologies and structured languages. The Cyber Engineering program also focuses on the skills needed for internationally recognized IT certifications and high demands in business, industry, and government. An Associate in Applied Science (AAS) in Cybersecurity is also available.

Program Notes

The Certificate of Completion in Cyber Engineering is currently not Title IV Federal Financial Aid eligible.

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

Students must earn a grade of "C" or better in all courses required within the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

++ indicates any suffixed course.

Only required courses taken within eight (8) years of completion of the program may be applied towards this degree. Consult with your faculty mentor or academic advisor.

Program Prerequisites: None

Required Courses: 42-46 Credits

The following courses are required and included in the CCL in Cybersecurity Fundamentals.

+BPC270	A+ Exam Prep: Operating System Configuration and Support (3) OR	
MST150++	Any Microsoft Windows course (3)	3
CIS105	Survey of Computer Information Systems	3
CIS111	Ethics in Information Technology (3) OR	
+ITS120	Legal, Ethical and Regulatory Issues (3)	3
CIS126DL	Linux Operating System (3) OR	
CIS126RH	Red Hat System Administration I (3)	3
+CIS156	Python Programming: Level I	3
+CIS190	Introduction to Networking (3) OR	
CNT140AA	Introduction to Networks (4)	3-4
+CIS270	Essentials of Network and Information Security (3) OR	
+CIS271DB	Information Security Essentials (3) AND	
+CIS272DB	Information Security Principles (3) OR	
+ITS110	Information Security Fundamentals (3)	3-6
+ITS240	Ethical Hacking and Network Defense	3

The following courses are required in the CCL in Cyber Engineering.

+CIS119DO	Introduction to Oracle: SQL (3) OR	
+CIS276++	Any SQL Database course (3)	3
+CIS162++	Any C Programming: Level I course	3
CIS227	Assembler Language	3
+CIS238DL	Linux System Administration (3) OR	
+CIS238RH	Red Hat System Administration II (3)	3
+CIS250	Management of Information Systems	3
+CIS262++	Any C Programming: Level II course	3

Cyber Operations

Certificate of Completion: CCL 5165

41-42 Credits

Program Contact

Tom Pearson | 480-726-4131 | tom.pearson@cgc.edu

Program Description

The Certificate of Completion (CCL) in Cyber Operations program is designed to focus on the necessary skills required to secure, protect and identify vulnerabilities in a network, including various operating systems and network devices. Emphasis is placed on developing the theoretical, legal, ethical and practical skills needed to maintain security on mission-critical networking and server systems. The program is designed to meet the training needs of government and industry employees. The program covers a variety of information security technologies and structured languages. The Cyber Operations program also focuses on the skills needed for internationally recognized IT certifications and high demands in business, industry, and government. An Associate in Applied Science (AAS) in Cybersecurity is also available.

Program Notes

The Certificate of Completion in Cyber Operations is currently not Title IV Federal Financial Aid eligible..

Students must earn a grade of "C" or better in all courses required within the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

++ indicates any suffixed course.

Only required courses taken within eight (8) years of completion of the program may be applied towards this degree. Consult with your faculty mentor or academic advisor.

Program Prerequisites: None

Required Courses: 41-42 Credits

The following courses are required and included in the CCL in Cybersecurity Fundamentals.

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

+BPC270	A+ Exam Prep: Operating System Configuration and Support (3) OR	
MST150++	Any Microsoft Windows course (3)	3
CIS105	Survey of Computer Information Systems	3
CIS111	Ethics in Information Technology (3) OR	
+ITS120	Legal, Ethical and Regulatory Issues (3)	3
CIS126DL	Linux Operating System (3) OR	
CIS126RH	Red Hat System Administration I (3)	3
+CIS156	Python Programming: Level I	3
+CIS190	Introduction to Networking (3) OR	
CNT140AB	Introduction to Networks (4)	3-4
+ITS110	Information Security Fundamentals	3
+ITS240	Ethical Hacking and Network Defense	3

The following courses are required in the CCL in Cyber Operations.

+BPC170	A+ Exam Prep: Computer Hardware Configuration and Support	3
+CIS238DL	Linux System Administration (3) OR	
+CIS238RH	Red Hat System Administration II (3)	3
+CIS290AC	Computer Information Systems Internship (3) OR	
+CIS298AC	Special Projects (3)	3
+ITS291	Computer Forensics Foundations	4
+ITS292	Advanced Computer Forensics	4

Cybersecurity

Associate in Applied Science : AAS 3197

61-77 Credits

Program Contact

Tom Pearson | 480-726-4131 | tom.pearson@cgc.edu

Program Description

The Associate in Applied Science (AAS) in Cybersecurity is designed to focus on the necessary skills required to secure, protect and identify vulnerabilities in a network, including various operating systems and network devices. Emphasis is placed on developing the theoretical, legal, ethical and practical skills needed to maintain security on mission-critical networking and server systems. The program is designed to meet the training needs of government and industry employees. The program covers a variety of information security technologies and structured languages. The Cybersecurity program also focuses on the skills needed for internationally recognized IT certifications and high demands in business, industry, and government. Certificates of Completion (CCLs) are also available in the following areas: Cybersecurity Fundamentals, Cyber Operations, Linux System Administration, Microsoft, Cisco Networking CCNA Security, Power Systems, and Cyber Engineering.

Program Notes

Students must earn a grade of "C" or better in all courses required within the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

++ indicates any suffixed courses.

Only required courses and restricted electives taken within eight (8) years of completion of the program may be applied towards this degree. Consult with your faculty mentor or academic advisor.

Program Prerequisites: None

Required Courses: 24-31 Credits

+BPC270	A+ Exam Prep: Operating System Configuration and Support (3) OR	
MST150++	Any Microsoft Windows course (3)	3
(MST150++ required for Microsoft emphasis)		
CIS105	Survey of Computer Information Systems	3
CIS111	Ethics in Information Technology (3) OR	
+ITS120	Legal, Ethical and Regulatory Issues (3)	3
CIS126DL	Linux Operating System (3) OR	
CIS126RH	Red Hat System Administration I (3)	3
+CIS156	Python Programming: Level I	3
+CIS190	Introduction to Networking (3) OR	
CNT140AB	Introduction to Networks (4)	3-4
(CNT140AB required for Networking emphasis and Power Systems emphasis)		
+CIS250	Management of Information Systems (3) AND	
+CIS271DB	Information Security Essentials (3) AND	
+CIS272DB	Information Security Principles (3) OR	
+CIS270	Essentials of Network and Information Security (3) OR	
+ITS110	Information Security Fundamentals (3)	3-9

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

(ITS110 required for Cyber Operations emphasis; CIS271DB and CIS272DB required for Power Systems emphasis)

+ITS240	Ethical Hacking and Network Defense	3

Restricted Electives: 15-18 Credits

Students must complete 15-18 credits from the following list of courses. Courses that are required for an emphasis in Cyber Operations, Cyber Engineering, Linux System Administration, Microsoft System Administration, Cisco Networking CCNA Security, and/or Power Systems are noted. Courses cannot be repeated for credit.

Specialization I: Cyber Operations Credits: 17

+BPC170	A+ Exam Prep: Computer Hardware Configuration and Support	3
+CIS238DL	Linux System Administration (3) OR	
+CIS238RH	Red Hat System Administration II (3)	3
+CIS290AC	Computer Information Systems Internship (3) OR	
+CIS298AC	Special Projects (3)	3
+ITS291	Computer Forensics Foundations	4
+ITS292	Advanced Computer Forensics	4

Specialization II: Linux System Administration Credits: 15

+CIS238DL	Linux System Administration (3) OR	
+CIS238RH	Red Hat System Administration II (3)	3
+CIS239DL	Linux Shell Scripting	3
+CIS240DL	Linux Network Administration	3
+CIS271DL	Linux Security	3
+CIS275DL	Linux Capstone	3

Specialization III: Microsoft System Administration Credits: 15

CIS121AH	Microsoft PowerShell/Command Line Operations	3
+MST155DC	Installation, Storage, and Compute with Windows Server	4
+MST157DC	Networking with Windows Server	4
+MST158DC	Identity Management with Windows Server 2016	4

Specialization IV: Cisco Network Administration and Security Credits: 16

CNT140AB	Introduction to Networks	4
+CNT150AB	Switching, Routing, and Wireless Essentials	4
+CNT160AB	Enterprise Networking, Security, and Automation	4
+CNT202	Cisco Secure Firewall Appliance Configuration (4) OR	
+CNT205	Cisco Certified Network Associate Security (4)	4

Specialization V: Power Systems Credits: 18

+CIS274DA	Introduction to Power Systems Security	3
+CIS275DA	Generation and Transmission Systems Security	3
+CIS275DB	Smart Grid and Distribution System Security	3
+CIS275DC	Embedded Systems Security	3
CPD104	Career and Personal Development	3
PPT120	Energy Industry Fundamentals	3

Specialization VI: Cyber Engineering Credits 18

+CIS119DO	Introduction to Oracle: SQL (3) OR	
+CIS276++	Any SQL Database course (3)	3
+CIS162++	Any C Programming: Level I course	3

(Students intending to transfer to U of A South should take CIS162 C Programming)

CIS227	Assembler Language	3
+CIS238DL	Linux System Administration (3) OR	
+CIS238RH	Red Hat System Administration II (3)	3
+CIS250	Management of Information Systems	3
+CIS262++	Any C Programming: Level II course	3

General Education: 22-28 Credits

Core: 12-18 Credits

First-Year Composition

+ENG101	First-Year Composition (3) OR	
+ENG107	First-Year Composition for ESL (3) AND	
+ENG102	First-Year Composition (3) OR	
+ENG108	First-Year Composition for ESL (3)	6

Oral Communication

COM100	Introduction to Human Communication (3) OR	
COM110	Interpersonal Communication (3) OR	
+COM225	Public Speaking (3) OR	

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

COM230	Small Group Communication (3)	3

COM100 required for students intending to transfer to ASU West to earn a Bachelor of Science in Applied Computing (Cybersecurity).

Critical Reading

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

Mathematics

Any approved general education course in the Mathematics area 3-6

Distribution: 10 Credits

Humanities, Arts and Design

Any approved general education course(s) in the Humanities, Arts and Design area. 3

Social and Behavioral Sciences

Any approved general education course(s) in the Social and Behavioral Sciences area. 3

Natural Sciences

Any approved general education course from the Natural Sciences area. 4

Cybersecurity Fundamentals

Certificate of Completion: CCL 5154

24-31 Credits

Program Contact

Tom Pearson | 480-726-4131 | tom.pearson@cgc.edu

Program Description

The Certificate of Completion (CCL) in Cybersecurity Fundamentals is designed to focus on the necessary skills required to secure, protect and identify vulnerabilities in a network, including various operating systems and network devices. Emphasis is placed on developing the theoretical, legal, ethical and practical skills needed to maintain security on mission-critical networking and server systems. The program is designed to provide applied skills necessary for government and industry employees. The program covers a variety of information security technologies and structured languages. The Cybersecurity program also focuses on the skills needed for internationally recognized IT certifications and high demands in business, industry, and government. An Associate in Applied Science (AAS) in Cybersecurity is also available.

Program Notes

The Certificate of Completion in Cybersecurity Fundamentals is currently not Title IV Federal Financial Aid eligible.

Students must earn a grade of "C" or better in all courses required within the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

++ indicates any suffixed course.

Only required courses taken within eight (8) years of completion of the program may be applied towards this degree. Consult with your faculty mentor or academic advisor.

Program Prerequisites: None

Required Courses: 24-31 Credits

+BPC270	A+ Exam Prep: Operating System Configuration and Support (3) OR	
MST150++	Any Microsoft Windows course (3)	3
CIS105	Survey of Computer Information Systems	3
CIS111	Ethics in Information Technology (3) OR	
+ITS120	Legal, Ethical and Regulatory Issues (3)	3
CIS126DL	Linux Operating System (3) OR	
CIS126RH	Red Hat System Administration I (3)	3
+CIS156	Python Programming: Level I	3
+CIS190	Introduction to Networking (3) OR	
CNT140AB	Introduction to Networks (4)	3-4
+CIS250	Management of Information Systems (3)	0-3

Only students taking CIS271DB would be required to take CIS250.

+CIS270	Essentials of Network and Information Security (3) OR	
+CIS271DB	Information Security Essentials (3) AND	
+CIS272DB	Information Security Principles (3) OR	
+ITS110	Information Security Fundamentals (3)	3-6
+ITS240	Ethical Hacking and Network Defense	3

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

Desktop Support

Certificate of Completion: CCL 5043

19-22 Credits

Program Contact

Tom Pearson | 480-726-4131 | tom.pearson@cgc.edu

Program Description

The Certificate of Completion (CCL) in Desktop Support program is designed to prepare students for entry-level computer maintenance, help desk, and network technician jobs. The classes focus on the development of knowledge and skills in computer, network, and security technologies, as well as the interpersonal skills in customer service/technical support needed to be successful within the industry. Depending on course selection, this program helps prepare students for the CompTIA A+, CompTIA Network+, and/or CompTIA Linux+ certification exams. Students who complete this program may seek employment in a variety of environments. Students can also pursue additional Certificates of Completion (CCLs) in a variety of specializations within the information technology field to deepen their knowledge and skills and help prepare them for multiple industry certification examinations. An Associate in Applied Science (AAS) in Network and Systems Administration is also available.

Program Notes

The Certificate of Completion in Desktop Support is currently not Title IV Federal Financial Aid eligible.

Students must earn a grade of "C" or better in all courses in the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

All courses within the Required Courses and Restricted Electives areas are not applicable if taken more than five (5) years prior to the completion of the program. Consult with an Academic Advisor or Program Director for exceptions.

Program Prerequisites: None

Required Courses: 18-19 Credits

+BPC170	A+ Exam Prep: Computer Hardware Configuration and Support	3
+BPC270	A+ Exam Prep: Operating System Configuration and Support	3
CIS102DA	Customer User Support	3
CIS105	Survey of Computer Information Systems	3
CIS126DL	Linux Operating System (3) OR	
CIS126RH	Red Hat System Administration I (3)	3
+CIS190	Introduction to Networking (3) OR	
CNT140AB	Introduction to Networks (4)	3-4

(Note: CNT140AB is recommended for students interested in pursuing their Cisco Network Administration Certification)

Restricted Electives: 1-3 Credits

Students must select one to three (1-3) credits from the following:

BPC171	Recycling Used Computer Technology	1
+CIS290AA	Computer Information Systems Internship	1
+CIS290AB	Computer Information Systems Internship	2
+CIS290AC	Computer Information Systems Internship	3
+CIS296WB	Cooperative Education	2
+CIS296WC	Cooperative Education	3
+CIS298AA	Special Projects	1
+CIS298AB	Special Projects	2
+CIS298AC	Special Projects	3

Enrolled Agent

Certificate of Completion: CCL 5958

17-18 Credits

Program Contact

Barbara Gonzalez | 602-243-8044 | barbara.gonzalez@cgc.edu

Program Description

Description: The Certificate of Completion (CCL) in Enrolled Agent program helps to prepare students for the Enrolled Agent Examination. The Internal Revenue Service (IRS) Enrolled Agent credential allows tax practitioners to represent taxpayers before the IRS when it comes to collections, audits, and appeals. Enrolled Agents` expertise in the continually changing

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

field of taxation enables them to effectively represent taxpayers at all administrative levels within the IRS. Students who successfully complete this CCL may also seek employment as tax preparers.

Program Notes

The Certificate of Completion in Enrolled Agent is currently not Title IV Federal Financial Aid eligible.

Students must earn a grade of "C" or better in all courses in the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

Consultation with an Academic Advisor is recommended for course selection. The Volunteer Income Tax Assistance (VITA) program internship is only available in the spring semester- Contact a program adviser for more information.

Program Prerequisites: None

Required Courses: 15 Credits

ACC111	Accounting Principles I (3) OR	
ACC211	Financial Accounting (3)	3
ACC121	Income Tax Preparation	3
+ACC221	Tax Accounting	3
+ACC224	Tax Practice Administration and Business Entity Analysis	3
CIS105	Survey of Computer Information Systems	3

Restricted Electives: 2-3 Credits

Students should select 2-3 credits from the list below:

ACC105	Payroll, Sales and Property Taxes	3
+ACC112	Accounting Principles II	3
+ACC115	Computerized Accounting	3
+ACC222	Payroll Accounting	3
+ACC230	Uses of Accounting Information I	3
+ACC270AB	Accounting Internship	2
+ACC270AC	Accounting Internship	3

General Business

Associate in Applied Science: AAS 3148

61-66 Credits

Program Contact

Nicki Lynn | 480-732-7394 | nicki.lynn@cgc.edu

Program Description

The Associate in Applied Science (AAS) in General Business program is designed to meet the needs of students who wish a broad overview of business and desire not to enroll in a specialized curriculum in business. The program is designed to acquaint students with major subject areas of business, to improve the student`s business vocabulary, and to provide students with an understanding of influencing factors in business decision making and activities. In addition, this program may aid a student in recognizing a specific business field to be pursued in future studies. A Certificate of Completion (CCL) is also available.

Program Notes

Students must earn a grade of "C" or better in all courses in the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

Program Prerequisites: None

Required Courses: 21 Credits

ACC111	Accounting Principles I	3
CIS105	Survey of Computer Information Systems	3
GBS120	Workplace Communication Skills (3) OR	
+GBS233	Business Communication (3)	3
GBS151	Introduction to Business	3
GBS205	Legal, Ethical and Regulatory Issues in Business	3
MGT175	Business Organization and Management (3) OR	
MGT251	Human Relations in Business (3)	3
MKT271	Principles of Marketing	3

Restricted Electives: 18 Credits

Students should select eighteen (18) credits from the following courses. Any 100/200 level prefixed courses may be selected, except courses used to satisfy the Required Courses area.

ACC+++	Any ACC Accounting course(s)	
CIS114DE	Excel Spreadsheet	3
CIS117DM	Microsoft Access: Database Management	3
CIS133DA	Internet/Web Development Level I	3
EPS+++	Any EPS Entrepreneurial Studies course(s)	
GBS+++	Any GBS General Business course(s)	

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

IBS+++	Any IBS International Business course(s)	
MGT+++	Any MGT Management course(s)	
MKT+++	Any MKT Marketing course(s)	
REA+++	Any REA Real Estate course(s)	
SBS+++	Any SBS Small Business Management course(s)	

General Education: 22-27 Credits

Core: 12-17 Credits

First-Year Composition

+ENG101	First-Year Composition (3) OR	
+ENG107	First-Year Composition for ESL (3) AND	
+ENG102	First-Year Composition (3) OR	
+ENG108	First-Year Composition for ESL (3)	6

Oral Communication

COM100	Introduction to Human Communication (3)	
COM110	Interpersonal Communication (3)	
+COM225	Public Speaking (3) OR	
COM230	Small Group Communication (3)	3

Critical Reading

+CRE101	College Critical Reading and Critical Thinking (3) OR	
Equivalent by Assessment		0-3

Mathematics

Any approved general education course from the Mathematics area.	3-5

Distribution: 10 Credits

Humanities, Arts and Design

Any approved general education course in the Humanities, Arts and Design area.	3

Social and Behavioral Sciences

ECN211	Macroeconomic Principles (3) OR	
ECN212	Microeconomic Principles (3) OR	
SBU200	Society and Business (3)	3

Natural Sciences

Any approved general education course in the Natural Sciences area.	4

General Business

Certificate of Completion: CCL 5683

21 Credits

Program Contact

Nicki Lynn | 480-732-7394 | nicki.lynn@cgc.edu

Program Description

The Certificate of Completion (CCL) in General Business is designed to provide business training for various entry-level positions in business. The courses include an introduction to business concepts, accounting and computer principles, and legal issues related to business. An Associate in Applied Science (AAS) is also available.

Program Notes

Students must earn a grade of "C" or better in all courses in the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

Program Prerequisites: None

Required Courses: 12 Credits

ACC111	Accounting Principles I	3
CIS105	Survey of Computer Information Systems	3
GBS151	Introduction to Business	3
GBS205	Legal, Ethical and Regulatory Issues in Business	3

Restricted Electives: 9 Credits

Students should select nine (9) credits from the following courses. Any 100/200 level prefixed courses may be selected, except courses used to satisfy the Required Courses area.

ACC+++	Any ACC Accounting course(s)	
CIS114DE	Excel Spreadsheet	3
CIS117DM	Microsoft Access: Database Management	3
CIS133DA	Internet/Web Development Level I	3
EPS+++	Any EPS Entrepreneurial Studies course(s)	1-3
GBS+++	Any GBS General Business course(s)	
MGT+++	Any MGT Management course(s)	
MKT+++	Any MKT Marketing course(s)	
IBS+++	Any IBS International Business course(s)	

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

REA+++	Any REA Real Estate course(s)	
SBS+++	Any SBS Small Business Management course(s)	

Human Resources Management

Certificate of Completion: CCL 5580

24 Credits

Program Contact

Nicki Lynn | 480-732-7394 | nicki.lynn@cgc.edu

Program Description

The Certificate of Completion (CCL) in Human Resources Management program is designed to provide skills necessary for careers in human resources management. The program is designed to provide students a series of courses with an emphasis in management and is designed to prepare students for an entry-level position in human resources. Graduates may be employed in employment (recruiting, interviewing, and hiring), benefits administration, compensation, and employee relations.

Program Notes

The Certificate of Completion in Human Resources Management is currently not Title IV Federal Financial Aid eligible.

Students must earn a grade of "C" or better in all courses required within the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

Program Prerequisites: None

Required Courses: 24 Credits

BPC110	Computer Usage and Applications (3) OR	
CIS105	Survey of Computer Information Systems (3)	3
GBS205	Legal, Ethical, and Regulatory Issues in Business	3
GBS131	Business Calculations (3) OR	
+MAT112	Mathematical Concepts and Applications (3) OR	
Satisfactory completion of higher level Mathematics course		3
GBS120	Workplace Communication Skills	3
MGT229	Management and Leadership I	3
MGT251	Human Relations in Business	3
MGT276	Personnel/Human Resources Management	3
+MGT286	Human Resource Employment Management	3

Information Technology

Associate in Applied Science: AAS 3196

60-65 Credits

Program Contacts

Tom Pearson | 480-726-4131 | tom.pearson@cgc.edu

Program Description

The Associate in Applied Science (AAS) in Information Technology (IT) program is designed to provide students with skills to meet information technology needs across industries. This program includes instruction in the principles of computer hardware components and business software, programming, databases, networking, customer service, web development, and information systems and project management. Coursework helps prepare students for a variety of industry-recognized examinations and certifications. Students will earn one or more of the following Certificates of Completion (CCLs):

CCL/5154 Cybersecurity Fundamentals
CCL/5083 Database Development
CCL/5043 Desktop Support
CCL/5793 Foundations of Mobile App Development
CCL/5132 Microsoft Office Professional
CCL/5031 Microsoft System Administration
CCL/5048 Programming and Systems Analysis Level I
CCL/5183N Oracle Database Operations
CCL/5050N Red Hat Linux Engineer
CCL/5984 Web Foundations

Program Notes

CCL 5183N, and 5050N are not eligible for Title IV Federal Financial Aid.

Students must earn a grade of "C" or better in all courses required within the program. Overall program minimum GPA = 2.00.

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

+ indicates course has prerequisite and/or corequisite.

++ indicates all suffixed courses.

Program Prerequisites: None

Required Courses: 32-38 Credits

Specialization 1: Cybersecurity Fundamentals

Credits:		33-38
Information Technology Core Credits: 24-25		
+BPC270	A+Exam Prep: Operating System Configuration and Support (3) OR	
MST150++	Any Microsoft Windows course (3)	3
CIS105	Survey of Computer Information Systems	3
CIS117DM	Microsoft Access: Database Management (3) OR	
+CIS119DO	Introduction to Oracle: SQL (3) OR	
+CIS276DA	MySQL Database (3) OR	
+CIS276DB	SQL Server Database (3)	3
CIS126DL	Linux Operating System (3) OR	
CIS126RH	Red Hat System Administration I (3)	3
CIS133DA	Internet/Web Development Level I	3
+CIS156	Python Programming: Level I	3
+CIS190	Introduction to Networks (3) OR	
CNT140AB	Introduction to Networks (4)	3-4
CIS224	Project management (3) OR	
+CIS250	Management of Information Systems (3)	3

Students taking CIS271DB would be required to take CIS250.

Cybersecurity Fundamentals Credits: 9-12		
CIS111	Ethics in Information Technology (3) OR	
+ITS120	Legal, Ethical and Regulatory Issues (3)	3
+CIS270	Essentials of Network and Information Security (3) OR	
+CIS271DB	Information Security Essentials (3) AND	
+CIS272DB	Information Security Principles (3) OR	
+ITS110	Information Security Fundamentals (3)	3-6
+ITS240	Ethical Hacking and Network Defense	3

Related Area Credits: 0-5

Select courses with one of the following prefixes to complete a minimum of 60 credits for the Associate in Applied Science (AAS) in Information Technology:

BPC+++++	Any BPC Business-Personal Computers courses
CIS+++++	Any CIS Computer Information Systems courses
CLD+++++	Any CLD Cloud Computing courses
CNT+++++	Any CNT Cisco Network Technology courses
ITS+++++	Any ITS Information Technology Security courses
MST+++++	Any MST Microsoft Technology courses

Specialization 2: Database Development 36-38

Information Technology Core Credits: 21-22		
+BPC270	A+ Exam Prep: Operating System Configuration and Support (3) OR	
CIS126DL	Linux Operating System (3) OR	
CIS126RH	Red Hat System Administration I (3) OR	
MST150++	Microsoft Windows (3)	3
CIS105	Computer Information Systems	3
+CIS119DO	Introduction to Oracle: SQL	3
CIS133DA	Internet/Web Development Level I	3
+CIS156	Python Programming: Level I (3) OR	
+CIS162++	Any C Programming: Level I course (3) OR	
+CIS163AA	Java Programming: Level I (3)	3
+CIS190	Introduction to Networks (3) OR	
CNT140AB	Introduction to Networks (4)	3-4
CIS224	Project management (3) OR	
CIS250	Management of Information Systems (3)	3

Database Development Credits: 15		
CIS117DM	Microsoft Access: Database Management (3) OR	
+CIS154	Database Modeling and Design (3)	3
+CIS150++	Programming Fundamentals	3
+CIS164AB	Oracle: PL/SQL Programming (3) OR	
+CIS276DA	MySQL Database (3) OR	
+CIS276DB	SQL Server Database (3)	3
+CIS217AM	Advanced Microsoft Access: Database Management (3) OR	
+CIS276DB	SQL Server Database (3)	3
+CIS225AB	Object-Oriented Analysis and Design	3

Related Area Credits: 0-2

Select courses with one of the following prefixes to complete a minimum of 60 credits for the Associate in Applied Science (AAS) in Information Technology:

BPC+++++	Any BPC Business-Personal Computers courses

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

CIS+++++	Any CIS Computer Information Systems courses	
CLD+++++	Any CLD Cloud Computing courses	
CNT+++++	Any CNT Cisco Network Technology courses	
ITS+++++	Any ITS Information Technology Security courses	
MST+++++	Any MST Microsoft Technology courses	

Specialization 3: Desktop Support Credits: 32-28

Information Technology Core Credits: 24-25

+BPC270	A+ Exam Prep: Operating System Configuration and Support	3
CIS105	Survey of Computer Information Systems	3
CIS117DM	Microsoft Access: Database Management (3) OR	
+CIS119DO	Introduction to Oracle: SQL (3) OR	
+CIS276DA	MySQL Database (3) OR	
+CIS276DB	SQL Server Database (3)	3
CIS126DL	Linux Operating System (3) OR	
CIS126RH	Red Hat System Administration I (3)	3
CIS133DA	Internet/Web Development Level I	3
+CIS150AB	Object Oriented Programming Fundamentals (3) OR	
+CIS156	Python Programming: Level I (3) OR	
+CIS162++	Any C Programming: Level I course (3) OR	
+CIS163AA	Java Programming: Level I (3)	3
+CIS190	Introduction to Networks (3) OR	
CNT140AB	Introduction to Networks (4)	3-4
CIS224	Project management (3) OR	
+CIS250	Management of Information Systems (3)	3

Desktop Support Credits: 6

+BPC170	A+ Exam Prep: Computer Hardware Configuration and Support	3
CIS102DA	Customer User Support	3

Related Area Credits: 2-8

Select courses with one of the following prefixes to complete a minimum of 60 credits for the Associate in Applied Science (AAS) in Information Technology:

BPC+++++	Any BPC Business-Personal Computers courses
CIS+++++	Any CIS Computer Information Systems courses
CLD+++++	Any CLD Cloud Computing courses
CNT+++++	Any CNT Cisco Network Technology courses
ITS+++++	Any ITS Information Technology Security courses
MST+++++	Any MST Microsoft Technology courses

Specialization 4: Foundations of Mobile App Development Credits: 33-38

Information Technology Core Credits: 21-22

CIS105	Survey of Computer Information Systems	3
+BPC270	A+ Exam Prep: Operating System Configuration and Support (3) OR	
CIS126DL	Linux Operating System (3) OR	
CIS126RH	Red Hat System Administration I (3) OR	
MST150++	Microsoft Windows (3)	3
CIS117DM	Microsoft Access: Database Management (3) OR	
+CIS119DO	Introduction to Oracle: SQL (3) OR	
+CIS276DA	MySQL Database (3) OR	
+CIS276DB	SQL Server Database (3)	3
CIS133DA	Internet/Web Development Level I	3
+CIS162++	Any C Programming: Level I course	3
+CIS190	Introduction to Networks (3) OR	
CNT140AB	Introduction to Networks (4)	3-4
CIS224	Project management (3) OR	
+CIS250	Management of Information Systems (3)	3

Foundations of Mobile App Development Credits: 12

CIS120DF	Computer Graphics: Adobe Photoshop	3
+CIS165	Introduction to IOS Application Development I	3
+CIS165DA	Android Mobile Device Programming	3
+CIS165DB	C#/VB.NET: Windows 8 App Development (3) OR	
+CIS165DC	Xamarin/C# Cross Platform Development (3)	3

Related Area Credits: 0-5

Select courses with one of the following prefixes to complete a minimum of 60 credits for the Associate in Applied Science (AAS) in Information Technology:

BPC+++++	Any BPC Business-Personal Computers courses
CIS+++++	Any CIS Computer Information Systems courses

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

CLD+++++	Any CLD Cloud Computing courses	
CNT+++++	Any CNT Cisco Network Technology courses	
ITS+++++	Any ITS Information Technology Security courses	
MST+++++	Any MST Microsoft Technology courses	

Specialization 5: Microsoft Office Professional
Credits: 31-38

Information Technology Core Credits: 18-19

CIS105	Survey of Computer Information Systems	3
CIS117DM	Microsoft Access: Database Management	3
CIS133DA	Internet/Web Development Level I	3
+CIS150AB	Object Oriented Programming Fundamentals (3) OR	
+CIS156	Python Programming: Level I (3) OR	
+CIS162++	Any C Programming: Level I course (3) OR	
+CIS163AA	Java Programming: Level I (3)	3
+CIS190	Introduction to Networks (3) OR	
CNT140AB	Introduction to Networks (4)	3-4
MST150++	Microsoft Windows (3) OR	
BPC270	A+ Exam Prep: Operating System Configuration and Support (3)	3

Microsoft Office Professional Credits: 11-13

BPC111AA	Computer Keyboarding (1) OR	
Permission of Program Director (0)		0-1
CIS113DE	Microsoft Word: Word Processing	3
CIS114DE	Excel Spreadsheet	3
CIS118DB	Desktop Presentation: PowerPoint	3
CIS124AA	Project Management Software: Level I (1) AND	
CIS124BA	Project Management Software: Level II (1) OR	
CIS224	Project Management Microsoft Project for Windows (3)	2-3

Relted Area Credits: 0-8
Select courses with one of the following prefixes to complete a minimum of 60 credits for the Associate in Applied Science (AAS) in Information Technology:

BPC+++++	Any BPC Business-Personal Computers courses
CIS+++++	Any CIS Computer Information Systems courses
CLD+++++	Any CLD Cloud Computing courses
CNT+++++	Any CNT Cisco Network Technology courses
ITS+++++	Any ITS Information Technology Security courses
MST+++++	Any MST Microsoft Technology courses

Specialization 6: Microsoft Server 36-38

Information Technology Core: 21-22

CIS105	Survey of Computer Information Systems	3
CIS117DM	Microsoft Access: Database Management (3) OR	
+CIS119DO	Introduction to Oracle: SQL (3) OR	
+CIS276DA	MySQL Database (3) OR	
+CIS276DB	SQL Server Database (3)	3
CIS133DA	Internet/Web Development Level I	3
+CIS150AB	Object Oriented Programming Fundamentals (3) OR	
+CIS156	Python Programming: Level I (3) OR	
+CIS162++	Any C Programming: Level I course (3) OR	
+CIS163AA	Java Programming: Level I (3)	3
+CIS190	Introduction to Networks (3) OR	
CNT140AB	Introduction to Networks (4)	3-4
CIS224	Project management (3) OR	
+CIS250	Management of Information Systems (3)	3
MST150++	Microsoft Windows	3

Microsoft Server Credits: 15

CIS121AH	Microsoft PowerShell/Command Line Operations	3
+MST155DC	Installation, Storage, & Compute With Windows Server	4
+MST157DC	Networking With Windows Server	4
+MST158DC	Installing and Configuring Windows Server	4

Related Area Credits: 0-2
Select courses with one of the following prefixes to complete a minimum of 60 credits for the Associate in Applied Science (AAS) in Information Technology:

BPC+++++	Any BPC Business-Personal Computers courses
CIS+++++	Any CIS Computer Information Systems courses
CLD+++++	Any CLD Cloud Computing courses

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

CNT+++++	Any CNT Cisco Network Technology courses	
ITS+++++	Any ITS Information Technology Security courses	
MST+++++	Any MST Microsoft Technology courses	

Specialization 7: Orace Database Operations 32-38

Information Technology Core Credits: 21-22

+BPC270	A+ Exam Prep: Operating System Configuration and Support (3) OR	
CIS126DL	Linux Operating System (3) OR	
CIS126RH	Red Hat System Administration I (3) OR	
MST150++	Microsoft Windows (3)	3
CIS105	Survey of Computer Information Systems	3
+CIS119DO	Introduction to Oracle: SQL	3
CIS133DA	Internet/Web Development Level I	3
+CIS150AB	Object Oriented Programming Fundamentals (3) OR	
+CIS156	Python Programming: Level I (3) OR	
+CIS162++	Any C Programming: Level I course (3) OR	
+CIS163AA	Java Programming: Level I (3)	3
+CIS190	Introduction to Networks (3) OR	
CNT140AB	Introduction to Networks (4)	3-4
CIS224	Project management (3) OR	
+CIS250	Management of Information Systems (3)	3

Oracle Database Operations Credits: 9

+CIS119DP	Oracle: Database Administration	3
+CIS154	Database Modeling and Design	3
+CIS164AB	Oracle: Developer PL/SQL Programming	3

Related Area Credits: 2-8

Select courses with one of the following prefixes to complete a minimum of 60 credits for the Associate in Applied Science (AAS) in Information Technology:

BPC+++++	Any BPC Business-Personal Computers courses
CIS+++++	Any CIS Computer Information Systems courses
CLD+++++	Any CLD Cloud Computing courses
CNT+++++	Any CNT Cisco Network Technology courses
ITS+++++	Any ITS Information Technology Security courses
MST+++++	Any MST Microsoft Technology courses

Specialization 8: Programming and Systems Analysis

Level 1 Courses: 32-38

Information Technology Core Credits: 21-22

CIS105	Survey of Computer Information Systems	3
+CIS119DO	Introduction to Oracle: SQL (3) OR	
+CIS276DA	MySQL Database (3) OR	
+CIS276DB	SQL Server Database (3)	3
CIS126DL	Linux Operating System (3) OR	
CIS126RH	Red Hat System Administration I (3) OR	
MST150++	Microsoft Windows (3)	3
CIS133DA	Internet/Web Development Level I	3
+CIS150AB	Object Oriented Programming Fundamentals	3
+CIS190	Introduction to Networks (3) OR	
CNT140AB	Introduction to Networks (4)	3-4
CIS224	Project management (3) OR	
+CIS250	Management of Information Systems (3)	3

Programming and Systems Analysis Credits: 9

+CIS159	Visual Basic Programming I (3) OR	
+CIS162++	Any C Programming: Level I course (3) OR	
+CIS163AA	Java Programming: Level I (3) OR	
+CIS165++	Any Mobile Application Development course (3)	3
+CIS166++	Any Web Scripting course	3
GBS151	Introduction to Business	3

Related Area Credits: 1-8

Select courses with one of the following prefixes to complete a minimum of 60 credits for the Associate in Applied Science (AAS) in Information Technology:

BPC+++++	Any BPC Business-Personal Computers courses
CIS+++++	Any CIS Computer Information Systems courses
CLD+++++	Any CLD Cloud Computing courses
CNT+++++	Any CNT Cisco Network Technology courses
ITS+++++	Any ITS Information Technology Security courses
MST+++++	Any MST Microsoft Technology courses

Specialization 9: Redhat Linux Engineer 32-38

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

Information Technology Core Credits: 21-22

CIS105	Survey of Computer Information Systems	3
CIS117DM	Microsoft Access: Database Management (3) OR	
+CIS119DO	Introduction to Oracle: SQL (3) OR	
+CIS276DA	MySQL Database (3) OR	
+CIS276DB	SQL Server Database (3)	3
CIS126RH	Red Hat System Administration I	3
CIS133DA	Internet/Web Development Level I	3
+CIS150AB	Object Oriented Programming Fundamentals (3) OR	
+CIS156	Python Programming: Level I (3) OR	
+CIS162++	Any C Programming: Level I course (3) OR	
+CIS163AA	Java Programming: Level I (3)	3
+CIS190	Introduction to Networks (3) OR	
CNT140AB	Introduction to Networks (4)	3-4
CIS224	Project management (3) OR	
+CIS250	Management of Information Systems (3)	3

Redhat Linux Engineer Credits: 6

+CIS238RH	Red Hat System Administration II	3
+CIS240RH	Red Hat System Administration III	3

Related Area Credits: 5-11

Select courses with one of the following prefixes to complete a minimum of 60 credits for the Associate in Applied Science (AAS) in Information Technology:

BPC+++++	Any BPC Business-Personal Computers courses
CIS+++++	Any CIS Computer Information Systems courses
CLD+++++	Any CLD Cloud Computing courses
CNT+++++	Any CNT Cisco Network Technology courses
ITS+++++	Any ITS Information Technology Security courses
MST+++++	Any MST Microsoft Technology courses

Specialization 10: Web Foundations Credits: 36-38

Information Technology Core Credits: 21-22

+BPC270	A+ Exam Prep: Operating System Configuration and Support (3) OR	
CIS126DL	Linux Operating System (3) OR	
CIS126RH	Red Hat System Administration I (3) OR	
MST150++	Microsoft Windows (3)	3
CIS105	Survey of Computer Information Systems	3
CIS117DM	Microsoft Access: Database Management (3) OR	
+CIS119DO	Introduction to Oracle: SQL (3) OR	
+CIS276DA	MySQL Database (3) OR	
+CIS276DB	SQL Server Database (3)	3
CIS133DA	Internet/Web Development Level I	3
+CIS150AB	Object Oriented Programming Fundamentals (3) OR	
+CIS156	Python Programming: Level I (3) OR	
+CIS162++	Any C Programming: Level I course (3) OR	
+CIS163AA	Java Programming: Level I (3)	3
+ CIS190	Introduction to Networks (3) OR	
CNT140AB	Introduction to Networks (4)	3-4
CIS224	Project management (3) OR	
+CIS250	Management of Information Systems (3)	3

Web Foundation Credits: 15

CIS120DF	Adobe Photoshop Level I: Digital Imaging	3
CIS136	Content Management Systems: WordPress	3
+CIS166AA	Introduction to Javascript	3
+CIS233DA	Internet/Web Development Level II	3
+CIS235	e-Commerce	3

Related Area Credits: 0-2

Select courses with one of the following prefixes to complete a minimum of 60 credits for the Associate in Applied Science (AAS) in Information Technology:

BPC+++++	Any BPC Business-Personal Computers courses
CIS+++++	Any CIS Computer Information Systems courses
CLD+++++	Any CLD Cloud Computing courses
CNT+++++	Any CNT Cisco Network Technology courses
ITS+++++	Any ITS Information Technology Security courses
MST+++++	Any MST Microsoft Technology courses

Specialization 11: A related Certificate of Completion (CCL) at the discretion of the Program Director (minimum of 11 credits) AND the following core courses with permission of the Program Director.

Information Technology Cored Credits: 21-22

CIS105	Survey of Computer Information Systems	3

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

CIS117DM	Microsoft Access: Database Management (3) OR	
+CIS119DO	Introduction to Oracle: SQL (3) OR	
+CIS276DA	MySQL Database (3) OR	
+CIS276DB	SQL Server Database (3)	3
+BPC270	A+ Exam Prep: Operating System Configuration and Support (3) OR	
CIS126DL	Linux Operating System (3) OR	
CIS126RH	Red Hat System Administration I (3) OR	
MST150++	Microsoft Windows (3)	3
+CIS150AB	Object Oriented Programming Fundamentals (3) OR	
+CIS156	Python Programming: Level I (3) OR	
+CIS162++	Any C Programming: Level I course (3) OR	
+CIS163AA	Java Programming: Level I (3)	3
CIS190	Introduction to Networks (3) OR	
CNT140AA	Introduction to Networks (4)	3-4
CIS133DA	Internet/Web Development Level I	3
+CIS224	Project management (3) OR	
CIS250	Management of Information Systems (3)	3

General Education: 22-28 Credits

Core: 12-18 Credits

First-Year Composition

+ENG101	First-Year Composition (3) AND	
+ENG102	First-Year Composition (3) OR	
+ENG107	First-Year Composition for ESL (3) AND	
+ENG108	First-Year Composition for ESL (3)	6

Oral Communication

COM100	Introduction to Human Communication (3) OR	
COM110	Interpersonal Communication (3) OR	
+COM225	Public Speaking (3) OR	
COM230	Small Group Communication (3)	3

Critical Reading

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

Mathematics

+MAT140	Intermediate Mathematics (5) OR	
+MAT141	Intermediate Mathematics (4) OR	
+MAT142	College Mathematics (3) OR	
+MAT145	College Mathematics (5) OR	
+MAT146	College Mathematics (6) OR	
Equivalent or higher level mathematics course in the Mathematical Applications [MA] area.		3-6

Distribution: 10 Credits

Humanities, Arts and Design

Any approved general education course from the Humanities, Arts and Design [HU] area. 3

Social and Behavioral Sciences

Any approved general education course from the Social-Behavioral Sciences [SB] area. 3

Natural Sciences

Any approved general education course from the Natural Science [SG] or [SQ] area. 4

iOS App Development

Certificate of Completion: CCL 5914N

9-12 Credits

Program Contact

Prema Rayappa | 480-732-7230 | prema.rayappa@cgc.edu

Program Description

The Certificate of Completion (CCL) in iOS App Development prepares students for positions in app development for the Apple iPad, iPhone, and Apple Watch series. The program emphasizes knowledge and skills required to design, develop, test, and document structured and object-oriented programs utilizing Swift and Xcode. Courses in this certificate can apply toward the Associate in Applied Science (AAS) in Mobile App Development and Certificates of Completion (CCLs) in Native App Development and Mobile App Development.

Program Notes

This program is not eligible for Title IV Federal Financial Aid.

Students must earn a grade of C or better for all courses required within the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisite and/or corequisites.

Program Prerequisites: None

Required Courses: 9-12 Credits

CIS105	Survey of Computer Information Systems (3) OR	

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

Permission of Program Director, Department or Division Chair (0)		0-3
+CIS150AB	Object-Oriented Programming Fundamentals	3
+CIS165	Introduction to IOS Application Development	3
+CIS265	Advanced iOS Application Development	3

Linux Associate

Certificate of Completion: CCL 5046N

6-9 Credits

Program Contact

Tom Pearson | 480-726-4131 | tom.pearson@cgc.edu

Program Description

The Certificate of Completion (CCL) in Linux Associate program is designed to help prepare students for employment or to improve current professional skills. The program includes Linux operating system basics and management including sophisticated manipulation of file structures, backup systems, printing processes, troubleshooting, user account management, hard disk maintenance and configuration, process monitoring and prioritizing, kernel customization, and system resource control. This program helps prepare students for the Linux Professional Institute Certification (LPIC-1) and CompTIA Linux + certification exams. Students who complete this program may seek employment in a variety of environments. Students can also pursue additional Certificates of Completion (CCLs) in a variety of specializations within the information technology field to deepen their knowledge and skills and to help prepare them for multiple industry certification examinations. An Associate in Applied Science (AAS) in Network and Systems Administration is also available.

Program Notes

This program is not eligible for Title IV Federal Financial Aid.

Students must earn a grade of "C" or better for all courses required within the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

Students who pursue this Certificate of Completion (CCL) should have a basic level of computer literacy including navigating the internet and computer systems or take CIS105 as indicated in the required courses. Students with the requisite skills may have the CIS105 requirement waived by permission of the Program Director.

All courses within the Required areas are not applicable if taken more than five (5) years prior to the completion of the program. Consult with an academic advisor or program director for exceptions.

Program Prerequisites: None

Required Courses: 6-9 Credits

CIS105	Survey of Computer Information Systems (3) OR	
Permission of program director (0)		0-3
CIS126DL	Linux Operating System	3
+CIS238DL	Linux System Administration	3

Linux System Administration

Certificate of Completion: CCL 5052N

15-18 Credits

Program Contact

Tom Pearson | 480-726-4131 | tom.pearson@cgc.edu

Program Description

The Certificate of Completion (CCL) in Linux System Administration program is designed to help prepare students for a variety of industry-recognized Linux certification exams as well as provide practical hands-on skills for the workplace. The program includes a core of Linux classes including Linux operating system basics, system administration, network administration and network security. The courses in the program will help develop a student`s knowledge and skill level in preparation for employment or to improve current professional skills. Students who complete this program may seek employment in a variety of environments. The program helps prepare students for the Red Hat Certified System Administrator (RHCSA), Red Hat Certified Engineer (RHCE), and CompTIA Linux+ certification exams. An Associate in Applied Science (AAS) in Network and Systems Administration is also available.

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

Program Notes

This program is not eligible for Title IV Federal Financial Aid.

Students must earn a grade of "C" or better for all courses required within the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

++ indicates any suffixed course.

Students who pursue this Certificate of Completion (CCL) should have a basic level of computer literacy including navigating the internet and computer systems or take CIS105 as indicated in the required courses. Students with the requisite skills may have the CIS105 requirement waived by permission of the Program Director.

All courses within the Required Courses and Restricted Electives areas are not applicable if taken more than five (5) years prior to the completion of the program. Consult with an Academic Advisor or Program Director for exceptions.

Program Prerequisites: None

Required Courses: 15-18 Credits

CIS105	Survey of Computer Information Systems (3) OR	
Permission of program director (0)		0-3

Students should select from one of the following two tracks (Linux or Red Hat Enterprise Linux): Linux Track

CIS126DL	Linux Operating System	3
+CIS238DL	Linux System Administration	3
+CIS239DL	Linux Shell Scripting	3
+CIS240DL	Linux Network Administration	3
+CIS275DL	Linux Capstone	3

Red Hat Enterprise Linux Track

CIS126RH	Red Hat System Administration I	3
+CIS238RH	Red Hat System Administration II	3
+CIS239DL	Linux Shell Scripting	3
+CIS240RH	Red Hat System Administration III	3
+CIS275DL	Linux Capstone	3

Management

Associate in Applied Science: AAS 3070

61-66 Credits

Program Contacts

Nicki Lynn | 480-732-7394 | nicki.lynn@cgc.edu

Program Description

The Associate in Applied Science (AAS) in Management program is designed to provide skills for management careers. Students completing this program are better equipped to apply competencies needed for successful performance in management occupations such as manufacturing, wholesaling, retailing, and service industries. The Certificate of Completion (CCL) in Management is fully embedded in this AAS. The following Certificates of Completion (CCL) are also available based on chosen restricted electives: Human Resources Management, Project Management, Business Administration, Supervision and Management, and Organizational Leadership

Program Notes

Students must earn a grade of C or better for all courses required in the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

++ indicates any suffixed courses

Program Prerequisites: None

Required Courses: 21 Credits

ACC111	Accounting Principles I	3
BPC110	Computer Usage and Applications (3) OR	
CIS105	Survey of Computer Information Systems (3)	3
GBS120	Workplace Communication Skills	3
GBS151	Introduction to Business	3
GBS205	Legal, Ethical, and Regulatory Issues in Business	3
MGT229	Management and Leadership I	3
MGT251	Human Relations in Business	3

Restricted Electives: 3-4 Credits

Students should select eighteen (18) credits from the following courses in consultation with a Department

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

Advisor. Courses cannot be shared with Required Courses.

ACC110	Understanding and Using Accounting Systems (3) OR	
+ACC112	Accounting Principles II (3)	3
CIS114DE	Excel Spreadsheet	3
CIS224	Project Management Microsoft Project for Windows	3
GBS131	Business Calculations	3
IBS101	Introduction to International Business	3
MKT271	Principles of Marketing	3
MGT+++	Any MGT Management course(s) (except courses used to satisfy Required Courses area)	3
TQM230	Teamwork Dynamics	2
TQM240	Project Management in Quality Organizations	3

General Education: 22-27 Credits

Core: 12-17 Credits

First-Year Composition

+ENG101	First-Year Composition (3) OR	
+ ENG107	First-Year Composition for ESL (3) AND	
+ ENG102	First-Year Composition (3) OR	
+ENG108	First-Year Composition for ESL (3)	6

Oral Communication

COM100	Introduction to Human Communication (3) OR	
COM110	Interpersonal Communication (3) OR	
+COM225	Public Speaking (3) OR	
COM230	Small Group Communication (3)	3

Critical Reading

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

Mathematics

Any approved general education course from the Mathematics [MA] area. 3-5

Distribution: 10 Credits

Humanities, Arts and Design

Any approved general education course from the Humanities, Arts and Design [HU] area. 3

Social and Behavioral Sciences

SBU200	Society and Business.	3

Natural Sciences

Any approved general education course in the Natural Sciences (Quantitative) [SQ] area or the Natural Sciences (General) [SG] area. 4

Microsoft Desktop Associate

Certificate of Completion: CCL 5030N

3 Credits

Program Contact

Tom Pearson | 480-726-4131 | tom.pearson@cgc.edu

Program Description

The Certificate of Completion (CCL) in Microsoft Desktop Associate program is designed to provide students with background knowledge and skills required for learning the specific tasks and industry recognized standards associated with how to effectively install and configure Windows operating systems. The course includes basic features of the Windows operating system, virtualization improvements, network connectivity, access to resources, monitor and maintain Windows clients and backup and recovery. It is designed to prepare students for the Microsoft 365 Certified: Modern Desktop Administrator Associate certification exam. Students who complete this program may seek employment in a variety of environments. Students can also pursue additional Certificates of Completion (CCL) in a variety of specializations within the information technology field to deepen their knowledge and skills and to help prepare them for multiple industry certification exams. An Associate in Applied Science (AAS) in Network and Systems Administration is also available.

Program Notes

This program is not eligible for Title IV Federal Financial Aid.

Students must earn a grade of "C" or better for all courses required within the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

Students are encouraged, but not required, to complete CIS105, or CIS190, or CNT140AB prior to

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beginning this CCL.

All courses within the Required areas are not applicable if taken more than five (5) years prior to the completion of the program. Consult with an academic advisor or program director for exceptions.

Program Prerequisites: None

Required Courses: 3 Credits

MST150WT	Installing and Configuring Microsoft Windows 10	3

Microsoft Office Professional

Certificate of Completion: CCL 5132

16-22 Credits

Program Contact

Lana Short | 480-732-7191 | lana.short@cgc.edu

Program Description

The Certificate of Completion (CCL) in Microsoft Office Professional emphasizes training on word processing, spreadsheet, database, and presentation software for business purposes. This certificate provides students with the knowledge and skills requisite of various business settings. This certificate helps with initial preparation for the Microsoft examinations for certification as a Microsoft Office Specialist (MOS). This certificate embeds into the Associate in Applied Science (AAS) degree in Information Technology and Certificate of Complete (CCL) in Microsoft Office Specialist.

Program Notes

The Certificate of Completion in Microsoft Office Professional is currently not Title IV Federal Financial Aid eligible.

Students must earn a grade of "C" or better in all courses required within the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

++ indicates any suffixed course.

Only required courses taken within eight (8) years of completion of the program may be applied towards this certificate. Consult with your faculty mentor or academic advisor.

Program Prerequisites: None

Required Courses: 16-22 Credits

BPC/OAS111AA	Computer Keyboarding I (1) OR	
Permission of Program Director (0)		0-1
CIS105	Survey of Computer Information Systems (3) OR	
Permission of Program Director (0)		0-3
CIS113DE	Microsoft Word: Word Processing	3
CIS114DE	Excel Spreadsheet	3
CIS117DM	Microsoft Access: Database Management	3
CIS118DB	Desktop Presentation: Powerpoint	3
+BPC270	A+ Exam Prep: Operating System Configuration and Support (3) OR	
CIS121AE	Windows Operating System: Level I (1) AND	
CIS122AE	Windows Operating System: Level II (1) OR	
MST150++	Microsoft Windows (3)	2-3
CIS124AA	Project Management Software: Level I (1) AND	
CIS124BA	Project Management Software: Level II (1) OR	
CIS224	Project Management Microsoft Project for Windows (3)	2-3

Microsoft Office Specialist

Certificate of Completion: CCL 5137

25-31 Credits

Program Contact

Lana Short | 480-732-7191 | lana.short@cgc.edu

Program Description

The Certificate of Completion (CCL) in Microsoft Office Specialist emphasizes advanced training on word processing, spreadsheet, and database software for business purposes. This certificate builds upon the knowledge and skills gained by the CCL in Microsoft Office Professional for use in various business settings. This certificate helps prepare students for the Microsoft Office Specialist (MOS) certification examinations. This certificate embeds into the Associate in Applied Science (AAS) degree in Information Technology.

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

Program Notes

The Certificate of Completion in Microsoft Office Specialist is currently not Title IV Federal Financial Aid eligible.

Students must earn a grade of "C" or better in all courses required within the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

++ indicates any suffixed course.

Only required courses taken within eight (8) years of completion of the program may be applied towards this certificate. Consult with your faculty mentor or academic advisor.

Program Prerequisites: None

Required Courses: 25-31 Credits

The following courses are required and included in Microsoft Office Professional CCL

BPC/OAS111AA	Computer Keyboarding I (1) OR	
Permission of Program Director (0)		0-1
CIS105	Survey of Computer Information Systems (3) OR	
Permission of Program Director (0)		0-3
CIS113DE	Microsoft Word: Word Processing	3
CIS114DE	Excel Spreadsheet	3
CIS117DM	Microsoft Access: Database Management	3
CIS118DB	Desktop Presentation: Powerpoint	3
+BPC270	A+ Exam Prep: Operating System Configuration and Support (3) OR	
CIS121AE	Windows Operating System: Level I (1) AND	
CIS122AE	Windows Operating System: Level II (1) OR	
MST150++	Microsoft Windows (3)	2-3
CIS124AA	Project Management Software: Level I (1) AND	
CIS124BA	Project Management Software: Level II (1) OR	
CIS224	Project Management Microsoft Project for Windows (3)	2-3

The following courses are required in Microsoft Office Specialist CCL

CIS213DE	Advanced Microsoft Word: Word Processing	3
CIS214DE	Advanced Excel Spreadsheet: Level II	3
CIS217AM	Advanced Microsoft Access: Database Management	3

Microsoft System Administration

Certificate of Completion: CCL 5031

18-21 Credits

Program Contact

Tom Pearson | 480-726-4131 | tom.pearson@cgc.edu

Program Description

The Certificate of Completion (CCL) in Microsoft System Administration program is designed to provide students with background knowledge and skills required for learning the specific tasks and industry recognized standards associated with computer networks and data communications. The program includes a core of Microsoft courses to develop professionals who implement, manage, and troubleshoot existing network and system environments based on current Microsoft operating systems including active directory, messaging services, file and print servers, and firewalls. The courses in the program are also designed to help prepare students for the Microsoft 365 Certified: Modern Desktop Administrator Associate and Microsoft Certified Solutions Associate (MCSA) - Windows Server 2016 certification exams. Students who complete this program may seek employment in a variety of environments. Students can also pursue additional Certificates of Completion (CCL) in a variety of specializations within the information technology field to deepen their knowledge and skills and to help prepare them for multiple industry certification examinations. An Associate in Applied Science (AAS) in Network and Systems Administration is also available.

Program Notes

The Certificate of Completion in Microsoft System Administration is currently not Title IV Federal Financial Aid eligible.

Students must earn a grade of "C" or better for all courses required within the program. Overall program minimum GPA = 2.00.

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

+ indicates course has prerequisites and/or corequisites.

++ indicates any suffixed course.

All courses within the Required areas are not applicable if taken more than five (5) years prior to the completion of the program. Consult with an academic advisor or program director for exceptions.

Program Prerequisites: None

Required Courses: 18-21 Credits

CIS105	Survey of Computer Information Systems (3) OR	
May be waived by permission of the Program Director (0)		0-3
CIS121AH	Microsoft PowerShell/Command Line Operations	3
MST150++	Any Microsoft Windows course	3
+MST155DC	Installation, Storage, and Compute with Windows Server	4
+MST157DC	Networking with Windows Server	4
+MST158DB	Installing and Configuring Windows Server	4

Network and Systems Administration

Associate in Applied Science: AAS 3189

60-65 Credits

Program Contact

Tom Pearson 480-726-4131 | tom.pearson@cgc.edu

Program Description

The Associate in Applied Science (AAS) in Network and Systems Administration program provides students with a solid, hands-on skill set of computer, networking, and internetworking systems technology principles and desktop support. Students gain an understanding of the interaction between microcomputer software and hardware, network and internetworking operating systems software and hardware, local area network administration and management, the use of troubleshooting techniques, troubleshooting hardware and software tools, as well as interpersonal/customer service skills. Students have the opportunity to specialize in specific information technology areas based on their interests and professional goals and leading to industry recognized certifications through an embedded Certificate of Completion (CCL) including, but not limited to, Desktop (Desktop Support, Computer System Configuration and Support, Computer System Configuration and Support, Network, Computer System Configuration and Support, Security, Computer System Configuration and Support, Linux), Cisco (Cisco Network CCNA, Cisco Network CCNP, Cisco Network CCNA Security), Linux (Red Hat Linux Engineer, Linux Associate, Red Hat Linux Administrator, Linux System Administration), Microsoft (Microsoft System Administration, Microsoft Desktop Associate), and VMware (VMware Network Administrator, VMware Foundations, VMware System Administrator). Graduates may pursue employment in a variety of information technology environments and/or transfer to a university.

Program Notes

Students must earn a grade of "C" or better in all courses within the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

++ indicates any suffixed course.

For students considering university transfer consult with an Academic, Program, or Faculty Advisor at the college and/or university transfer partner.

All courses within the Required Courses and Restricted Electives areas are not applicable if taken more than five (5) years prior to the completion of the program. Consult with an Academic Advisor or Program Director for exceptions.

Students may receive credit for courses within the program based on current industry certifications. Consult with an Academic Advisor or Program Director.

Program Prerequisites: None

Required Courses: 30-37 Credits

+BPC170	A+ Exam Prep: Computer Hardware Configuration and Support	3
+BPC270	A+ Exam Prep: Operating System Configuration and Support	3
CIS102DA	Customer User Support	3

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

CIS105	Survey of Computer Information Systems	3
CIS126DL	Linux Operating System (3) OR	
CIS126RH	Red Hat System Administration I (3)	3
+CIS190	Introduction to Networking (3) OR	
CNT140AB	Introduction to Networks (4)	3-4

(CNT140AB is required for students on the Cisco emphasis)

Students must also select from one of the following areas of emphasis based on their career goals.

Emphasis 1: Cisco System Administration (CCNA) and Security - Credits: 12

+CNT150AB	Switching, Routing, and Wireless Essentials	4
+CNT160AB	Enterprise Networking, Security, and Automation	4
+CNT202	Cisco Secure Firewall Appliance Configuration (4) OR	
+CNT205	Cisco Certified Network Associate Security (4)	4

Emphasis 2: Cisco System Administration (CCNP) - Credits: 16

+CNT150AB	Switching, Routing, and Wireless Essentials	4
+CNT160AB	Enterprise Networking, Security, and Automation	4
+CNT200	CCNP ROUTE: Implementing Cisco IP Routing	4
+CNT220	CCNP SWITCH: Implementing Cisco IP Switching	4

Emphasis 3: Linux System Administation - Credits: 12

+CIS238DL	Linux System Administration	3
+CIS239DL	Linux Shell Scripting	3
+CIS240DL	Linux Network Administration	3
+CIS275DL	Linux Capstone	3

Emphasis 4: Red Hat Enterprise Linux Administration - Credits: 12

+CIS238RH	Red Hat System Administration II	3
+CIS239DL	Linux Shell Scripting	3
+CIS240RH	Red Hat System Administration III	3
+CIS275DL	Linux Capstone	3

Emphasis 5: Microsoft System Administration - Credits: 18

CIS121AH	Microsoft PowerShell/Command Line Operations	3
MST150++	Any Microsoft Windows Operating System course	3
+MST155DC	Installation, Storage, and Compute with Windows Server	4
+MST157DC	Networking with Windows Server	4
+MST158DC	Identity Management with Windows Server 2016	4

Emphasis 6: Vmare Network Administrator - Credits: 12

CIS189	Virtualization and IT Solutions for Digital Businesses 3	
+CIS197	VMware ESXI Server Enterprise	3
+CIS198	VMware vSphere: Optimize and Scale	3
+CIS200	VMware NSX: Install, Configure, Manage	3

Restricted Electives: 0-8 Credits

Students are to select enough Restricted Elective credits to meet a minimum of 60 credits not used to satisfy Required Courses or selected area of emphasis within the Required Courses. Consult with an Academic, Program, or Faculty Advisor to pick courses that align with your career goals.

Cisco Electives

CNT140AB	Introduction to Networks	4
+CNT150AB	Switching, Routing, and Wireless Essentials	4
+CNT160AB	Enterprise Networking, Security, and Automation	4
+CNT171	CCNA Exam Prep 1	
+CNT200	CCNP ROUTE: Implementing Cisco IP Routing	4
+CNT202	Cisco Secure Firewall Appliance Configuration (4) OR	
+CNT205	Cisco Certified Network Associate Security (4)	4
+CNT206	Cisco Certified Network Associate Wireless 4	
+CNT220	CCNP SWITCH: Implementing Cisco IP Switching	4

Linux Electives

+CIS238DL	Linux System Administration (3) OR	
+CIS238RH	Red Hat System Administration II (3)	3
+CIS239DL	Linux Shell Scripting	3
+CIS240DL	Linux Network Administration (3) OR	
+CIS240RH	Red Hat Systems Administration III (3)	3

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+CIS275DL	Linux Capstone	3

Microsoft Electives

MST+++++	Any MST Microsoft Technology Course	
CIS121AB	Microsoft Command Line Operations	1
CIS121AH	Microsoft PowerShell/Command Line Operations	3

Security Electives

+CIS270	Essentials of Network and Information Security	3
+CIS271DB	Information Security Essentials	3
+CIS272DB	Information Security Principles	3
+ITS110	Information Security Fundamentals	3

Vmare Electives

CIS189	Virtualization and IT Solutions for Digital Businesses	3
+CIS197	VMware ESXI Server Enterprise	3
+CIS198	VMware vSphere: Optimize and Scale	3
+CIS200	VMware NSX: Install, Configure, Manage	3

Other Information Technology Electives

BPC171	Recycling Used Computer Technology	1-3
CIS111	Ethics in Information Technology	3
CIS124AA	Project Management Software: Level I	1
+CIS124BA	Project Management Software: Level II	1
+CIS156	Python Programming: Level I	3
+CIS190	Introduction to Networking	3
CIS224	Project Management Microsoft Project for Windows	3
+CIS240	Local Area Network Planning and Design	3
+CIS250	Management of Information Systems	3
+CIS266	Network Integration Capstone	4
CIS290++	Computer Information Systems Internship	1-3
+ITS120	Legal, Ethical, and Regulatory Issues	3
+CIS290AA	Computer Information Systems Internship	1
+CIS290AB	Computer Information Systems Internship	2
+CIS290AC	Computer Information Systems Internship	3
+CIS296WB	Cooperative Education	2
+CIS296WC	Cooperative Education	3
+CIS298AA	Special Projects	1
+CIS298AB	Special Projects	2
+CIS298AC	Special Projects	3

General Education: 22-28 Credits

Core: 12-15 Credits

First-Year Composition

+ENG101	First-Year Composition (3) OR	
+ENG107	First-Year Composition for ESL (3) AND	
+ENG102	First-Year Composition (3) OR	
+ENG108	First-Year Composition for ESL (3) OR	
+ENG111	Technical and Professional Writing (3)	6

(ENG111 does not count as an ENG Transfer option)

Oral Communication

COM100	Introduction to Human Communication (3) OR	
COM110	Interpersonal Communication (3) OR	
+COM225	Public Speaking (3) OR	
COM230	Small Group Communication (3)	3

COM225 is recommended for students transferring to Northern Arizona University.

Critical Reading

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

Mathematics

+MAT140	College Mathematics (5) OR	
+MAT141	College Mathematics (4) OR	
+MAT142	College Mathematics (3) OR	
MAT145	College Mathematics with Review (5) OR	
MAT146	College Mathematics with Review (6) OR	
Equivalent or higher level mathematics course in the Mathematical Applications [MA] area.		3-6

Distribution: 10 Credits

Humanities, Arts and Design

Any approved general education course from the Humanities, Arts and Design [HU] area. 3

Social and Behavioral Sciences

Any approved general education course from the Social-Behavioral Sciences [SB] area. 3

Natural Sciences

Any approved general education course from the Natural Sciences [SG] or [SQ] area 4

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

Oracle Database Operations

Certificate of Completion: CCL 5183N

12 Credits

Program Contact

Prema Rayappa | 480-732-7230 | prema.rayappa@cgc.edu

Program Description

The Certificate of Completion (CCL) in Oracle Database Operations program provides training for students seeking professional positions in designing, creating, and maintaining databases. This program allows students to create PL/SQL application code that can be shared by multiple forms, reports, and data management tools. As an Oracle Academic Initiative institution, this program is designed to prepare students for industry-recognized certifications. Courses in the program also help prepare students wanting to pursue Oracle Application Developer Certified Associate and Oracle Database Administrator Certified Associate industry-certified examinations (Oracle Corporation OCA certifications). This certificate can embed into the Associate of Applied Science (AAS) degree in Information Technology.

Program Notes

This program is not eligible for Title IV Federal Financial Aid.

Students must earn a grade of "C" or better in all courses within the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

This Certificate of Completion (CCL) is intended for industry professionals with the requisite experience of foundational knowledge in word processing, spreadsheets, databases, presentation software, operating systems, and networking. Consult with a program advisor or director to determine if this CCL aligns with intended academic/career goals.

The Computer Information System (CIS) courses required by this program are not applicable if taken more than eight (8) years prior to the completion of the program of study. Consult with an Academic Advisor for complete information.

Program Prerequisites: None

Required Courses: 12 Credits

+CIS119DO	Introduction to Oracle: SQL	3
+CIS119DP	Oracle: Database Administration	3
+CIS154	Database Modeling and Design	3
+CIS164AB	Oracle: PL/SQL Programming	3

Organizational Leadership

Certificate of Completion: CCL 5731

18 Credits

Program Contact

Nicki Lynn | 480-732-7394 | nicki.lynn@cgc.edu

Program Description

The Certificate of Completion (CCL) in Organizational Leadership is designed to prepare students with knowledge and skills needed in today`s changing workplace. The program provides leadership and communication skills and techniques for planning, organizing, leading and controlling business situations. This program also emphasizes procedures for effective resource allocation. The CCL in Organizational Leadership is fully embedded in an Associate in Applied Science (AAS) in Organizational Management.

Program Notes

Students must earn a grade of "C" or better in all courses within the program. Overall program minimum GPA = 2.00

+ indicates course has prerequisite and/or corequisites.

Program Prerequisites: None

Required Courses: 18 Credits

BPC110	Computer Usage and Applications (3) OR	
CIS105	Survey of Computer Information Systems (3)	3
GBS110	Human Relations in Business and Industry (3) OR	
MGT251	Human Relations in Business (3)	3
GBS120	Workplace Communication Skills	3
GBS151	Introduction to Business	3
MGT175	Business Organization and Management (3) OR	

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

TQM240	Project Management in Quality Organizations (3)	3
MGT101	Techniques of Supervision (3) OR	
MGT229	Management and Leadership I (3)	3

Organizational Management

Associate in Applied Science: AAS 3727

60-65 Credits

Program Contact

Nicki Lynn | 480-732-7394 | nicki.lynn@cgc.edu

Program Description

The Associate in Applied Science (AAS) in Organizational Management program is designed with a customized curriculum specific to the student's individual needs in addition to the knowledge and skills needed in today's changing workplace. The program provides leadership and communication skills and techniques for planning, organizing, leading and controlling business situations. This program also emphasizes procedures for effective resource allocation. A Certificate of Completion (CCL) in Organizational Leadership is fully embedded in this AAS.

Program Notes

Students must earn a grade of "C" or better for all courses required within the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisite and/or corequisites.

Program Prerequisites: None

Required Courses: 18 Credits

Certificate of Completion in Organizational Leadership (5731) Requirements listed below

BPC110	Computer Usage and Applications (3) OR	
CIS105	Survey of Computer Information Systems (3)	3
GBS110	Human Relations in Business and Industry (3) OR	
MGT251	Human Relations in Business (3)	3
GBS120	Workplace Communication Skills	3
GBS151	Introduction to Business	3
MGT175	Business Organization and Management (3) OR	
TQM240	Project Management in Quality Organizations (3)	3
MGT101	Techniques of Supervision (3) OR	
MGT229	Management and Leadership I (3)	3

Restricted Electives: 20 Credits

Students must choose 20 industry/job related course credits from any MCCCD occupational program and/or Academic Certificate.

Industry/job related course credits must include a minimum of 9 credits with a common subject or theme. Program of study must be approved by the business department chair or designee.

General Education: 22-27 Credits

Core: 12-17 Credits

First-Year Composition

+ENG101	First-Year Composition (3) OR	
+ENG107	First-Year Composition for ESL (3) AND	
+ENG102	First-Year Composition (3) OR	
+ENG108	First-Year Composition for ESL (3)	6

Oral Communication

Any approved general education course from the Oral Communication area 3

Critical Reading

+CRE101	College Critical Reading and Critical Thinking (3) OR	
Equivalent by assessment		0-3

Mathematics

Any approved general education course from the Mathematics [MA] area 3-5

Distribution: 10 Credits

Humanities, Arts and Design

Any approved general education course from the Humanities, Arts and Design area. 3

Social and Behavioral Sciences

Any approved general education course from the Social and Behavioral Sciences [SB] area. 3

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

Natural Science

Any approved general education course in the Natural Sciences (Quantitative) [SQ] area or the Natural Sciences (General) [SG] area. 4

Programming and Systems Analysis

Associate in Applied Science: AAS 3844

61-67 Credits

Program Contact

Patricia Baker | 480-732-7392 | patricia.baker@cgc.edu

Program Description

The Associate in Applied Science (AAS) in Programming and Systems Analysis program provides an in-depth exploration of different computer language and technical skills. The AAS includes, but is not limited to the following: operating systems, local area networks, business communication, team roles, and dynamics. Certificate of Completions (CCL) in Programming and Systems Analysis Level I and Level II and iOS Application Development are also available.

Program Notes

Students must earn a grade of "C" or better for all courses required within the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

++ indicates any suffixed courses.

Consultation with an Academic Advisor is recommended for course selection.

Program Prerequisites: None

Required Courses: 33-34 Credits

GBS151	Introduction to Business	3
CIS105	Survey of Computer Information Systems	3
CIS126DL	Linux Operating System (3) OR	
CIS126RH	Red Hat System Administration I (3) OR	
+MST150++	Any Microsoft Windows course (3)	3
CIS133DA	Internet/Web Development Level I	3

Students interested in pursuing an iOS Certificate of Completion (CCL) are recommended to take CIS150AB.

+CIS150	Programming Fundamentals (3) OR	
+CIS150AB	Object-Oriented Programming Fundamentals (3)	3
+CIS166++	Any Web Scripting course(s)	3
+CIS190	Introduction to Networks (3) OR	
CNT140AA	Introduction to Networks (4) OR	
+MST140	Microsoft Networking Essentials (3)	3-4
+CIS225	Business Systems Analysis and Design (3) OR	
+CIS225AB	Object-Oriented Analysis and Design (3) OR	
+CIS250	Management of Information Systems (3)	3
+CIS119	DO Introduction to Oracle: SQL (3) OR	
+CIS276DA	MySQL Database (3) OR	
+CIS276DB	SQL Server Database (3)	3

Select a programming language from below that best aligns with academic and professional goals (2 courses for a total of 6 credits) in one of the following areas:

+CIS159	Visual Basic Programming I (3) AND	
+CIS259	Visual Basic Programming II (3) OR	
+CIS162++	Any C Programming: Level I course (3) AND	
+CIS262++	Any C Programming: Level II course (3) OR	
+CIS163AA	Java Programming: Level I (3) AND	
+CIS263AA	Java Programming: Level II (3) OR	
+CIS165++	Any Mobile Application Development course (3) AND	
+ CIS265	Advanced iOS Application Development (3)	6

Restricted Electives: 6

Students may not use courses from the Required Courses Area.

CIS224	Project Management Microsoft Project for Windows	3
+CIS151	Computer Game Development-Level I	3
+CIS156	Python Programming: Level I	3
+CIS159	Visual Basic Programming I	3
+CIS162++	Any C Programming: Level I course	3
+CIS163AA	Java Programming: Level I	3
+CIS165++	Any Mobile Application Development course	3
+CIS251	Computer Game Development-Level II	3
+CIS259	Visual Basic Programming II	3
+CIS262++	Any C Programming: Level II course	3
+CIS263AA	Java Programming: Level II	3
+CIS265	Advanced iOS Application Development	3

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

GBS211	Legal, Ethical and Regulatory Issues of the Internet Studies	3

General Education: 22-27 Credits

Core: 12-17 Credits

First-Year Composition

+ENG101	First-Year Composition (3) OR	
+ENG107	First-Year Composition for ESL (3) AND	
+ENG102	First-Year Composition (3) OR	
+ENG108	First-Year Composition for ESL (3)	6

Oral Communication

Any approved general education course in the Oral Communication area. 3

Critical Reading

+CRE101	College Critical Reading and Critical Thinking (3) OR	
Equivalent by assessment		0-3

Mathematics

+MAT150	College Algebra/Functions (5) OR	
+MAT151	College Algebra/Functions (4) OR	
+MAT152	College Algebra/Functions (3) OR	
Any MAT course that is equivalent or higher		3-5

Distribution: 10 credits

Humanities, Arts and Design

Any approved general education courses in the Humanities, Arts and Design [HU] area. 3

Social and Behavioral Sciences

ECN211	Macroeconomic Principles (3) OR	
ECN212	Microeconomic Principles (3) OR	
SBU200	Society and Business (3)	3

Natural Sciences

Any approved general education course in the Natural Sciences (Quantitative) [SQ] area or the Natural Sciences (General) [SG] area. 4

Programming and Systems Analysis Level I

Certificate of Completion: CCL 5048

24 Credits

Program Contact

Patricia Baker | 480-732-7392 | patricia.baker@cgc.edu

Program Description

The Certificate of Completion (CCL) in Programming and Systems Analysis Level I provides an exploration of different computer language and technical skills. The CCL includes, but is not limited to the following: operating systems, local area networks, business communication, team roles, and dynamics. A Certificate of Completion (CCL) in Programming and Systems Analysis Level II, Certificate of Completion (CCL) in iOS Application Development and an Associate in Applied Science (AAS) in Programming and Systems Analysis are also available.

Program Notes

Students must earn a grade of "C" or better for all courses required within the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

++ indicates any suffixed courses.

Consultation with an Academic Advisor is recommended for course selection.

Program Prerequisites: None

Required Courses: 24 Credits

CIS105	Survey of Computer Information Systems	3
CIS133DA	Internet/Web Development Level I	3
GBS151	Introduction to Business	3
CIS126DL	Linux Operating System (3) OR	
CIS126RH	Red Hat System Administration I (3) OR	
+MST150++	Any Microsoft Windows course (3)	3
+CIS150	Programming Fundamentals (3) OR	
+CIS150AB	Object-Oriented Programming Fundamentals (3)	3
+CIS166++	Any Web Scripting course(s)	3
+CIS119DO	Introduction to Oracle: SQL (3) OR	
+CIS276DA	MySQL Database (3) OR	
+CIS276DB	SQL Server Database (3)	3

Select a programming language from below that best aligns with academic and professional goals (1 course for a total of 3 credits) in one of the following areas:

+CIS159	Visual Basic Programming I (3) OR
+CIS162++	Any C Programming: Level I course (3) OR
+CIS163AA	Java Programming: Level I (3) OR

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

+CIS165++	Any Mobile Application Development course (3)	3

Programming and Systems Analysis Level II

Certificate of Completion: CCL 5962

36-37 Credits

Program Contact

Patricia Baker | 480-732-7392 | patricia.baker@cgc.edu

Program Description

The Certificate of Completion (CCL) in Programming and Systems Analysis Level II provides an in-depth exploration of different computer language and technical skills. This CCL includes, but is not limited to the following: local area networks, team roles, and dynamics. A Certificate of Completion (CCL) in iOS Application Development and an Associate in Applied Science (AAS) in Programming and Systems Analysis are available.

Program Notes

Students must earn a grade of "C" or better for all courses required within the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

++ indicates any suffixed courses.

Consultation with an Academic Advisor is recommended for course selection.

Program Prerequisites: None

Required Courses: 33-34 Credits

The following courses are required and included in CCL Programming and Systems Analysis Level I

CIS105	Survey of Computer Information Systems	3
CIS133DA	Internet/Web Development Level I	3
GBS151	Introduction to Business	3
CIS126DL	Linux Operating System (3) OR	
CIS126RH	Red Hat System Administration I (3) OR	
+MST150++	Any Microsoft Windows course (3)	3
+CIS150	Programming Fundamentals (3) OR	
+CIS150AB	Object-Oriented Programming Fundamentals (3)	3
+CIS166++	Any Web Scripting course(s)	3
+CIS119DO	Introduction to Oracle: SQL (3) OR	
+CIS276DA	MySQL Database (3) OR	
+CIS276DB	SQL Server Database (3)	3
+CIS159	Visual Basic Programming I OR (3)	
+CIS162++	Any C Programming: Level I course OR (3)	
+CIS163AA	Java Programming: Level I OR (3)	
+CIS165++	Any Mobile Application Development course (3)	3

The following courses are required for CCL Programming and Systems Level II

+CIS190	Introduction to Local Area Networks (3) OR	
CNT140AA	Introduction to Networks (4) OR	
+MST140	Microsoft Networking Essentials (3)	3-4
+CIS225	Business Systems Analysis and Design (3) OR	
+CIS225AB	Object-Oriented Analysis and Design (3) OR	
+CIS250	Management of Information Systems (3)	3

Select a programming language from below that best aligns with academic and professional goals (1 course for a total of 3 credits) in one of the following areas:

+CIS259	Visual Basic Programming II (3) OR	
+CIS262++	Any C Programming: Level II course (3) OR	
+CIS263AA	Java Programming: Level II (3) OR	
+CIS265	Advanced iOS Application Development (3)	3

Restricted Electives: 3 Credits

Restricted Electives Detail: Select one of the courses below that best aligns with academic and professional goals for a total of 3 credits. Students may not choose courses they have taken from the required courses area.

CIS224	Project Management Microsoft Project for Windows	3
+CIS151	Computer Game Development-Level I	3
+CIS156	Python Programming: Level I	3
+CIS159	Visual Basic Programming I	3
+CIS162++	Any C Programming: Level I course	3
+CIS163AA	Java Programming: Level I	3
+CIS165++	Any Mobile Application Development course	3
+CIS251	Computer Game Development-Level II	3
+CIS259	Visual Basic Programming II	3

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

+CIS262++	Any C Programming: Level II course	3
+CIS263AA	Java Programming: Level II	3
+CIS265	Advanced iOS Application Development	3
GBS211	Legal, Ethical and Regulatory Issues of the Internet Studies	3

Red Hat Linux Administrator

Certificate of completion: CCL 5049N

6-9 Credits

Program Contact

Tom Pearson | 480-726-4131 | tom.pearson@cgc.edu

Program Description

The Certificate of Completion (CCL) in Red Hat Linux Administrator program is designed to help prepare students for employment or to improve current professional skills. The program includes Red Hat Enterprise Linux system basics and management including sophisticated manipulation of file structures, backup systems, troubleshooting, user account management, hard disk maintenance and configuration, process monitoring and prioritizing, and system resource control. This program helps prepare students for the Red Hat Certified System Administrator (RHCSA) certification exam. Students who complete this program may seek employment in a variety of environments. Students can also pursue additional Certificates of Completion (CCLs) in a variety of specializations within the information technology field to deepen their knowledge and skills and help prepare them for multiple industry certification examinations. An Associate in Applied Science (AAS) in Network and Systems Administration is also available.

Program Notes

This program is not eligible for Title IV Federal Financial Aid.

Students must earn a grade of "C" or better for all courses required within the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

Students who pursue this Certificate of Completion (CCL) should have a basic level of computer literacy including navigating the internet and computer systems or take CIS105 as indicated in the required courses. Students with the requisite skills may have the CIS105 requirement waived by permission of the Program Director.

All courses within the Required areas are not applicable if taken more than five (5) years prior to the completion of the program. Consult with an academic advisor or program director for exceptions.

Program Prerequisites: None

Required Courses: 6-9 Credits

CIS105	Survey of Computer Information Systems (3) OR	
Permission of Program Director (0)		0-3
CIS126RH	Red Hat System Administration I	3
+CIS238RH	Red Hat System Administration II	3

Red Hat Linux Engineer

Certificate of completion: CCL 5050N

9-12 Credits

Program Contact

Tom Pearson | 480-726-4131 | tom.pearson@cgc.edu

Program Description

The Certificate of Completion (CCL) in Red Hat Linux Engineer program is designed to help prepare students for employment or to improve current professional skills. The program includes in depth Red Hat Enterprise Linux system networking including integrating Linux servers and workstations into a network environment with multi-platform network operating systems with a variety of open-standard and proprietary protocols. This program helps prepare students for the Red Hat Certified System Administrator (RHCSA) and Red Hat Certified Engineer (RHCE) certification exams. Students who complete this program may seek employment in a variety of environments. Students can also pursue additional Certificates of Completion (CCL) in a variety of specializations within the information technology field to deepen their knowledge and skills and help prepare them for multiple industry certification examinations. An Associate in Applied Science (AAS) in Network and Systems Administration is also available.

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

Program Notes

This program is not eligible for Title IV Federal Financial Aid.

Students must earn a grade of "C" or better for all courses required within the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

++ indicates any suffixed course.

Students who pursue this Certificate of Completion (CCL) should have a basic level of computer literacy including navigating the internet and computer systems or take CIS105 as indicated in the required courses. Students with the requisite skills may have the CIS105 requirement waived by permission of the Program Director.

All courses within the Required Courses and Restricted Electives areas are not applicable if taken more than five (5) years prior to the completion of the program. Consult with an Academic Advisor or Program Director for exceptions.

Program Prerequisites: None

Required Courses: 9-12 Credits

CIS105	Survey of Computer Information Systems (3) OR	
Permission of Program Director (0)		0-3
CIS126RH	Red Hat System Administration I	3
+CIS238RH	Red Hat System Administration II	3
+CIS240RH	Red Hat System Administration III	3

Retail Management

Associate in Applied Science: AAS 3048

61-63 Credits

Program Contact

Nicki Lynn | 480-732-7394 | nicki.lynn@cgc.edu

Program Description

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

Program Notes

Students must earn a grade of "C" or better in all courses within the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

++ indicates any suffixed courses.

Program Prerequisites: None

Required Courses: 27-30 Credits

Choose one of the following three accounting sequences:

ACC111	Accounting Principles I (3) AND	
+ACC230	Uses of Accounting Information I (3) AND	
+ACC240	Uses of Accounting Information II (3) OR	
ACC111	Accounting Principles I (3) AND	
+ACC112	Accounting Principles II (3) AND	
+ACC212	Managerial Accounting (3) OR	
ACC211	Financial Accounting (3) AND	
+ACC212	Managerial Accounting (3)	6-9
BPC110	Computer Usage and Applications (3) OR	
CISI05	Survey of Computer Information Systems (3)	3
MGT101	Techniques of Supervision (3) OR	
MGT229	Management and Leadership I (3)	3
MGT180	Retail Management (3) OR	
MKT268	Merchandising (3)	3
MGT251	Human Relations in Business	3
MGT276	Personnel/Human Resources Management	3
MKT271	Principles of Marketing	3
SBU200	Society and Business	3

Restricted Electives: 9-15 Credits

Student must complete an additional nine (9) to fifteen (15) credits from GBS, MGT, and/or MKT prefixed courses (except courses used to satisfy Required Courses area) to complete a minimum of 61 total program credits. Must include at least one MKT course.

GBS+++++	Any GBS General Business course(s)
MGT+++++	Any MGT Management course(s)
MKT+++++	Any MKT Marketing course(s)

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

General Education: 19-24 Credits

Core: 12-17 Credits

First-Year Composition

+ENG101	First-Year Composition (3) OR	
+ENG107	First-Year Composition for ESL (3) AND	
+ENG102	First-Year Composition (3) OR	
+ENG108	First-Year Composition for ESL (3) OR	
+ENG111	Technical Writing (3)	6

ENG102 or ENG108 recommended for students considering pursuing a bachelors degree at an Arizona university.

Oral Communication

COM100	Introduction to Human Communication	3

Critical Reading

+CRE101	College Critical Reading and Critical Thinking (3) OR	
Equivalent as indicated by assessment		3

Mathematics

Any approved general education course from the Mathematics area 3-5

Distribution: 7 Credits

Humanities, Arts and Design

Any approved general education course from the Humanities, Arts and Design area. 3

Social and Behavioral Sciences

Met by SBU200 in Required Courses area.

Natural Sciences

Any approved general education course from the Natural Sciences area. 4

Retail Management

Certificate of Completion: CCL 5286

24 Credits

Program Contact

Nicki Lynn | 480-732-7394 | nicki.lynn@cgc.edu

Program Description

The Certificate of Completion (CCL) in Retail Management is designed to prepare individuals working in the retail industry, and related fields, for the industry training needs in supervision and management, marketing, financial management, and business planning. The curriculum encompasses several business essentials and also emphasizes the skill sets needed for effective management and communication in the work environment.

Program Notes

Students must earn a grade of "C" or better required for all courses within the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

Program Prerequisites: None

Required Courses: 24 Credits

ACC111	Accounting Principles I (3) OR	
ACC211	Financial Accounting (3)	3
BPC110	Computer Usage and Applications (3) OR	
CISI05	Survey of Computer Information Systems (3)	3
COM100	Introduction to Human Communication	3
MGT251	Human Relations in Business	3
MGT101	Techniques of Supervision (3) OR	
MGT229	Management and Leadership I (3)	3
MGT180	Retail Management (3) OR	
MKT268	Merchandising (3)	3
MGT276	Personnel/Human Resources Management	3
MKT271	Principles of Marketing	3

Risk Management and Insurance

Associate in Applied Science : AAS 3172

61-67 Credits

Program Contact

Nicki Lynn | 480-732-7394 | nicki.lynn@cgc.edu

Program Description

The Associate in Applied Science (AAS) in Risk Management and Insurance program is designed to provide students with foundational skills in insurance and risk management. This program encourages development of critical thinking, leadership, and communication skills as well as techniques for planning and organizing personal and business insurance strategies. Courses offer a framework of knowledge

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

including an introduction to the insurance industry, risk management, principles of property and liability insurance, health, life, personal, and commercial insurance. A Certificate of Completion (CCL) in Risk Management and Insurance is also available and is fully embedded in this program.

Program Notes

Students must earn a grade of "C" or better for all courses within the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

++ indicates any suffixed courses.

Program Prerequisites: None

Required Courses: 15 Credits

INS100	Insurance Industry Profession	3
INS200	Principles of Property and Liability Insurance	3
+INS205	Personal Insurance	3
+INS210	Commercial Insurance	3
CIS105	Survey of Computer Information Systems (3) OR	
BPC110	Computer Usage and Applications (3)	3

Restricted Electives: 24 Credits

Students must choose twenty-four (24) industry/job related credits from the list of Restricted Electives below.

Students must choose 6-9 credits from:

Any INS Insurance Studies course except courses used to satisfy the Required Courses area. 6-9

AND

Students must choose a total of 15-18 credits from other Business courses listed up to the maximum number of credits allowed for each prefix.

ACC+++++	Any ACC Accounting course(s)	0-9
CIS113DE	Microsoft Word: Word Processing (3) OR	
CIS114DE	Excel Spreadsheet (3) OR	
CIS117DM	Microsoft Access: Database Management (3)	0-3
COM+++++	Any COM Communication course(s)	0-3
EPS+++++	Any EPS Entrepreneurial Studies course(s)	0-6
FIN+++++	Any FIN Financial Planning course(s)	0-6
GBS+++++	Any additional GBS General Business course(s)	0-6

(Recommend GBS120 or GBS233 as one of the course options)

IBS+++++	Any IBS International Business course(s)	0-3
MGT+++++	Any MGT Management course(s)	0-6
MKT+++++	Any MKT Marketing course(s)	0-6
REA+++++	Any REA Real Estate course(s)	0-6
SBS+++++	Any SBS Small Business Management course(s)	0-6
TQM+++++	Any TQM Total Quality Management course(s)	0-6

General Education: 22-28 Credits

Core: 12-18 Credits

First-Year Composition

+ENG101 First-Year Composition (3) OR
+ENG107 First-Year Composition for ESL (3) AND
+ENG102 First-Year Composition (3) OR
+ENG108 First-Year Composition for ESL (3) 6

Oral Communication

COM100	Introduction to Human Communication (3) OR	
COM110	Interpersonal Communication (3) OR	
+COM225	Public Speaking (3) OR	
COM230	Small Group Communication (3)	3

Critical Reading

+CRE101	College Critical Reading and Critical Thinking (3) OR	
Equivalent as indicated by assessment.		0-3

Mathematics

Any approved general education course from the Mathematics area. MAT1++ recommended. 3-6

Distribution: 10 Credits

Humanities, Arts and Design

Any approved general education course in the Humanities, Arts and Design area. 3

Social and Behavioral Sciences

Any approved general education course in the Social and Behavioral Sciences area. 3

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

Natural Sciences

Any approved general education course in the Natural Sciences area. 4

Risk Management and Insurance

Certificate of Completion: CCL 5842

18 Credits

Program Contact

Nicki Lynn | 480-732-7394 | nicki.lynn@cgc.edu

Program Description

The Certificate of Completion (CCL) in Risk Management and Insurance program is designed to provide students with foundational skills in insurance and risk management. Courses offer a framework of knowledge including an introduction to the insurance industry, risk management, principles of property and liability insurance, health, life, personal, and commercial insurance. An Associate in Applied Science (AAS) in Risk Management and Insurance is also available.

Program Notes

The Certificate of Completion in Risk Management and Insurance is currently not Title IV Federal Financial Aid eligible.

Students must earn a grade of "C" or better for all courses within the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

++ indicates any suffixed course.

Program Prerequisites: None

Required Courses: 12 Credits

INS100	Insurance Industry Profession	3
INS200	Principles of Property and Liability Insurance	3
+INS205	Personal Insurance	3
+INS210	Commercial Insurance	3

Restricted Electives: 6 Credits

Students must choose six (6) industry/job related credits from the list of Restricted Electives below.

COM+++++	Any COM Communication course(s)	0-6
Recommended:		
COM110	Interpersonal Communication	3
FIN+++++	Any FIN Financial Planning course(s)	0-6
GBS+++++	Any GBS General Business course(s)	0-6
Recommended:		
GBS151	Introduction to Business (3) OR	
GBS205	Legal, Ethical, and Regulatory Issues in Business	3
INS+++++	Any INS Insurance Studies course(s) except courses used to satisfy Required Courses area	0-6
MGT+++++	Any MGT Management course(s)	0-6
Recommended:		
MGT175	Business Organization and Management	3
MKT+++++	Any MKT Marketing course(s)	0-6
Recommended:		
MKT271	Principles of Marketing	3
TQM+++++	Any TQM Total Quality Management course(s)	0-6
Recommended:		
TQM101	Quality Customer Service	3

Social Media Marketing

Certificate of Completion: CCL 5830

17-18 Credits

Program Contacts

Nicki Lynn | 480-732-7394 | nicki.lynn@cgc.edu

Program Description

The Certificate of Completion (CCL) in Social Media Marketing is designed to provide useful skills important in a variety of strategic marketing areas, e.g., social media, digital communications, integrated marketing, media relations, and brand management. An Associate in Applied Science (AAS) in Marketing and Sales is also available.

Program Notes

Students must earn a grade of "C" or better for all courses in the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

Program Prerequisites: None

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

Required Courses: 15 Credits

CIS103	Introduction to Social Media	3
GBS120	Workplace Communication Skills	3
MKT110	Marketing and Social Networking	3
+MKT111	Applied Marketing and Social Networking	3
MKT271	Principles of Marketing	3

Restricted Electives: 2-3 Credits

MKT101	Introduction to Public Relations	3
+MKT280AB	Marketing Internship	2
+MKT298AB	Special Projects	2

VMware Network Administrator

Certificate of Completion: CCL 5032

24-28 Credits

Program Contact

Tom Pearson | 480-726-4131 | tom.pearson@cgc.edu

Program Description

The Certificate of Completion (CCL) in VMware Network Administrator program is designed to help students prepare for VMware industry certifications and work in a variety of information technology environments including software-defined data centers. Courses will build the knowledge and skills for students to design, install, configure, troubleshoot, and manage virtual environments and help prepare students for the CompTIA A+, CompTIA Linux +, CompTIA Network +; VMware VCA, VCP, and/or VCAP-NV Deploy certification exams. Students can also pursue additional Certificates of Completion (CCLs) in a variety of specializations within the information technology field to deepen their knowledge and skills and to help prepare them for multiple industry certification examinations. An Associate in Applied Science (AAS) in Network and Systems Administration is also available.

Program Notes

The Certificate of Completion in VMware Network Administrator is currently not Title IV Federal Financial Aid eligible.

Students must earn a grade of "C" or better for all courses required within the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

++ indicates any suffixed course.

All courses within the Required and Restricted elective areas are not applicable if taken more than five (5) years prior to the completion of the program. Consult with an academic advisor or program director for exceptions.

Students who pursue this Certificate of Completion (CCL) should have a basic level of computer literacy including navigating the internet and computer systems or take CIS105 as indicated in the required courses. Students with the requisite skills may have the CIS105 requirement waived by permission of the Program Director.

Program Prerequisites: None

Required Courses: 24-28 Credits

+BPC170	A+ Exam Prep: Computer Hardware Configuration and Support	3
+BPC270	A+ Exam Prep: Operating System Configuration and Support	3
CIS105	Survey of Computer Information Systems (3) OR	
Permission of Program Director (0)		0-3
CIS126DL	Linux Operating System (3) OR	
CIS126RH	Red Hat System Administration I (3)	3
CIS189	Virtualization and IT Solutions for Digital Businesses	3
+CIS190	Introduction to Networking (3) OR	
CNT140AB	Introduction to Networks (4)	3-4
+CIS197	VMware ESXI Server Enterprise	3
+CIS198	VMware vSphere: Optimize and Scale	3
+CIS200	VMware NSX: Install, Configure, Manage	3

Web App Development

Certificate of Completion: CCL 5835N

9-12 Credits

Program Contact

Prema Rayappa | 480-732-7230 | prema.rayappa@cgc.edu

Program Description

The Certificate of Completion (CCL) in Web App Development prepares students for employment in

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entry-level coding, programming, and software development positions with an emphasis on web apps. Courses in this certificate can apply toward the Associate in Applied Science (AAS) in Mobile App Development and Certificates of Completion (CCL) in Mobile App Development and Cross-Platform App Development.

Program Notes

This program is not eligible for Title IV Federal Financial Aid.

Students must earn a grade of "C" or better for all courses within the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

Program Prerequisites: None

Required Courses: 9-12 Credits

CIS105	Survey of Computer Information Systems (3) OR	
Permission of Program Director, Department or Division Chair (0)		0-3
+CIS133DA	Internet/Web Development Level I	3
+CIS166AA	Introduction to JavaScript	3
+CIS233DA	Internet/Web Development Level II	3

Web Design

Certificate of Completion: CCL 5986

38-43 Credits

Program Contact

Prema Rayappa | 480-732-7230 | prema.rayappa@cgc.edu

Program Description

The Certificate of Completion (CCL) in Web Design provides students with comprehensive and focused studies in web design, including advanced image manipulation, vector graphics, page layout, video editing and design principles. A Certificate of Completion (CCL) in Web Development and an Associate in Applied Science (AAS) in Web Design/ Development are also available.

Program Notes

The Certificate of Completion in Web Design is currently not Title IV Federal Financial Aid eligible.

Students must earn a grade of "C" or better in each course in the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

Program Prerequisites: None

Required Courses: 36-37 Credits

The following courses are required and also fulfill the requirements for the CCL in Web Foundations:

CIS105	Survey of Computer Information Systems	3
CIS120DF	Adobe Photoshop Level I: Digital Imaging	3
CIS133DA	Internet/Web Development Level I	3
CIS136	Content Management Systems: WordPress	3
+CIS166AA	Introduction to Javascript	3
+CIS233DA	Internet/Web Development Level II	3
+CIS235	e-Commerce	3

The following courses are required and fulfill the requirements for the CCL in Web Design:

ADA/ART183	Digital Graphic Arts I (3) OR	
ART100	Introduction to Digital Arts (1) AND	
ART181	Graphic Design I (3) OR	
ART112	Two-Dimensional Design (3)	3-4
CIS120DB	Computer Graphics: Adobe Illustrator	3
CIS120DA	Introduction to Digital Video Editing: Adobe Premiere (3) OR	
CIS120DK	Introduction to Digital Video Editing (3)	3
+CIS138DA	Desktop Design and Publishing Using Adobe InDesign	3
+CIS220DF	Adobe Photoshop Level II: Advanced Digital Imaging	3

Restricted Electives: 2-6 Credits

Select 2 to 6 credits in consultation with your program advisor to further develop skills in the areas of Adobe, Art, Social Media, Marketing, Business and/or Multimedia.

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

Web Design/Development

Associate in Applied Science : AAS 3185

60-67 Credits

Program Contact

Prema Rayappa | 480-732-7230 | prema.rayappa@cgc.edu

Program Description

The Associate in Applied Science (AAS) in Web Design/Development prepares students to design, create, and administer interactive and professional web sites. Courses focus on "hands-on" experience with web publishing, web graphics preparation, scripting, content management systems and e-commerce solutions. The program provides students a pathway to either develop advanced skills in Web Design or Web Development. Certificates of Completion (CCLs) in Foundational Web Technologies, Web Design and Web Development are also available.

Program Notes

Students must earn a grade of "C" or better for all courses required within the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

Program Prerequisites: None

Required Courses: 21 Credits

In addition to the required course work students must consult with a program advisor to select one of the specializations within the Restricted Electives area.

CIS105	Survey of Computer Information Systems	3
CIS120DF	Adobe Photoshop Level I: Digital Imaging	3
CIS133DA	Internet/Web Development Level I	3
CIS136	Content Management Systems: WordPress	3
+CIS166AA	Introduction to Javascript	3
+CIS233DA	Internet/Web Development Level II	3
+CIS235	e-Commerce	3

Restricted Electives: 17-22 Credits

Specialization I: Web Design, Credits: 17-22

ADA/ART183	Digital Graphic Arts I (3) OR	
ART100	Introduction to Digital Arts (1) AND	
ART181	Graphic Design I (3) OR	
ART112	Two-Dimensional Design (3)	3-4
CIS120DA	Introduction to Digital Video Editing: Adobe Premiere (3) OR	
CIS120DK	Introduction to Digital Video Editing (3)	3
CIS120DB	Computer Graphics: Adobe Illustrator	3
CIS120DC	Adobe Animate: Digital Animation (3) OR	
+CIS220DF	Adobe Photoshop Level II: Advanced Digital Imaging (3)	3
+CIS138DA	Desktop Design and Publishing Using Adobe InDesign	3

Students must select 2 to 6 credits in consultation with your program advisor to further develop skills in the areas of Adobe, Art, Social Media, Marketing, Business and/or Multimedia.

Specialization II: Web Development, Credits: 18

+CIS119DO	Introduction to Oracle: SQL (3) OR	
+CIS276++	Any Database Management Systems course (3)	3
CIS126DL	Linux Operating System (3) OR	
CIS126RH	Red Hat System Administration I (3)	3
+CIS166AE	Web Scripting with PHP: Hypertext Preprocessor (PHP)	3

Programming Language: Select two courses for a total of 6 credits

+CIS150AB	Object-Oriented Programming Fundamentals	3
+CIS156	Python Programming: Level I	3
+CIS159	Visual Basic Programming I	3
+CIS162++	Any C Programming course	3
+CIS163AA	Java Programming: Level I	3
+CIS165++	Any Mobile Application Development course	3
+CIS262AD	C# Level II	3
+CIS263AA	Java Programming: Level II	3
+CIS265++	Advanced iOS Application Development	3

Students must select 3 credits of any course with a CIS prefix in consultation with their program advisor to further develop skills in the areas of Databases, Information Systems, Programming, and/or Operating Systems.

General Education: 22-28 Credits

Core: 12-18 Credits

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

First-Year Composition

+ENG101	First-Year Composition (3) OR	
+ENG107	First-Year Composition for ESL (3) AND	
+ENG102	First-Year Composition (3) OR	
+ENG108	First-Year Composition for ESL (3)	6

Oral Communication

Any approved general education course from the Oral Communication area 3

Critical Reading)

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

Mathematics

Any approved general education course in the Mathematics Area. 3-6
(MAT140, MAT141, MAT142, MAT145, MAT146 College Mathematics) OR (MAT150, MAT151, MAT152, MAT155, MAT156 College Algebra/Functions) OR higher math course with the Mathematical Applications [MA] general education designation recommended for students intending to transfer to a four-year institution.

MAT187 Precalculus is recommended for students intending to transfer to ASU (Tempe campus) to earn a BS in Graphic Information Technology.

Distribution: 10 Credits

Humanities, Arts and Design

Any approved general education course from the Humanities, Arts and Design area. 3

Social and Behavioral Sciences

Any approved general education course from the Social-Behavioral Sciences area. 3
PSY101 Introduction to Psychology is recommended for students intending to transfer to ASU (Polytechnic campus) to earn a BS in Technical Communication (User Experience) or to ASU (Tempe campus) to earn a BS in Graphic Information Technology.

Natural Sciences

Any approved general education course from the Natural Sciences area. 4

Web Development

Certificate of Completion: CCL 5988

39 Credits

Program Contact

Prema Rayappa | 480-732-7230 | prema.rayappa@cgc.edu

Program Description

The Certificate of Completion (CCL) in Web Development prepares students to create and administer interactive and professional websites. The program provides students with knowledge and skills in developing dynamic websites, client and server side programs, database structures, and object-oriented design. A Certificate of Completion (CCL) in Web Design and an Associate in Applied Science (AAS) in Web Design/Development are also available.

Program Notes

The Certificate of Completion in Web Development is currently not Title IV Federal Financial Aid eligible.

Students must earn a grade of "C" or better in each course in the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites

++ indicates any suffixed courses

Program Prerequisites: None

Required Courses: 36 Credits

The following courses are required and also fulfill the requirements for the CCL in Web Foundations:

CIS105	Survey of Computer Information Systems	3
CIS120DF	Adobe Photoshop Level I: Digital Imaging	3
CIS133DA	Internet/Web Development Level I	3
CIS136	Content Management Systems: WordPress	3
+CIS166AA	Introduction to Javascript	3
+CIS233DA	Internet/Web Development Level II	3
+CIS235	e-Commerce	3

The following courses are required and fulfill the requirements for the CCL in Web Development:

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

+CIS166AE	Web Scripting with PHP: Hypertext Preprocessor (PHP)	3
+CIS119DO	Introduction to Oracle: SQL (3) OR	
+CIS276++	Any Database Management Systems course (3)	3
CIS126DL	Linux Operating System (3) OR	
CIS126RH	Red Hat System Administration I (3)	3

Programming Language: Select two courses for a total of 6 credits

+CIS150AB	Object-Oriented Programming Fundamentals	3
+CIS156	Python Programming: Level I	3
+CIS159	Visual Basic Programming I	3
+CIS162++	Any C Programming course	3
+CIS163AA	Java Programming: Level I	3
+CIS165++	Any Mobile Application Development course	3
+CIS262AD	C# Level II	3
+CIS263AA	Java Programming: Level II	3
+CIS265++	Advanced iOS Application Development	3

Restricted Electives: 3 Credits

Students should select any course with a CIS prefix in consultation with their program advisor to further develop skills in the areas of Databases, Information Systems, Programming, and/or Operating Systems. 3

Web Foundations

Certificate of Completion: CCL 5984

21 Credits

Program Contact

Prema Rayappa | 480-732-7230 | prema.rayappa@cgc.edu

Program Description

The Certificate of Completion (CCL) in Web Foundations introduces students to designing and developing web pages. This CCL prepares students for entry level web positions. Certificates of Completion (CCL) in Web Design and Web Development are available. An Associate in Applied Science (AAS) degree in Web Design/Development is also available.

Program Notes

The Certificate of Completion in Web Foundations is currently not Title IV Federal Financial Aid eligible.

Students must earn a grade of "C" or better in each course in the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

Program Prerequisites: None

Required Courses: 21 Credits

CIS105	Survey of Computer Information Systems	3
CIS120DF	Adobe Photoshop Level I: Digital Imaging	3
CIS133DA	Internet/Web Development Level I	3
CIS136	Content Management Systems: WordPress	3
+CIS166AA	Introduction to Javascript	3
+CIS233DA	Internet/Web Development Level II	3
+CIS235	e-Commerce	3

Communication & Fine Arts

Illustration

Certificate of Completion: CCL 5174

31 Credits

Program Contact

Louis Mendoza | 480-732-7089 | louis.mendoza@cgc.edu

Program Description

The Certificate of Completion (CCL) in Illustration develops knowledge and skills in creating visual narratives through traditional and digital media. The program emphasizes art principles, knowledge, and skills needed to solve design and compositional problems. Areas of emphasis include graphic arts, publications, and storyboarding for animation, video, and media. This certificate prepares students for employment and upgrades the skills of persons employed in occupations such as freelance artist-designer, concept artist, visual development artist for gaming/film, and storyboarder. Students may also pursue an Associate in Applied Science (AAS) in Illustration and Sequential Art.

Program Notes

The Certificate of Completion in Illustration is currently not Title IV Federal Financial Aid eligible.

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

Students must earn a grade of "C" or better in all courses within the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

Required Courses: 31 Credits

+ADA/ART169	2D Media Design	3
+ADA/ART177	Digital Photographic Imaging I	3
ADA/ART248	Design Self Promotion (3) OR	
ART255	Art Marketing (3)	3
+ADA/ART289	Computer Illustration	3
ART100	Introduction to Digital Arts	1
ART111	Drawing I	3
ART113	Color (3) OR	
ART114	Digital Color (3)	3
ART116	Life Drawing I	3
+ART178	Digital Arts Studies	3

Restricted Electives: 6 Credits

Students must select six (6) credits from the following list of courses. Students may select from one emphasis or may select from different emphases to fulfill the six (6) credit requirement.

Animation Emphasis

+ADA/ART/ MMT184	Digital Animation I	3
+ART/MMT185	3D Modeling for Animation I	3

Drawing Emphasis

+ART117	Life Drawing II	3
+ART118	Art Anatomy	3
+ART122	Drawing and Composition II	3

Painting Emphasis

+ART165	Watercolor Painting I	3
+ART166	Watercolor Painting II	3
+ART167	Painting I	3
+ART168	Painting II	3
+ART263	Figure Painting	3

Illustration and Sequential Art

Associate in Applied Science : AAS 3203

60-71 Credits

Program Contact

Louis Mendoza | 480-732-7089 | louis.mendoza@cgc.edu

Program Description

The Associate in Applied Science (AAS) in Illustration and Sequential Art is designed for the student who wishes to develop an area of specialization in illustration and comics and sequential art. Students will develop narratives through traditional and digital media. The program emphasizes art principles, knowledge, and skills needed to solve design and compositional problems. Areas of emphasis include comic book and sequential art, illustration for publications, and storyboarding. It allows for the development of an individual`s personal interest in this area, prepares students for employment, and upgrades skills of those already employed in this field. Employment opportunities are available in a variety of fields including, but not limited to, freelance artist-designer, concept artist, comics/sequential art, visual development artist for gaming/film, and storyboarder. A Certificate of Completion (CCL) in Illustration and in Sequential Art is also available.

Program Notes

Students must earn a grade of "C" or better for all courses required within the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

Program Prerequisites: None

Required Courses: 23-25 Credits

+ADA/ART169	2D Media Design	3
+ADA/ART177	Digital Photographic Imaging I	3
+ADA/ART289	Computer Illustration	3
ART100	Introduction to Digital Arts	1
ART111	Drawing I	3
ART113	Color (3) OR	
ART114	Digital Color (3)	3
ART116	Life Drawing I	3
+ART178	Digital Arts Studies	3
Capstone/Internship Course:		
+ART280AA	Digital Media Arts and Design Capstone (1) OR	
+ART280AB	Digital Media Arts and Design Capstone (2) OR	
+ART280AC	Digital Media Arts and Design Capstone (3)	1-3

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

Restricted Electives: 9-18 Credits

Specialization 1: Sequential Art, Credits: 18

ART119	Penciling for Sequential Art	3
ART120	Inking for Sequential Art	3
ART219	Coloring, Toning and Lettering for Sequential Art	3
ART220	Publishing for the Comic Industry	3
ART221	Comics Creation	3
CRW172	Introduction to Comic Book Writing (3) OR	
CRW176	Writing Narrative for Video Games (3) OR	
CRW190	Introduction to Screenwriting (3)	3

Specialization 2: Illustration, Credits: 9

ADA/ART248	Design Self Promotion (3) OR	
ART255	Art Marketing (3)	3

Students must select six (6) credits from the following list of courses. Students may select from one emphasis or may select from different emphases to fulfill the six (6) credit requirement.

Animation Emphasis

+ADA/ART/ MMT184	Digital Animation I	3
+ART/MMT185	3D Modeling for Animation I	3

Drawing Emphasis

+ART117	Life Drawing II	3
+ART118	Art Anatomy	3
+ART122	Drawing and Composition II	3

Painting Emphasis

+ART165	Watercolor Painting I	3
+ART166	Watercolor Painting II	3
+ART167	Painting I	3
+ART168	Painting II	3
+ART263	Figure Painting	3

Free Electives: 0-6 Credits

Select additional courses 100-level or higher to complete the minimum credits required for this degree. Consult with the Program Director or an Academic Advisor.

General Education: 22-18 Credits

Core: 12-18 Credits

First-Year Composition

+ENG101	First-Year Composition (3) OR	
+ENG107	First-Year Composition for ESL (3) AND	
+ENG102	First-Year Composition (3) OR	
+ENG108	First-Year Composition for ESL (3)	6

Oral Communication

COM100	Introduction to Human Communication (3) OR	
COM110	Interpersonal Communication (3) OR	
+COM225	Public Speaking (3) OR	
COM230	Small Group Communication (3)	3

Critical Reading

+CRE101	College Critical Reading and Critical Thinking (3) OR	
Equivalent as indicated by assessment. (0)		0-3

Mathematics

Any approved general education course from the Mathematics area 3-6

Recommended for students planning to transfer to a four-year university:

+MAT140	College Mathematics (5) OR	
+MAT141	College Mathematics (4) OR	
+MAT142	College Mathematics (3) OR	
MAT145	College Mathematics with Review (5) OR	
MAT146	College Mathematics with Review (6)	3-6

Distribution: 10 Credits

Humanities, Arts and Design

ARH101	Prehistoric through Gothic Art (3) OR	
ARH102	Renaissance through Contemporary Art (3)	3

Social and Behavioral Sciences

Any approved general education course from the Social and Behavioral Sciences area. 3

Natural Sciences

Any approved general education course from the Natural Sciences area. 4

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

Music Business I

Certificate of Completion: CCL 5106

16 Credits

Program Contact

Ted Goddard | 480-857-5182 | ted.goddard@cgc.edu

Program Description

The Certificate of Completion (CCL) in Music Business program is an innovative curriculum designed to prepare students for today`s music industry. The certificate and degree with a music business emphasis are designed for both the performing musician and the business student with limited performing experience. This program combines a flexible curriculum with an emphasis in business and marketing, along with music industry related courses and experiences.

Program Notes

The Certificate of Completion in Music Business I is currently not Title IV Federal Financial Aid eligible.

Students must earn a grade of "C" or better for all courses required within the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisite and/or corequisites

Program Prerequisites: None

Required Courses: 11 Credits

MGT253	Owning and Operating a Small Business	3
MKT110	Marketing and Social Networking (3) OR	
MKT271	Principles of Marketing (3)	3
MUC109	Music Business: Content Creation and Copyright	3
MUC110	Music Business: Marketing and Monetization	3
MUC293	Self Promotion for Music	1
+MTC180	Computer Literacy for Musicians (3) OR	
MUC180	Computer Literacy for the Music Business (3)	3

Note: Students who have not already completed MTC180 must take MUC180

Music Business II

Certificate of Completion: CCL 5258

35-37 Credits

Program Contact

Ted Goddard | 480-857-5182 | ted.goddard@cgc.edu

Program Description

The Certificate of Completion (CCL) in Music Business II is designed to provide aspiring music industry professionals with a broad background in music management, production, and entrepreneurship activities. The program combines theoretical and applied learning experiences to help students gain a strategic understanding of commercial music as both an art and profession. An Associate in Applied Science (AAS) in Music Industries: Music Business is available.

Program Notes

The Certificate of Completion in Music Business I is currently not Title IV Federal Financial Aid eligible.

Students must earn a grade of "C" or better for all courses required within the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisite and/or corequisites

Program Prerequisites: None

Required Courses: 25-26 Credits

MGT253	Owning and Operating a Small Business	3
MKT110	Marketing and Social Networking (3) OR	
MKT271	Principles of Marketing (3)	3
MUC109	Music Business: Content Creation and Copyright	3
MUC110	Music Business: Marketing and Monetization	3
+MTC180	Computer Literacy for Musicians (3) OR	
MUC180	Computer Literacy for the Music Business (3)	3

Note: Students who have not already completed MTC180 must take MUC180

+MUC209	Music Industry Entrepreneurship	3
MUC293	Self Promotion for Music	1

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

Music Industry Capstone Experience

+MUC290AA	Music Business Internship (1) OR	
+MUC296WA	Cooperative Education (1) OR	
MUC298AA	Special Projects (1)	1

Overview of Music Genres

MUC242	Music Genres and Styles (2) OR	
MHL155	Survey of American Music (3)	2-3

Restricted Electives: 10-11 Credits

Students should work with their program advisor to select 10-11 credits from courses that align with the academic/career goals and further their development in the areas of Music Business and Marketing, Music Production, and Commercial Performance. Courses from required courses area may not be used.

Music Business and Marketing

GBS+++	Any GBS General Business course
MKT+++	Any MKT Marketing course
MUC+++	Any MUC Music: Commercial/ Business course

Music Production

MTC+++	Any MTC Music: Theory/ Composition course
MUC+++	Any MUC Music: Commercial/ Business course

Commercial Performance

MTC+++	Any MTC Music: Theory/ Composition course
MUP+++	Any MUP Music: Performance course

Music Industries: Music Business

Associate in Applied Science: AAS 3017

60-66 Credits

Program Contact

Ted Goddard | 480-857-5182 | ted.goddard@cgc.edu

Program Description

The Associate in Applied Science (AAS) in Music Industries: Music Business is designed to provide aspiring music industry professionals with a broad background in music management, production, and entrepreneurship activities. The program combines theoretical and applied learning experiences to help students gain a strategic understanding of commercial music as both an art and profession. Students will choose a focus area among business and marketing, commercial performance, and music production. They will employ analytical and communication skills and explore aesthetic, cultural, and historical perspectives relevant to the music industry.

Program Notes

Students must earn a grade of "C" or better for all courses required within the program. Overall program minimum GPA = 2.00

+ indicates course has prerequisite and/or corequisites.

Program Prerequisites: None

Required Courses: 25-26 Credits

MGT253	Owning and Operating a Small Business	3
MKT110	Marketing and Social Networking	3
MKT271	Principles of Marketing	3
MUC109	Music Business: Content Creation and Copyright	3
MUC110	Music Business: Marketing and Monetization	3
+MTC180	Computer Literacy for Musicians (3) OR	
MUC180	Computer Literacy for the Music Business (3)	3

Note: Students who have not already completed MTC180 must take MUC180.

+MUC209	Music Industry Entrepreneurship	3
MUC293	Self Promotion for Music	1

Music Industry Capstone Experience

+MUC290AA	Music Business Internship (1) OR	
+MUC296WA	Cooperative Education (1) OR	
MUC298AA	Special Projects (1)	1

Overview of Music Genres

MUC242	Music Genres and Styles (2) OR	
MHL155	Survey of American Music (3)	2-3

Restricted Electives: 12-13 Credits

Students should work with their program advisor to select 12-13 credits from courses that align with the academic/career goals and further their development in the areas of music business and marketing, music production, and commercial performance. Courses from required courses area may not be used.

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

Business and Marketing

GBS+++	Any GBS General Business course	
MKT+++	Any MKT Marketing course	
MUC+++	Any MUC Music: Commercial/ Business course	

Music Production

MTC+++	Any MTC Music: Theory/ Composition course	
MUC+++	Any MUC Music: Commercial/ Business course	

Commercial Performance

MTC+++	Any MTC Music: Theory/ Composition course	

Free Electives: 0-1 Credits

Select courses 100-level or higher to complete a minimum of 60 semester credits. Consult with an Academic and/or Program Advisor.

General Education: 22-28 Credits

Core: 12-18 Credits

First-Year Composition

+ENG101	First-Year Composition (3) OR	
+ENG107	First-Year Composition for ESL (3) AND	
+ENG102	First-Year Composition (3) OR	
+ENG108	First-Year Composition for ESL (3) OR	
+ENG111	Technical and Professional Writing (3)	6

ENG101 or ENG107 and ENG102 or ENG108 is recommended for students who intend to transfer.

Oral Communication

COM100	Introduction to Human Communication (3) OR	
COM110	Interpersonal Communication (3) OR	
+COM225	Public Speaking (3) OR	
COM230	Small Group Communication (3)	3

Consult with an academic advisor about specific COM requirements if intending to transfer.

Critical Reading

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

Mathematics

+MAT140	College Mathematics (5) OR	
+MAT141	College Mathematics (4) OR	
+MAT142	College Mathematics (3) OR	
+MAT145	College Mathematics with Review (5) OR	
MAT146	College Mathematics with Review (6)	3-6

Distribution: 10 Credits

Humanities, Arts and Design

Any approved general education course from the Humanities Arts and Design area 3

Social and Behavioral Sciences

Any approved general education course from the Social and Behavioral Sciences area 3

Natural Sciences

Any approved general education course from the Natural Sciences area 4

Photography

Associate in Applied Science : AAS 3195

60-64 Credits

Program Contact

Buzzy Sullivan | 480-732-7291 | buzzy.sullivan@cgc.edu

Program Description

The Associate in Applied Science (AAS) in Photography program is designed for the student who wishes to pursue a career in photography, either commercial or fine arts. Students will study digital and traditional film-based (darkroom) media, content and image selection, and the theory and practice of visual communication.

Program Notes

Students must earn a grade of "C" or better for all courses required within the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

There will be costs for supplies and equipment in this program.

Program Prerequisites: None

Required Courses: 26-28 Credits

ARH101	Prehistoric Through Gothic Art (3) OR	

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

ARH102	Renaissance Through Contemporary Art (3)	3
ARH115	History of Photography	3
ART100	Introduction to Digital Arts	1
ART112	Two-Dimensional Design	3
ART113	Color	3
ART131	Photography I	3
+ART132	Photography II	3
ART142	Introduction to Digital Photography	3
+ART143	Intermediate Digital Photography	3
ART255	Art Marketing (3) OR	
ART255AB	The Portfolio (1)	1-3

Restricted Electives: 8-19 Credits

Complete all courses in the subplan option below that best aligns with your academic and professional goals.

Subplan 1: Commercial (Fashion, Studio, Portrait, and Editorial) Photography, Credits: 13-19

+ART138	Commercial Photography I	3
+ART139	Commercial Photography II	3
+ART140	Portrait Photography (3) OR	
+ART237	Fashion Photography (3)	3
SBS200	Small Business Operations	2
SBS204	Small Business Marketing and Advertising	2

Select 0-6 credits from the following:

+ADA/ART169	2D Media Design	3
+ADA/ART177	Digital Photographic Imaging I	3
ART111	Drawing I	3
ART116	Life Drawing I	3
ART137	Alternative Photographic Processes	3
+ART178	Digital Arts Studies	3
+ART181	Graphic Design I	3
+ART234	Color Photography I	3
+ART270	Digital Photographic Imaging II	3
+ART290AC	Studio Art	3
+ART290EC	Studio Art: Photography	3
+ART290MC	Studio Art: Digital Photography	3
+ART295DA	Art Workshop/Seminar: Photography	1
+ART295DB	Art Workshop/Seminar: Photography	2
+ART295DC	Art Workshop/Seminar: Photography	3
+ART297AA	Commercial Art Internship	1
FMP108	Video Production	3

Subplan 2: Fine Art Photography, Credits: 8-19

+ART133	Photography III	3
ART137	Alternative Photographic Processes	3

Select 2-13 credits from the following:

+ADA/ART169	2D Media Design	3
+ADA/ART177	Digital Photographic Imaging I	3
ART111	Drawing I	3
ART116	Life Drawing I	3
+ART134	Photography IV	3
+ART178	Digital Arts Studies	3
+ART234	Color Photography I	3
+ART250	Introduction to Printmaking	3
+ART270	Intermediate Computer Photographic Imaging	3
+ART274	Digital Photographic Imaging III	3
+ART290AC	Studio Art	3
+ART290EC	Studio Art: Photography	3
+ART290MC	Studio Art: Digital Photography	3
+ART295DA	Art Workshop/Seminar: Photography	1
+ART295DB	Art Workshop/Seminar: Photography	2
+ART295DC	Art Workshop/Seminar: Photography	3
+ART297AA	Commercial Art Internship	1
SBS200	Small Business Operations	2
SBS204	Small Business Marketing and Advertising	2

Free Electives: 0-7 Credits

Select courses 100-level or higher to complete a minimum of 60 semester credits but no more than a total of 64 semester credits. Consult with the Program Director or an Academic Advisor.

Recommend that students interested in transferring to a four-year institution to earn a bachelor`s degree take courses that fulfill any unmet Arizona General Education Curriculum (AGEC) requirements.

General Education: 19-25 Credits

Core: 12-18 Credits

First-Year Composition

+ENG101	First-Year Composition (3) OR	
+ENG107	First-Year Composition for ESL (3) AND	
+ENG102	First-Year Composition (3) OR	
+ENG108	First-Year Composition for ESL (3)	6

Oral Communication

COM100	Introduction to Human Communication (3) OR	

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

COM110	Interpersonal Communication (3) OR	
+COM225	Public Speaking (3) OR	
COM230	Small Group Communication (3)	3

Critical Reading

+CRE101	College Critical Reading and Critical Thinking (3) OR	
Equivalent as indicated by assessment.		0-3

Mathematics

+MAT140	College Mathematics (5) OR	
+MAT141	College Mathematics (4) OR	
+MAT142	College Mathematics (3) OR	
+MAT145	College Mathematics with Review (5) OR	
MAT146	College Mathematics with Review (6) OR	
Any approved general education course in the Mathematical Applications [MA] area (3-6)		3-6

Distribution: 7 Credits

Humanities, Arts and Design

Met by ARH101 OR ARH102 OR ARH115 OR ART131 in Required Courses. 0

Social and Behavioral Sciences

Any approved general education courses in the Social-Behavioral Sciences [SB] area. 3

Natural Sciences

Any approved general education course in the Natural Sciences (Quantitative) [SQ] area or the Natural Sciences (General) [SG] area. 4

Sequential Art

Certificate of Completion: CCL 5177

40 Credits

Program Contact

Louis Mendoza | 480-732-7089 | louis.mendoza@cgc.edu

Program Description

The Certificate of Completion (CCL) in Sequential Art develops knowledge and skills in the area of sequential art, including but not limited to comics, graphic novels, anime, children`s books, self-publishing, digital illustration, and storyboarding for digital media. Students will develop diverse narratives that reflect cultural, historical, and social diversity. The program provides the student with an understanding of writing for sequential art, illustration techniques, and digital media tools for illustration, layout and publication. This certificate prepares students for employment and upgrades the skills of persons employed in occupations such as illustrator, comic book artist, storyboarder, cartoonist, penciler, inker, colorist, letterer, production artist, game designer, and comic book writer. An Associate in Applied Science (AAS) in Illustration and Sequential Art is also available.

Program Notes

The Certificate of Completion in Illustration is currently not Title IV Federal Financial Aid eligible.

Students must earn a grade of "C" or better in all courses within the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

Program Prerequisites: None

Required Courses: 40 Credits

+ADA/ART169	2D Media Design	3
+ADA/ART177	Digital Photographic Imaging I	3
+ADA/ART289	Computer Illustration	3
ART100	Introduction to Digital Arts	1
ART111	Drawing I	3
ART113	Color (3) OR	
ART114	Digital Color (3)	3
ART116	Life Drawing I	3
ART119	Penciling for Sequential Art	3
ART120	Inking for Sequential Art	3
+ART178	Digital Arts Studies	3
ART219	Coloring, Toning and Lettering for Sequential Art	3
ART220	Publishing for the Comic Industry	3
ART221	Comics Creation	3
CRW172	Introduction to Comic Book Writing (3) OR	
CRW176	Writing Narrative for Video Games (3) OR	
CRW190	Introduction to Screenwriting (3)	3

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

Composition, Creative Writing & Literature

Creative Writing

Academic Certificate: AC 6224N

24 Credits

Program Contact

Patrick Finn | 480-857-5543 | patrick.finn@cgc.edu

Program Description

The Academic Certificate (AC) in Creative Writing program is designed to provide students and professional writers with access to a community of writers and creative writing activities, instruction and guidance from established authors, and ongoing support in improving their writing skills and marketing their work. As students take courses in the program, they will build a portfolio of original work that may be submitted for publication. The program offers classes, workshops, and other activities such as readings and contests, which are accessible to writers of all levels regardless of academic or professional standing. The program aims to serve a diverse community who may be underrepresented in traditional creative writing programs. Completion of the certificate does not lead to a particular degree program, but may aid students in their pursuit of a career in the writing professions and in their continued enjoyment of writing for personal growth

Program Notes

This program is not eligible for Title IV Federal Financial Aid.

Students must earn a grade of "C" or better for all courses required within the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

++ indicates any suffixed course.

Admission Criteria

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

Program Prerequisites: None

Required Courses: 21 Credits

ENG210 may be substituted for CRW150 with permission of the Program Director.

CRW150	Introduction to Creative Writing	3

CRW200 must be repeated for a total of (2) two credits

+CRW200	Readings for Writers (1)	2
+CRW201	Portfolio	1

Students must complete six (6) credits from Series I and nine (9) credits from Series II in consultation with a Program Director.

Series I: Credits: 6

Students must complete two (2) of the following courses for a total of six (6) credits.

CRW120	Introduction to Writing Children's Literature	3
CRW160	Introduction to Writing Poetry	3
CRW170	Introduction to Writing Fiction	3
CRW172	Introduction to Comic Book Writing	3
CRW180	Intro to Writing Nonfiction	3
CRW190	Introduction to Screenwriting	3
THE118	Playwriting	3

Series II: Credits: 9

Students must complete three (3) of the following courses for a total of nine (9) credits.

+CRW202	The Writer as Witness	3
+CRW203	Dialogue	3
+CRW204	Journaling	3
+CRW220	Intermediate Writing Children's Literature	3
CRW251	Topics in Creative Writing	3
+CRW260	Intermediate Poetry Writing	3
+CRW261	Topics in Writing: Poetry	3
+CRW270	Intermediate Fiction Writing	3
+CRW271	Topics in Writing: Fiction	3
+CRW272	Planning and Structuring the Novel	3
+CRW273	Writing the Novel	3
+CRW274	Revising the Novel	3
+CRW281	Topics in Writing: Non-Fiction	3
+CRW290	Intermediate Screenwriting	3
+CRW291	Topics in Writing: Plays	3

Restricted Electives: 3 Credits

+CRW+++++	Any CRW Creative Writing prefixed course not listed under Required Courses area	1-3

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ENG235	Magazine Article Writing	3
ENG/THE260	Film Analysis	3
+ENH+++++	Any ENH English Humanities prefixed course	3
HUM/THF210	Contemporary Cinema	3

Health Sciences

Emergency Medical Technology

Certificate of Completion: CCL 5643N

13 Credits

Program Contact

Sherrick Bader | 480-988-8101 | sherrick.bader@cgc.edu

Program Description

The Certificate of Completion (CCL) in Emergency Medical Technology curriculum provides the student with the necessary knowledge and skills in accordance with the National EMS Scope of Practice published by National Highway Traffic Safety Administration (NHTSA) and the Arizona Department of Health Services. Successful completion of the curriculum and upon licensure, the candidate can seek employment with ambulance service companies, first responder agencies, fire departments, and hospitals as an Emergency Medical Technician (EMT). Emphasis is on the fundamental principles and skills required to provide emergency medical care for the ill or injured. The primary focus of an EMT is to respond to, assess and triage emergent, urgent, and non-urgent requests for medical care, apply basic knowledge and skills necessary to provide patient care and medical transportation to/from an emergency or health care facility.

Program Notes

This program is not eligible for Title IV Federal Financial Aid.

Students must earn a grade of "C" or better in all courses within the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

EMT104 requires students to complete additional hours in a competency-based clinical, vehicular, and/or scenario based experience. Depending on the college, this may be completed through EMT/FSC104AB or program director-approved rotation.

Program Prerequisites: None

Required Courses: 13 Credits

Students who have current validation in Basic Life Support (BLS) are required to receive credit by evaluation.

EMT101	Basic Life Support/Cardiopulmonary Resuscitation (CPR) for Health Care Providers (0.5) OR Current validation in Basic Life Support (BLS) Health Care Provider/Professional Rescuer (0) AND Credit By Evaluation (0.5)	0.5
+EMT/ FSC104AB	Applied Practical Studies for Emergency Medical Technology	0.5
+EMT104LL	Emergency Medical Technology Practicum	2
+EMT104	Emergency Medical Technology	10

Emergency Medical Technology Comprehensive

Certificate of Completion: CCL 5058

16-17 Credits

Program Contact

Sherrick Bader | 480-988-8101 | sherrick.bader@cgc.edu

Program Description

The Certificate of Completion (CCL) in Emergency Medical Technology Comprehensive curriculum provides the student with the necessary knowledge and skills in accordance with the National EMS Scope of Practice published by National Highway Traffic Safety Administration (NHTSA) and the Arizona Department of Health Services. This certificate provides students with the expanded knowledge and skills for pre-hospital settings. Successful completion of the curriculum and upon licensure, the candidate can seek employment

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

with ambulance service companies, first responder agencies, fire departments, and hospitals as an Emergency Medical Technician (EMT). Emphasis is on the fundamental principles and skills required to provide emergency medical care for the ill or injured. The primary focus of an EMT is to respond to, assess and triage emergent, urgent, and non-urgent requests for medical care, apply basic knowledge and skills necessary to provide patient care and medical transportation to/from an emergency or health care facility.

Program Notes

The Certificate of Completion in Emergency Medical Technology Comprehensive is currently not Title IV Federal Financial Aid eligible.

Students must earn a grade of "C" or better in all courses within the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

EMT104 requires students to complete additional hours in a competency-based clinical, vehicular, and/or scenario based experience. Depending on the college, this may be completed through EMT/FSC104AB or program director-approved rotation.

Program Prerequisites: None

Required Courses: 13 Credits

Students who have current validation in Basic Life Support (BLS) are required to receive credit by evaluation.

EMT101	Basic Life Support/Cardiopulmonary Resuscitation (CPR) for Health Care Providers (0.5) OR Current validation in Basic Life Support (BLS) Health Care Provider/Professional Rescuer (0) AND Credit By Evaluation (0.5)	0.5
+EMT/ FSC104AB	Applied Practical Studies for Emergency Medical Technology	0.5
+EMT104	Emergency Medical Technology	10
+EMT104LL	Emergency Medical Technology Practicum	2

Restricted Electives: 3-4 Credits

AJS/EMT/FSC/ SWU258	Victimology and Crisis Management	3
BIO156	Introductory Biology for Allied Health	4
HCC145	Medical Terminology for Health Care Professionals	3
PME190	Introduction to ECG Rhythm Analysis and Interpretation for EMS Professionals	3
PME191	Introduction to Pharmacology for EMS Professionals	3

Exercise Science: Health, Fitness and Sports Performance

Associate in Applied Science: AAS 3059

63-72.5 Credits

Program Contact

Dr. Kim McGee, ACSM (EP-C) | 480-726-4246 | kimberly.mcgee@cgc.edu

Program Description

The Associate in Applied Science (AAS) in Exercise Science: Health, Fitness and Sports Performance program prepares students for the American College of Sports Medicine (ACSM), National Strength and Conditioning Association (NSCA), National Academy of Sports Medicine (NASM) and the American Council on Exercise (ACE) personal trainer certifications. The curriculum is designed to prepare students for employment in entry-level positions such as personal training within health and fitness clubs, wellness centers, and public and private recreation facilities. This curriculum also provides good preparation for transfer to a four-year bachelor program.

Program Notes

Students must earn a grade of C or better required for all courses within the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisite and/or corequisites.

Students can achieve the AGEC-A by completing the following:

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

An additional course with the Humanities, Arts and Design general studies designation		3
An additional course with the Natural Science general studies designation		4
Recommend BIO202 Human Anatomy and Physiology II		4
An additional course with the Computer/Statistics/ Quantitative Applications general studies designation		3
Recommend MAT206 Elements of Statistics		3
OR PSY230 Introduction to Statistics		3

Program Prerequisites: None

Required Courses: 44-48.5 Credits

EXS101	Introduction to Exercise Science	3
+EXS125	Introduction to Exercise Physiology	3
+EXS210	Assessment and Program Design: Muscular Fitness	2
+EXS211	Assessment and Program Design: Flexibility and Balance	2
+EXS212	Assessment and Program Design: Cardiorespiratory Fitness	2
+EXS213	Assessment and Program Design: Weight Management and Motivation	2
+EXS214	Instructional Competency: Flexibility and Mind Body Exercises	2
+EXS216	Instructional Competency: Muscular Strength and Conditioning	2
+EXS218	Instructional Competency: Cardiorespiratory Exercises and Activities	2
+EXS290	Introduction to Evidence Based Practice	3
+EXS239	Practical Applications of Personal Training Skills and Techniques Internship (3) OR	
+EXS239AA	Practical Applications of Personal Training Skills and Techniques Internship (1) AND	
+EXS239AB	Practical Applications of Personal Training Skills and Techniques Internship (2)	3
HES100	Healthful Living	3
HES210	Cultural Aspects of Health and Illness	3
HES106	Cardiopulmonary Resuscitation (CPR)/ Automated External Defibrillator (AED) (0.5) OR	
EMT101	Basic Life Support/Cardiopulmonary Resuscitation (CPR) for Health Care Providers (0.50) OR	
Current Basic Life Support (BLS) Health Care Provider/ Professional Rescuer certification (0)		0-0.5
FON100	Introductory Nutrition (3) OR	
FON241	Principles of Human Nutrition (3)	3
PSY101	Introduction to Psychology	3
+BIO181	General Biology (Majors) I (4) OR	
	1 year of high school biology	0-4
+BIO201	Human Anatomy and Physiology I	4
PED101ST	Strength Training	1
PED101GF	Group Fitness/Aerobics (1) OR	
PED101KB	Kickboxing (1) OR	
PED101PS	Pilates (1) OR	
PED101TC	Tai Chi (1) OR	
PED101YH	Hatha Yoga (1) OR	
PED101YO	Yoga (1) OR	
PED101YP	Power Yoga (1) OR	
PED101YR	Restorative Yoga (1) OR	
PED101BS	Body Sculpting (1) OR	
PED101PC	Physical Conditioning (1) OR	
PED101BC	Boot Camp (1) OR	
PED101ZU	Zumba Fitness (1) OR	
PED101SR	Stretch and Relaxation (1) OR	
PED101CY	Cycling - Indoor (1) OR	
PED101YG	Gentle Yoga (1) OR	
PED101TX	Suspension Training (1)	1

Free Electives: 4 Credits

Students must choose four (4) additional credits of general elective courses. (CHM130 AND CHM130LL), OR (CHM151 and CHM151LL) OR BIO202 are recommended for students who intend to transfer.

General Education: 15-20 Credits

Core: 12-17 Credits

First Year Composition

+ENG101	First-Year Composition (3) OR	
+ENG107	First-Year Composition for ESL (3) AND	
+ENG102	First-Year Composition (3) OR	
+ENG108	First-Year Composition for ESL (3)	6

Oral Communication

COM100	Introduction to Human Communication (3) OR	
COM110	Interpersonal Communication (3) OR	
+COM225	Public Speaking (3) OR	
COM230	Small Group Communication (3)	3

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

Critical Reading

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

Mathematics

+MAT150	College Algebra/Functions (5) OR	
+MAT151	College Algebra/Functions (4) OR	
+MAT152	College Algebra/Functions (3)	3-5

General Education Distribution: 3 Credits

Humanities and Fine Arts

Any approved general education course from the Humanities, Arts and Design area. 3

Social and Behavioral Sciences

Met by HES100 in Required Courses. 0

Natural Sciences

Met by BIO201 in Required Courses. 0

Mortuary Science

Associate in Applied Science: AAS 3765

69-70 Credits

Program Contact

Donna G. Backhaus | 480-988-8503 | donna.backhaus@cgc.edu

Program Description

The Associate in Applied Science (AAS) in Mortuary Science program includes studies in public health; business management; natural sciences; legal, ethical and regulatory concerns; and clinical requirements associated with the mortuary field. The curriculum combines coursework in mortuary science with a general education component. The AAS in Mortuary Science is accredited by the American Board of Funeral Service Education (ABFSE) 992 Mantua Pike, Suite 108, Woodbury Heights, NJ 08097, 816-233-3747, www.abfse.org. Completion of the courses in program prepares the student to sit for the National Board examination and begin state internship requirements.

Program Notes

Overall program minimum GPA = 2.00.

+ indicates course has prerequisite and/or corequisites.

++ indicates any suffixed courses.

Students must complete all Program Prerequisite Courses and General Education Courses before beginning the Required course area of this degree.

Related courses from other colleges and universities will not automatically transfer to CGCC. All transfer courses are reviewed by the Mortuary Science program director for transferability. In all cases, it is the responsibility of the student to initiate the process.

During the fall semester embalming lab, the student must provide his or her own transportation to preceptor-site embalming experiences at local funeral homes.

The nationally accredited Mortuary Science Program AAS degree at CGCC and students scores from the National Board Examination are transferable to states other than Arizona. The examination offered by the International Conference of Funeral Service Examining Boards (ICFSEB) has a fee of $500 and is the responsibility of the student. Scores remain valid for life, even if students wait to practice in the funeral service profession. Licensure is on a state-by-state basis since each state does its own licensing.

Admission Criteria

Students must have completed all first year course work with a minimum GPA of 2.5, and must have proof of high school graduation or GED or permission of Program Director.

Program Prerequisites: 10-11 Credits

ACC107	Bookkeeping Theory and Practice (4) OR	
ACC111	Accounting Principles I (3)	3-4
BPC/CIS+++++	Any BPC/CIS Business-Personal Computers or Computer Information Systems course	1
GBS205	Legal, Ethical, and Regulatory Issues in Business	3
MGT253	Owning and Operating a Small Business	3

Required Courses: 34 Credits

MSP101	Orientation to Funeral Service	1
MSP201	History and Sociology of Funeral Service	3

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

MSP202	Embalming	4
MSP203	Microbiology for Funeral Service	3
MSP204	Chemistry for Funeral Service	3
MSP205	Mortuary Administration I	3
MSP206	Mortuary Administration II	3
MSP207	Restorative Art	4
MSP208	Legal, Regulatory, and Ethical Issues in Funeral Service	3
MSP209	Pathology for Funeral Service	3
MSP210	Counseling for Funeral Service	2
MSP211	Compendium for Funeral Service	2

Free Electives: 0-3 Credits

Students should choose zero (0) to three (3) credits from Free Electives. Any 100/200 level prefixed courses may be selected, except courses used to satisfy the Required Courses area.

General Education: 22-25 Credits

Core: 12-15 Credits

First-Year Composition: 6 credits

+ENG101	First-Year Composition (3) OR	
+ENG107	First-Year Composition for ESL (3) AND	
+ENG102	First-Year Composition (3) OR	
+ENG108	First-Year Composition for ESL (3) OR	
+ENG111	Technical and Professional Writing (3)	6

Oral Communication

Any approved general education course in the Oral Communication area.

Critical Reading

Any approved general education course in the Critical Reading area or equivalent as indicated by assessment. If test exempt, students must complete a (3) credit course from the Free Electives area with a C or better.

Mathematics

+ Any approved general education course from the Mathematics area with a C or better.

Distribution: 10 Credits

Humanities, Arts and Design

Any approved general education course in the Humanities, Arts and Design area. REL100 is recommended 3

Social and Behavioral Sciences

PSY101	Introduction to Psychology (3) OR	
PSY156	Understanding Death and Dying (3)	3

Natural Sciences

BIO160	Introduction to Human Anatomy and Physiology	4

Personal Trainer

Certificate of Completion: CCL 5421

18-18.5 Credits

Program Contact

Dr. Kim McGee, ACSM (EP-C) | 480-726-4246 | kimberly.mcgee@cgc.edu

Program Description

The Certificate of Completion (CCL) in Personal Trainer is designed to provide students with the foundational skills needed to design and implement fitness routines appropriate to clients` goals and aligned with current industry best practices. The curriculum for this certificate fosters the development of critical thinking, leadership, and communication skills important for developing and implementing individualized exercise programs. A CCL in Personal Training: Advanced and an Associate in Applied Science (AAS) in Exercise Science: Health, Fitness, and Sports Performance are also available for students interested in continuing their studies in this field.

Program Notes

The Certificate of Completion in Personal Trainer is currently not Title IV Federal Financial Aid eligible.

Students must earn a grade of “C” or better for all courses required within the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

++ indicates any suffixed course.

Program Prerequisites: None

Required Courses: 18-18.5 Credits

EXS101	Introduction to Exercise Science	3
+EXS125	Introduction to Exercise Physiology	3

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

+EXS210	Assessment and Program Design: Muscular Fitness	2
+EXS211	Assessment and Program Design: Flexibility and Balance	2
+EXS212	Assessment and Program Design: Cardiorespiratory Fitness	2
+EXS213	Assessment and Program Design: Weight Management and Motivation	2
+EXS239AA	Practical Applications of Personal Training Skills and Techniques Internship	1
FON241	Principles of Human Nutrition	3
HES106	Cardiopulmonary Resuscitation (CPR)/ Automated External Defibrillator (AED) (0.5) OR	
Current CPR/AED certification		0-0.5

Personal Trainer: Advanced

Certificate of Completion: CCL 5445

31-31.5 Credits

Program Contact

Dr. Kim McGee, ACSM (EP-C) | 480-726-4246 | kimberly.mcgee@cgc.edu

Program Description

The Certificate of Completion (CCL) in Personal Training: Advanced is designed to prepare students for the American College of Sports Medicine (ACSM), National Strength and Conditioning Association (NSCA), National Academy of Sports Medicine (NASM), and the American Council on Exercise (ACE) personal trainer certifications. These certifications are generally required for employment in personal training positions and/or professional advancement within the fitness industry. The curriculum includes the foundational courses required for the CCL in Personal Trainer coupled with some additional advanced and specialized courses.

Program Notes

Students must earn a grade of "C" or better for all courses required within the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

++ indicates any suffixed course.

Program Prerequisites: None

Required Courses: 31-31.5 Credits

EMT101	Basic Life Support/Cardiopulmonary Resuscitation (CPR) for Health Care Providers (0.50) OR	
HES106	Cardiopulmonary Resuscitation (CPR)/ Automated External Defibrillator (AED) (0.5) OR	
Current Basic Life Support (BLS) Health Care Provider/ Professional Rescuer certification (0)		0-0.5
EXS101	Introduction to Exercise Science	3
+EXS125	Introduction to Exercise Physiology	3
+EXS210	Assessment and Program Design: Muscular Fitness	2
+EXS211	Assessment and Program Design: Flexibility and Balance	2
+EXS212	Assessment and Program Design: Cardiorespiratory Fitness	2
+EXS213	Assessment and Program Design: Weight Management and Motivation	2
+EXS214	Instructional Competency: Flexibility and Mind-Body Exercises	2
+EXS216	Instructional Competency: Muscular Strength and Conditioning	2
+EXS218	Instructional Competency: Cardiorespiratory Exercises and Activities	2
+EXS239	Practical Applications of Personal Training Skills and Techniques Internship (3) OR	
+EXS239AA	Practical Applications of Personal Training Skills and Techniques Internship (1) AND	
+EXS239AB	Practical Applications of Personal Training Skills and Techniques Internship (2)	3
FON100	Introductory Nutrition (3) OR	
FON241	Principles of Human Nutrition (3)	3
HES100	Healthful Living	3
PED101ST	Strength Training	1
PED101BC	Boot Camp (1) OR	
PED101BS	Body Sculpting (1) OR	
PED101CY	Cycling - Indoor (1) OR	
PED101GF	Group Fitness/Aerobics (1) OR	
PED101KB	Kickboxing (1) OR	
PED101PC	Physical Conditioning (1) OR	
PED101PS	Pilates (1) OR	
PED101SR	Stretch and Relaxation (1) OR	
PED101TC	Tai Chi (1) OR	

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

PED101TX	Suspension Training (1) OR	
PED101YG	Gentle Yoga (1) OR	
PED101YH	Hatha Yoga (1) OR	
PED101YO	Yoga (1) OR	
PED101YP	Power Yoga (1) OR	
PED101YR	Restorative Yoga (1) OR	
PED101ZU	Zumba® Fitness (1)	1

Nursing

Nursing

Associate in Applied Science: AAS 3812

62-75 Credits

Program Contacts

Director of Nursing

Karen Flanigan | 480-988-8884 | karen.flanigan@cgc.edu

Nursing Advisor

Maria Dela Torre | 480-988-8880 | chuy.delatorre@cgc.edu

Nursing Office

teresa hull | 480-988-8881 | teresa.hull@cgc.edu

Program Description

The Associate in Applied Science (AAS) in Nursing Program is available at eight of the Maricopa Community Colleges. Clinical experiences are provided in a variety of healthcare settings. Nursing Program graduates are eligible to apply for the national exam for the registered nurse license. Licensing requirements are the exclusive responsibility of the State Board of Nursing.

The Associate in Applied Science (AAS) Nursing Program is approved by the Arizona State Board of Nursing and accredited by the Accreditation Commission for Education in Nursing (ACEN), 3343 Peachtree Road NE, Suite 850, Atlanta, GA 30326; (404-975-5000); email: info@acennursing.org

Program offerings

This program is offered at the following sites:

- Chandler-Gilbert Community College
- Estrella Mountain Community College
- Gateway Community College
- Glendale Community College
- Mesa Community College
- Paradise Valley Community College
- Phoenix College
- Scottsdale Community College

Waiver of Licensure/Certification Guarantee

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

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

Level One Fingerprint Clearance is required for admission into the program. Applicants must present a Level One Fingerprint Clearance Card to be copied by the advisor or designee. For a Department of Public Safety Fingerprint Clearance Card application, contact MCCCD Healthcare/Nursing Advisor. If there is any question about eligibility for licensure or certification, contact the nursing education consultant at the Arizona State Board of Nursing (602.771.7800).

Health Declaration

It is essential that nursing students be able to perform a number of physical activities in the clinical portion of the program. At a minimum, students will be required to lift patients, stand for several hours at a time and perform bending activities. Students who have a chronic illness or condition must be maintained on current treatment and be able to implement direct patient care. The clinical nursing experience also places students under considerable mental and emotional stress as they undertake responsibilities and duties impacting patients` lives. Students must be able to demonstrate rational and appropriate behavior under

stressful conditions. Individuals should give careful consideration to the mental and physical demands of the program prior to making application. All must provide documentation of compliance with all health and safety requirements required to protect patient safety. Only students in compliance are permitted to enroll in nursing courses. Students will meet these requirements by providing the required documentation for the Health/Safety Requirements Documentation Checklist and the signed Health Declaration Form.

Health & Safety Requirements for the Maricopa Nursing Program

1. Students must submit a Health and Safety Documentation Checklist verifying completion of all requirements and maintain current status throughout the program.
2. Students must submit the Health Declaration Form signed by a licensed health care provider.
3. Students must test negative on a timed urine drug screen.
4. Admission to an Allied Health program requires that students be in compliance with the Maricopa County Community College District Supplemental Background Check policy. Program applications will not be accepted without a copy of an Arizona Department of Public Safety Level One Fingerprint Clearance Card. Upon conditional program admission, the student must comply with all requirements of the current MCCCD background check policy.

University Transfer Students

Students who are planning to earn the Bachelor of Science in Nursing may obtain their prerequisite courses at the Maricopa Community Colleges. For information on courses that meet requirements for admission into a baccalaureate program, please contact a program advisor.

Registered Nurse Pathway

Associate in Applied Science Degree in Nursing Program

The Associate in Applied Science (AAS) degree in Nursing graduate is eligible to apply for licensure as a Registered Nurse (RN). The RN is educated as a generalist who delivers health care to clients and family groups and has competencies related to the art and science of nursing. The RN may be employed in a variety of acute, long term, and community-based healthcare settings. The AAS degree in Nursing provides the graduate with an educational foundation for articulation into the university setting.

Program Notes

Students must earn a grade of "C" or better in all courses required within the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

Course Fee Information:

Please see class schedule for information regarding course fees.

Maricopa Nursing is aligned with Nurse of the Future Competencies: Patient-Centered Care, Professionalism, Leadership, Systems-Based Practice, Informatics and Technology, Communication, Teamwork and Collaboration, Safety, Quality Improvement, and Evidence-Based Practice. These competencies focus on key stakeholders of healthcare clients, colleagues and communities. Demonstration of the competencies will signify preparation for successful transition into nursing practice and further professional development.

Admission Criteria

High School diploma or GED is required for the Associate in Applied Science degree in Nursing. Applicants must signify that they meet this requirement by providing high school diploma/ transcripts or GED completion OR by signing the nursing application page containing the 'Declaration of High School Graduation or GED completion'. In some instances, high school diploma/transcripts or proof of GED completion may be required.

Formal application and admission to the program is required; all program prerequisites must be completed prior to submission of application.

A passing score on a nursing program admission test is required to complete an application.

Applicants for Advanced Placement must receive a passing score on a practical nursing content exam for

placement into Block 3.

The final decision rests with the Nursing Program Chair at the College to which the student is accepted.

The Nursing Program Chair reserves the right to deny acceptance of an admission application if the applicant was previously dismissed for issues relating to academic integrity, unsafe patient care, and/or two (2) or more failures from any nursing program.

All applicants holding or receiving a certificate as a Nursing Assisting and/or license as a Practical Nurse must remain in good standing with the Regulatory Board. Once enrolled, students receiving any disciplinary actions against their certificate or license must notify the Nursing Program Chair within five (5) school days. The Nursing Program Chair reserves the right to restrict the student's participation in clinical experiences and involvement in patient care until the certificate and/or license is valid and unrestricted.

Program Prerequisites: 10-20 Credits

The credit hour range is subject to change depending on the student's educational experience.

+BIO156	Introductory Biology for Allied Health (4) OR	
+BIO181	General Biology (Majors) I (4) OR	
One year of high school biology		0-4
+BIO201	Human Anatomy and Physiology I	4
+CHM130	Fundamental Chemistry (3) AND	
+CHM130LL	Fundamental Chemistry Laboratory (1) OR	
	One year of high school chemistry	0-4
+ENG101	First-Year Composition (3) OR	
+ENG107	First-Year Composition for ESL (3)	3
+MAT140	College Mathematics (5) OR	
+MAT141	College Mathematics (4) OR	
+MAT142	College Mathematics (3) OR	
Satisfactory completion of higher level math course		3-5

Required Courses: 36 Credits

+NUR152	Nursing Theory and Science I	9
+NUR172	Nursing Theory and Science II	9
+NUR252	Nursing Theory and Science III	9
+NUR283	Nursing Theory and Science IV	9

General Education: 16-19 Credits

Core: 3-6 Credits

First-Year Composition

Three (3) credits of First Year Composition are met by ENG101 or ENG107 in Program Prerequisites area.

+ENG102	First-Year Composition (3) OR	
+ENG108	First-Year Composition for ESL (3)	3

Oral Communication

Waived	0

Critical Reading

CRE101	College Critical Reading and Critical Thinking (3) OR	
Equivalent by assessment		0-3

Mathematics

Met by MAT140, OR MAT141, OR MAT142 OR Satisfactory completion of higher level mathematics course in Program Prerequisites area	0

Distribution: 13 Credits

Humanities, Arts and Design

Any approved general education course in the Humanities, Arts and Design area	2

Social and Behavioral Sciences

PSY101	Introduction to Psychology	3

Natural Sciences

+BIO202	Human Anatomy and Physiology II (4) AND	
+BIO205	Microbiology (4)	8

Physical Sciences & Engineering

Artificial Intelligence

Associate in Applied Science : AAS 3891

60-73 Credits

Program Contact

Angel Fuentes | 480 - 732-7033|
angel.fuentes@cgc.edu

Program Description

The Associate in Applied Science (AAS) in Artificial Intelligence and Machine Learning focuses on building

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

machine learning models that can be used for predicting, making decisions and enhancing human capabilities. The program prepares students for entry level positions in a variety of fields using artificial intelligence, including the information technology, automotive, healthcare, aerospace, industrial, and manufacturing industries. Program content includes an introduction to artificial intelligence and machine learning, natural language processing, computer vision, and artificial intelligence for business solutions and other applications. The curriculum also includes coursework in computer programming, math, engineering, and statistics.

Program Notes

Students must earn a grade of C or better for all courses required within the program. Overall program minimum GPA = 3.00.

+ indicates course has prerequisites and/or corequisites.

++ indicates any suffixed course.

Program Prerequisites: None

Required Courses: 34-37 Credits

AIM100	Introduction to Artificial Intelligence	3
+AIM110	Introduction to Machine Learning	3
+AIM210	Natural Language Processing	3
+AIM220	Artificial Intelligence for Computer Vision	3
+AIM230	Artificial Intelligence for Business Solutions	3
+AIM240	Artificial Intelligence Capstone Project	3
CIS105	Survey of Computer Information Systems (3) OR	
May be waived by permission of the Program Director		0-3
+CIS119DO	Introduction to Oracle: SQL (3) OR	
+CIS276DA	MySQL Database (3) OR	
+CIS276DB	SQL Server Database (3)	3
+CIS156	Python Programming: Level I	3
+ECE102	Engineering Analysis Tools and Techniques	2
+ECE103	Engineering Problem Solving and Design	2
+MAT206	Elements of Statistics	3
+MAT225	Elementary Linear Algebra	3

Restricted Electives: 0-3 Credits

Select a programming language from below that best aligns with academic and professional goals (to equal a minimum of 60 credits as needed) in one of the following areas:

+CIS150	Programming Fundamentals	3
+CIS150AB	Object-Oriented Programming Fundamentals	3
+CIS159	Visual Basic Programming I	3
+CIS162++	Any C Programming: Level I course	3
+CIS163AA	Java Programming: Level I	3
+CIS165++	Any Mobile Application Development course	3
+CSC100++	Introduction to Computer Science (C++)	3-4
+CSC110++	Introduction to Computer Science (Java)	3-4
ACC+++	Any ACC Accounting prefixed course (except ACC115)	3

General Education: 23-36 Credits

Core: 13-26 Credits

First-Year Composition

+ENG101	First-Year Composition (3) OR	
+ENG107	First-Year Composition for ESL (3) AND	
+ENG102	First-Year Composition (3) OR	
+ENG108	First-Year Composition for ESL (3)	6

Oral Communication

COM100	Introduction to Human Communication (3) OR	
COM110	Interpersonal Communication (3) OR	
+COM225	Public Speaking (3) OR	
COM230	Small Group Communication (3) OR	
Any approved general education course from the Oral Communication area		3

Critical Reading

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

Mathematics

Any approved general education course in the Mathematical Applications [MA] area (that serves as a prerequisite for) MAT22+.		0-9
+MAT220	Calculus with Analytic Geometry I (5) OR	
+MAT221	Calculus with Analytic Geometry I (4)	4-5

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

Distribution: 10 Credits

Humanities, Arts and Design

Any approved general education course in the Humanities, Arts and Design area. 3

Social and Behavioral Sciences

Any approved general education course in the Social-Behavioral Sciences area. 3
Recommend PSY101 or SOC101.

Natural Sciences

Any approved general education course in the Natural Sciences area. 4

Artificial Intelligence and Machine Learning

Certificate of Completion: 5897N

21-36 Credits

Program Contact

Angel Fuentes | 480 - 732-7033|
angel.fuentes@cgc.edu

Program Description

The Certificate of Completion (CCL) in Artificial Intelligence and Machine Learning focuses on building machine learning models that can be used for predicting, making decisions and enhancing human capabilities. The program provides the industry professional with the knowledge and skills used in a variety of fields using artificial intelligence, including the information technology, automotive, healthcare, aerospace, industrial, and manufacturing industries. Program content includes an introduction to artificial intelligence and machine learning, natural language processing, computer vision, and artificial intelligence for business solutions and other applications. The curriculum also includes coursework in computer programming, math, and statistics.

Program Notes

This program is not eligible for Title IV Federal Financial Aid.

This Certificate of Completion (CCL) is a closed program that is available to industry professionals with the requisite industry experience or those with an associate or bachelor`s degree in a related field. Speak to a Program Director for additional information.

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

+ indicates course has prerequisites and/or corequisites.
++ indicates any suffixed course

Program Prerequisites: None

Required Courses: 21-36 Credits

AIM100	Introduction to Artificial Intelligence	3
+AIM110	Introduction to Machine Learning	3
+AIM210	Natural Language Processing	3
+AIM220	Artificial Intelligence for Computer Vision	3
+AIM230	Artificial Intelligence for Business Solutions	3
+AIM240	Artificial Intelligence Capstone Project	3
CIS105	Survey of Computer Information Systems (3) OR	
May be waived by permission of the Program Director		0-3
+CIS119DO	Introduction to Oracle: SQL (3) OR	
+CIS276DA	MySQL Database (3) OR	
++CIS276DB	SQL Server Database (3) OR	
May be waived by permission of the Program Director		0-3
+CIS156	Python Programming: Level I (3) OR	
May be waived by permission of the Program Director		0-3
+MAT14+	Any College Mathematics course (3-6) OR	
+MAT15+	Any College Algebra/Functions course (3-6) OR	
+MAT187	Precalculus (5) OR Appropriate District placement OR Permission of Department/Division Chair	0-6
+MAT206	Elements of Statistics	3

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

Engineering Technology

Associate in Applied Science: AAS 3228

63-93 Credits

Program Contact

Bassam Matar | 480 - 732-7139 | b.matar@cgc.edu

Program Description

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

Program Notes

Students must earn a grade of "C" or better for all courses required within the program and must have a cumulative GPA of 3.0 in these courses to complete their degree. Overall program minimum GPA = 3.00.

+ indicates course has prerequisites and/or corequisites.

Program Prerequisites: 0-17 Credits

The credit hour range is subject to change depending on the student's educational experiences. PHY111 AND PHY112 are also strongly recommended for those who have not completed one year of high school physics with a grade of "C" or better.

CHM130	Fundamental Chemistry (3) AND	
CHM130LL	Fundamental Chemistry Lab (1) OR	
CHM130AA	Fundamental Chemistry with Lab (4) OR	
One year of high school chemistry with a grade of "C" or better taken within the last five years		0-4
+MAT120	Intermediate Algebra (5) OR	
+MAT121	Intermediate Algebra (4) OR	
+MAT122	Intermediate Algebra (3) OR	
Equivalent by assessment		0-5
+MAT187	Precalculus (5) OR	
+MAT150	College Algebra/Functions (5) OR	
+MAT151	College Algebra/Functions (4) OR	
+MAT152	College Algebra/Functions (3) AND	
+MAT182	Plane Trigonometry (3) OR	
Equivalent by assessment		0-8

Required courses: 32-38

+ECE102	Engineering Analysis Tools and Techniques (2) OR	
+ECE102AA	Engineering Analysis Tools and Techniques (2)	2
+ECE103	Engineering Problem Solving and Design (2) OR	
+ ECE103AB	Engineering Problem Solving and Design (2) OR	
+ ECE103EP	Engineering Problem Solving and Design (EPICS projects) (2)	2
+EEE202	Circuits and Devices	5
+MAT220	Calculus with Analytic Geometry I (5) OR	
+ MAT221	Calculus with Analytic Geometry I (4)	4-5
+MAT230	Calculus with Analytic Geometry II (5) OR	
+MAT231	Calculus with Analytic Geometry II (4)	4-5
+MAT240	Calculus with Analytic Geometry III (5) OR	
+MAT241	Calculus with Analytic Geometry III (4)	4-5
+MAT276	Modern Differential Equations (4) OR	
+MAT277	Modern Differential Equations (3)	3-4
+PHY115	University Physics I (5) OR	
+PHY121	University Physics I: Mechanics (4)	4-5
+PHY116	University Physics II (5) OR	
+PHY131	University Physics II: Electricity and Magnetism (4)	4-5

Restricted Electives: 16-20

Students should select 16-20 credits from the following list of electives based on their area of Engineering and interests. Consultation with Program Director is recommended particularly for students considering transfer to the university so that they optimize their transferable course work.

+BIO181	General Biology (Majors) I	4
+BIO182	General Biology (Majors) II	4
+CHM150	General Chemistry I (4) OR	
+CHM151	General Chemistry I (3) AND	
+CHM151LL	General Chemistry I Laboratory (1) OR	
+CHM150AA	General Chemistry I (5) OR	
+CHM151AA	General Chemistry I (5)	4-5
+CHM152	General Chemistry II (3) AND	
+CHM152LL	General Chemistry II Laboratory (1) OR	

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+CHM152AA	General Chemistry II (4)	4
+CHM230	Fundamental Organic Chemistry (3) AND	
+CHM230LL	Fundamental Organic Chemistry Laboratory (1) OR	
+CHM235	General Organic Chemistry I (3) AND	
+CHM235LL	General Organic Chemistry I Laboratory (1)	4
+CHM236	General Organic Chemistry IIA (3) OR	
+CHM238	General Organic Chemistry IIB (3)	3
+CSC100	Introduction to Computer Science (C++) (3) OR	
+CSC100AA	Introduction to Computer Science (C++) (3) OR	
+CSC100AB	Introduction to Computer Science (C++) (4) OR	
+CSC110	Introduction to Computer Science (Java) (3) OR	
+CSC110AB	Introduction to Computer Science (Java)(4)	3-4
+CSC205	Object Oriented Programming and Data Structures (3) OR	
+CSC205AB	Object Oriented Programming and Data Structures (4)	3-4
+CSC/EEE120	Digital Design Fundamentals (4) OR	
+ECE216	Computer-Aided Engineering (2) AND	
+ECE216LL	Computer-Aided Engineering Laboratory (1)	3-4
ECE104	EPICS Gold I	2
ECE105	MATLAB Programming	1
ECE111	Bioengineering Systems	3
+ECE211	Engineering Mechanics- Statics	3
+ECE212	Engineering Mechanics- Dynamics 3	
+ECE214	Engineering Mechanics	4
+ECE215	Mechanics of Materials	3
+CSC/EEE220	Programming for Computer Engineering	3
+CSC/EEE230	Computer Organization and Assembly Language	4
GLG101	Introduction to Geology I - Physical Lecture	3
+MAT225	Elementary Linear Algebra	3
+MAT227	Discrete Mathematical Structures	3
+PHY241	University Physics III: Thermodynamics, Optics, and Wave Phenomena	4

General Education: 15-18 Credits

Core: 9-12 Credits

First-Year Composition

+ENG101	First-Year Composition (3) OR	
+ENG107	First-Year Composition for ESL (3) AND	
+ENG102	First-Year Composition (3) OR	
+ENG108	First-Year Composition for ESL (3)	6

Oral Communication

Any approved general education course from the Oral Communication area 3

COM100 or COM110 or COM230 recommended.

Critical Reading

+CRE101	College Critical Reading and Critical Thinking (3) OR	

Equivalent as indicated by assessment (0) 0-3

Mathematics

Met by Any Mathematics course listed in the Required Courses area. 0

Distribution: 6 credits

Humanities and Fine Arts

Any approved general studies course in the Humanities and Fine Arts Area 3

Social and Behavioral Sciences

Any approved general studies course in the Social and Behavioral Sciences Area 3

Natural Sciences

Met by PHY115 or PHY121 in the Required Courses Area 0

Social & Behavioral Sciences

Early Childhood Education

Associate in Applied Science: AAS 3186

60-71 Credits

Program Contact

Jennifer Peterson | 480-857-5535 | jennifer.peterson@cgc.edu

Program Description

The Associate in Applied Science (AAS) in Early Childhood Education (ECE) program is designed to prepare individuals for employment as early childhood professionals in a variety of educational settings. The

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

AAS program includes courses based on current ECE theory and practice as well as general education classes to broaden a student`s base of knowledge. Certificates of Completion are also available.

Program Notes

Students must earn a grade of "C" or better for all courses within the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

Program Prerequisites: None

Required Courses: 32 Credits

CFS/ECH176	Child Development (3) OR	
CFS235	Developing Child: Theory into Practice, Prenatal - Age 8 (3) OR	
EED205	The Developing Child: Prenatal to Age Eight (3)	3
EED225	Language and Literacy in the Context of Culture and Relationships	3
CFS101AH	Art Activities for the Young Child (1) AND	
ECH281	Movement/Music for the Young Child (1) OR	
+EED210	Creative and Cognitive Play (3) OR	
ECH128	Early Learning: Play and the Arts (3)	2-3
EED200	Foundations of Early Childhood Education	3
CFS/ECH271	Arranging the Environment (1) AND	
CFS282	Mainstreaming The Young Child with A Disability (1) AND	
ECH282	Discipline/Guidance of Child Groups (1) OR	
EED212	Guidance, Management and the Environment (3)	3
CFS123	Health and Nutrition In Early Childhood Settings (1) AND	
CFS125	Safety in Early Childhood Settings (1) AND	
ECH280	Food Experiences With Young Children (1) OR	
EED215	Early Learning: Health, Safety, Nutrition and Fitness (3)	3
EED222	Introduction to the Exceptional Young Child: Birth to Age Eight (3) OR	
EDU222	Introduction to the Exceptional Learner (3)	3
CFS/ECH269	Child Care Seminar (1) AND	
CFS/ECH287	Professional Development in Early Childhood Education (1) OR	
EED255	Portfolio Development and Writing for the Profession (3)	2-3
+CFS/ ECH284AB	Early Childhood Teaching Internship (3) OR	
+EED260	Early Childhood Infant/Toddler Internship (1) AND	
+EED261	Early Childhood Preschool Internship (1)	2-3
ECH272	Science for the Young Child (1) AND	
CFS/ECH273	Math for the Young Child (1) AND	
CFS/ECH275	Literacy Development and the Young Child (1) AND	
ECH279	Early Childhood Curriculum Development (1) OR	
+EED278	Early Learning: Curriculum and Instruction - Birth/Preschool (3)	3-4
ECH140	Learning Made Visible Through Documentation (1) AND	
ECH270	Observing Young Children (1) OR	
+ EED280	Standards, Observation and Assessment of Typical/Atypical Behaviors of Young Children Birth Age Eight (3)	2-3

Restricted Electives: 9-12 Credits

Students must select 9-12 credits from the following and must complete a minimum of 60 credits for the degree. Students are encouraged to consult with a faculty advisor or student services analyst to identify the requirements for their desired academic and professional goals:

CFS+++	Any CFS Child/Family Studies course(s)
ECH+++	Any ECH Early Childhood Education course(s)
EDU+++	Any EDU Education course(s)
EED+++	Any EED Early Education course(s)
FCS+++	Any FCS Family and Consumer Science course(s)
ITD+++	Any ITD Infant/Toddler Development course(s)

General Education: 19-25 Credits

Core: 12-18 Credits

First-Year Composition

+ENG101	First-Year Composition (3) OR

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+ENG107	First-Year Composition for ESL (3) AND	
+ENG102	First-Year Composition (3) OR	
+ENG108	First-Year Composition for ESL (3)	6

Oral Communication

Any approved General Education course from the Oral Communication area. 3

Note: COM225 is recommended for students who wish to transfer to the BAE at ASU.

Critical Reading

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

Mathematics

Any approved General Education course in the Mathematical Applications [MA] area 3-6

Distribution: 7 Credits

Humanities, Arts and Design

Any approved General Education course from the Humanities, Arts and Design area. 3

Recommend: EDU/ENH291 Children`s Literature OR EDU/HUM/STO292 The Art of Storytelling

Social and Behavioral Sciences

Fulfilled by EDU222 or EED222 in Required Courses area.0

Natural Sciences

Any approved General Education course in the Natural Sciences area 4

Early Childhood Education

Certificate of Completion: CCL 5056

36 Credits

Program Contact

Jennifer Peterson | 480-857-5535 | jennifer.peterson@cgc.edu

Program Description

The Certificate of Completion (CCL) in Early Childhood Education program is designed to prepare students for employment as early childhood teachers in a variety of educational programs. Students learn effective teaching skills as they apply developmentally appropriate early childhood educational theory in the classroom setting. Courses have been selected with a focus on developing an educational career ladder. An Associate in Applied Science (AAS) in Early Childhood Education is also available and includes additional early childhood electives and general education classes to broaden the student`s base of knowledge.

Program Notes

The Certificate of Completion in Early Childhood Education is currently not Title IV Federal Financial Aid eligible.

Students must earn a grade of "C" or better for all courses within the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

For some employment and field experiences (including internship courses), students will be required to have a current Identity Verified Print (IVP) Fingerprint Clearance Card and a current TB vaccination.

Program Prerequisites: None

Required Courses: 29-34 Credits

CFS/ECH176	Child Development (3) OR	
CFS235	Developing Child: Theory into Practice, Prenatal - Age 8 (3) OR	
EED205	The Developing Child: Prenatal to Age Eight (3)	3
EED200	Foundations of Early Childhood Education	3
CFS/ECH271	Arranging the Environment (1) AND	
CFS282	Mainstreaming The Young Child with A Disability (1) AND	
ECH282	Discipline/Guidance of Child Groups (1) OR	
EED212	Guidance, Management and the Environment (3)	3
CFS123	Health and Nutrition In Early Childhood Settings (1) AND	
CFS125	Safety in Early Childhood Settings (1) AND	
ECH280	Food Experiences With Young Children (1) OR	
EED215	Early Learning: Health, Safety, Nutrition and Fitness (3)	3
CFS101AH	Art Activities for the Young Child (1) AND	

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ECH281	Movement/Music for the Young Child (1) OR	
ECH128	Early Learning: Play and the Arts (3) OR	
+EED210	Creative and Cognitive Play (3)	2-3
EED222	Introduction to the Exceptional Young Child: Birth to Age Eight (3) OR	
EDU222	Introduction to the Exceptional Learner (3)	3
ECH272	Science for the Young Child (1) AND	
CFS/ECH273	Math for the Young Child (1) AND	
CFS/ECH275	Literacy Development and the Young Child (1) AND	
ECH279	Early Childhood Curriculum Development (1) OR	
+EED278	Early Learning: Curriculum and Instruction - Birth/Preschool (3)	3-4
EED225	Language and Literacy in the Context of Culture and Relationships	3
ECH140	Learning Made Visible Through Documentation (1) AND	
ECH270	Observing Young Children (1) OR	
+EED280	Standards, Observation and Assessment of Typical/Atypical Behaviors of Young Children Birth Age Eight (3)	2-3
CFS/ECH269	Child Care Seminar (1) AND	
CFS/ECH287	Professional Development in Early Childhood Education (1) OR	
EED255	Portfolio Development and Writing for the Profession (3)	2-3
+CFS/ ECH284AB	Early Childhood Teaching Internship (3) OR	
+EED260	Early Childhood Infant/Toddler Internship (1) AND	
+EED261	Early Childhood Preschool Internship (1)	2-3

Restricted Electives

Students must select 2-7 credits from the following courses to meet a minimum of 36 credits for the certificate. Cannot be shared with Required Courses Area.

CFS+++	Any CFS Child/Family Studies course(s)
ECH+++	Any ECH Early Childhood Education course(s)
EDU+++	Any EDU Education course(s)
EED+++	Any EED Early Education course(s)
FCS+++	Any FCS Family and Consumer Science course(s)
ITD+++	Any ITD Infant/Toddler Development course(s)

Foundations of Early Childhood Education

Certificate of Completion: CCL 5054

18-19 Credits

Program Contact

Jennifer Peterson | 480-857-5535

jennifer.peterson@cgc.edu

Program Description

The Certificate of Completion (CCL) in Foundations of Early Childhood Education is designed to prepare students with foundational knowledge regarding the growth and development of the young child. Topics include cognitive and physical development of the young child, language acquisition, curriculum development, health and safety guidelines, business procedures, and family/community relationship building. The program requirements meet the 18 hours of coursework required for the Child Development Associate (CDA). This CCL is embedded (can be used to fulfill part of the requirements) in a second available CCL, Early Childhood Education. Both CCLs are embedded (can be used to fulfill requirements) in the Associate in Applied Science (AAS) in Early Childhood Education.

Program Notes

The Certificate of Completion in Foundations of Early Childhood Education is currently not Title IV Federal Financial Aid eligible.

Students must earn a grade of "C" or better for all courses within the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

For some employment and field experiences (including internship courses), students will be required to have a current Identity Verified Print (IVP) Fingerprint Clearance Card and a current TB vaccination.

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

Required Courses: 18-19 Credits

CFS/ECH176	Child Development (3) OR	
CFS235	Developing Child: Theory into Practice, Prenatal - Age 8 (3) OR	
EED205	The Developing Child: Prenatal to Age Eight (3)	3
EED200	Foundations of Early Childhood Education	3
CFS/ECH271	Arranging the Environment (1) AND	
CFS282	Mainstreaming The Young Child with A Disability (1) AND	
ECH282	Discipline/Guidance of Child Groups (1) OR	
EED212	Guidance, Management and the Environment (3)	3
CFS123	Health and Nutrition In Early Childhood Settings (1) AND	
CFS125	Safety in Early Childhood Settings (1) AND	
ECH280	Food Experiences With Young Children (1) OR	
EED215	Early Learning: Health, Safety, Nutrition and Fitness (3)	3
CFS101AH	Art Activities for the Young Child (1) AND	
ECH281	Movement/Music for the Young Child (1) OR	
ECH128	Early Learning: Play and the Arts (3) OR	
+EED210	Creative and Cognitive Play (3)	2-3
EDU222	Introduction to the Exceptional Learner (3) OR	
EED222	Introduction to the Exceptional Young Child: Birth to Age Eight (3)	3
+EED260	Early Childhood Infant/Toddler Internship (1) OR	
+EED261	Early Childhood Preschool Internship (1)	1

Women and Gender Studies

Academic Certificate: AC 6225N

15 Credits

Program Contact

Donna Thompson | 480-857-5534|

donna.thompson@cgc.edu

Program Description

The Academic Certificate (AC) in Women and Gender Studies is an intensive interdisciplinary liberal arts certificate program, which provides students with tools and opportunities to discuss and critique historical and contemporary theories and practices of feminism(s) and gender identities. The curriculum enables students to think critically, analyze problems, and communicate effectively. Using women`s experiences and perspectives, students explore cultural and global issues by completing a variety of courses focusing on gender, history, culture, class, race, ethnicity, and sexuality to foster equality and understanding.

Program Notes

This program is not eligible for Title IV Federal Financial Aid.

Students must earn a grade of C or better for all courses required within the program. Overall program minimum GPA = 2.00.

+ indicates course has prerequisites and/or corequisites.

Required Courses: 3 Credits

WST100	Introduction to Women's and Gender Studies	3

Restricted Electives: 12 Credits

Students must complete 12 credits from the list below:

ASB211	Women in Other Cultures	3
ENH/WST284	19th Century Women Writers	3
ENH/WST285	Contemporary Women Writers	3
HIS201	History of Women in America	3
HLR/WST286	Women and Health: Body/Mind/Spirit/ Connection	3
HUM/WST209	Women and Films	3
+PSY235	Psychology of Gender	3
REL/WST290	Women and World Religion	3
SOC212	Gender and Society	3
WST120	Gender, Class, and Race	3
WST128	Law and Violence Against Women	3
WST160	Women and the Early American Experience	3
WST161	American Women Since 1920	3
WST200	Essential Feminist Writing	3

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

Special Programs

Continuing Education and Workforce Development

Chandler-Gilbert Community College offers life-long learning opportunities through non-credit courses. The Continuing Education Department offers courses designed to enhance personal and professional development through classroom instruction as well as online learning.

Workforce development at CGCC brings together employers, employees and education. Instruction is either at the company, at the college, or online. Students can enroll in CTE programs or take courses to learn skills needed by current or future employers.

To continue learning with flexible courses year-round, call 480-857-5500.

English as a Second Language

CGCC is committed to a partnership in learning with students who are non-native English speakers. The English as a Second Language (ESL) courses are designed to help foreign speakers from a variety of countries learn English by emphasizing four skill areas: listening, speaking, reading, and writing.

Students enrolling in ESL courses should be tested. Based on test scores, students are placed in the appropriate-level conversation, grammar, and writing courses. Call 480-732-7159 to schedule an appointment for ESL testing.

Call 480-857-5010 for more information about CGCC's ESL program.

Fitness, Wellness and Recreation

CGCC offers a variety of fitness, wellness, and recreation opportunities on the Pecos and Williams Campus.

Fitness Center

The Pecos Fitness Center features state-of-the-art cardiovascular training equipment, Life Fitness and Cybex weight training machines, and a complete free-weight area with Olympic style platforms and bumper plates. The Fitness Center is equipped with TRX trainers, plyometric boxes, medicine balls, stability balls, bands and hurdles for complete performance training. Whether you are an elite athlete or a week-end warrior we have all of the equipment that you need.

All members of the Pecos Fitness Center are offered personalized instruction, a complete fitness assessment, and body composition analysis from our degreed and certified instructors. Fitness Center members also have access to amenities such as locker rooms and shower facilities.

To use the Fitness Center, all students must be enrolled in a credit (PED115) or non-credit (Fitness 600-100) Lifetime Fitness course. PED115 students also have access to Group Fitness Courses. Additional information is available by calling the Pecos Campus Fitness Center at 480-732-7200.

Group Fitness Classes

Chandler-Gilbert also has a wide variety of group fitness classes open to students. All Group Fitness classes are 1-credit classes and have the PED101 prefix. Students may choose from Boot Camp Fitness, Zumba, Pilates, Yoga, Restorative Yoga, Stretch and Relaxation, Tai Chi, Karate
and other classes.

To see a complete list of group fitness classes being offered this semester, please see the current schedule of classes.

Students, faculty, staff, and community members interested in using the Fitness Center or taking a group fitness class can contact the Pecos Campus Fitness Center at 480-732-7200 for more information.

Honors Program

The CGCC Honors Program provides the opportunity for academically advanced students to participate in challenging and rewarding educational experiences. The purpose of the Honors Program is to foster greater depth of thought in reading, writing, and discussion with faculty and guest lecturers, which will better prepare Honors students to complete baccalaureate

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

degrees or to begin their careers. A variety of academic scholarships are available to eligible Honors Program students.

Honors students enjoy:

- Scholarships
- Special recognition on transcripts and diplomas
- Cultural and social activities, such as the Honors Forum Lecture Series and other experiential learning activities
- Enhanced intellectual growth through Honors courses and projects

Students with a cumulative grade point average of 3.25 or higher and have earned at least 12 credit hours of Maricopa Community College coursework are invited to apply as an Honors Achievement Scholar. Recent high school graduates with a 3.0 GPA from attending an accredited Maricopa County high school are invited to apply to the Honors Program as a Presidents' Scholar. Other requirements may apply at the time of application.

For full details and specific requirements about the Honors Program or Honors scholarships, visit www.cgc.edu/honors or contact the Honors Office at 480-732-7252.

Performing Arts

The Performing Arts Program at CGCC offers an integrated approach to dance, theatre, and music. The classes, while separate, are coordinated within the area to provide students a broader base and more versatility in their performing arts education.

Students can explore all aspects of the performing arts at CGCC. The department offers a transfer program to four-year institutions in music performance, music education, music theory, dance education, dance performance, theater education, theater performance, technical theater and musical theater. Two-year degrees are offered in dance, theater and music business as well as a certificate of completion in music business. Preparing for life after CGCC is the focus of the program and student success is the goal of the dedicated faculty.

Courses available at CGCC are listed in the Course Descriptions section of this document. General Education Requirements are also listed. For the most current information regarding degree requirements, log on to curriculum.maricopa.edu

COURSE DESCRIPTIONS

Course Descriptions

All courses offered by the Maricopa Community Colleges appear in a standardized format using six common course elements. Students are encouraged to become familiar with the course elements included in a course description. Please see "How to Read Course Descriptions".

The courses that follow are offered at Chandler-Gilbert Community College (CGCC). Not all courses in this section will necessarily be offered during any given school year. Not all courses listed in the required courses and/or restricted elective areas of shared occupational programs are offered at CGCC. Please check the current class schedule for course availability. The intent of the Course Description section is to enable students to review courses that are available at CGCC.

How to Read Course Descriptions

All courses offered at the Maricopa Community Colleges are identified by a three-letter abbreviation of the academic subject plus a three-digit number (e.g., ENG101 identifies an English course). Course descriptions are listed alphabetically and in ascending numerical order. Each course listing has six common elements:

1. Course Prefix: Three-letter subject code abbreviation indicating discipline or area of study (e.g., ENG for English).
2. Course Number: Three-digit number assigned to indicate sequence and academic level. Numbers range from 001-299. Courses numbered below 100 are offered for the purpose of strengthening skills and knowledge and cannot be applied toward degrees awarded by Maricopa Community Colleges. These courses cannot be transferred to four-year institutions. First-year courses are generally identified with 100-level numbers. Second-year courses are generally identified with 200-level numbers.
3. Course Title: Identifying name of the course. May also indicate course level (e.g., College Mathematics or Beginning Spanish Conversation I).
4. Course Description: Brief statement describing the content of the course. Each instructor's course syllabus gives additional information, including objectives and grading criteria.
5. Course Credit Hours: College credit hours awarded for satisfactory completion of the course.
6. Course Prerequisites and/or Corequisites: Requirements that must be met before or, in the case of corequisites, at the same time as enrollment in a course. Not all courses have prerequisites or corequisites.
7. Shared Unique Number (SUN) System: The Shared Unique Number (SUN) System is a college course numbering system designed to help students locate and enroll in courses that have direct equivalents for transfer among Arizona's public community colleges and three state universities.

EXAMPLE:

(1) = Course Prefix
(2) = Course Number
(3) = Course Title
(4) = Course Description
(5) = Course Credits
(6) = Course Prerequisites and/or Corequisites
(7) = Shared Unique Number (SUN) System
* = Periods: Weekly time in class during a typical 16-week semester; 50 minutes = 1 period.

(1)ENG (2)101 / (5)3 CREDITS / *3 PERIODS

(7) SUN ENG 1101

(3)First-Year Composition

(4)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.

(6)Prerequisites: Appropriate writing placement test score, or a grade of C or better in ENG091 or ESL097.

ACC – Accounting

ACC105 / 3 CREDITS / 3 PERIODS

Payroll, Sales and Property Taxes

Tax reporting for payroll, sales, and personal property. Prerequisites: None.

For the most current information regarding course descriptions, log on to curriculum.maricopa.edu.

ACC111 / 3 CREDITS / 3 PERIODS

Accounting Principles I

Fundamental theory of accounting principles and procedures. Prerequisites: None.

ACC112 / 3 CREDITS / 3 PERIODS

Accounting Principles II

Continuation of the fundamental theory of accounting principles and procedures, including interpretation of general purpose financial statements. Prerequisites: ACC111 with a grade of "C" or better, or permission of department or division.

ACC115 / 3 CREDITS / 3 PERIODS

Computerized Accounting

Understanding of fundamental accounting principles and mastery of an accounting information systems including the general ledger, accounts receivable, accounts payable and payroll. Prerequisites: None.

ACC121 / 3 CREDITS / 3 PERIODS

Income Tax Preparation

Preparation of and practical experience in preparing individual federal income tax returns using computer software. Prerequisites: None.

ACC211 / 3 CREDITS / 3 PERIODS

SUN ACC2201

Financial Accounting

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

ACC212 / 3 CREDITS / 3 PERIODS

SUN ACC2202

Managerial Accounting

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

ACC216 / 3 CREDITS / 3 PERIODS

Fraud Examination

Fundamental theory of fraud examination methodology to detect and prevent accounting fraud. Prerequisites: A grade of C or better in (ACC230 or ACC112 or ACC211) or permission of Department or Division.

ACC219 / 3 CREDITS / 3 PERIODS

Intermediate Accounting I

Theory and practice applicable to determination of asset values, liabilities, and related problems of income determination. Prerequisites: ACC212 or ACC240 with a grade of "C" or better, or permission of Department/Division.

ACC220 / 3 CREDITS / 3 PERIODS

Intermediate Accounting II

Continuation of the theory and practice applicable to liabilities and owner's equity; special problems and financial reporting. Prerequisites: ACC219 with a grade of "C" or better, or permission of Department/Division.

ACC230 / 3 CREDITS / 3 PERIODS

Uses of Accounting Information I

Introduction to the uses of accounting information for internal and external purposes with emphasis on financial statement analysis. Prerequisites: A grade of C or better in (ACC111 or ACC211) or [(ENG101 or ENG107) and MAT151 and CRE101] or (appropriate District English, Reading, and Math placement).

ACC240 / 3 CREDITS / 3 PERIODS

Uses of Accounting Information II

Introduction to the uses of accounting information for internal and external purposes with emphasis on analysis for use by management. Prerequisites: ACC230.

ACC296WA / 1 CREDIT / 5 PERIODS

Cooperative Education

Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. Prerequisites: Completion of at least twelve

For the most current information regarding course descriptions, log on to curriculum.maricopa.edu.

(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.

AET – Aeronautics

AET107 / 5 CREDITS / 5 PERIODS

Private Pilot Ground School

Ground school in preparation for the Federal Aviation Administration (FAA) Private Pilot Certificate written examination. Includes aerodynamics, airplane systems, airports, airspace, communications, Federal Air Regulations, navigation, airplane performance, flight planning, and flight physiology. Requires passing a written exam similar to the FAA Private Pilot written exam. Prerequisites: None. Corequisite: AET110.

AET107HH / 5 CREDITS / 5 PERIODS

Private Pilot Ground School: Helicopter

Ground school in preparation for the Federal Aviation Administration (FAA) Private Pilot Certificate written examination. Includes aerodynamics, helicopter systems, airports, airspace, communications, Federal Air Regulations, navigation, helicopter performance, flight planning, and flight physiology. Requires passing a written exam similar to the FAA Private Pilot written exam. Prerequisites: None. Corequisites: AET110HH.

AET110 / 1 CREDITS / 5 PERIODS

Private Pilot Flight

Flight course in preparation for the Federal Aviation Administration (FAA) Private Pilot Certificate practical examination. Includes preflight preparation and planning, ground operations, airport operations, departures, navigation, basic instrument flight, night flight, slow flight, ground reference maneuvers, emergency operations, and arrivals. Approximately 50 hours airplane flight experience at student`s expense required. Requires passing check ride similar to the FAA Private Pilot check ride. Prerequisites: None. Corequisites: AET107.

AET112 / 2 CREDITS / 5 PERIODS

Private Pilot Flight-Test Course

Flight course in preparation for transition into continued AET course work. Includes preflight preparation and planning, ground operations, airport operations, departures, navigation, basic instrument flight, slow flight, ground reference maneuvers, emergency operations, and arrivals. Requires passing check ride similar to the Federal Aviation Administration Private Pilot check ride. Prerequisites: FAA Private Pilot Airplane Single-Engine Land or advanced certification. Corequisites: AET107.

AET115 / 3 CREDITS / 3 PERIODS

Aviation Meteorology

Meteorology for professional pilots. Includes atmosphere, air mass circulation, cloud type identification, weather hazards, and high altitude, Arctic, and tropical weather systems. Basic forecasting, use of Direct User Access Terminal (DUAT) systems and reading and interpreting weather charts. Prerequisites: None.

AET203 / 3 CREDITS / 3 PERIODS

Basic Airplane Systems

Beginning commercial pilot ground course in preparation for the Federal Aviation Administration (FAA) Commercial Pilot Certificate and Commercial written examination. Discussions will include, but not be limited to reciprocating engines, engine systems, airplane systems, altitude systems, and commercial regulations. Prerequisites: AET207, AET217 and AET210 or permission of instructor. Corequisites: AET220 and AET213.

AET205 / 4 CREDITS / 4 PERIODS

Aircraft Structures, Systems, and Maintenance

Survey of airframe structures, systems, and maintenance regulations for pilots. Includes aircraft and airfoil design and construction, and electrical, instrumentation, and automatic flight control systems. Maintenance privileges and limitations, and forms and records. Prerequisites: Private Pilot Certificate or permission of instructor.

For the most current information regarding course descriptions, log on to curriculum.maricopa.edu.

AET207 / 3 CREDITS / 3 PERIODS

Attitude Instruments and Navigation

Beginning instrument pilot ground course in preparation for the Federal Aviation Administration (FAA) Instrument Pilot Rating and Instrument rating written examinations. Includes preflight preparation, flight instruments, basic attitude instrument flying, radio navigation systems, and technically advanced aircraft systems. Prerequisites: AET110 or permission of instructor. Corequisites: AET217 and AET210.

AET208 / 3 CREDITS / 3 PERIODS

Aviation Safety

Introduction to aviation safety, including aviation safety programs, risk management, pilot psychology, physiology, human factors, and accident review and investigation. Prerequisites: A grade of C or better in AET107 or permission of Instructor.

AET210 / 1 CREDITS / 5 PERIODS

Instrument Commercial Flight I

Initial flight course in preparation for the Federal Aviation Administration (FAA) Instrument rating practical examination. Emphasis on night and instrument operations. Student must fly approximately 60 hours at own expense. Requires passing operational phase checks. Prerequisites: AET110 or permission of instructor. Corequisites: AET217 and AET207.

AET213 / 3 CREDITS / 3 PERIODS

Aerodynamics and Performance

Advance instrument and commercial pilot ground course in preparation for the Federal Aviation Administration (FAA) Commercial Pilot Certificate and Commercial written examinations. Includes discussion of aerodynamic factors including lift, weight, drag, and thrust. Discussions will include, but are not limited to aerodynamics, performance, safe and efficient airplane operations, airplane stability and control, stalls and spins. Prerequisites: AET207, AET217, and AET210. Corequisites: AET203 and AET220.

AET215 / 4 CREDITS / 4 PERIODS

Aircraft Powerplants

Survey of engines and engine systems for pilots. Includes theory and analysis of reciprocating and turbine aircraft engines. Lubrication, ignition, fuel control, cooling, exhaust, and propellers. Prerequisites: AET205 or permission of instructor.

AET217 / 3 CREDITS / 3 PERIODS

Instrument Procedures

Advance instrument pilot ground school course in preparation for the Federal Aviation Administration (FAA) Instrument pilot rating and Instrument rating written examinations. Include Federal Aviation Regulations, instrument approach procedures, and instrument enroute considerations. Requires passing written exam similar to the Instrument pilot rating and Instrument rating written exams. Prerequisites: AET110 or permission of instructor. Corequisites: AET210 and AET207.

AET220 / 1 CREDITS / 5 PERIODS

Instrument Commercial Flight II

Advanced flight course in preparation for the Federal Aviation Administration (FAA) Commercial Pilot practical examinations. Emphasis on commercial and high performance operations. Student must fly approximately 60 hours at own expense. Requires passing instrument ration and commercial pilot stage checks similar to the FAA check rides. Prerequisites: AET210, AET207 and AET217. Corequisites: AET203 and AET213.

AET225 / 4 CREDITS / 4 PERIODS

Advanced Aircraft Systems

Survey of advanced aircraft systems to include electrical, automatic flight control, pressurization, cabin atmosphere, ice control, rain control, fire detection and extinguishing. Includes theory and analysis of turbine aircraft engines. Introduction to turbine engine systems to include lubrication, ignition, fuel control, cooling, exhaust, and propellers. Includes overview of maintenance publications, forms and records. Prerequisites: Private Pilot Certificate or permission of Instructor.

For the most current information regarding course descriptions, log on to curriculum.maricopa.edu.

AET227 / 5 CREDITS / 5 PERIODS

Certified Flight Instructor: Airplane, Single Engine Land Ground School

Ground school in preparation for the Federal Aviation Administration (FAA) Certified Flight Instructor and Fundamentals of Instruction written examinations. Includes fundamentals of instruction, aerodynamics, airplane performance, systems, operations, weight and balance, weather, federal regulations, navigation, maneuvers, pilot physiology, ethics, and aeronautical decision making. Requires passing written exams similar to the FAA Certified Flight Instructor: Airplane, and Fundamentals of Instruction written exams. Prerequisites: AET240 or FAA Commercial Pilot Certificate with instrument rating. Corequisite: AET230.

AET229 / 3 CREDITS / 3 PERIODS

Crew Resource Management

Crew communications, teamwork, leadership, "followership," decision-making, and situational awareness; also the benefits of diversity, and the role diversity plays in the modern aerospace industry. Emphasis on utilization of all available resources in order to conduct a safe and efficient flight. Prerequisites: A grade of C or better in AET217 or permission of Instructor..

AET230 / 1 CREDIT / 3 PERIODS

Certified Flight Instructor: Airplane, Single Engine Land

Flight course in preparation for the Federal Aviation Administration (FAA) Certified Flight Instructor: Airplane practical examination. Emphasis on demonstration and analysis of flight maneuvers. Includes preflight, ground operations, airport operations, takeoffs, climbs, flight fundamentals, stalls, spins, slow flight, basic instrument operations, performance maneuvers, ground reference maneuvers, emergency operations, approaches, landings, and postflight procedures. Requires approximately 25 hours of flight that includes high performance operations at student's expense. Also requires passing check ride similar to the FAA Certified Flight Instructor check ride. Prerequisites: AET240 or FAA Commercial Pilot Certificate with instrument rating. Corequisite: AET227.

AET237 / 2 CREDITS / 2 PERIODS

Multiengine Airplane Pilot Ground School

Aeronautical knowledge necessary to meet requirements for a multiengine airplane rating including orientation, aerodynamics, airplane systems, airplane performance, flight planning, and emergency procedures. Prerequisites: AET220 or FAA Commercial Pilot Certificate with instrument rating. Corequisites: AET240.

AET240 / 1 CREDIT / 1.5 PERIODS

Multiengine Airplane Pilot Flight

Flight course in preparation for the Federal Aviation Administration (FAA) Multiengine Airplane practical examination. Approximately 15 hours of flight experience at the student's expense and passing check ride similar to the FAA Multiengine check ride are required. Prerequisites: AET220 or FAA Commercial Pilot Certificate with instrument rating. Corequisites: AET237.

AET257 / 3 CREDITS / 4 PERIODS

Readings in Aviation

Critical inquiry of a particular aviation theme from a wide variety of sources. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. International data communication facilities and equipment made available for student use. Prerequisites: ENG102 or ENG111, and permission of instructor.

AET258 / 3 CREDITS / 3 PERIODS

Certified Flight Instructor: Instrument Airplane Ground School

Aeronautical knowledge and practical teaching ability necessary to obtain an Instrument Flight Instructor Certificate with an Airplane-Single-Engine rating and necessary to satisfactorily pass the Flight Instructor Instrument knowledge test. Prerequisites: Valid FAA Commercial Pilot Certificate, or Airline Transport Pilot Certificate with instrument rating and the appropriate category and class of airplane used in the course; and Flight Instructor Certificate-Airplane. Corequisites: AET270.

For the most current information regarding course descriptions, log on to curriculum.maricopa.edu.

AFR – African American Studies

AFR110 / 3 CREDITS / 3 PERIODS

Introduction to African-American Studies

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

AFR202 / 3 CREDITS / 3 PERIODS

Ethnic Relations in the United States

Basic concepts and processes, including historic overview, of interethnic relations in the United States: culture, race, ethnicity, ethnocentrism, prejudice, discrimination, racism, assimilation, acculturation, and individual and group responses to interethnic contact. Cultural knowledge and intercultural communication skills and perspectives as fundamental tools for successful management of social relations in a multicultural world. Prerequisites: None. Cross-References: ASB202, CCS202.

AFR207 / 3 CREDITS / 3 PERIODS

Black Women

Analysis and discussion of critical issues for Black women in America today. Prerequisites: None. Cross-References: WST207.

AIM – Artificial Intelligence and Machine Learning

AIM100 / 3 CREDITS / 3 PERIODS

Introduction to Artificial Intelligence

Basic concepts and applications of artificial intelligence (AI), including AI project cycles. Focus on issues surrounding AI including ethics, bias, culture, regulations, and professional expectations. Prerequisites: None.

AIM110 / 3 CREDITS / 4 PERIODS

Introduction to Machine Learning

Introduction to machine learning concepts and Python applications, including data acquisition, supervised and unsupervised learning, and data modeling. Prerequisites: A grade of C or better in AIM100, CIS156, and MAT206.

AIM210 / 3 CREDITS / 4 PERIODS

Natural Language Processing

Fundamental concepts in Natural Language Processing (NLP) and text processing. Focus on knowledge and skills necessary to create a language recognition application. Prerequisites: A grade of C or better in AIM110.

AIM220 / 3 CREDITS / 4 PERIODS

Artificial Intelligence for Computer Vision

Understand and apply the basic techniques to process images using OpenCV and Python libraries. Prerequisites: A grade of C or better in AIM110.

AIM230 / 3 CREDITS / 4 PERIODS

Artificial Intelligence for Business Solutions

Fundamentals of artificial intelligence (AI) and machine learning to support business solutions. Prerequisites: A grade of C or better in AIM210 and AIM220.

AIM240 / 3 CREDITS / 4 PERIODS

Artificial Intelligence Capstone Project

Focus on how a social issue is explored, brought through the Artificial Intelligence (AI) Project cycle, and delivered as a solution using the different domains of AI, including computer vision and natural language processing. Prerequisites: A grade of C or better in AIM210 and AIM220.

For the most current information regarding course descriptions, log on to curriculum.maricopa.edu.

AIS – American Indian Studies

AIS105 / 3 CREDITS / 3 PERIODS

Introduction to American Indian Studies

Introduction to political, economic, and social structures of American Indian Nations. Provides overview of American Indian tribal cultures prior to contact, the impact of European contact, and the influence of western social systems on tribal nations. Prerequisites: None.

AIS110 / 3 CREDITS / 3 PERIODS

Navajo Government

Addresses and examines major historical developments of the Navajo People with a focus on government, law, society, livelihood, tradition, and culture. Includes the major components and operation of Navajo government and related tribal laws, such as Title II and Title VII of the Navajo Nation Code, as well as the significance of the Treaty of 1868. Federal Indian policies and their impact on Navajo society and government, the importance of federal and tribal citizenship and related federal and tribal laws, and the role of the Navajo clanship system and other relevant cultural concepts addressed. Prerequisites: None.

AJS – Administration of Justice Studies

AJS101 / 3 CREDITS / 3 PERIODS

SUN AJS 1101

Introduction to Criminal Justice

An introduction to crime and society's responses to it. Examines the nature and causes of crime, the criminal law, constitutional safeguards, and the organization and operation of the criminal justice system including the police, courts, jails, prisons, probation and parole departments, and community corrections agencies. Covers the history of the criminal justice system, terminology and career opportunities. Prerequisites: None.

AJS102 / 17 CREDITS / 30 PERIODS

Peace Officer Certification I

Training program for limited authority peace officers, leading to certification by the Arizona Peace Officer Standards and Training Board (AzPOST – The statutory agency for certifying peace officers – all person with arrest powers – in Arizona.) Includes introduction to Law Enforcement, Law and legal matters, patrol procedures, traffic control, and police proficiency skills. Prerequisites: Student must comply with AzPOST employment standards for peace officers.

AJS109 / 3 CREDITS / 3 PERIODS

Substantive Criminal Law

Covers philosophy of legal sanctions and historical development from the common law to modern American criminal law, classifications of crimes, elements of and parties to crimes, general definition of crimes, common defenses utilized. Includes specific offenses and the essential elements of each offense. Prerequisites: None.

AJS113 / 3 CREDITS / 3 PERIODS

Criminal Justice Crime Control Policies and Practices

Focus on changing the distribution of crime opportunities rather than offender motivation. Topics include application of situational crime prevention strategies, problem-oriented crime control approaches, hot spots policing, defensible space, and crime prevention through defensible space. Prerequisites: None.

AJS119 / 3 CREDITS / 4 PERIODS

Computer Applications in Justice Studies

Provides literacy in microcomputer applications in major areas of the criminal justice system. Examines availability and uses of current software packages in criminal justice work. Provides hands-on experience with appropriate integrated software packages pertaining to justice studies. Prerequisites: None.

For the most current information regarding course descriptions, log on to curriculum.maricopa.edu.

AJS123 / 3 CREDITS / 3 PERIODS

Ethics and the Administration of Justice

Description: Introduces and explores ethical issues and the justice system. Focuses on ethics and the law, the police, courts and corrections. Reviews ethical theory, concepts and practices as they relate to administration of justice. Explores issues of how media/social media shape ethics. Encourages critical thinking and value decision making in criminal justice system situations. Prerequisites: None.

AJS139 / 3 CREDITS / 3 PERIODS

Emergency Response to Terrorism

Fundamentals of emergency response to suspected terrorist events. Historical perspective of terrorist activities and methods by which responders can identify and protect themselves and the public from these threats. Coordination of responding agencies. Prerequisites: None.

AJS195 / 3 CREDITS / 3 PERIODS

International and Domestic Terrorism

An overview of the history, structure, goals, and activities of domestic and international terrorist groups. Explores theories explaining terrorism and reviews methods used to combat it. Prerequisites: None.

AJS200 / 3 CREDITS / 3 PERIODS

Current Issues in Criminal Justice

Examines current issues, techniques and trends in the Criminal Justice System. Prerequisites: None.

AJS201 / 3 CREDITS / 3 PERIODS

Rules of Evidence

A practical insight into the rules of evidence to include how to recognize evidence: the general rules governing admissibility of evidence; the hearsay rule and its exceptions; the use of documentary evidence, written memoranda, photographs, recordings and electronic surveillance; corpus delicti; opinion evidence, circumstantial evidence, evidential privileges. Prerequisites: None.

AJS202 / 13 CREDITS / 22.5 PERIODS

Peace Officer Certification II

A continuation of the basic, entry-level training program leading to full authority peace officer certification as required by the Arizona Peace Officer Standards and Training Board I (AzPOST). Subjects to include: Patrol Procedure, Accident Investigation, Records and Report Writing, Community Relations, Criminal Investigations, and Officer Survival. Prerequisites: Grade of "C" or better in AJS/LEO102 or AzPOST Limited Authority Peace Officer certification.

AJS205 / 3 CREDITS / 3 PERIODS

Effective Communication and Report Writing in Criminal Justice

Overview of effective communication for criminal justice agencies. Covers the communication process and flow. Written communication emphasized with report writing, including characteristics of reports and field notes, and the importance and uses of each. Form, style, and procedures for writing various reports, including elements of composition, required substance, proper and improper conclusions, and descriptions of persons and property.

AJS212 / 3 CREDITS / 3 PERIODS

Juvenile Justice Procedures

Examines the nature and extent of juvenile delinquency to the present. Including but not limited to the history, jurisdictions, terminology, procedures, and institutions of the juvenile justice system. Prerequisites: None.

AJS213 / 3 CREDITS / 3 PERIODS

Evidence Technology/Fingerprints

Fundamental principles and processes of fingerprints to include identification, interpretation, and classification. In addition, students will apply fingerprinting latent fingerprint developing, preservation of evidence and the chain of custody. Prerequisites: None.

For the most current information regarding course descriptions, log on to curriculum.maricopa.edu.

AJS215 / 3 CREDITS / 3 PERIODS

Criminalistics: Physical Evidence

The scientific analysis and examination of physical evidence with emphasis on scientific investigation, recognition, collection, and preservation of evidence. Topics include fingerprints, shoe prints, tool marks, firearms identification, paint chips and arson. Prerequisites: None.

AJS216 / 3 CREDITS / 3 PERIODS

Criminalistics: Biological Evidence

The scientific analysis and examination of biological evidence with emphasis on collection and preservation of evidence. Topics discussed include blood, drugs, blood alcohol, hairs and fibers, and topics of special interest in criminalistics. Prerequisites: None.

AJS225 / 3 CREDITS / 3 PERIODS

Criminology

Study of deviance, society's role in defining behavior; theories of criminality and the economic, social, and psychological impact of crime; relationships between statistics and crime trends. Examines crime victimization and the various types of crime and categories of offenders. Required in the AJS curriculum. Prerequisites: None.

AJS230 / 3 CREDITS / 3 PERIODS

The Police Function

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.

AJS240 / 3 CREDITS / 3 PERIODS

The Correction Function

Examines the history and development of correctional theories and institutions. Prerequisites: None.

AJS241 / 3 CREDITS / 3 PERIODS

Police Photography

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.

AJS258 / 3 CREDITS / 3 PERIODS

Victimology and Crisis Management

Victimology, the criminal justice system, techniques of crisis intervention, and the importance of a multicultural and global perspective. Includes sexual assault, family violence, post-traumatic stress disorder, the role of substance abuse, effective coping skills, appropriate community resources and the responsiveness of the justice system. Prerequisites: None.

AJS260 / 3 CREDITS / 3 PERIODS

Procedural Criminal Law

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.

AJS270 / 3 CREDITS / 3 PERIODS

Community Relations

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.

For the most current information regarding course descriptions, log on to curriculum.maricopa.edu.

AJS275 / 3 CREDITS / 3 PERIODS

Criminal Investigation I

Introduction to the theory of criminal investigation. Examines crime scene procedures, case preparation, interviewing, and basic investigative techniques. Prerequisites: None.

AMT – Aircraft Maintenance Technology

AMT124 / 5 CREDITS / 9 PERIODS

Aircraft Forms and Regulations, Weight and Balance, Drawings, and Ground Operations

Federal Aviation maintenance publications, forms and records. Overview of technician's privileges and limitations. Perform aircraft weight and balance, aircraft ground operations and fuel servicing techniques. Drawings, symbols and schematic diagrams. Prerequisites: Admission to the Aircraft Maintenance Technology program.

AMT126 / 9 CREDITS / 12 PERIODS

Fundamentals of Mathematics and Electricity

Mathematical computation of fundamental electrical circuit parameters. Basic definitions, laws, and concepts. Schematic, wiring, and parts placement diagrams. Test and troubleshoot electrical and electronic components and circuits. Prerequisites: Admission to the Aircraft Maintenance Technology program.

AMT128 / 5 CREDITS / 9 PERIODS

Fundamentals of Aviation Physics, Corrosion Control, Materials and Processes, Fluid Lines and Fittings

Basic concepts of motion, fluid dynamics, heat and sound, aerodynamics, aircraft structure and theory of flight. Fluid lines and fittings, component identification, function, inspection, and installation. Cleaning and corrosion control, materials and processes, non-destructive testing, and precision measurement techniques. Prerequisites: Admission to the Aircraft Maintenance Technology program.

AMT220 / 3 CREDITS / 6 PERIODS

Fundamentals of Aircraft Wood Structures, Covering and Finishing, and Bonded Structures

Theories and techniques of aircraft wood structures. Inspection, test and repair of aircraft fabric and wood structures. Aircraft structural design and methods of working with selected materials. Characteristics of composites, inspections and repairs. Prerequisites: Admission to the program.

AMT222 / 4 CREDITS / 6 PERIODS

Atmosphere Control, Fire Detection, Ice and Rain Protection Systems

Operation and maintenance of aircraft auxiliary systems. Inspection, servicing, troubleshooting and repair of environmental control, ice and rain control, fire protection and warning systems. Prerequisites: Admission to the program.

AMT224 / 5 CREDITS / 11 PERIODS

Aircraft Sheet Metal

Inspection, fabrication, and repair techniques of aircraft structural and nonstructural components. Sheet metal heat-treating techniques. Prerequisites: Admission to the program.

AMT226 / 7 CREDITS / 12 PERIODS

Aircraft Landing Gear, Hydraulic, Pneumatic, Fuel, Position and Warning Systems

Identification, inspection, repair, and troubleshooting techniques of aircraft landing gear, hydraulic, fuel, pneumatic, and position and warning system components. Prerequisites: Admission to the program.

AMT228 / 7 CREDITS / 12 PERIODS

Aircraft Electrical Systems, Instruments, Fuel Indicating, Communication and Navigation Systems

For the most current information regarding course descriptions, log on to curriculum.maricopa.edu.

Proper operation, inspection, servicing and troubleshooting of DC (Direct Current) and AC (Alternating Current) sources, systems, and components. Mechanical and electrical sensing and information display systems. Fuel indicator system inspections, repairs, and troubleshooting. Transmitter and receiver fundamentals. Avionics installation, inspection and testing. Prerequisites: Admission to the program.

AMT230 / 6 CREDITS / 11 PERIODS

Airframe Assembly, Inspection and Welding

Aircraft assembly and rigging. Flight control balancing and rigging. Airframe inspection techniques, reporting procedures, and aircraft jacking. Welding techniques, theory, and materials identification. Prerequisites: Admission to the program.

AMT263 / 5 CREDITS / 9 PERIODS

Aircraft Turbine Engines

Historical development and application of turbine engines. Theory of thrust and the design and environmental factors which influence thrust. Turbine engine troubleshooting, inspection, service, repair and overhaul. Operational characteristics and engine test techniques on the aircraft and in test cells. Prerequisites: Admission to the program.

AMT264 / 7 CREDITS / 11 PERIODS

Aircraft Reciprocating Engines

Historical development and application of reciprocating engines, theory, design, and operations. Techniques used in troubleshooting, overhaul, inspection, and repair of opposed and radial engines. Prerequisites: Admission to the program.

AMT266 / 6 CREDITS / 9 PERIODS

Engine Fuel Systems, Fuel Metering and Induction System

Inspection, servicing, troubleshooting, overhaul, and repair of aircraft fuel systems and components, fuel metering devices, injection systems, turbochargers, and superchargers. Induction system principles of operation and design. Prerequisites: Admission to the program.

AMT268 / 6 CREDITS / 12 PERIODS

Engine Electrical, Ignition and Starter Systems

Inspect, service, troubleshoot, overhaul, and repair of engine electrical, ignition, starter systems, and components. Prerequisites: Admission to the program.

AMT270 / 5 CREDITS / 8 PERIODS

Engine Instruments, Fire Protection and Lubrication, Cooling and Exhaust Systems

Operation, maintenance, servicing, inspection, repair, and troubleshooting of engine instruments, fire detection and extinguishing, engine lubrication, cooling, and exhaust systems. Prerequisites: Admission to the program.

AMT272 / 4 CREDITS / 8 PERIODS

Propeller Systems and Engine Inspections

Historical development, operation, disassembly, inspection, repair, and maintenance of propellers. Reciprocating and turbine engine inspection and documentation. Prerequisites: Admission to the program.

ARH – Art Humanities

ARH100 / 3 CREDITS / 3 PERIODS

Introduction to Art

Understanding and enjoyment of art and visual culture through study of two-dimensional and three-dimensional works of art, design elements, media and processes, and cultural contexts. Emphasis on contemporary topics and cultural diversity in the arts. Prerequisites: None.

For the most current information regarding course descriptions, log on to curriculum.maricopa.edu.

ARH101 / 3 CREDITS / 3 PERIODS

SUN ART 1101

Prehistoric Through Gothic Art

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

ARH102 / 3 CREDITS / 3 PERIODS

SUN ART 1102

Renaissance Through Contemporary Art

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

ARH109 / 3 CREDITS / 3 PERIODS

History of American Art

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

ARH112 / 3 CREDITS / 3 PERIODS

History of Modern Art

Development of and significant aspects of modern art since the mid-nineteenth century. Emphasis on modern art`s relationship to socio-political and aesthetic developments, new media and the rise of mass culture. Prerequisites: None.

ARH115 / 3 CREDITS / 3 PERIODS

History of Photography

Survey of history of photography from beginning to present. Emphasizes medium`s impact upon society and other visual arts. Technical developments, aesthetic concerns, and individual photographers studied. Prerequisites: None.

ARH145 / 3 CREDITS / 3 PERIODS

History of American Indian Art

Survey of American Indian Art from precontact to present. Reviews the impact of these art forms on contemporary American society, other world societies and on the visual arts. Explores characteristics, cultural influences and concerns represented in various art forms past and present. Features field trips to galleries and collections Prerequisites: None.

ARH203 / 3 CREDITS / 3 PERIODS

Art of Ancient Egypt

The art and culture of ancient Egypt from prehistoric through the Greco-Roman period. Prerequisites: None.

ARH204 / 3 CREDITS / 3 PERIODS

Roman Art and Architecture

Detailed examination of the art and architecture of ancient Rome from the monarchical period to the late empire, with emphasis on the visual culture and artifacts of the civilization. Prerequisites: None.

ART – Art

ART100 / 1 CREDIT / 2 PERIODS

Introduction to Digital Arts

Foundation course in digital arts and design, with emphasis in the production of art using the computer. Prerequisites: None.

ART106 / 3 CREDITS / 6 PERIODS

Gallery Operations

Operation of an art gallery. Includes organization, publicity, evaluation of artwork, selection and installation of exhibits. Prerequisites: Permission of Instructor. Course Notes: ART106 may be repeated for a total of six (6) credit hours.

ART111 / 3 CREDITS / 6 PERIODS

SUN ART 1111

Drawing I

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

ART112 / 3 CREDITS / 6 PERIODS

SUN ART 1112

Two-Dimensional Design

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

For the most current information regarding course descriptions, log on to curriculum.maricopa.edu.

ART113 / 3 CREDITS / 6 PERIODS

Color

Investigation seeking visual solutions to a variety of problems concerning color in two and three dimensions and modes of color appearances, including light and effects in design and theory of design. Prerequisites: None.

ART115 / 3 CREDITS / 6 PERIODS

SUN ART 1115

Three-Dimensional Design

Fundamental principles of three-dimensional design. Prerequisites: None.

ART116 / 3 CREDITS / 6 PERIODS

Life Drawing I

Use of form, structure and anatomy of draped and undraped human figure to develop basic principles of sound draftsmanship. Prerequisites: None.

ART117 / 3 CREDITS / 6 PERIODS

Life Drawing II

Further study of form, structure, and anatomy of the draped and undraped human figure with emphasis on composition. Prerequisites: ART116.

ART119 / 3 CREDITS / 6 PERIODS

Penciling for Sequential Art

Development of observational skills as they apply to sequential art. Emphasis on techniques that showcase how characters interact with their environment and manipulate props and cartooning anatomy. Includes techniques on composing page layouts, adapting scripts and reference gathering. Prerequisites: A grade of C or better in ART100 or permission of Instructor.

ART120 / 3 CREDITS / 6 PERIODS

Inking for Sequential Art

Development of inking materials and techniques used in sequential art. Emphasis on the types of tools used in the industry and the various means of employing them. Understanding the duties of the inker and the process of computer finishing. Prerequisites: None.

ART122 / 3 CREDITS / 6 PERIODS

Drawing and Composition II

Emphasis on composition and exploration of drawing media. Prerequisites: ART111.

ART131 / 3 CREDITS / 6 PERIODS

Photography I

Basic photographic principles and techniques. Basic camera functions and controls. Experience in the image-making process by creating and editing photographs for various display environments. Introduction to the photographic aesthetic and photography's role in society. Prerequisites: None. Course Note: Camera required.

ART132 / 3 CREDITS / 6 PERIODS

Photography II

Advanced camera and darkroom techniques. Aesthetic awareness with personal expression. Prerequisites: ART131 or permission of instructor.

ART133 / 3 CREDITS / 6 PERIODS

Photography III

Refinement of aesthetic and technical aspects producing convincing images of highest quality. Prerequisites: A grade of C or better in ART132 or permission of Instructor.

ART137 / 3 CREDITS / 6 PERIODS

Alternative Photographic Processes

Emphasis on development of alternative photographic processes including technique, aesthetics, and creative imagery. Exploration of various types of non-silver photographic processes including cyanotype, Van Dyke, Polaroid imaging, and others. Prerequisites: None.

ART142 / 3 CREDITS / 6 PERIODS

Introduction to Digital Photography

Fundamentals of digital photography. Includes camera operations, exposure techniques, introduction to digital output, and theory of digital photography. Prerequisites: None. Course Note: Digital camera required.

For the most current information regarding course descriptions, log on to curriculum.maricopa.edu.

ART143 / 3 CREDITS / 6 PERIODS

Intermediate Digital Photography

Intermediate theory and techniques of digital photography. Aesthetic awareness and personal expression from image capture through intermediate techniques in the digital darkroom. Introduction to high-resolution digital output. Prerequisites: ART142 or permission of instructor.

ART151 / 3 CREDITS / 6 PERIODS

Sculpture I

Exploration of sculptural form and expression in clay, plaster, stone, wood and metal. Prerequisites: None.

ART161 / 3 CREDITS / 6 PERIODS

Ceramics I

Introduction to ceramic materials and techniques of hand construction, decorating, glazing and throwing on potters' wheel. Prerequisites: None.

ART162 / 3 CREDITS / 6 PERIODS

Ceramics II

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

ART165 / 3 CREDITS / 6 PERIODS

Watercolor Painting I

Transparent and Gouache watercolor painting. Prerequisites: (ART111 and ART112), or permission of instructor.

ART166 / 3 CREDITS / 6 PERIODS

Watercolor Painting II

Painting in water soluble media. Emphasis on individual techniques and design. Prerequisites: ART165.

ART167 / 3 CREDITS / 6 PERIODS

Painting I

Exploration of technical and expressive possibilities of various painting media in easel painting. Prerequisites: (ART111 and ART112), or permission of instructor.

ART168 / 3 CREDITS / 6 PERIODS

Painting II

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

ART169 / 3 CREDITS / 6 PERIODS

2D Media Design

Generation of two-dimensional (2D) images, designs, and media using digital and traditional methods of visual problem solving. Understanding digital and design-based techniques and workflows. Prerequisites: A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: ART100 or permission of Instructor. Cross-References: ADA169.

ART173 / 3 CREDITS / 6 PERIODS

Computer Art

Introduction to the multiple elements of paint software programs using the microcomputer. Basic foundation in the use of computer techniques including color paint programs for the production of computer images. Use of electronic input and output devices. Prerequisites: ART100, or permission of instructor.

ART177 / 3 CREDITS / 6 PERIODS

Digital Photographic Imaging I

Introduction to multiple elements of digital imaging. Basic foundation in photographic manipulation of images, with special attention to aesthetic foundations underlying photographic composition. Prerequisites: A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: ART100 or permission of Instructor. Cross-References: ADA177.

ART178 / 3 CREDITS / 6 PERIOD

Digital Arts Studies

Designed for broad overview of the digital arts. Experience in digital based media, creative problem solving, design and aesthetics. Prerequisites: A grade of C or better in ART100 or permission of Instructor.

For the most current information regarding course descriptions, log on to curriculum.maricopa.edu.

ART190 / 3 CREDITS / 6 PERIODS

Art of Web Site Design

Introduction to design production for websites. Layout, typography and presentation style for HTML (Hyper Text Markup Language). Design of mock-ups using digital design software to produce artistic form and content for the Web using Hyper Text Markup Language (HTML), digital text, and graphics. Discussion of color, proportion, typography and Web-specific design principles. Emphasizes design of cross-browser compatible interfaces that optimize usability, accessibility and browser interoperability. Prerequisites: ART100, or permission of Instructor. CIS133DA recommended.

ART219 / 3 CREDITS / 6 PERIODS

Coloring, Toning and Lettering for Sequential Art

Understanding of the digital rules and programs used in coloring, toning and lettering comics, and the problems presented therein within the sequential narrative. Emphasis on rules and guidelines within the industry, and digital coloring and lettering. Prerequisites: A grade of C or better in (ART100, ART119, and ART120) or permission of Instructor.

ART220 / 3 CREDITS / 6 PERIODS

Publishing for the Comic Industry

Understanding of the comics industry. Includes researching, marketing, packaging, and distributing comics. Emphasis on selling and submitting to comic publishers, how to develop comics for self-publishing, promotional materials, and understanding contracts and copyrights involved in the process of publishing comics. Prerequisites: A grade of C or better in ART100 or permission of Instructor.

ART221 / 3 CREDITS / 6 PERIODS

Comics Creation

Development of a complete sequential comic, using all comics skills from beginning to end. Process includes scripting, penciling, inking, coloring or toning, lettering, and printing for publication. Prerequisites: A grade of C or better in (ART100 and ART219) or permission of Instructor.

ART255AA / 1 CREDIT / 1 PERIOD

Self Promotion

Career goals, presentation of artist, communication skills, keeping files and records, developing self-promotional materials. Prerequisites: None.

ART255AB / 1 CREDIT / 1 PERIOD

The Portfolio

Choosing the right pieces to include, presenting art work, developing the portfolio. Prerequisites: None.

ART255AC / 1 CREDIT / 1 PERIOD

Marketing Fine Art

Exhibitions and galleries, establishing a studio, alternative markets. Prerequisites: ART255AB or permission of Instructor.

ART270 / 3 CREDITS / 6 PERIODS

Digital Photographic Imaging II

Intermediate digital photographic imaging techniques. Refinement of aesthetic awareness and personal expression. Prerequisites: A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: ADA/ ART177).

ART274 / 3 CREDITS / 6 PERIODS

Digital Photographic Imaging III

Advanced digital photographic imaging techniques. Advanced manipulation techniques of photographic images and time-based media. Continued development of aesthetic awareness and personal expression. Prerequisites: A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: ART270.

ART289 / 3 CREDITS / 6 PERIODS

Computer Illustration

Introduction to the multiple elements of commercial illustration using the microcomputer. Basic foundation in the use of computer techniques including color paint and draw programs for the production of commercial illustrations for publications and printed matter. Use of input and output devices. Prerequisites or Corequisites: ART100 or permission of instructor.

For the most current information regarding course descriptions, log on to curriculum.maricopa.edu.

ART290AA / 1 CREDIT / PERIODS

ART290AB / 2 CREDITS / 4 PERIODS

ART290AC / 3 CREDITS / 6 PERIODS

Studio Art

Studio course for art majors allowing continuation in a subject field. Prerequisites: Permission of instructor. Course Notes: ART290AC students must have completed advanced courses in the subject field.

ART290BC / 3 CREDITS / 6 PERIODS

Studio Art: Drawing

Studio course for art majors allowing continuation in a subject field. Prerequisites: ART111 or permission of Instructor. Course Notes: ART290BC may be repeated for credit.

ART290DC / 3 CREDITS / 6 PERIODS

Studio Art: Life Drawing

Studio course for art majors allowing continuation in a subject field. Prerequisites: A grade of C or better in ART117 or permission of Instructor. Course Notes: ART290DC may be repeated for credit.

ART290EC / 3 CREDITS / 6 PERIODS

Studio Art: Photography

Studio course for art majors allowing continuation in a subject field. Prerequisites: ART132 or permission of Instructor. Course Notes: ART290EC may be repeated for credit.

ART290GC / 3 CREDITS / 6 PERIODS

Studio Art: Ceramics

Studio course for art majors allowing continuation in a subject field. Prerequisites: ART162 or permission of Instructor. Course Notes: ART290GC may be repeated for credit.

ART290JC / 3 CREDITS / 6 PERIODS

Studio Art: Color

Studio course for art majors allowing continuation in a subject field. Prerequisites: ART113 or permission of Instructor. Course Notes: ART290JC may be repeated for credit.

ART290MC / 3 CREDITS / 6 PERIODS

Studio Art: Digital Photography

Studio course for art majors allowing continuation in a subject field. Prerequisites: ART143 or permission of Instructor. Course Notes: ART290MC may be repeated for credit.

ART290PC / 3 CREDITS / 6 PERIODS

Studio Art: Painting

Studio course for art majors allowing continuation in a subject field. Prerequisites: ART168 or permission of Instructor. Course Notes: ART290PC may be repeated for credit.

ART295EC / 3 CREDITS / 6 PERIODS

Art Workshop/Seminar: Painting

Advanced level workshop seminar in art disciplines. Prerequisites: Minimum of three (3) credits introductory and three (3) credits intermediate level courses in specific field or permission of Department or Division Chair.

ART295GA / 1 CREDIT / 2 PERIODS

Art Workshop/Seminar: Ceramics

Advanced level workshop seminar in art disciplines. Prerequisites: Minimum of three (3) credits introductory and three (3) credits intermediate level courses in specific field or permission of Department or Division Chair.

ART295GB / 2 CREDITS / 4 PERIODS

Art Workshop/Seminar: Ceramics

Advanced level workshop seminar in art disciplines. Prerequisites: Minimum of three (3) credits introductory and three (3) credits intermediate level courses in specific field or permission of Department or Division Chair.

For the most current information regarding course descriptions, log on to curriculum.maricopa.edu.

ART295HA / 1 CREDIT / 2 PERIODS

Art Workshop/Seminar: Mixed Media

Advanced level workshop seminar in art disciplines. Prerequisites: Minimum of three (3) credits introductory and three (3) credits intermediate level courses in specific field, or permission of Department/Division Chair.

ART295LB / 2 CREDITS / 4 PERIODS

Art Workshop/Seminar: Glazing Techniques

Advanced level workshop seminar in art disciplines. Prerequisites: Permission of Instructor.

ART295LC / 3 CREDITS / 6 PERIODS

Art Workshop/Seminar: Glazing Techniques

Advanced level workshop seminar in art disciplines. Prerequisites: Permission of Instructor.

ASB – Anthropology

ASB102 / 3 CREDITS / 3 PERIODS

Introduction to Cultural Anthropology

Principles of cultural anthropology, with illustrative materials from a variety of cultures. The nature of culture; social, political, and economic systems; religion, aesthetics and language. Prerequisites: None.

ASB211 / 3 CREDITS / 3 PERIODS

Women in Other Cultures

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

ASB214 / 3 CREDITS / 3 PERIODS

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

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

ASB222 / 3 CREDITS / 3 PERIODS

Buried Cities and Lost Tribes: Old World

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

ASB223 / 3 CREDITS / 3 PERIODS

Buried Cities and Lost Tribes: New World

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

ASB253 / 3 CREDITS / 3 PERIODS

Death and Dying Across Cultures

Responses to death and dying in cultures around the world. Explanations for particular cultural responses to death and dying. Examples drawn from ancient and contemporary cultures. Prerequisites: None

For the most current information regarding course descriptions, log on to curriculum.maricopa.edu.

ASL – American Sign Language

ASL101 / 4 CREDITS / 4 PERIODS

American Sign Language I

Introduction of principles, methods, and techniques for communicating with deaf people who sign. Development of expressive and receptive sign skills, manual alphabet, numbers, and sign vocabulary. Overview of syntax, grammar, and culture related to American Sign Language (A.S.L.). Prerequisites: None. ASL103 suggested as a corequisite but not required.

ASL102 / 4 CREDITS / 4 PERIODS

American Sign Language II

Continued development of knowledge and language skills for communicating with deaf people who sign. Includes numbers, fingerspelling, and culture. Emphasis on enhancement of receptive sign skills and continued development of expressive sign skills. Application of rudimentary, syntactical, and grammatical structure stressed with continued development of sign vocabulary. Prerequisites: A grade of C or better in ASL101 or permission of Department or Division. Completion of prerequisites within the last three years is required.

ASL103 / 1 CREDIT / 1 PERIOD

Introduction to the Deaf Community

History and development of American Sign Language (ASL) and English codes. Overview of education for Deaf and Hard of Hearing children. Legal rights and common adaptive devices used by Deaf and Hard of Hearing individuals. Prerequisites: None.

ASL110 / 3 CREDITS / 3 PERIODS

Fingerspelling

Introduction to fingerspelling techniques. Focus on methods, theory, and applications on receptive and expressive skills including manual alphabet production and numbers. In addition, skill development in speed, dexterity, clarity, and lexicalized fingerspelling, numeric incorporation, prefixes, suffixes, and polysyllabic words. Prerequisites: A grade of C or better in ASL101 or permission of Department or Division. Completion of prerequisites within the last three years is required.

ASL201 / 4 CREDITS / 4 PERIODS

American Sign Language III

Linguistics of American Sign Language (A.S.L.) including non-manual behaviors and signing English idioms with conceptual accuracy. Emphasis on practical application of A.S.L. skills, expanded vocabulary, and cross-cultural communication. Prerequisites: A grade of C or better in ASL102 or permission of Department or Division. (ENG101 or ENG107) and (CRE101 or equivalent as indicated by assessment) suggested but not required. Completion of prerequisites within the last three years is required.

ASL202 / 4 CREDITS / 4 PERIODS

American Sign Language IV

Advanced American Sign Language skills including continued vocabulary. Emphasis on conversational techniques in a cross-cultural framework. Continued work on conceptual accurate signing of English idioms and words with multiple meanings. Prerequisites: A grade of C or better in ASL201 or permission of Department or Division. (ENG101 or ENG107), ASL200, and (CRE101 or equivalent as indicated by assessment) suggested but not required. Completion of prerequisites within the last three years is required.

ASM – Anthropology

ASM104 / 4 CREDITS / 5 PERIODS

Bones, Stones and Human Evolution

The study of human evolution and variation; including fossil hominids and their tools, primate anatomy and behavior, human genetics, and the environment and human biology. Prerequisites: None.

For the most current information regarding course descriptions, log on to curriculum.maricopa.edu.

AST – Astronomy

AST101 / 4 CREDITS / 6 PERIODS

Survey of Astronomy

Survey of astronomy for the nontechnical student. The history, content, and evolution of the solar system and the universe in general. Astronomical principles and instrumentation. The planets, moons, sun, comets, stars and star formation, galaxies, and cosmology. Prerequisites: None.

AST106 / 4 CREDITS / 6 PERIODS

Life in the Universe

Introduction to the search for life in the universe for the non-science major. Earth`s location in space and time, nature of life, light and the spectrum, origin and history of the universe, origin of life on Earth and the possibility of life on other planets. Prerequisites: A grade of C or better in MAT090 or MAT091 or MAT092 or completion of higher level mathematics course, or satisfactory placement. Cross-References: GLG106.

AST111 / 4 CREDITS / 6 PERIODS

Introduction to Solar System Astronomy

Introduction to astronomy for the non-science major. The scientific method, properties of light, astronomical instruments, our Solar System and solar systems around other stars. Includes hands-on astronomical observations and laboratory exercises. Prerequisites: A grade of C or better in MAT092 or higher, or satisfactory score on district placement exam.

AST112 / 4 CREDITS / 6 PERIODS

Introduction to Stars, Galaxies, and Cosmology

Introduction to astronomy for the non-science major. Structure and evolution of stars; supernovae, black holes, and quasars; nebulae; star clusters; galaxies; cosmology, including the birth and death of the universe. Prerequisites: A grade of C or better in MAT092 or higher, or satisfactory score on district placement exam. Course Notes: Note that AST111 is not a prerequisite for this course.

AST114 / 1 CREDIT / 3 PERIODS

Introduction to Stars, Galaxies, and Cosmology Laboratory

Hands-on astronomical observations and exercises to supplement AST112. Prerequisites: A grade of C or better in AST112 and permission of Instructor or Department or Division. AST114 is a legacy course intended for those students who have previously completed the corresponding lecture course. Current MCCCD students should enroll in AST112 only.

AST294 / 3 CREDIT / 3 PERIODS

Special Topics in Astronomy

Conceptual, experimental, and computational aspects of a special topic in astronomy. Prerequisites: Permission of Department or Division. Course Notes: AST294 may be repeated for credit.

AST294AA / 2 CREDITS / 2 PERIODS

Special Topics in Astronomy

Conceptual, experimental, and computational aspects of a special topic in astronomy. Prerequisites: Permission of Department or Division. Course Notes: AST294AA may be repeated for credit.

AST294AB / 1 CREDIT / 1 PERIOD

Special Topics in Astronomy

Conceptual, experimental, and computational aspects of a special topic in astronomy. Prerequisites: Permission of Department or Division. Course Notes: AST294AB may be repeated for credit.

BIO – Biology

BIO100 / 4 CREDITS / 6 PERIODS

Biology Concepts

Introductory course covering basic principles and concepts of biology. Methods of scientific inquiry and behavior of matter and energy in biological systems are explored. Prerequisites: None. Course Notes: Field trips may be required at students` expense.

For the most current information regarding course descriptions, log on to curriculum.maricopa.edu.

BIO105 / 4 CREDITS / 6 PERIODS

Environmental Biology

Fundamentals of ecology and their relevance to human impact on natural ecosystems. Field trips may be required at students` expense. Prerequisites: None.

BIO108 / 4 CREDITS / 6 PERIODS

Plants and Society

A global study of plants in relation to humans; as a source of food, fiber, drugs, and other products; for aesthetic value, survival, and energy. Prerequisites: None.

BIO156 / 4 CREDITS / 6 PERIODS

Introductory Biology for Allied Health

An introductory biology course for allied health majors with an emphasis on humans. Topics include fundamental concepts of cell biology, histology, microbiology, and genetics. Prerequisites: A grade of "C" or better in RDG091 or higher or eligibility for CRE101 as indicated by appropriate reading placement test score. One year of high school or one-semester of college level chemistry is strongly recommended.

BIO160 / 4 CREDITS / 6 PERIODS

Introduction to Human Anatomy and Physiology

Principles of scientific method. Structural organization, homeostasis and control mechanisms of the body. Specific chemistry concepts. Structure and function of the major systems of the body. Prerequisites: None.

BIO181 / 4 CREDITS / 6 PERIODS

SUN BIO 1181

General Biology (Majors) I

The study and principles of structure and function of organisms at the molecular and cellular levels. A detailed exploration of the chemistry of life, the cell, and genetics. Prerequisites: A grade of C or better in RDG100 or higher or eligibility for CRE101 as indicated by appropriate reading placement test score. One year of high school or one semester of college-level biology and chemistry is strongly recommended.

BIO182 / 4 CREDITS / 6 PERIODS

SUN BIO 1182

General Biology (Majors) II

The study and principles of structure and function of living things at cellular, organismic, and higher levels of organization. A detailed exploration of the mechanisms of evolution, biological diversity, biology of organisms, and ecology. Prerequisites: A grade of C or better in BIO181 or BIO181XT. Course Notes: BIO182 may require field trips.

BIO201 / 4 CREDITS / 6 PERIODS

SUN BIO 2201

Human Anatomy and Physiology I

Study of structure and function of the human body. Topics include cells, tissues, integumentary system, skeletal system, muscular system, and nervous system. Prerequisites: (A grade of C or better in BIO156 or BIO156XT or BIO181 or BIO181XT or one year of high school biology) and a grade of C or better in RDG100 or higher or eligibility for CRE101 as indicated by reading placement test score. CHM130 or higher or one year of high school chemistry suggested but not required.

BIO202 / 4 CREDITS / 6 PERIODS

SUN BIO 2202

Human Anatomy and Physiology II

Continuation of structure and function of the human body. Topics include endocrine, circulatory, lymphatic, respiratory, digestive, urinary, and reproductive systems; and fluid and electrolyte balance. Prerequisites: A grade of C or better in BIO201 or BIO201XT.

BIO205 / 4 CREDITS / 6 PERIODS

SUN BIO 2205

Microbiology

Study of microorganisms and their relationship to health, ecology, and related fields. Prerequisites: (A grade of C or better in BIO156 or BIO156XT or BIO181 or BIO181XT or one year of high school biology) and a grade of C or better in RDG100 or higher or eligibility for CRE101 as indicated by reading placement test score. CHM130 or higher or one year of high school chemistry suggested but not required.

For the most current information regarding course descriptions, log on to curriculum.maricopa.edu.

BIO220 / 4 CREDITS / 6 PERIODS

Biology of Microorganisms

Detailed study of microbial cells, their structure, genetics, physiology and taxonomy. Prerequisites: BIO181 Corequisites: (CHM152 and CHM152LL) or (CHM154 and CHM154LL)

BHS – Behavioral Health Sciences

BHS160 / 3 CREDIT / 3 PERIODS

Ethical, Legal and Professional Issues in Behavioral Health and Social Service

Explores relevant ethical, legal, and professional issues inherent in the behavioral health and social services field, including expectations of and limitations on providers. Key areas of inquiry include boundaries and dual relationships, mandated reporting, confidentiality, scope of practice, beneficence and non-maleficence, rights and responsibilities, professional relationships, and credentialing/regulating agencies. Prerequisites: None.

BPC – Business-Personal Computers

BPC110 / 3 CREDITS / 4 PERIODS

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. Prerequisites: None.

BPC111AA / 1 CREDIT / 1.7 PERIODS

Computer Keyboarding I

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

BPC111AB / 1 CREDIT / 1.7 PERIODS

Computer Keyboarding II

Further development of microcomputer keyboard speed and accuracy. Emphasis on touch typing with speed and accuracy development of numerals as related to preparation and handling of documents. Prerequisites: BPC/OAS111AA or permission of instructor.

BPC115AA / 1 CREDIT / 2 PERIODS

Personal Finance Software: Quicken – Level I

Introduction to the basic features of Quicken, a computerized personal finances software program. Prerequisites: None.

BPC128 / 1 CREDIT / 2 PERIODS

Introduction to Desktop Publishing

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.

BPC128AF / 1 CREDIT / 2 PERIODS

Introduction to Desktop Publishing: MS Publisher

Presents basic concepts of commercially prepared software used to do desktop publishing. Incorporates a combination of narrative and pictorial/graphic creation and presentation, including set-up, text entry, graphic generation, text and graphic merging, and other computer-based functions. Prerequisites: None.

BPC170 / 3 CREDITS / 4 PERIODS

A+ Exam Prep: Computer Hardware Configuration and Support

Explore technical aspects of personal computers, including system components, installation, system configuration, peripheral devices, and notebooks. Emphasis placed on hardware installation, maintenance, mobile devices, and hardware

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troubleshooting. Helps prepare students for the CompTIA A+ examinations. Prerequisites: None.

BPC171 / 1 CREDIT / 2 PERIODS

Recycling Used Computer Technology

Use of hardware maintenance knowledge and skills to refurbish used computers. May be repeated for a total of three (3) credits. Prerequisites or Corequisites: BPC270 or permission of instructor.

BPC270 / 3 CREDITS / 4 PERIODS

A+ Exam Prep: Operating System Configuration and Support

Explore advanced technical aspects of maintaining and servicing computers. Emphasis placed on OS installation, maintenance, mobile devices, security, software troubleshooting, and on proper usage of tools, safety procedures, and professionalism. Helps prepare students for the CompTIA A+ examinations. Prerequisites: A grade of "C" or better in CIS105 or permission of Instructor.

CCS – Chicana and Chicano Studies

CCS101 / 3 CREDITS / 3 PERIODS

Chicana and Chicano Studies

Introduction to the wealth and diversity of Chicana and Chicano Studies research from a variety of disciplinary perspectives through the use of a series of historical and social scientific studies, novels, testimonies, and films. Prerequisites: A grade of C or better in ENG101 or ENG107 or equivalent.

CFS – Child/Family Studies

CFS176 / 3 CREDITS / 3 PERIODS

Child Development

Study of the science of human development from conception through adolescence. Includes observation skills, parent and adult roles in the lives of children, and contemporary issues. Prerequisites: None.

CHM – Chemistry

CHM107 / 3 CREDITS / 3 PERIODS

Chemistry and Society

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

CHM107LL / 1 CREDIT / 3 PERIODS

Chemistry and Society Laboratory

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

CHM130 / 3 CREDITS / 3 PERIODS

SUN CHM 1130

Fundamental Chemistry

A survey of the fundamentals of general chemistry. Emphasis on essential concepts and problem solving techniques. Basic principles of measurement, chemical bonding, structure and reactions, nomenclature, and the chemistry of acids and bases. Preparation for students taking more advanced courses in chemistry. Designed to meet needs of students in such diverse areas as agriculture, nursing, home economics, physical education and water technology. Prerequisites: A grade of C or better in [CHM090 or MAT090 or MAT091 or MAT092 or (MAT103AA and MAT103AB) or higher level mathematics course or satisfactory score on math placement exam] and [RDG100 or higher or eligibility for CRE101 as indicated by appropriate reading placement test score], or permission of the Instructor, or Department or Division Chair.

CHM130AA / 4 CREDIT / 3 PERIODS

Fundamental Chemistry with Lab

A survey of the fundamentals of general chemistry. Emphasis on essential concepts and problem solving techniques. Basic principles of measurement, chemical bonding, structure and reactions, nomenclature, and

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the chemistry of acids and bases. Preparation for students taking more advanced courses in chemistry. Designed to meet needs of students in such diverse areas as agriculture, nursing, home economics, physical education and water technology. Prerequisites: A grade of C or better in [CHM090 or MAT090 or MAT091 or MAT092 or (MAT103AA and MAT103AB) or higher level mathematics course or satisfactory score on math placement exam] and [RDG100 or higher or eligibility for CRE101 as indicated by appropriate reading placement test score], or permission of the Instructor, or Department or Division Chair. Course Notes: Student may receive credit for only one of the following: CHM130 and CHM130LL, or CHM130AA.

CHM130LL / 1 CREDIT / 3 PERIODS

SUN CHM 1130

Fundamental Chemistry Laboratory

Laboratory experience in support of CHM130. Prerequisites or Corequisites: A grade of "C" or better in CHM130.

CHM138 / 3 CREDITS / 3 PERIODS

Chemistry for Allied Health

Elements of fundamental and organic chemistry. Includes the general chemical behavior of inorganic matter and the structure of organic and biochemical systems. Course designed for specific allied health programs at MCCD. May not be applicable to other allied health programs or transferable. Prerequisites: A grade of C or better in [CHM090 or MAT090 or MAT091 or MAT092 or (MAT103AA and MAT103AB) or higher or satisfactory score on math placement exam], or one year of high school chemistry taken within the last five years with a grade of C or better, or permission of the Instructor, or Department or Division Chair.

CHM138LL / 1 CREDIT / 3 PERIODS

Chemistry for Allied Health Lab

Laboratory experience in support of CHM138, Chemistry for Allied Health. Prerequisites: None. Corequisites: CHM138.

CHM151 / 3 CREDITS / 3 PERIODS

SUN CHM 1151

General Chemistry I

Detailed study of principles of chemistry for science majors and students in pre-professional curricula. Prerequisites: A grade of C or better in [(CHM130 and CHM130LL), or CHM130AA, or one year of high school chemistry taken within the last five years] and (a grade of C or better in MAT151 or higher level mathematics course, or satisfactory score on placement exam), or permission of the Instructor, or Department or Division Chair. Course Notes: Completion of all prerequisites within the last two years is recommended. Student may receive credit for only one of the following: CHM150 and CHM151LL, or CHM151 and CHM151LL, or CHM150AA, or CHM151AA.

CHM151AA / 4 CREDIT / 6 PERIODS

General Chemistry I

Detailed study of principles of chemistry for science majors and students in pre-professional curricula. Prerequisites: A grade of C or better in [(CHM130 and CHM130LL), or CHM130AA, or one year of high school chemistry taken within the last five years] and (a grade of C or better in MAT151 or higher level mathematics course, or satisfactory score on placement exam), or permission of the Instructor, or Department or Division Chair. Course Notes: Completion of all prerequisites within the last two years is recommended. Student may receive credit for only one of the following: CHM150 and CHM151LL, or CHM151 and CHM151LL, or CHM150AA, or CHM151AA.

CHM151LL / 1 CREDIT / 3 PERIODS

SUN CHM 1151

General Chemistry I Laboratory

Laboratory experience in support of CHM150 or CHM151. Prerequisites: A grade of C or better in CHM150 or CHM151 or Co-requisites: CHM150 or CHM151.

CHM152 / 3 CREDITS / 3 PERIODS

SUN CHM 1152

General Chemistry II

A study of the chemical properties of the major groups of elements, equilibrium theory, thermodynamics,

electrochemistry, and other selected topics. Prerequisites: A grade of C or better in [(CHM150 or CHM151) and CHM151LL], or CHM150AA, or CHM151AA, or permission of the Instructor, or Department or Division Chair. Course Notes: Completion of prerequisites within the last two years recommended. Completion of CHM152LL required to meet the Natural Science requirement. Student may receive credit for only one of the following: CHM152 and CHM152LL, or CHM152AA.

CHM152AA / 4 CREDIT / 6 PERIODS

General Chemistry II

A study of the chemical properties of the major groups of elements, equilibrium theory, thermodynamics, electrochemistry, and other selected topics. Prerequisites: A grade of C or better in [(CHM150 or CHM151) and CHM151LL], or CHM150AA, or CHM151AA, or permission of the Instructor, or Department or Division Chair. Completion of prerequisites within the last two years recommended. Student may receive credit for only one of the following: CHM152 and CHM152LL, or CHM152AA.

CHM152LL / 1 CREDIT / 3 PERIODS

SUN CHM 1152

General Chemistry II Laboratory

Laboratory experience in support of CHM152. Prerequisites or Corequisites: A grade of "C" or better in CHM152. Course Notes: Student may receive credit for only one of the following: CHM152 and CHM152LL, or CHM152AA.

CHM230 / 3 CREDITS / 3 PERIODS

SUN CHM 2230

Fundamental Organic Chemistry

Chemistry of representative groups of organic compounds, emphasizing biological applications. Prerequisites: A grade of C or better in (CHM130 and CHM130LL) or (CHM150 or CHM151 and CHM151LL), or permission of the Instructor, or Department or Division Chair. Course Notes: Completion of prerequisites within the last two years recommended. CHM230 course content is designed to meet the needs of students in such areas as agriculture, home economics, nursing, pre-physician assistant, and physical education among others.

CHM230LL / 1 CREDIT / 3 PERIODS

SUN CHM 2230

Fundamental Organic Chemistry Laboratory

Laboratory experience in support of CHM230. Prerequisites: CHM130LL, or CHM151LL, or equivalent. Prerequisites or Corequisites: CHM230.

CHM235 / 3 CREDITS / 3 PERIODS

SUN CHM 2235

General Organic Chemistry I

Rigorous introduction to chemistry of carbon-containing compounds. Reaction mechanisms and recent methods of synthesis emphasized. Prerequisites: A grade of C or better in (CHM152 and CHM152LL), or CHM152AA, or (CHM154 and CHM154LL), or permission of the Instructor, or Department or Division Chair. Course Notes: Completion of prerequisites within the last two years recommended.

CHM235LL / 1 CREDIT / 4 PERIODS

SUN CHM 2235

General Organic Chemistry I Laboratory

Laboratory experience in support of CHM235. Prerequisites or Corequisites: A grade of "C" or better in CHM235. Completion of prerequisites within the last two years recommended.

CHM236 / 3 CREDITS / 3 PERIODS

SUN CHM 2236

General Organic Chemistry IIA

Study of chemistry of carbon-containing compounds continued. Structural determination and additional reaction mechanisms and modern methods of synthesis emphasized. Prerequisites: A grade of C or better in CHM235 and CHM235LL, or permission of the Instructor, or Department or Division Chair. Course Notes: Completion of prerequisites within the last two years recommended.

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CHM236LL / 1 CREDIT / 4 PERIODS

SUN CHM 2236

General Organic Chemistry IIA Laboratory

Laboratory experience in support of CHM236. Prerequisites or Corequisites: A grade of "C" or better in CHM236. Completion of prerequisites within the last two years recommended.

CHM260 / 3 CREDITS / 3 PERIODS

Fundamental Biochemistry

Structures, properties, and functions of proteins, enzymes, nucleic acids, carbohydrates and lipids; the utilization and synthesis of these materials by living systems and the relationship of the processes to energy production and utilization. Prerequisites: A grade of C or better in (CHM230 and CHM230LL) or (CHM235 and CHM235LL), or permission of the Instructor, or Department or Division Chair. Course Notes: Completion of prerequisites within the last two years recommended. Designed for students in agriculture, dental hygiene, home economics, nursing, and physical therapy.

CHM260LL / 1 CREDIT / 3 PERIODS

Fundamental Biochemistry Laboratory

Laboratory experience in support of CHM260. Prerequisites or Corequisites: A grade of "C" or better in CHM260. Completion of prerequisites within the last two years recommended.

CHM298AA / 1 CREDIT / 1 PERIOD

Special Projects

Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and 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.

CIS – Computer Information Systems

CIS102DA / 3 CREDIT / 4 PERIODS

Customer User Support

Examines skills, tools and strategies necessary for becoming a computer help-desk or end-user support professional. Prerequisites: None.

CIS103 / 3 CREDITS / 4 PERIODS

Introduction to Social Media

Identify and explain social media and Web 2.0 technologies for personal, academic, professional, and business applications. Create and maintain accounts on various sites to socialize, write, and share multimedia, while understanding the related ethics, privacy and security issues. Prerequisites: None.

CIS105 / 3 CREDITS / 4 PERIODS

SUN CIS 1120

Survey of Computer Information Systems

Overview of computer technology, concepts, terminology, and the role of computers in business and society. Discussion of social and ethical issues related to computers. Use of word processing, spreadsheet, database, and presentation software. Includes uses of application software and the Internet for efficient and effective problem solving. Exploration of relevant emerging technologies. Prerequisites: None.

CIS111 / 3 CREDITS / 3 PERIODS

Ethics in Information Technology

Ethical issues that arise as a result of increasing use of computers, and the responsibilities of those who work with computers, either as computer science professionals or end users. Critical inquiry and review of ethical challenges in information technology business, including professional and corporate responsibility, government regulation, fiduciary responsibilities of information, infringement of intellectual property, security risk assessment, Internet crime, identity theft,

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employee surveillance, privacy, compliance, social networking, and the ethics of IT corporations. Prerequisites: None.

CIS126RH / 3 CREDITS / 4 PERIODS

Red Hat System Administration I

Introduction to core administration skills needed to manage a Red Hat Enterprise Linux system. This Red Hat Academy course helps prepare for the Red Hat certification exams using a hands-on, task-focused curriculum. Prerequisites: None.

CIS113DE / 3 CREDITS / 4 PERIODS

Microsoft Word: Word Processing

Using word processing software to create, name and manage files, edit text, format, apply themes and styles, create and modify tables, apply desktop publishing features, and print a variety of types of documents. Prerequisites: None.

CIS114DE / 3 CREDITS / 4 PERIODS

Excel Spreadsheet

Computer spreadsheet skills for solving business problems using Excel, including calculations, forecasting, projections, macro programming, database searching, extraction, linking, statistics, and matrix manipulation. Production of graphs and reports. Project design using multiple, integrated spreadsheets. Prerequisites: None. Course Notes: CIS114DE may be repeated for a total of nine (9) credit hours.

CIS117DM / 3 CREDITS / 4 PERIODS

Microsoft Access: Database Management

Introduction to the basic elements, exploration of additional components and common database management problems related to the Microsoft Access program. Prerequisites: None CIS117DM combines the contents of CIS117AM, CIS117BM and CIS117CM. Course Notes: CIS114DE may be repeated for a total of nine (9) credit hours.

CIS118DB / 3 CREDITS / 5 PERIODS

Desktop Presentation: PowerPoint

Use of PowerPoint to produce professional-quality presentation visuals with animation and sound. Prerequisites: None

CIS119DO / 3 CREDITS / 4 PERIODS

Introduction to Oracle: SQL

Use of Oracle tools and methodologies to fulfill real-world business information requirements. Hands-on exercises for designing, creating, and maintaining database structures to store, retrieve, update, and display data in a relational database using the SQL programming language. Creating and maintaining database objects. Advanced retrieval techniques. Prerequisites: A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: CIS105 or permission of Instructor.

CIS119DP / 3 CREDITS / 4 PERIODS

Oracle: Database Administration

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: A grade of C or better in CIS119DO, or permission of Instructor. (CIS126++ or CIS121++ or MST152++) is recommended.

CIS120DB / 3 CREDITS / 4 PERIODS

Introduction to Adobe Illustrator

Provides students with the knowledge and skills to use Adobe Illustrator graphics software on a computer. Basic foundation course in the use of electronic techniques to create, manipulate, and edit images, text, abstract art, graphics design, color graphics and business charts; determine file formats appropriate for web and print; utilize tools to optimize graphics and create a PDF file. Prerequisites: None.

CIS120DC / 3 CREDITS / 4 PERIODS

Introduction to Adobe Animate

Focuses on entry-level skill expectations for digital

animation using Adobe Animate. Covers basic animation techniques used in the creation, manipulation, and editing of animation graphics. Prepares students for the Adobe certifications related to Adobe Animate. Prerequisites: None.

CIS120DF / 3 CREDITS / 4 PERIODS

Introduction to Adobe Photoshop

Focuses on entry-level skills and knowledge for digital imaging using Adobe Photoshop. Prepares students for the Adobe Certifications related to Photoshop. Prerequisites: None.

CIS120DP / 3 CREDITS / 4 PERIODS

Adobe Acrobat Pro: Portable Document Format (PDF) Files

Introduction to creating PDF (Portable Document Format) files using Adobe Acrobat for web viewing and printing. Addresses creation of interactive PDF documents including security settings, navigation links, and form fields. Prerequisites: None.

CIS121AB / 1 CREDIT / 2 PERIODS

Microsoft Command Line Operations

Use of the Microsoft command line interface: basic concepts, internal and external commands, subdirectories, and editor. Prerequisites: None.

CIS121AE / 1 CREDIT / 2 PERIODS

Windows Operating System: Level I

Specific topics include booting and shutting down the computer, navigating the desktop, start button features, taskbar status, and receiving online help support. Exploring and managing folders and files, running programs, and learning about Wordpad and Paint application programs. Prerequisites: None.

CIS121AH / 3 CREDIT / 4 PERIODS

Microsoft PowerShell/Command Line Operations

Day-to-day command line administration tasks of Microsoft Windows. PowerShell used to create scripts to administer Microsoft windows environment. Prerequisites: None. MST150++ recommended but not required.

CIS126DL / 3 CREDITS / 4 PERIODS

Linux Operating System

Introduction to the Linux Operating system. Develop knowledge and skills required to install, configure and troubleshoot a Linux-based workstation including basic network functions. Learn basic command line and Graphical User Interface (GUI) desktop environment utilities and applications. Fundamental abilities to achieve the entry-level industry certification covered. Prerequisites: A grade of C or better in CIS120DA or CIS120DK or permission of Instructor.

CIS133DA / 3 CREDITS / 4 PERIODS

Internet/Web Development Level I

Overview of the Internet/World Wide Web (WWW) and its resources. Hands-on experience with various Internet/WWW resource discovery, information retrieval, and social media tools. Design and Development of multi-page websites using current Hyper Text Markup Language (HTML) and Cascading Style Sheets (CSS) standards. Prerequisites: None.

CIS150AB / 3 CREDITS / 4 PERIODS

Object-Oriented Programming Fundamentals

Structured and Object-Oriented design and logic tools. Use of computer problems to demonstrate and teach concepts using appropriate programming language. Prerequisites: CIS105, or permission of instructor.

CIS151 / 3 CREDITS / 4 PERIODS

Computer Game Development – Level I

Introduction to object-oriented game development, game design, and game theory. Use of computer software to demonstrate and teach concepts using an appropriate game development platform to model real-time simulations and create computer games using object oriented tools. Introduction to developing PC games, educational software, and training software using windows based object oriented developments tools. Prerequisites: CIS105 or permission of Instructor.

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CIS154 / 3 CREDITS / 4 PERIODS

Database Modeling and Design

Top-down, systematic approach to defining a database design based on analysis of business information and requirements. Identifying and evaluating standard data model and design patterns. Developing an entity-relationship (ER) diagram that accurately reflects the business. Mapping the ER diagram to an initial database design and revising for complex entities, attributes, and relationships Prerequisites: CIS105 or permission of Instructor.

CIS156 / 3 CREDITS / 4 PERIODS

Python Programming: Level I

Use of the Python programming language to solve problems using suitable examples from business or other disciplines. Prerequisites: A grade of C or better in CIS105 or permission of Instructor.

CIS159 / 3 CREDITS / 4 PERIODS

Visual Basic Programming I

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 / 3 CREDITS / 4 PERIODS

C Programming I

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: A grade of C or better in CIS105 or permission of Instructor.

CIS162AB / 3 CREDITS / 4 PERIODS

C++: Level I

Introduction to C++ programming including general concepts, program design, development, data types, operators, expressions, flow control, functions, classes, input and output operations, debugging, structured programming, and object-oriented programming. Prerequisites: CIS105, or permission of instructor.

CIS162AD / 3 CREDITS / 4 PERIODS

C#: Level I

Introduction to C# programming including general concepts, program design, development, data types, operators, expressions, flow control, functions, classes, input and output operations, debugging, structured programming, and object-oriented programming. Prerequisites: CIS105, or permission of instructor.

CIS163AA / 3 CREDITS / 4 PERIODS

Java Programming: Level I

Introduction to Java programming. Includes features needed to construct Java Applets, Java Applications, control structures, methods, arrays, character and string manipulation, graphics, and object-oriented programming. Prerequisites: CIS105.

CIS164AB / 3 CREDITS / 4 PERIODS

Oracle: PL/SQL Programming

Writing PL/SQL procedures, functions, and packages. Creating and managing PL/SQL program units and database triggers in Oracle development environment. Managing dependencies and manipulating large objects. Prerequisites: CIS119DO, or permission of the instructor.

CIS165 / 3 CREDITS / 4 PERIODS

Introduction to IOS Application Development

Introduction to iOS device programming utilizing the XCode application, and the programming languages Objective-C and/or Swift, utilizing various iOS frameworks. Understand iOS hardware and feature basics. Go through the entire design process from concept to final product delivery. Prerequisites: A grade of C or better in CIS150++, or CIS156, or CIS159, or CIS162++, or CIS163AA, or permission of Instructor.

CIS165DA / 3 CREDITS / 4 PERIODS

Android Mobile Device Programming

Beginning with an overview of Android features, this class explores the required software tools and programming techniques for developing Android device applications from creating the user interface,

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working with activities, intents and views, to using databases, providing data persistence, accessing device features and services, to debugging and publishing applications. Prerequisites: CIS163AA, or permission of Instructor.

CIS166 / 3 CREDITS / 4 PERIODS

Web Scripting/Programming

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

CIS166AA / 3 CREDITS / 4 PERIODS

Introduction to JavaScript

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.

CIS190 / 3 CREDITS / 4 PERIODS

Introduction to Networks

Overview of networks. Emphasis on the elements of a network, current issues and products, and use of a network. Includes terminology, hardware and software components, connectivity, resource monitoring and sharing, electronic mail and messaging, and security issues. Helps prepare students for the CompTIA Network+ examination. Prerequisites: None. Corequisites: CIS105 or permission of Instructor.

CIS213DE / 3 CREDITS / 4 PERIODS

Advanced Microsoft Word: Word Processing

Using advanced word processing software features to perform tasks such as mail merge, collaboration, web pages, math functions, macros, photo enhancements, graphics, tables, forms and manage long documents. Prerequisites: CIS113DE or (CIS113AE and CIS113BE and CIS113CE) or permission of Instructor.

CIS214DE / 3 CREDITS / 4 PERIODS

Advanced Excel Spreadsheet: Level II

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

CIS217AM / 3 CREDITS / 4 PERIODS

Advanced Microsoft Access: Database Management

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

CIS225AB / 3 CREDITS / 4 PERIODS

Object-Oriented Analysis and Design

Methodologies and notations for fundamental object-oriented analysis and design including use cases, objects, classes, stereotypes, and relationships. Object-oriented iterative process for system development. A continuous application development exercise for applying the analysis and design concepts. Prerequisites: Any programming language or permission of Instructor.

CIS233DA / 3 CREDITS / 4 PERIODS

Internet/Web Development Level II

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: CIS133CA or CIS133DA or permission of instructor.

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CIS235 / 3 CREDITS / 4 PERIODS

e-Commerce

Introduction to Electronic Commerce on the Internet. Designing an electronic storefront including web page content and development, e-commerce site marketing, advertisement, legal and security considerations, credit card and other debit transaction covered. Also includes current issues in e-commerce. Prerequisites: CIS133CA, or CIS133DA, or permission of instructor.

CIS238DL / 3 CREDITS / 4 PERIODS

Linux System Administration

Managing Linux Operating Systems including sophisticated manipulation of file structures, backup systems, printing processes, troubleshooting, user account management, hard disk maintenance and configuration, process monitoring and prioritizing, kernel customization, and system resource control. Preparation for industry certifications such as the CompTIA's Linux+, the Red Hat certified system administrator (RHCSA), the Red Hat Certified Engineer (RHCE), and the Linux Professional Institute (LPIC-I). Prerequisites: A grade of "C" or better in CIS126DL or CIS126RH or Permission of instructor.

CIS238RH / 3 CREDITS / 4 PERIODS

Red Hat System Administration II

Continue to develop core administration skills needed to manage a Red Hat Enterprise Linux system. This Red Hat Academy course helps to prepare students for the Red Hat certification exams using a hands-on, task-focused curriculum. Prerequisites: A grade of C or better in CIS126RH, or permission of Instructor.

CIS239DL / 3 CREDITS / 4 PERIODS

Linux Shell Scripting

Linux Shell Scripting syntax and methods including the automation of system tasks as well as interpreted user-level programming. Course includes the Linux Borne Again Shell (BASH) as well as a variety of industry competitors. Prerequisites: A grade of C or better in CIS238DL or CIS238RH or permission of Instructor.

CIS240DL / 3 CREDITS / 4 PERIODS

Linux Network Administration

In depth networking based on Linux servers and the Transmission Control Protocol/Internet Protocol (TCP/IP) protocol suite. Integrating Linux servers and workstations into a network environment with multi-platform network operating systems including a variety of open-standard and proprietary protocols. Preparation for industry certifications such as the CompTIA's Linux+, the Red Hat certified system administrator (RHCSA), the Red Hat Certified Engineer (RHCE), and the Linux Professional Institute (LPIC-I) Prerequisites: A grade of C or better in CIS238DL or permission of Instructor.

CIS240RH / 3 CREDITS / 4 PERIODS

Red Hat System Administration III

Provides solid understanding of how to automate services on a Linux system. Covers use of Ansible to automate provisioning, configuration, application deployment, and orchestration on Red Hat Enterprise Linux 8. Content aligns with the Red Hat Certified Engineer (RHCE - EX294) exam, a professional certification. Prerequisites: A grade of C or better in CIS238RH or permission of Instructor.

CIS250 / 3 CREDITS / 4 PERIODS

Management of Information Systems

The study of business information systems and its management, communication, e-business strategies, emerging technologies, database concepts, and project management. Overview of systems analysis and design. Learn about the competitive and strategic uses of information systems and how they are transforming organizations and their management. Prerequisites: CIS105.

CIS259 / 3 CREDITS / 4 PERIODS

Visual Basic Programming II

Use of the Visual Basic programming language to identify and solve advanced problems using suitable examples from business or other disciplines. Prerequisites: CIS159 or permission of instructor.

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CIS263AA / 3 CREDITS / 4 PERIODS

Java Programming: Level II

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.

CIS265 / 3 CREDITS / 4 PERIODS

Advanced iOS Application Development

Advanced iOS device programming utilizing the Swift/XCode application, and the programming languages Objective-C and/or Swift, utilizing various iOS frameworks. Understand iOS hardware and feature basics. Go through entire design process from concept to final product delivery. Prerequisites: A grade of C or better in CIS150++ and CIS165, or permission of Instructor.

CIS271DL / 3 CREDITS / 4 PERIODS

Linux Security

Implementing in-depth security methods and techniques in a Linux-based network environment. Utilize programs, utilities and configuration techniques to provide user-level, file system, and network security. Gain knowledge in a variety of security cracking techniques and how to guard against them. In all aspects of security, the standard of practicing professional ethics seriously emphasized. Preparation for industry certifications such as the SAIR/GNU LCP and LCA certificates, CompTIA's Linux+, RHCT, RHCE, and LPIC. Prerequisites: CIS240DL or Permission of Instructor.

CIS280 / 3 CREDITS / 4 PERIODS

CIS280AA / 1 CREDIT / 2 PERIODS

Current Topics in Computing

Critical inquiry of current topics in computing. Application of industry trends to solve problems and/or investigate issues. Prerequisites: None.

CIS290AA / 1 CREDIT / 6 PERIODS

CIS290AB / 2 CREDITS / 12 PERIODS

CIS290AC / 3 CREDITS / 18 PERIODS

Computer Information Systems Internship

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

CIS296WA / 1 CREDIT / 5 PERIODS

CIS296WB / 2 CREDITS / 10 PERIODS

CIS296WC / 3 CREDITS / 15 PERIODS

Cooperative Education

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

CNT – Cisco Network Technology

CNT140AA / 4 CREDITS / 6 PERIODS

Introduction to Networks

Introduces the architecture, structure, functions, components, and models of the Internet and other computer networks. The principles and structure of IP addressing and the fundamentals of Ethernet concepts, media, and operations are introduced. Students will build simple LANs, perform basic configurations for routers and switches, and implement IP addressing schemes. Preparation for Cisco certification examination. Prerequisites: None.

For the most current information regarding course descriptions, log on to curriculum.maricopa.edu.

CNT150AA / 4 CREDITS / 6 PERIODS

Cisco – Routing and Switching Essentials

Architecture, components, and operations of routers and switches in a small network. Students learn how to configure a router and a switch for basic functionality. Configuration and troubleshooting routers and switches and resolving common issues with RIPv1, RIPng, single-area and multi-area OSPF, virtual LANs, and inter-VLAN routing in both IPv4 and IPv6 networks. Preparation for Cisco certification examination. Prerequisites: CNT140AA or permission of Instructor.

CNT160AA / 4 CREDITS / 6 PERIODS

Scaling Networks

Architecture, components, and operations of routers and switches in large and complex networks. Configuring routers and switches for advanced functionality. Configuring and troubleshooting routers and switches and resolving common issues with OSPF, EIGRP, and STP in both IPv4 and IPv6 networks. Developing the knowledge and skills needed to implement a WLAN in a small-to-medium network. Preparation for Cisco certification examination. Prerequisites: CNT150AA or permission of Instructor.

CNT170AA / 4 CREDITS / 6 PERIODS

Cisco – Connecting Networks

Wide Area Network (WAN) technologies and network services required by converged applications in a complex network. Criteria selection of network devices and WAN technologies to meet network requirements. Configuring and troubleshooting network devices, and resolving common issues with data link protocols issues, and developing the knowledge and skills needed to implement Internet Protocol Security (IPSec) and Virtual Private Network (VPN) operations. Preparation for Cisco certification examination. Prerequisites: CNT160AA or permission of Instructor.

CNT185 / 4 CREDITS / 5 PERIODS

Cisco Network Security

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, 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.

CNT200 / 4 CREDITS / 6 PERIODS

CCNP ROUTE: Implementing Cisco IP Routing

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: A grade of C or better in CNT160AB, or CCNA industry certification, or permission of Instructor. Corequisites: CNT220. Course Notes: Preparation for Cisco Certified Network Professional (CCNP) exam.

CNT202 / 4 CREDITS / 5 PERIODS

Cisco Secure Firewall Appliance Configuration

Applications of Cisco Networking technologies in designing and implementing security solutions to reduce risk of revenue loss and vulnerability. Hands-on experience and skills in security policy design and management, security technologies, products and solutions, secure firewall design, installation, configuration and maintenance, Authentication, Authorization, and Accounting (AAA), Failover, and

Virtual Private Network (VPN) implementation using firewalls. Prerequisites: CNT170AA or permission of Instructor.

CNT205 / 4 CREDITS / 6 PERIODS

Cisco Certified Network Associate Security

Associate-level knowledge and skills required to secure Cisco networks. Development of a security infrastructure, identification of threats and vulnerabilities to networks. Mitigation of security threats. Core security technologies. Installation, troubleshooting and monitoring of network devices to maintain integrity, confidentiality and availability of data and devices. Competency in the technologies that Cisco uses in its security structure. Prerequisites: CNT170 or CNT170AA or Certified Cisco Networking Associate (CCNA) certification or permission of Instructor.

CNT206 / 4 CREDITS / 6 PERIODS

Cisco Certified Network Associate Wireless

Associate-level knowledge and skills required in Cisco wireless networks. Includes comprehensive hands-on labs to design, plan, implement, operate, secure, and troubleshoot wireless networks. Prerequisites: CNT170, or CNT170AA, or permission of Instructor. Course Notes: Prepares students to earn Cisco Certified Network Associate Wireless (CCNA Wireless) designation by taking the Implementing Cisco Unified Wireless Networks Essentials (IUWNE) exam.

CNT220 / 4 CREDITS / 6 PERIODS

CCNP SWITCH: Implementing Cisco IP Switching

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: A grade of C or better in CNT160AB, or CCNA industry certification, or permission of Instructor. Corequisites: CNT200. Course Notes: Preparation for Cisco Certified Network Professional (CCNP) exam.

CNT231 / 4 CREDITS / 6 PERIODS

CCNPT Shoot: Maintaining and Troubleshooting CISCO IP Networks

Development of knowledge and skills in monitoring and maintaining complex enterprise routed and switched Internet Protocol (IP) networks. Skills learned include the planning and execution of regular network maintenance, as well as support and troubleshooting using technology-based processes and best practices, in a systematic approach. Extensive labs emphasize hands-on learning and practice to reinforce configuration skills. Note: Preparation for Cisco Certified Network Professional (CCNP) exam. Prerequisites: A grade of C or better in CNT200 and CNT220, or permission of Instructor.

COM – Communication

COM095 / 3 CREDITS / 3 PERIODS

Basic Oral Communication Skills

Listening, speaking, and related academic performance skills, including note taking. Emphasis on activities designed to improve and synthesize these skills. Prerequisites: None.

COM100 / 3 CREDITS / 3 PERIODS

SUN COM 1100

Introduction to Human Communication

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

COM110 / 3 CREDITS / 3 PERIODS

SUN COM 1110

Interpersonal Communication

Theory and practice of communication skills which affect day-to-day interactions with other persons. Topics may include using verbal and nonverbal

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symbols, interactive listening, resolving interpersonal conflict, developing and maintaining personal and professional relationships. Prerequisites: None.

COM207 / 3 CREDITS / 3 PERIODS

Introduction to Communication Inquiry

Overview of theory and methodological practice in communication with particular attention to scholarly writing skills. Emphasis on development of critical thinking skills through active participation in the research process. Prerequisites: ENG101 or ENG107 or equivalent, and COM100 or equivalent, or permission of instructor. Course Note: Recommended for the communication major.

COM225 / 3 CREDITS / 3 PERIODS

Public Speaking

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 / 3 CREDITS / 3 PERIODS

SUN COM 2271

Small Group Communication

Principles and processes of small groups and development of skills for participation and leadership in small group settings. Practice in problem solving, decision making, and information sharing. Prerequisites: None.

COM250 / 3 CREDITS / 3 PERIODS

Introduction to Organizational Communication

Introduction to the study of communication in organizations including identification of variables, roles and patterns influencing communication in organizations. Prerequisites: None.

COM259 / 3 CREDITS / 3 PERIODS

Communication in Business and Professions

Interpersonal, organizational, intercultural, group, and public communication in business and professional organizations. Emphasis on oral communication and the effective use of technology and new media. Prerequisites: ENG101, or ENG107, or equivalent.

COM263 / 3 CREDITS / 3 PERIODS

Elements of Intercultural Communication

Basic concepts, principles, and skills for improving oral communication between persons from different minority, racial, ethnic, and cultural backgrounds. Prerequisites: None

CPD – Counseling and Personal Development

CPD101 / 2 CREDITS / 2 PERIODS

Personal Development

Designed to assist students in developing confidence in making personal, social, and educational decisions. Examination and assessment of individual needs, interests, abilities and values to develop and strengthen interpersonal communication, enhance transitional skills and identify realistic life planning goals. Prerequisites: None.

CPD102AB / 2 CREDITS / 2 PERIODS

Career Exploration

Designed to assist students make informed career decisions. Focuses on current occupational trends and outlook. Explores career-related interests, values, needs, preferences, skills, and strengths with the use of various assessments. Aids in the development of individualized educational/career goals and action plan. Prerequisites: None. Course Notes: CPD102AB may be repeated for a total of six (6) credit hours.

CPD102AF / 2 CREDITS / 2 PERIODS

Human Sexuality

Enables students to view gender and sexuality as dimensions of personal identity, and explores intersectionality between multiple identities. Examination of differences between identify

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expression, behavior, and biological influences, tracing social evolution from masculine-feminine dichotomy to non-binary perspectives. Prerequisites: None.

CPD102AH / 2 CREDITS / 2 PERIODS

Stress Management

Reviews the sources of stress, the physiological effects and the psychological impact of stress on the individual. Provides strategies to manage and reduce stress. Helps students develop and understand behaviors to create a healthy balance in their lives by studying the biological, psychological, physiological, and social aspects of stress and wellness. Prerequisites: None.

CPD103BA / 2 CREDITS / 2 PERIODS

Women in Transition

Designed to assist and support women who are experiencing life transitions. Emphasis on assessing self-potential, increasing self-confidence, managing life change, and exploring education/career/life options in terms of the realities of roles for women today. Prerequisites: None.

CPD104 / 3 CREDITS / 3 PERIODS

Career and Personal Development

An overview of the holistic process of career/life planning through self-awareness and understanding of the world of work. Exploration and application of behavioral, social, and cultural factors leading to college, career, and personal success with emphasis on assessment, applied behavior management, motivation, self-care, and career development. Prerequisites: None.

CPD115 / 1 CREDIT / 1 PERIOD

Creating College Success

Strategies to create success in college. Methods for selecting and developing effective academic strategies, increasing self-awareness and developing self-management strategies. Elements of college resources and relationships with others explored in support of students` educational experience. Prerequisites: None. Cross-References: AAA115.

CPD120 / 3 CREDITS / 3 PERIODS

Introduction to Counseling

Introduction to the field of counseling with a focus on skills and competencies needed as a mental health practitioner. Foundations of counseling including counseling theories, ethical considerations, prevention and intervention topics, and multicultural counseling practices. Prerequisites: None.

CPD150 / 3 CREDITS / 3 PERIODS

Strategies for College Success

Focus on increasing student success through college orientation and personal growth, study skills development, and educational and career planning. Prerequisites: None.

CPD150AA / 1 CREDIT / 1 PERIOD

College Orientation & Personal Growth

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.

CPD150AB / 1 CREDIT / 1 PERIOD

Study Skills Development

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

CPD150AC / 1 CREDIT / 1 PERIOD

Educational and Career Planning

Emphasis on increasing student success through educational and career planning. Prerequisites: None.

CPD160 / 3 CREDITS / 3 PERIODS

Introduction to Multiculturalism

Examination of the multiple cultures and subcultures within the contemporary United States. Personal exploration of awareness and appreciation of

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multiculturalism. Activities for experiencing diverse cultural perspectives. Critical thinking skills for recognizing, analyzing, and mediating cultural and psychological factors impacting conflict and accord between diverse cultures through written and oral discourse. Prerequisites: ENG101, or ENG107, or permission of Instructor.

CPD220 / 3 CREDITS / 3 PERIODS

The Counselor in a Multicultural Society

Current theories and research on culture, race and ethnicity, gender and other aspects of cultural diversity in a multicultural society through the lens of counseling. Focus on personal perspectives, will explore themes, theories, topics and research related to power, privilege and oppression in the United States as applied to counseling discipline. Prerequisites: None.

CPD240 / 3 CREDITS / 3 PERIODS

Introduction to Counseling Skills

Introduction to basic skills and techniques used in the counseling field. Focuses on active listening, self-awareness, and other related skills. Prerequisites: A grade of C or better in CPD120.

CRE – Critical Reading

CRE101 / 3 CREDITS / 3 PERIODS

College Critical Reading and Critical Thinking

Develop and apply critical thinking skills through critically reading varied and challenging materials. Includes analysis, evaluation, interpretation, and synthesis through at least two substantial writing and/or speaking tasks. Prerequisites: A grade of C or better in (ENG101 or ENG107) and (RDG095, or RDG100, or RDG100LL, or RDG111, or RDG112, or RDG113, or an appropriate district placement, or permission of Instructor).

CRE101HS / 3 CREDITS / 3 PERIODS

College Critical Reading and Critical Thinking in Health Sciences

Develop and apply critical thinking skills through critically reading varied and challenging materials relevant to current issues in health sciences. Includes analysis, evaluation, interpretation, and synthesis through at least two substantial writing and/or speaking tasks. Prerequisites: A grade of C or better in [(ENG101 or ENG107) and (RDG095, or RDG100, or RDG100LL, or RDG111, or RDG112, or RDG113)], or a grade of B or better in ALT100, or an appropriate district placement, or permission of Instructor.

Also see Reading (RDG).

CRW – Creative Writing

CRW150 / 3 CREDITS / 3 PERIODS

Introduction to Creative Writing

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 / 3 CREDITS / 3 PERIODS

Introduction to Writing Poetry

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

CRW170 / 3 CREDITS / 3 PERIODS

Introduction to Writing Fiction

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

manipulating various elements and forms of fiction. Prerequisites: None. CRW150 recommended but not required.

CRW190 / 3 CREDITS / 3 PERIODS

Introduction to Screenwriting

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

CRW200 / 1 CREDIT / 1 PERIOD

Readings for Writers

Close analysis and interpretation of selected literary texts designed to strengthen the students' own writing by extending their familiarity with the genre in which they write and their knowledge of selected literary elements. One-on-one meetings between student and instructor. Prerequisites: CRW150, or permission of Instructor. Course Notes: CRW200 may be repeated for a total of six (6) credits.

CRW201 / 1 CREDIT / 1 PERIOD

Portfolio

Close analysis of the creative writing portfolio culminating in selection, revision, editing, and compiling of the student's own literary work in a portfolio. Students meet individually with instructor to choose, prepare, and compile their work. Prerequisites: (Acceptance into Creative Writing Certificate Program and completion of at least nine (9) credit hours in creative writing (CRW)), or permission of Program Director. Course Notes: CRW201 may be repeated for a total of two (2) credit hours.

CRW260 / 3 CREDITS / 3 PERIODS

Intermediate Poetry Writing

Emphasis on writing a series of original poems; analysis and evaluation of the functions and effects of established works of poetry; concentration on evaluation and revising students` poetry through intensive workshops. Prerequisites: A grade of C or better in CRW160 or permission of Instructor.

CRW261 / 3 CREDITS / 3 PERIODS

Topics in Writing: Poetry

Analysis, writing, and revision of genre or element within poetry. Prerequisites: A grade of C or better in CRW150 or permission of Instructor.

CRW270 / 3 CREDITS / 3 PERIODS

Intermediate Fiction Writing

Writing original short stories; analysis of works of fiction; concentration on revising students' fiction through intensive workshopping. Prerequisites: CRW170.

CRW272 / 3 CREDITS / 3 PERIODS

Planning and Structuring the Novel

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 / 3 CREDITS / 3 PERIODS

Writing the Novel

Provides the beginning novelist with structure, support, and guidance vital to sustained writing; focus on establishing goals and using critique sessions with instructor and peers to draft a novel; open- and topic-focused in-class forums, novel writing, peer and instructor critiques. Prerequisites: CRW272 or permission of Instructor.

CRW274 / 3 CREDITS / 3 PERIODS

Revising the Novel

Studio course workshop format. Requires a complete novel finished, in manuscript, ready for revision and polishing. Prerequisites: CRW273 or permission of Instructor.

CRW290 / 3 CREDITS / 3 PERIODS

Intermediate Screenwriting

Drafting and revision of original screenplay; overview of marketing a screenplay. Prerequisites: A grade of C or better in CRW190 or permission of Instructor.

For the most current information regarding course descriptions, log on to curriculum.maricopa.edu.

CSC – Computer Science

CSC100AA / 3 CREDITS / 4 PERIODS

Introduction to Computer Science (C++)

Concepts of problem solving, structured programming in C++, fundamental algorithms and techniques, and computer system concepts. Social and ethical responsibilities. Intended for majors other than Computer Science. Prerequisites: MAT120, or MAT121, or MAT122.

CSC110AA / 3 CREDITS / 4 PERIODS

Introduction to Computer Science (Java)

Concepts of problem solving, structured and object-oriented programming in Java, fundamental algorithms and techniques and computer system concepts. Social and ethical responsibilities. Intended for Computer Science and Computer Systems Engineering Majors. Prerequisites: MAT120 or MAT121 or MAT122.

CSC110AB / 4 CREDITS / 4 PERIODS

Introduction to Computer Science (Java)

Concepts of problem solving, structured and object-oriented programming in Java, fundamental algorithms and techniques and computer system concepts. Social and ethical responsibilities. Intended for Computer Science and Computer Systems Engineering Majors. Prerequisites: MAT120 or MAT121 or MAT122

CSC120 / 4 CREDITS / 6 PERIODS

Digital Design Fundamentals

Number systems, conversion methods, binary and complement arithmetic, Boolean switching algebra and circuit minimization techniques. Analysis and design of combinational logic, flip-flops, simple counters, registers, ROMs, PLDs, synchronous and asynchronous sequential circuits, and state reduction techniques. Building physical circuits. Prerequisites: None. Corequisites: CSC100 or CSC110 or Permission of Instructor or Division or Department Chair.

CSC180AB / 4 CREDITS / 4 PERIODS

Computer Literacy

Introduction to computers and technology and their impact on society. Explores technology, current topics in computing, applications and related issues. Students gain fluency in integrating technology to solve problems using computational thinking. Use of application software to create documents, spreadsheets, databases, e-mail and text files, and use of Internet browsers. Prerequisites: None.

CSC181AA / 3 CREDITS / 4 PERIODS

Applied Problem Solving with Visual Basic

Introduction to systematic definition of problems, solution formulation, and testing. Visual BASIC programming language applied to problems in mathematics, science, and business. Prerequisites: None.

CSC182AA / 3 CREDITS / 4 PERIODS

Principles of Programming with C#.NET

Introduction to object-oriented program analysis, design, and development using Visual C#.NET. Includes general concepts, data types, expressions, flow control, methods, classes, arrays, event-driven models, Windows applications, and Web applications. Prerequisites: None.

CSC205AA / 3 CREDITS / 4 PERIODS

Object Oriented Programming and Data Structures

Covers Object-Oriented design and programming; elementary data structures; arrays; lists; stacks; queues; binary trees; recursion; searching and sorting algorithms. Prerequisites: CSC110, or permission of Instructor.

CSC220 / 4 CREDITS / 5 PERIODS

Programming for Computer Engineering

Introduction to procedural programming (C/C++) and hardware description language (VHDL). Prerequisites:

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((EEE120 or CSC120) and CSC205) or permission of Instructor.

CSC230 / 4 CREDITS / 5 PERIODS

Computer Organization and Assembly Language

Assembly language programming including input/output (I/O) programming and exception/interrupt handling. Register-level computer organization, I/O interfaces, assemblers, and linkers. Processor organization and design, data path, control, pipelining, and input/output. Memory organization with cache and virtual memory. Prerequisites: [(CSC100 or CSC110) and CSC/EEE120], or permission of instructor.

CSC240 / 3 CREDITS / 5 PERIODS

Introduction to Different Programming Languages

Introduction to procedural (C/C++), applicative (LISP), and declarative (Prolog) languages. Prerequisites: CSC205 or permission of instructor.

DAH – Dance Humanities

DAH100 / 3 CREDITS / 3 PERIODS

Introduction to Dance

Overview of the field of dance focusing on origins, historical development, and cultural characteristics of the various styles of dance. Prerequisites: None.

DAH101 / 3 CREDITS / 3 PERIODS

Introduction to Dance Through History

Survey of dance throughout history examining the interplay between the cultural, social and political climate of the time and its expression in dance. Prerequisites: None.

DAH190 / 1 CREDIT / 1 PERIOD

Discovering Dance Careers

An overview of the professional opportunities available in dance and dance related fields. Prerequisites: None.

DAH201 / 3 CREDITS / 3 PERIODS

World Dance Studies

Exploration, analysis, synthesis, and evaluation of the role of dance in various cultures around the world. Prerequisites: None. DAH100 strongly suggested but not required.

DAH250 / 3 CREDITS / 3 PERIODS

Dance in Popular Culture

Interdisciplinary approach investigating diverse cultural dance practices that have shaped American popular culture from the late 19th century to the present. Highlights issues of power, class, race, ethnicity, gender, age and sexuality. Emphasis is on revealing diverse cultural influences in U.S. popular culture. Prerequisites: None.

DAN – Dance

DAN102AA / 1 CREDIT / 3 PERIODS

Hip Hop I

Theory and practice of Hip Hop dance at the beginning level. Development of movement quality and performance skills. Prerequisites: None. Course Notes: DAN102AA may be repeated for credit.

DAN102AB / 1 CREDIT / 3 PERIODS

Hip Hop II

Theory and practice of Hip Hop dance at the advanced beginning level. Development of movement quality and performance skills. Prerequisites: DAN102AA or permission of Instructor. Course Notes: DAN102AB may be repeated for credit.

DAN115 / 1 CREDIT / 3 PERIODS

Dance Trends

Theory and practice of current social dance trends. Development of movement quality and performance skills. Prerequisites: None. Course Notes: DAN115 may be repeated for credit.

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DAN120AA / 1 CREDIT / 3 PERIODS

World Dance: African Dance

Theory and practice of African dance. Development of movement quality and performance skills, individually or in a group setting. May include African, Caribbean or Afro-fusion dance. Prerequisites: None. Course Note: DAN120AA may be repeated for credit.

DAN120AB / 1 CREDIT / 3 PERIODS

World Dance: Flamenco

Theory and practice of Flamenco. Development of movement quality and performance skills, individually, with a partner or in a group setting. Prerequisites: None. Course Notes: DAN120AB may be repeated for credit.

DAN120AC / 1 CREDIT / 3 PERIODS

World Dance: Irish Dance

Theory and practice of Irish Dance. Development of movement quality and performance skills, individually or in a group setting. Prerequisites: None. Course Notes: DAN120AC may be repeated for credit.

DAN120AD / 1 CREDIT / 3 PERIODS

World Dance: Mexican Folkloric Dance

Theory and practice of Mexican Folkloric dance. Development of movement quality and performance skills, individually with a partner or in a group setting. Prerequisites: None. Course Notes: DAN120AD may be repeated for credit.

DAN120AE / 1 CREDIT / 3 PERIODS

World Dance: Middle Eastern Dance

Theory and practice of Middle Eastern dance. Development of movement quality and performance skills. Prerequisites: None. Course Notes: DAN120AE may be repeated for credit.

DAN120AF / 1 CREDIT / 3 PERIODS

World Dance: Afro-Brazilian Dance

Theory and practice of Afro-Brazilian dance. Development of movement quality and performance skills. Prerequisites: None. Course Notes: DAN120AF may be repeated for credit.

DAN120AG / 1 CREDIT / 3 PERIODS

World Dance: East Indian Dance

Theory and practice of East Indian dance. Development of movement quality and performance skills. Prerequisites: None. Course Notes: DAN120AG may be repeated for credit.

DAN120AH / 1 CREDIT / 3 PERIODS

World Dance: Native American Dance

Theory and practice of Native American dance. Development of movement quality and performance skills. Prerequisites: None. Course Notes: DAN120AH be repeated for credit.

DAN120AI / 1 CREDIT / 3 PERIODS

World Dance: European Folk Dance

Theory and practice of European Folk dance. Development of movement quality and performance skills individually or in a group setting. Prerequisites: None. Course Notes: DAN120AI may be repeated for credit.

DAN120AJ / 1 CREDIT / 3 PERIODS

World Dance: Asian Dance Forms

Theory and practice of Asian Dance Forms. Development of movement quality and performance skills. Prerequisites: None. Course Notes: DAN120AJ may be repeated for credit.

DAN120AK / 1 CREDIT / 3 PERIODS

World Dance: Capoeira

Theory and practice of Capoeira. Development of movement quality and performance skills. Prerequisites: None. Course Notes: DAN120AK may be repeated
for credit.

DAN129 / 1 CREDIT / 3 PERIODS

Musical Theatre Dance I

Introduction to the theory and practice of musical theatre dance at the beginning level. Development of movement quality and performance skills. Prerequisites: None. Course Notes: DAN129 may be repeated for credit.

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DAN131 / 1 CREDIT / 3 PERIODS

Ballet I

Introduction to the theory and practice of ballet at the beginning level. Development of movement quality and performance skills. Prerequisites: None. Course Notes: DAN131 may be repeated for credit.

DAN132 / 1 CREDIT / 3 PERIODS

Modern Dance I

Introduction to the theory and practice of modern dance at the beginning level. Development of movement quality and performance skills. Prerequisites: None. Course Notes: DAN132 may be repeated for credit.

DAN132PA / .5 CREDITS / 1.5 PERIODS

Modern Dance Basic Level

Dance training for personal skill development and interest. Introduction to the theory and practice of modern dance at the basic level. Prerequisites: None. Prior dance experience suggested but not required. Course Notes: DAN132PA may be repeated for credit. Course is not intended for dance majors.

DAN133 / 1 CREDIT / 3 PERIODS

Jazz Dance I

Introduction to the theory and practice of jazz dance at the beginning level. Development of movement quality and performance skills. Prerequisites: None. Corequisites: DAN138 for dance majors. Course Notes: DAN133 may be repeated for credit.

DAN134 / 1 CREDIT / 3 PERIODS

Ballet II

Theory and practice of ballet at the advanced beginning level. Development of movement quality and performance skills. Prerequisites: DAN131 or permission of Instructor. Course Notes: DAN134 may be repeated for credit.

DAN135 / 1 CREDIT / 3 PERIODS

Modern Dance II

Theory and practice of modern dance at the advanced beginning level. Development of movement quality and performance skills. Prerequisites: DAN132 or permission of Instructor. Course Notes: DAN135 may be repeated for credit.

DAN136 / 1 CREDIT / 3 PERIODS

Jazz Dance II

Theory and practice of jazz dance at the advanced beginning level. Development of movement quality and performance skills. Prerequisites: DAN133 or permission of Instructor. Course Notes: DAN136 may be repeated for credit.

DAN140 / 1 CREDIT / 3 PERIODS

Tap Dance I

An introduction to the theory and practice of tap dance. Prerequisites: None. Course Notes: DAN140 may be repeated for credit.

DAN141 / 1 CREDIT / 3 PERIODS

Dance Workshop

An intensive experience in the process of choreography, performance, and production elements. Prerequisites: None. Course Notes: DAN141 may be repeated for credit.

DAN150 / 1 CREDIT / 3 PERIODS

Dance Performance I

An introduction to the process and practice of dance performance. Prerequisites: None. Course Notes: DAN150 may be repeated for credit.

DAN155 / 1 CREDIT / 3 PERIODS

Dance Performance II

Continued study of the process and practice of dance performance at a level II. Prerequisites: DAN150 or permission of Instructor. Corequisites: Any level of any of the following dance technique courses with a DAN prefix: ballet, modern, jazz, hip hop, tap, social, or world dance. Course Notes: DAN155 may be repeated for credit.

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DAN164 / 1 CREDIT / 3 PERIODS

Improvisation

An introduction to and an exploration of basic improvisational dance skills. Prerequisites: None. Course Notes: DAN164 may be repeated for credit.

DAN210 / 3 CREDITS / 3 PERIODS

Dance Production I

Introduction to the elements of light, sound, and scenery as they relate to the art of dance. Prerequisites: None.

DAN211 / 3 CREDITS / 3 PERIODS

Dance Production II

Introduction to the theory and practice of makeup and costuming as they relate to dance. Prerequisites: None.

DAN221 / 3 CREDITS / 3 PERIODS

Rhythmic Awareness I

Exploration of rhythm in dance performance, choreography and pedagogy. Emphasis on the basic understanding of rhythm and cultivating awareness of rhythm in everyday life. Prerequisites: None.

DAN222 / 3 CREDITS / 3 PERIODS

Rhythmic Awareness II

Study at the intermediate level of rhythm and how it can be applied in dance and choreography. Emphasis on awareness of rhythm in everyday life as well as creative practice in rhythm and movement. Prerequisites: DAN221 or permission of instructor.

DAN231 / 1 CREDIT / 3 PERIODS

Ballet III

Theory and practice of ballet at the beginning intermediate level. Development of movement quality and performance skills. Prerequisites: DAN134 or permission of Instructor. Course Notes: DAN231 may be repeated for credit.

DAN232 / 1 CREDIT / 3 PERIODS

Modern Dance III

Theory and practice of modern dance at the beginning intermediate level. Development of movement quality and performance skills. Prerequisites: DAN135 or permission of Instructor. Course Notes: DAN232 may be repeated for credit.

DAN232AA / 2 CREDITS / 5 PERIODS

Modern Dance III: Intensive

Theory and intensive practice of modern dance at the beginning intermediate level. Development of movement quality and performance skills. Prerequisites: DAN135 or permission of Instructor. Course Note: DAN232AA may be repeated for credit.

DAN233 / 1 CREDIT / 3 PERIODS

Jazz Dance III

Theory and practice of jazz dance at the beginning intermediate level. Development of movement quality and performance skills. Prerequisites: DAN136 or permission of Instructor. Course Notes: DAN233 may be repeated for credit.

DAN234 / 1 CREDIT / 3 PERIODS

Ballet IV

Theory and practice of ballet at the intermediate level. Development of movement quality and performance skills. Prerequisites: DAN231 or permission of Instructor. Course Notes: DAN234 may be repeated for credit.

DAN235 / 1 CREDIT / 3 PERIODS

Modern Dance IV

Theory and practice of modern dance at the intermediate level. Development of movement quality and performance skills. Prerequisites: DAN232 or permission of Instructor. Course Note: DAN235 may be repeated for credit.

DAN235AA / 2 CREDITS / 5 PERIODS

Modern Dance IV: Intensive

Theory and intensive practice of modern dance at the advanced intermediate level. Development of

movement quality and performance skills. Prerequisites: DAN232AA or permission of Instructor. Course Notes: DAN235AA may be repeated for credit.

DAN236 / 1 CREDIT / 3 PERIODS

Jazz Dance IV

Theory and practice of jazz dance at the intermediate level. Development of movement quality and performance skills. Prerequisites: DAN233 or permission of Instructor. Course Notes: DAN236 may be repeated for credit.

DAN264 / 3 CREDITS / 3 PERIODS

Choreography I

Study of basic dance choreography to include construction of a phrase, structure and form in a composition, and the basic elements of time, space and energy. Prerequisites: None.

DAN265 / 3 CREDITS / 3 PERIODS

Choreography II

Exploration of choreography at the intermediate level. Experimentation with the various approaches to creative practice as established by 20th and 21st century artists. Prerequisites: DAN264 or permission of Instructor.

DAN280 / 2 CREDITS / 6 PERIODS

Dance Practicum

A culmination of coursework for the dance major requiring completion of an extended choreographic work from conception to performance. Also requires a final evaluative paper on the successes and challenges encountered throughout the project. Prerequisites: Permission of instructor.

DAN290AA / 1 CREDIT / 3 PERIODS

DAN290AB / 2 CREDITS / 6 PERIODS

DAN290AC / 3 CREDITS / 9 PERIODS

Dance Conservatory I

An intensive course focusing on the theory and practice of dance technique including, but not limited to, ballet, modern dance, modern jazz, pilates, yoga and dance performance at the beginning level. Study of repertory and development of movement quality and performance skills. Includes an informal public showing of dance technique and performance skills. Prerequisites: None. Course Notes: DAN290AA may be repeated for a total of three (3) credit hours; DAN290AB may be repeated for a total of six (6) credit hours; DAN290AC may be repeated for a total of nine (9) credit hours.

DAN291AA / 1 CREDIT / 3 PERIODS

DAN291AB / 2 CREDITS / 6 PERIODS

DAN291AC / 3 CREDITS / 9 PERIODS

Dance Conservatory II

An intensive course focusing on the theory and practice of dance technique including, but not limited to, ballet, modern dance, modern jazz, pilates, yoga and dance performance at the intermediate level. Study of repertory and development of movement quality and performance skills. Includes an informal public showing of dance technique and performance skills. Prerequisites: (DAN131 and DAN132) or permission of instructor. Course Notes: DAN291AA may be repeated for a total of three (3) credit hours; DAN291AB may be repeated for a total of six (6) credit hours; DAN291AC may be repeated for a total of nine (9) credit hours.

DAN292AA / 1 CREDIT / 3 PERIODS

DAN292AB / 2 CREDITS / 6 PERIODS

DAN292AC / 3 CREDITS / 9 PERIODS

Dance Conservatory III

An intensive course focusing on the theory and practice of dance technique including, but not limited to, ballet, modern dance, modern jazz, pilates, yoga and dance performance at the advanced level. Study of repertory and development of movement quality and performance skills. Includes an informal public showing of dance technique and performance skills. Prerequisites: (DAN134 and DAN135) or permission of instructor. Course Notes: DAN292AA may be repeated for a total of three (3) credit hours; DAN292AB may be

repeated for a total of six (6) credit hours; DAN292AC may be repeated for a total of nine (9) credit hours.

ECE – Engineering Science

ECE102 / 2 CREDITS / 4 PERIODS

SUN EGR 1102

Engineering Analysis Tools and Techniques

Learning culture of engineering, engineering use of computer tools, and computer modeling as applied to engineering analysis and design. Prerequisites: A grade of C or better is required in all Prerequisites. Prerequisites or Corequisites: MAT182, or higher level mathematics course, or permission of Instructor or Department or Division Chair.

ECE102AA / 2 CREDITS / 4 PERIODS

SUN EGR 1102

Engineering Analysis Tools and Techniques

Learning culture of engineering, engineering use of computer tools, and computer modeling as applied to engineering analysis and design. Prerequisites: Two years of high school algebra or MAT122 or departmental approval. Corequisites: MAT151 or MAT182 or MAT187.

ECE103 / 2 CREDITS / 4 PERIODS

SUN EGR 1102

Engineering Problem Solving and Design

Fundamentals of the design process: engineering modeling, communication and problem-solving skills in a team environment. Emphasis on process-based improvements to the design process. Introduction to engineering as a profession. Prerequisites: A grade of C or better in ECE102 OR permission of instructor.

ECE103AB / 2 CREDITS / 4 PERIODS

SUN EGR 1102

Engineering Problem Solving and Design

Fundamentals of the design process: engineering modeling, communication and problem-solving skills in a team environment. Emphasis on process-based improvements to the design process. Introduction to engineering as a profession. Prerequisites: (ECE102 or ECE102AA) and (high school physics, or PHY111, or PHY111AA).

ECE105 / 1 CREDIT / 2 PERIODS

MATLAB Programming

Use MATLAB to solve engineering problems. An overview of programming, including matrices, structures, strings, functions, control flow, file management, data analysis, graphing capabilities, and mathematical calculations. Prerequisites: [(MAT150 or MAT151 or MAT152) and MAT182] or MAT187 or higher level mathematics course.

ECE111 / 3 CREDITS / 5 PERIODS

Bioengineering Systems

Introduction to biological concepts and application of engineering to biological and earth systems. Analysis of materials, structures, fluid mechanics, bioelectricity, and dynamics as applied to biological and environmental systems. Prerequisites: None.

ECE211 / 3 CREDITS / 5 PERIODS

Engineering Mechanics-Statics

Mathematical treatment of the basic physical principles of statics. Methods of vector algebra and vector calculus. Prerequisites: A grade of C or better in PHY115 or PHY121 or permission of Instructor or Division or Department Chair. Corequisites: MAT230 or MAT231 or permission of Instructor or Division or Department Chair.

ECE212 / 3 CREDITS / 5 PERIODS

Engineering Mechanics-Dynamics

Kinematics and kinetics of particles, translating and

rotating coordinate systems, rigid body kinematics, dynamics of systems of particles and rigid bodies, and energy and momentum principles. Prerequisites: A grade of C or better required in all Prerequisites. Prerequisites: [ECE211 and (PHY115 or PHY121)] or permission of Instructor or Division or Department Chair. Prerequisites or Corequisites: MAT240 or MAT241 or permission of Instructor or Division or Department Chair.

ECE214 / 4 CREDITS / 6 PERIODS

Engineering Mechanics

Foundations of engineering mechanics, including force systems, resultants, equilibrium of particles and rigid bodies, centroids and centers of mass, area and mass moments of inertia, friction, internal forces in structures, kinematics and kinetics of particles, kinematics and kinetics of rigid bodies, energy and momentum principles. Prerequisites: (ECE103 or ECE103AB), (MAT230 or MAT231), and (PHY115 or PHY121). Corequisites: MAT240 or MAT241.

ECE215 / 3 CREDITS / 5 PERIODS

Mechanics of Materials

Designed to provide students with a strong fundamental foundation in the mechanics of solids. Includes the concepts of stress and strain applied to the analysis and design of members subjected to axial and torsional loads and members subjected to shear and bending, applications and transformation of plane stress and plane strain, deformation of beams, and elastic buckling of columns. Prerequisites: A grade of C or better in ECE211 or ECE214 or permission of Instructor or Division or Department Chair.

ECE216 / 2 CREDITS / 2 PERIODS

Computer-Aided Engineering

Introduction to engineering graphics, including tolerancing and fasteners, as well as creation and use of engineering drawings. Prerequisites: A grade of C or better in (ECE103 or ECE103EP) OR permission of instructor. Co-Requisites: ECE216LL.

ECE216LL / 1 CREDITS / 2 PERIODS

Computer-Aided Engineering Laboratory

Laboratory experience in support of ECE216. Prerequisites: A grade of C or better in (ECE103 or ECE103EP) OR permission of instructor Co-Requisites: ECE216.

ECE294 / 3 CREDITS / 3 PERIODS

Special Topics in Engineering

Exploration and investigation of a focused topic in engineering. Prerequisites: Permission of Instructor, or Department or Division Chair. Course Notes: ECE294 may be repeated for credit.

ECE294AA / 2 CREDITS / 2 PERIODS

Special Topics in Engineering

Exploration and investigation of a focused topic in engineering. Prerequisites: Permission of Instructor, or Department or Division Chair. Course Notes: ECE294AA may be repeated for credit.

ECE294AB / 1 CREDIT / 1 PERIOD

Special Topics in Engineering

Exploration and investigation of a focused topic in engineering. Prerequisites: Permission of Instructor, or Department or Division Chair. Course Notes: ECE294AB may be repeated for credit.

ECE294AC / .50 CREDITS / .50 PERIODS

Special Topics in Engineering

Exploration and investigation of a focused topic in engineering. Prerequisites: Permission of Instructor, or Department or Division Chair. Course Notes: ECE294AC may be repeated for credit.

ECH – Early Childhood Education

ECH128 / 3 CREDITS / 3 PERIODS

Early Learning: Play and the Arts

Examines theory, research and practices relating to

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play and the creative arts in early childhood. Considers practical constraints and alternative perspectives. Prerequisites: None.

ECH253 / 3 CREDITS / 3 PERIODS

National Credential Portfolio Development

Portfolio or resource file development, completion, and presentation. Self-assessment and credentialing planning, professional development, writing, and critical learning included. Prerequisites: Permission of Program Director.

ECN – Economics

ECN211 / 3 CREDITS / 3 PERIODS

SUN ECN 2201

Macroeconomic Principles

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

ECN212 / 3 CREDITS / 3 PERIODS

SUN ECN 2202

Microeconomic Principles

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

EDU – Education

EDU220 / 3 CREDITS / 3 PERIODS

Introduction to Serving English Language Learners (ELL)

Rationale for and current educational and legal issues for serving English Language Learners (ELL). Comparison and evaluation of various types of language educational models including Structured English Immersion (SEI), English as a Second Language (ESL) and bilingual/Dual Language Immersion (DLI). Includes SEI, ESL, and bilingual/DLI strategies. Prerequisites: None. Course Notes: Approved school-based practicum is required. EDU220 incorporates the 45-clock hour curricular framework for SEI endorsement through the Arizona Department of Education.

EDU221 / 3 CREDITS / 3 PERIODS

Introduction to Education

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 / 3 CREDITS / 3 PERIODS

Introduction to the Exceptional Learner

Overview of the exceptional learner with emphasis on factors relating to current practices, identification, characteristics, and educational adaptations. Issues related to mild disabilities, severe disabilities, emotional and behavioral disorders, intellectual disabilities, and students who are gifted. Prerequisites: None. EDU222 requires an approved field experience.

EDU230 / 3 CREDITS / 3 PERIODS

Cultural Diversity in Education

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.

For the most current information regarding course descriptions, log on to curriculum.maricopa.edu.

EDU236 / 3 CREDITS / 3 PERIODS

Classroom Relationships

Analysis of K-12 classroom interactions, classroom environment, and classroom management skills from a teacher's point of view. Focus on classroom as a multidimensional environment in which principles of classroom design, communication, management, and resources determine effectiveness. Prerequisites: None. EDU221 suggested but not required. Course Note: Requires a 20-hour field experience in a K-12 classroom.

EDU250 / 3 CREDITS / 3 PERIODS

Overview of the Community Colleges

The history, functions, organization and current issues in the community/junior college with emphasis on the Arizona community colleges. Prerequisites: None.

EDU291 / 3 CREDITS / 3 PERIODS

Children's Literature

Review of folk and modern literature from a variety of world cultures, including application of literary criteria to folk and modern literature for children. Prerequisites: None.

EDU292 / 3 CREDITS / 3 PERIODS

The Art Of Storytelling

Explore the art and origin of storytelling. Provide a variety of storytelling techniques, styles and exercises to enhance the delivery of telling stories. Assist in the integration and application of storytelling to the learning environment in the classroom. Prerequisites: None. Cross-References: HUM292, STO292.

EED – Early Education

EED205 / 3 CREDITS / 3 PERIODS

The Developing Child: Prenatal to Age Eight

Examination of process of physical, social, emotional, cognitive, language, and literacy development of typical and atypical young children; prenatal through age eight. Includes practical application and fieldwork experience. Prerequisites: None.

EED212 / 3 CREDITS / 3 PERIODS

Guidance, Management and the Environment

Principles for guiding young children in early care and education environments. Exploration of guidance, management, and how the environment impacts the lives of young children. Includes observation of classrooms of children ages birth to age eight. Prerequisites: None.

EED215 / 3 CREDITS / 3 PERIODS

Early Learning: Health, Safety, Nutrition and Fitness

Consideration of public health issues and safety procedures within early childhood settings, serving young children birth to age eight. Overview of nutritional needs and issues of physical fitness and well-being in young children. Includes field experiences. Prerequisites: None.

EED220 / 3 CREDITS / 3 PERIODS

Child, Family Community and Culture

Examines family, community and cultural influences on development of the young child (birth to age eight). Considers trends and threats to attachment, relationships and cultural identity. Includes social and emotional experiences and their impact on the developing brain. Prerequisites: None.

EED261 / 1 CREDIT / 1 PERIOD

Early Childhood Preschool Internship

Work experience with preschoolers in early care and education settings. 80 hours of designated work per credit. Prerequisites: Permission of Department or Division. Course Notes: EED261 may be repeated for a total of six (6) credit hours.

For the most current information regarding course descriptions, log on to curriculum.maricopa.edu.

EEE – Electrical Engineering

EEE120 / 4 CREDITS / 6 PERIODS

Digital Design Fundamentals

Number systems, conversion methods, binary and complement arithmetic, Boolean switching algebra and circuit minimization techniques. Analysis and design of combinational logic, flip-flops, simple counters, registers, ROMs, PLDs, synchronous and asynchronous sequential circuits, and state reduction techniques. Building physical circuits. Prerequisites: None. Corequisites: CSC100 or CSC110 or permission of Instructor.

EEE202 / 5 CREDITS / 7 PERIODS

Circuits and Devices

Introduction to circuits and devices. Component models, transient analysis, steady state analysis, Laplace transform, and active and passive filter networks. Prerequisites: A grade of C or better in PHY116 or PHY131. Corequisites: MAT276 or permission of Instructor.

EEE220 / 4 CREDITS / 5 PERIODS

Programming for Computer Engineering

Introduction to procedural programming (C/C++) and hardware description language (VHDL). Prerequisites: ((EEE120 or CSC120) and CSC205) or permission of Instructor.

EEE230 / 4 CREDITS / 5 PERIODS

Computer Organization and Assembly Language

Assembly language programming including input/output (I/O) programming and exception/interrupt handling. Register-level computer organization, I/O interfaces, assemblers, and linkers. Processor organization and design, data path, control, pipelining, and input/output. Memory organization with cache and virtual memory. Prerequisites: [(CSC100 or CSC110) and CSC/EEE120], or permission of instructor.

ELE – Electronics

ELE111 / 4 CREDITS / 6 PERIODS

Circuit Analysis I

Direct current (DC) and Alternating current (AC) electric circuits. Ohm's law, Kirchoff's laws, series, parallel and series-parallel circuits, fundamentals of inductance and capacitance, and the transient behavior of circuits containing resistance and capacitance or resistance and inductance. Prerequisites: None. Corequisites: MAT120, or MAT121, or MAT122, or equivalent.

ELT – Electronics Technology

ELT100 / 3 CREDITS / 3 PERIODS

Survey of Electronics

An introduction to the field of electronics for those who may not intend to specialize in electronics. Essentially nonmathematical in nature; includes familiarization with a wide range of electronic components. Application to electronic systems, such as radio transmitters and receivers – both AM (amplitude modulation) and FM (frequency modulation), television transmitters and receivers, logic control, and computers. Application also to automotive electronics. Prerequisites: None.

EMT – Emergency Medical Technology

EMT101 / .5 CREDITS / .5 PERIODS

Basic Life Support/Cardiopulmonary Resuscitation (CPR) for Health Care Providers

Designed to provide the allied healthcare provider with the knowledge and skills to perform Basic Life Support (BLS) according to current guidelines for emergency cardiovascular care (ECC). Prerequisites: None. Course Notes: EMT101 may be repeated for credit.

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EMT104 / 10 CREDITS / 10 PERIODS

Emergency Medical Technology

Designed as the Emergency Medical Technician (EMT) lecture to prepare students for scope of practice and standard of care with comprehensive assessment, diagnostic technology, patient advocacy, ethical and professional behaviors, critical thinking, decision-making, and patient management of medical and trauma emergencies and non-emergencies. Prerequisites: Appropriate score on Reading placement test to demonstrate minimum tenth grade level reading, or completion of an Associate`s degree or higher from an accredited institution. Course Notes: Students must meet National Registry of EMT requirements for certification. Additional information available at nremt.org. EMT104 may be repeated for credit.

EMT104AB / .5 CREDITS / .5 PERIODS

Applied Practical Studies for Emergency Medical Technology

Simulation of actual emergency responses, with practical application of techniques and skills covered in EMT curricula. Scenario based learning applied to the techniques of emergency medical care in accordance with national and state curriculum. Practical application of anatomy, physiology, patient assessment, and treatment of medically or traumatically compromised patients, special hazards and medical operations. Also includes patient-assisted medication administration, semi-automatic external defibrillator and blood glucose monitoring. Students operate in outside, scenario based environments. Prerequisites: None. Corequisites: EMT104. Course Notes: EMT/FSC104AB may be repeated for credit. Cross-References: FSC104AB.

EMT104LL / 2 CREDITS / 3.5 PERIODS

Emergency Medical Technology Practicum

Designed as the simulated Emergency Medical Technician (EMT) practicum in which the student synthesizes standard of care and scope of practice with comprehensive assessment and diagnostic technology, patient advocacy, ethical and professional behaviors, critical thinking, decision-making, and patient management of medical and trauma emergencies. Provides scenario based learning applied to the techniques of emergency medical care in accordance with national and state curriculum. Prerequisites: A grade of C or better in EMT104 or permission of Instructor or Corequisites: EMT104. Course Notes: EMT104LL may be repeated for credit. Students must meet National Registry of EMT requirements for certification. Additional information available at nremt.org

ENG – English

ENG101 / 3 CREDITS / 3 PERIODS

SUN ENG 1101

First-Year Composition

Emphasis on rhetoric and composition with a focus on expository writing and understanding writing as a process. Establishing effective college-level writing strategies through four or more writing projects comprising at least 3,000 words in total. Prerequisites: Appropriate district placement, or a grade of B or better in ALT100, or a grade of C or better in ENG091 or ESL097 or WAC101 OR (Prerequisites: ALT100. Corequisites: ENG100A+ or ENG101LL or ENG107LL or WAC101).

ENG102 / 3 CREDITS / 3 PERIODS

SUN ENG 1102

First-Year Composition

Emphasis on rhetoric and composition with a focus on persuasive, research-based writing and understanding writing as a process. Developing advanced college-level writing strategies through three or more writing projects comprising at least 4,000 words in total. Prerequisites: Grade of C or better in ENG101.

ENG107 / 3 CREDITS / 3 PERIODS

First-Year Composition for ESL

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

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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 district placement, or a grade of B or better in ALT100, or a grade of C or better in ENG091 or ESL097 or WAC101 OR (Prerequisites: ALT100. Corequisites: ENG100A+ or ENG101LL or ENG107LL or WAC101).

ENG108 / 3 CREDITS / 3 PERIODS

First-Year Composition for ESL

Equivalent of ENG102 for students of English as a Second Language (ESL). Emphasis on rhetoric and composition with a focus on persuasive, research-based writing and understanding writing as a process. Developing advanced college-level writing strategies through three or more writing projects comprising at least 4,000 words in total. Prerequisites: Grade of C or better in ENG107.

ENG111 / 3 CREDITS / 3 PERIODS

Technical Writing

Covers analyzing, planning, organizing, researching, and writing correspondence, reports, and presentations for specific work-related audiences. Includes integrating data and graphics into work-related documents and presentations. Prerequisites: ENG101 with a grade of "C", or better, or permission of instructor.

ENG200 / 3 CREDITS / 3 PERIODS

Reading and Writing About Literature

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

ENG216 / 3 CREDITS / 3 PERIODS

Persuasive Writing on Public Issues

Advanced course in techniques of analyzing and writing persuasive arguments addressing topics of current public interest. Papers research based. Prerequisites: ENG102.

ENG217 / 3 CREDITS / 3 PERIODS

Personal and Exploratory Writing

Using writing to explore one's self and the world one lives in; emphasis on journal writing as a source and inspiration for public writing. Prerequisites: ENG101 or ENG107 or equivalent.

ENG270 / 3 CREDITS / 3 PERIODS

Workplace Writing

Emphasizes rhetoric and composition with a focus on adapting writing to meet the needs of very specific workplace objectives and audiences. Uses primary and secondary research practices to investigate a variety of workplace discourse communities. Prerequisites: Grade of C or better in ENG102 or ENG108. Course Notes: Develop advanced college-level writing strategies through three or more writing projects comprising at least 4,000 words in total.

ENH – English Humanities

ENH110 / 3 CREDITS / 3 PERIODS

Introduction to Literature

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.

ENH114 / 3 CREDITS / 3 PERIODS

African-American Literature

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

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ENH206 / 3 CREDITS / 3 PERIODS

Nature and Environmental Literature

Investigates major themes in nature and environmental writing. Explores relationship between humanity and the environment as expressed through fiction, non-fiction, and poetry. Examines how literature drives attitudes and policies. Prerequisites: None.

ENH221 / 3 CREDITS / 3 PERIODS

Survey of English Literature Before 1800

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

ENH222 / 3 CREDITS / 3 PERIODS

Survey of English Literature After 1800

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

ENH241 / 3 CREDITS / 3 PERIODS

American Literature Before 1860

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

ENH242 / 3 CREDITS / 3 PERIODS

American Literature After 1860

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

ENH251 / 3 CREDITS / 3 PERIODS

Mythology

Deals with the myths and legends of civilizations with the greatest influence upon the development of the literature and culture of the English speaking people, and compares those myths with myths from other cultures. Prerequisites: None.

ENH253 / 3 CREDITS / 3 PERIODS

Contemporary Global Literature and Film

Characteristics of literary and cinematic mediums. Challenges of adapting literature to film. Global examination of historical, religious, socio-economic, political, and colonial/post colonial themes depicted in Western and non-Western literature and film (e. g., Africa, Asia, and Latin America) outside the United States. Use of narrative in each medium and how it translates various global/international perspectives and cultural assumptions. Specific genres present in literature and film. Cultural metaphors and symbols used in literature and film. Prerequisites: ENG101.

ENH254 / 3 CREDITS / 3 PERIODS

Literature and Film

Presents works of literature and their film versions and analyzes distinguishing techniques of each medium. Prerequisites: ENG101, or ENG107, or equivalent.

ENH255 / 3 CREDITS / 3 PERIODS

Contemporary U.S. Literature and Film

Strengths and weaknesses of literature and film. Challenges of adapting literature to film. Addressing racial, ethnic, gender, class and religious differences between cultures and mediums. Use of narrative in each medium and how it translates various cultural values and assumptions. Specific genres present in literature and film. Cultural metaphors and symbols used in literature and film. Prerequisites: ENG101.

ENH259 / 3 CREDITS / 3 PERIODS

American Indian Literature

Contemporary American Indian forms of literary expression. Selected oral traditions of American Indians. Trends and movements within American Indian literary history. Prerequisites: None.

ENH260 / 3 CREDITS / 3 PERIODS

Literature of the Southwest

Investigates major themes in Southwestern American literature including the Western myth, minority roles in

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the region's literature, control of nature versus primacy of nature, and growth. Both prose and poetry are examined with an emphasis on contemporary Southwestern writing. Prerequisites: None.

ENH284 / 3 CREDITS / 3 PERIODS

19th Century Women Writers

Investigates major themes in literature by women writing in the 19th century including the nature of women's lives in the family, in work situations, and in society. Poetry, prose, essays and drama are examined with an emphasis on common themes. Prerequisites: None.

ENH285 / 3 CREDITS / 3 PERIODS

Contemporary Women Writers

Explores twentieth century literature (short stories, essays, plays, and poetry) written by women and about women. Focus on themes relevant to women's lives regardless of age, creed, or ethnic background. Prerequisites: None.

ENH291 / 3 CREDITS / 3 PERIODS

Children's Literature

Review of folk and modern literature from a variety of world cultures, including application of literary criteria to folk and modern literature for children. Prerequisites: None.

ENH295 / 3 CREDITS / 3 PERIODS

Banned Books and Censorship

History, motivations, and effects of censorship in a democratic society. Censorship and book banning as a method of silencing diverse voices. Critical analysis of banned or challenged literature for children and adults. Prerequisites: None.

ESL – English as a Second Language

ESL001BB / 2 CREDITS / 2 PERIODS

Basic ESL I: Services & Employment

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.

ESL001BC / 2 CREDITS / 2 PERIODS

Basic ESL I: Shopping & Everyday Life

Listening, speaking, reading and writing in English at a basic level. Focus on survival skills related to shopping and everyday life when living in the United States. Introduction to elementary grammatical patterns. Prerequisites: ESL001BB or permission of instructor.

ESL010 / 3 CREDITS / 3 PERIODS

English as a Second Language I: Grammar

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 / 3 CREDITS / 3 PERIODS

English as a Second Language I: Listening and Speaking

Emphasis on listening and speaking skills involving survival skills. Asking and answering questions related to work, shopping, and personal safety. May be repeated for a maximum of six (6) credits. Prerequisites: Appropriate ESL placement test score or ESL002.

ESL013 / 1 CREDIT / 1 PERIOD

Vocabulary for ESL I

Emphasis on the acquisition of basic English vocabulary including identifying and pronouncing words related to people, medical/dental care, occupations and other activities. Prerequisites: Appropriate ESL placement test score or permission of Instructor. Course Notes: ESL013 may be repeated for a maximum of two (2) credits.

For the most current information regarding course descriptions, log on to curriculum.maricopa.edu.

ESL016 / 3 CREDITS / 3 PERIODS

Reading English as a Second Language I

Designed for students who are learning English as a second language. Skills needed to become proficient readers in English. Sound symbol relationships of the English alphabet. Essential vocabulary for daily communication both in isolation and context. Development of reading comprehension skills. Prerequisites: Appropriate ESL placement test score.

ESL020 / 3 CREDITS / 3 PERIODS

English as a Second Language II: Grammar

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.

ESL021 / 3 CREDITS / 3 PERIODS

English as a Second Language II – Listening and Speaking

Emphasis on listening and speaking skills involving social exchange. Asking and answering questions, using tag questions. Practice with question and answer patterns. Polite questions and responses. Prerequisites: Appropriate ESL placement test score or ESL010 or ESL011 or ESL012 or RDG/ESL016. Course Notes: ESL021 may be repeated for a maximum of six (6) credits.

ESL022 / 3 CREDITS / 3 PERIODS

ESL II-Writing with Oral Practice

Emphasis on basic writing skills, accompanied by recitation of short writings. Sentence patterns and introduction of paragraph writing. May be repeated for a maximum of six (6) credits. Prerequisites: Appropriate ESL course placement score, or a grade of C or better in ESL012, or permission of instructor.

ESL026 / 3 CREDITS / 3 PERIODS

Reading English as a Second Language II

Designed for students who are learning English as a second language. Continued development of vocabulary and reading comprehension skills. Prerequisites: Appropriate ESL placement test score, or grade of "C" or better in ESL/RDG016, or permission of Instructor.

ESL030 / 3 CREDITS / 3 PERIODS

English as a Second Language III: Grammar

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. Course Notes: ESL030 may be repeated for a total of six (6) credit hours. Credit (P) or no credit (Z). Standard grading available according to procedures outlined in catalog.

ESL031 / 3 CREDITS / 3 PERIODS

English as a Second Language III – Listening and Speaking

Emphasis on listening and speaking skills related primarily to academic environment. Asking questions, working in small groups, using college resources, informal oral presentation. Prerequisites: Appropriate ESL placement test score or ESL020 or ESL021 or ESL022 or RDG/ESL026. Course Notes: ESL031 may be repeated for a total of six (6) credit hours.

ESL032 / 3 CREDITS / 3 PERIODS

ESL III-Writing with Oral Practice

Emphasis on complex sentence patterns in writing and speech. Introduction to the prewriting and writing process in a college setting. 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.

For the most current information regarding course descriptions, log on to curriculum.maricopa.edu.

ESL036 / 3 CREDITS / 3 PERIODS

Reading English as a Second Language III

Designed for students who are learning English as a second language. Instruction for more advanced vocabulary and reading comprehension skills. Prerequisites: Appropriate ESL placement test score, or grade of "C" or better in ESL/RDG026, or permission of Instructor.

ESL040 / 3 CREDITS / 3 PERIODS

English as a Second Language IV: Grammar

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. Course Notes: ESL040 may be repeated for a total of six (6) credit hours. Credit (P) or no credit (Z). Standard grading available according to procedures outlined in catalog.

ESL041 / 3 CREDITS / 3 PERIODS

English as a Second Language IV: Listening and Speaking

Emphasis on academic skills. Listening to lectures, notetaking, peer interaction, accessing and using media resources, formal oral presentations. Prerequisites: Appropriate ESL placement test score or ESL030 or ESL031 or ESL032 or RDG/ESL036. Course Notes: ESL041 may be repeated for a maximum of six (6) credits.

ESL042 / 3 CREDITS / 3 PERIODS

ESL IV-Writing with Oral Practice

Emphasis on paragraph writing and oral recitation of complex sentences and paragraphs. Introduction to the prewriting and writing process for short essays. May be repeated for a maximum of six (6) credits. Prerequisites: Appropriate ESL course placement score, or a grade of C or better in ESL032, or permission of instructor.

ESL046 / 3 CREDITS / 3 PERIODS

Reading English as a Second Language IV

Developed for students of English as a second language. Development of advanced vocabulary, comprehension skills, and culture awareness. Prerequisites: Appropriate ESL placement test score, or grade of "C" or better in ESL/RDG036, or permission of Instructor.

ESL050 / 3 CREDITS / 3 PERIODS

Review Grammar For ESL

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 / 3 CREDITS / 3 PERIODS

Pronunciation Improvement for ESL Speakers

Individualized pronunciation practice and drills for English as a Second Language (ESL) speakers. Prerequisites: Appropriate ESL course placement score, or a grade of C or better in (ESL020 or ESL021 or ESL022 or RDG/ESL026), or permission of instructor. Course Notes: ESL051 may be repeated for a total of six (6) credits.

ESL071 / 3 CREDITS / 3 PERIODS

Advanced Pronunciation and Oral Reading for ESL

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

For the most current information regarding course descriptions, log on to curriculum.maricopa.edu.

ESL087 / 3 CREDITS / 3 PERIODS

Preparatory Academic Writing II for ESL

Emphasizes preparation for college-level composition and related reading tasks with a focus on critical writing, reading, and thinking skills and processes. Prerequisites: Appropriate writing placement test score, or grade of C or better in ESL077 or ENG071, or permission of Department or Division.

ETL – Excellence/ Teaching/Learning

ETL220 / 3 CREDITS / 3 PERIODS

Online Teaching and Learning I

Application of and experience using an online teaching and learning environment from a student`s perspective to inform the design and support of an online course environment. Application and evaluation of online learning principles and tools for teaching and learning. Identification and development of online facilitation knowledge and skills. Introduction to the best practices in content building, course design and delivery. Prerequisites: Permission of Instructor.

ETL221 / 3 CREDITS / 3 PERIODS

Online Teaching and Learning II

Experience with creating an online or hybrid duplicative course module structure in an online teaching and learning environment using evidence-based practices in course design. Develop learning objectives and module map based on curricular principles. Using instructional design techniques develop and align materials, activities, assignments and assessments to learning objectives. Discuss and develop active learning strategies for presenting content, facilitating discussions, creating assignments and administering assessments in the online environment. Prerequisites: A grade of C or better in ETL220 or permission or Instructor.

EUT – Electric Utility Technology

EUT103 / 2 CREDITS / 2 PERIODS

Introduction to Rigging

Basic fundamentals of overhead rigging. Topics covered include elements of safe rigging, rope, knots and knot tying, use of a handline, and use of blocks and tackle. Exploration of variety approaches to basic rigging tasks. Prerequisites: [A grade of B or better in (MAT055, MAT056, and MAT057), or a grade of B or better in MAT09+, or appropriate district placement into MAT122], and a grade of C or better in ENG091, or ESL097, or appropriate district placement into ENG101.

EUT104 / 2 CREDITS / 2 PERIODS

Equipment Safety and Operation

Operation and maintenance of equipment used in the utility industry. Identification and inspection of the major mechanical operations of equipment, as well as performance of pre-trip inspections on utility equipment. Emphasis on safety operations. Prerequisites: None.

EUT105 / 1 CREDIT / 1 CREDIT

Introduction to Pole Climbing

Proper climbing techniques for new climbers. Inspection and maintenance of pole climbing equipment, the equipment used in pole climbing, and how to maintain it. Prerequisites: None

EUT110 / 2 CREDITS / 2 PERIODS

Line Work I

Overview of line work industry including its history, technological developments and current practices. Examines industry equipment and tools. Focuses on safety practices and procedures used in utility line work industry. Prerequisites: None.

For the most current information regarding course descriptions, log on to curriculum.maricopa.edu.

EUT112 / 4 CREDITS / 4 PERIODS

Basic Electricity: AC and DC

Reviews the basic principles of Alternating Current (AC) and Direct Current (DC) electricity. Examines the structure and function of AC and DC circuits including series, parallel and series-parallel circuits. Includes an overview of electric systems and their applications in the utility industry. Prerequisites: None. Corequisites: EUT110 and EUT115.

EUT115 / 4 CREDITS / 12 PERIODS

Field Training I

Practice in the basics of climbing and working on utility poles. Focuses on apparatus and equipment, using ropes and rigging equipment, installations of single and double cross arms, pole framing and setting, use of hand line and building single-phase lines. Prerequisites: None. Corequisites: EUT110, EUT112.

EUT210 / 2 CREDITS / 2 PERIODS

Line Work II

Overview of line work industry including its history, technological developments and current practices. Examines industry equipment and tools. Focuses on hot sticking, tag out and lock out procedures with emphasis on industry safety practices and procedures. Prerequisites: EUT110.

EUT211 / 4 CREDITS / 4 PERIODS

Electrical Apparatus

Overview of transformers and how they operate. Reviews single and three-phase theory. Focuses on construction and hook-up of single-phase, three-phase, open Y and Delta transformer connections. Presents an overview of surge arresters, including applications and installation. Prerequisites: EUT110, EUT112 and EUT115. Corequisites: EUT215.

EUT215 / 4 CREDITS / 12 PERIODS

Field Training II

Practice in the installation of electrical lines including transformers, reclosers, and service loops. Teaches rubber gloving, hot sticking techniques, and trenching of underground lines. Practice in the safe set-up and operation of equipment used in the line industry with a focus on the development of entry-level skills as drivers and operators. Includes procedures and practice in pole-top and bucket-truck rescues. Prerequisites: EUT110, EUT112, and EUT115. Corequisites: EUT211.

EXS – Exercise Science

EXS101 / 3 CREDITS / 3 PERIODS

Introduction to Exercise Science

Introductory course that will provide the student with a general overview of the key theories and concepts, professions, and research areas associated with the field of Exercise Science. Educational pathways and career options will also be examined. Prerequisites: None.

EXS112 / 3 CREDITS / 3 PERIODS

Professional Applications of Fitness Principles

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 / 3 CREDITS / 3 PERIODS

Introduction to Exercise Physiology

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 / 3 CREDITS / 3 PERIODS

Strength Fitness-Physiological Principles and Training Techniques

Principles and techniques of strength training including strength physiology, performance factors, training recommendations, exercise techniques, and program design and management. Prerequisites: None.

For the most current information regarding course descriptions, log on to curriculum.maricopa.edu.

EXS132 / 3 CREDITS / 3 PERIODS

Cardiovascular Fitness: Physiological Principles and Training Techniques

Covers principles and techniques of aerobic training and the application of these to the development of aerobic training programs. Includes instructional techniques and safety, and stresses injury prevention. Prerequisites: None.

EXS145 / 3 CREDITS / 4.5 PERIODS

Guidelines for Exercise Testing and Prescription

Follows the current ACSM guidelines for health appraisal, risk assessment, safety of exercise, exercise testing, and exercise prescription. Prerequisites: None.

EXS210 / 2 CREDITS / 3 PERIODS

Assessment and Program Design: Muscular Fitness

Principles of muscular fitness training including evaluation of movement patterns, selection and interpretation of assessment techniques and evidence-based program design for healthy and special populations. Prerequisites: A grade of C or better in EXS125.

EXS211 / 2 CREDITS / 3 PERIODS

Assessment and Program Design: Flexibility and Balance

Principles of flexibility and balance including evaluation of movement patterns, selection and interpretation of assessment techniques and evidence-based program design for healthy and special populations. Prerequisites: A grade of C or better in EXS125.

EXS213 / 2 CREDITS / 3 PERIODS

Assessment and Program Design: Weight Management and Motivation

Principles of weight management including evidence-based program design and interpretation of assessments for various populations as well as explanation of theories of motivation and behavior modification. Prerequisites: A grade of C or better in EXS125.

EXS214 / 2 CREDITS / 3 PERIODS

Instructional Competency: Flexibility and Mind- Body Exercises

Fundamental methods of instructing and leading fitness activities including flexibility activities. Core competencies identified by professional certification agencies. Prerequisites: A grade of C or better required in all Prerequisites. Prerequisites: (RDG100, or RDG111, or RDG112, or RDG113, or satisfactory score on District reading placement exam) and (EXS125 and HES100) or permission of Instructor.

EXS215 / 3 CREDITS / 3 PERIODS

Fitness for Life

Lifetime health and skill-related components of fitness to achieve total wellness. Topics include health and skill- related components of fitness, guidelines for health and fitness assessment, exercise safety and precautions, nutrition, weight control, cardiovascular risk reduction, psychology of fitness and wellness, consumerism, and overall self-management of personal health and lifestyle habits to achieve the highest potential for well-being. Prerequisites: None.

EXS216 / 2 CREDITS / 3 PERIODS

Instructional Competency: Muscular Strength and Conditioning

Fundamental methods of instructing and leading fitness activities including strength and conditioning activities. Core competencies identified by professional certification agencies. Prerequisites: A grade of C or better required in all Prerequisites. Prerequisites: (RDG100, or RDG111, or RDG112, or RDG113, or satisfactory score on District reading placement exam) and (MAT120 or satisfactory score on District math placement exam) and (EXS125 and HES100) or permission of Instructor.

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EXS218 / 2 CREDITS / 3 PERIODS

Instructional Competency: Cardiorespiratory Exercises and Activities

Fundamental methods of instructing and leading fitness activities including cardiorespiratory exercises and activities. Core competencies identified by professional certification agencies. Prerequisites: A grade of C or better required in all Prerequisites. Prerequisites: (RDG100, or RDG111, or RDG112, or RDG113, or satisfactory score on District reading placement exam) and (MAT120 or satisfactory score on District math placement exam) and (EXS125 and HES100) or permission of Instructor.

EXS230 / 3 CREDITS / 3 PERIODS

Introduction to Research Methods in Health and Exercise Science

Introduction to the general nature of research with specific application to accessing, reading, evaluating, and reporting research in health and exercise science. Introduce students to select, data-based literature in order to engender an appreciation for and ability to critically evaluate health/exercise science research. Prerequisites: (ENG101 or ENG107) and MAT082 or permission of Instructor.

EXS239 / 3 CREDITS / 5.4 PERIODS

Practical Applications of Personal Training Skills and Techniques Internship

Work experience in a fitness or health related facility. Eighty (80) hours of designated work per credit. Prerequisites: Completion of nine (9) credits of EXS courses required for the (AAS in Exercise Science and Personal Training, or CCL in Personal Training Specialist, or CCL in Personal Trainer), current CPR card, and permission of Department or Division. Course Notes: CPR certification must be current through the duration of the internship. EXS239 may be repeated for a maximum of six (6) credits.

EXS285 / 3 CREDITS / 3 PERIODS

Exercise Program Design and Instruction

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.

EXS290 / 3 CREDITS / 3 PERIODS

Introduction to Evidence-Based Practice

Introduction to best practices in the acquisition, analysis, synthesis, and potential application of research in the discipline of exercise science. Specific emphasis on the application of research-based evidence for applied problem solving in exercise science. Prerequisites: A grade of C or better in [(RDG100, or RDG100LL, or RDG111, or RDG112, or RDG113 or satisfactory District reading placement) and (MAT090, or MAT091, or MAT092, or satisfactory District math placement) and (ENG101 or ENG107)] or permission of Instructor. EXS101 recommended.

FON – Food and Nutrition

FON100 / 3 CREDITS / 3 PERIODS

Introductory Nutrition

Introduction to the science of food and human nutrition. Current sustainable dietary recommendations and applications for maximizing well-being and minimizing risk of chronic disease throughout the life cycle. An overview of the nutrients, emphasizing the importance of energy and fluid balance, and optimal functioning of the digestive system. Understanding factors that influence food intake in different cultures. Methods for evaluating credibility of nutrition claims, a focus on modern food

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safety and technology practices, and a worldview of nutrition are included. Emphasis is on personal dietary behavior change for a holistic life of wellness. Prerequisites: None.

FON104 / 1 CREDIT / 1 PERIOD

Certification in Food Service Safety and Sanitation

Preparation for and certification in a national food sanitation and safety program. Emphasis on food from purchasing, receiving, and storing to preparation, holding, and serving. Focuses on safe and sanitary food service facilities and equipment, employee habits and personal hygiene, and role of management in safety and sanitation. Includes time-temperature principles, foodborne illnesses, pest control, accident prevention, standards for cleaning and sanitizing, and regional regulations and standards. Prerequisites: None.

FON125 / 1 CREDIT / 1 PERIOD

Introduction to Professions in Food, Nutrition, and Dietetics

Overview and discussion of career opportunities in the fields of food, nutrition, and dietetics. Includes information about history, ethics, standards of practice, communication and counseling skills. Emphasis on how to become a Registered Dietitian Nutritionist or a Dietetic Technician Registered. Prerequisites: None.

FON142AB / 3 CREDITS / 5 PERIODS

Applied Food Principles

Exploration and applications of scientific principles involved in food preparation; experiences with basic cooking methods; emphasis on the rationale of cooking techniques. Prerequisites: None.

FON143 / 3 CREDITS / 3 PERIODS

Food and Culture

Understanding diet in the context of culture. Historical, religious, and socio-cultural influences on the development of cuisine, meal patterns, eating customs, cooking methods, and nutritional status of various ethnic groups. Traditional and contemporary food habits. Health and social impact of changes in diet. Preparation and serving of foods from many cultures. Prerequisites: None.

FON207 / 3 CREDITS / 3 PERIODS

Introduction to Nutrition Services Management

Principles, knowledge, and techniques required for effective nutrition services management. Includes nutrition service issues in relation to health care trends, leadership skills, management theories and styles, food service manager responsibilities, and laws which pertain to nutrition service operations. Prerequisites: MAT092 or equivalent, or satisfactory score on district placement exam.

FON225 / 3 CREDITS / 3 PERIODS

Research in Complementary and Alternative Nutrition Therapies

Introduction to basic research methods and statistics as applied to complementary and alternative nutrition therapies. Emphasis on the analysis and interpretation of health-related research. Prerequisites: MAT092 or equivalent, or satisfactory score on district placement exam.

FON241 / 3 CREDITS / 3 PERIODS

Principles of Human Nutrition

Scientific principles of human nutrition. Emphasis on scientific literacy and the study of nutrients for disease prevention. Includes micro and macro nutrients, human nutrient metabolism and nutrition's role in the health of the human body throughout the life cycle. Addresses nutrition principles for prevention of nutrition-related health conditions. Prerequisites: None

FON241LL / 1 CREDIT / 3 PERIODS

Principles of Human Nutrition Laboratory

Self-evaluative laboratory experience to complement FON241, Principles of Human Nutrition using anthropometric, biochemical, and dietary analysis. Includes the use of qualitative and quantitative methodology to determine nutritional status and

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evaluate methodological applications. Prerequisites or Corequisites: A grade of C or better in FON241 and BIO160.

FON242 / 3 CREDITS / 3 PERIODS

Introduction to Medical Nutrition Therapy

Introduction to fundamental principles of medical nutrition therapy. Emphasis on development and analysis of diets that fit an individual's personal and therapeutic needs. Includes strategies to promote dietary adherence and the development of educational programs for a diverse adult population. Prerequisites: A grade of C or better in FON241 and BIO160.

FON244AA / 2 CREDITS / 2 PERIODS

Food Service Management Practicum

Classroom preparation and training, under the instruction and supervision of a registered dietitian. Understanding of principles, knowledge, and skills required for the delivery of medical nutrition therapy. Comprehension of nutritional screening, assessment, monitoring, and evaluation for common and complex medical conditions, medical documentation, patient interviewing and counseling, and education in health promotion and disease prevention. Competencies in the classroom met prior to their application in supervised practice settings during the practicum lab (FON245AB). Prerequisites: A grade of C or better in FON104, FON125, FON142AB, FON207 and FON242. Students must be in compliance with the Maricopa Community Colleges Allied Health Program Student Policies. Permission of Program Director required. Corequisites: FON244AB.

FON244AB / 2.5 CREDITS / 10 PERIODS

Food Service Management Practicum Laboratory

Practicum experience under the supervision of a registered dietitian. Application of principles, knowledge, and skills required in the delivery of nutrition services for food service management including food service operations, quantity food production, procurement, organizing and management principles, facility design and equipment, financial management, food safety and sanitation, menu planning, and marketing. Prerequisites: A grade of C or better in FON125, FON242, HCC145AA, and MAT092 or equivalent, or satisfactory score on district placement exam. Students must be in compliance with the Maricopa Community Colleges Allied Health Program Student Policies. Permission of Program Director required. Corequisite: FON245AB.

FON245AA / 2 CREDITS / 2 PERIODS

Medical Nutrition Therapy Practicum

Classroom preparation and training, under the instruction and supervision of a registered dietitian. Understanding of principles, knowledge, and skills required for the delivery of medical nutrition therapy. Comprehension of nutritional screening, assessment, monitoring, and evaluation for common and complex medical conditions, medical documentation, patient interviewing and counseling, and education in health promotion and disease prevention. Prerequisites: FON125, FON242, HCE103 or equivalent, and MAT092 or equivalent, or satisfactory score on district placement exam. Corequisites: FON245AB.

FON245AB / 2.5 CREDITS / 10 PERIODS

Medical Nutrition Therapy Practicum Laboratory

Practicum experience under the supervision of a registered dietitian. Application of principles, knowledge, and skills required for the delivery of medical nutrition therapy. Perform nutritional screening, assessment, monitoring, and evaluation for common and complex medical conditions, medical documentation, patient interviewing and counseling, and education in health promotion and disease prevention. Prerequisites: A grade of C or better in FON125, FON242, HCC145AA, and MAT092 or equivalent, or satisfactory score on district placement exam. Students must be in compliance with the Maricopa Community Colleges Allied Health Program Student Policies. Permission of Program Director required. Corequisite: FON245AA.

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FON246AA / 2 CREDITS / 2 PERIODS

Community Nutrition Practicum

Classroom preparation and training, under the instruction of a registered dietitian. Understanding of principles, knowledge and skills required in the delivery of nutrition services in community-based agencies, outpatient health care settings, and social service agencies. Includes knowledge and understanding of nutrition intervention and wellness promotion for individuals and groups across the lifespan, i.e. infants through geriatrics with a diversity of cultural, religious and social backgrounds. Competencies in the classroom met prior to their application in supervised practice settings during the practicum lab (FON246AB). Prerequisites: A grade of C or better in FON125 and FON242. Students must be in compliance with the Maricopa Community Colleges Allied Health Program Student Policies. Permission of Program Director required. Corequisites: FON246AB.

FON246AB / 2 CREDITS / 10 PERIODS

Community Nutrition Practicum Laboratory

Practicum experience under the supervision of a registered dietitian. Application of principles, knowledge and skills required in the delivery of nutrition services in community-based agencies, outpatient health care settings, and social service agencies. Includes nutrition intervention and wellness promotion for individuals and groups across the lifespan, i.e. infants through geriatrics with a diversity of cultural, religious and social backgrounds. Prerequisites: A grade of C or better in FON125 and FON242. Students must be in compliance with the Maricopa Community Colleges Allied Health Program Student Policies. Permission of Program Director required. Corequisite: FON246AA.

FON247 / 3 CREDITS / 3 PERIODS

Weight Management Theory

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.

GBS – General Business

GBS120 / 3 CREDITS / 3 PERIODS

Workplace Communication Skills

Reviews planning, organization, development, and evaluation of written and oral communication in business settings, including informative and persuasive messages. Prerequisites: None.

GBS131 / 3 CREDITS / 3 PERIODS

Business Calculations

Review of basic arithmetic and application of mathematics to business problems, includes percentage, interest, discount, and markups. Prerequisites: None.

GBS132 / 3 CREDITS / 3 PERIODS

Personal and Family Financial Security

Principles and practices of personal and family financial planning, includes savings, budgeting, credit, buying versus renting and general principles of consumerism. Prerequisites: None.

GBS151 / 3 CREDITS / 3 PERIODS

Introduction to Business

Characteristics and activities of current local, national, and international business. An overview of economics, marketing, management and finance. Prerequisites: None.

GBS205 / 3 CREDITS / 3 PERIODS

Legal, Ethical, and Regulatory Issues in Business

Legal theories, ethical issues and regulatory climate affecting business policies and decisions. Prerequisites: None.

For the most current information regarding course descriptions, log on to curriculum.maricopa.edu.

GBS220 / 3 CREDITS / 3 PERIODS

Quantitative Methods in Business

Business applications of quantitative optimization methods in operations management decisions. Prerequisites: (A grade of C or better in MAT150 or MAT151 or MAT152) or satisfactory District math placement.

GBS221 / 3 CREDITS / 3 PERIODS

SUN BUS2201

Business Statistics

Business applications of descriptive and inferential statistics, measurement of relationships, and statistical process management. Includes the use of spreadsheet software for business statistical analysis. Prerequisites: A grade of C or better in GBS220 or MAT217 or MAT218.

GBS233 / 3 CREDITS / 3 PERIODS

Business Communication

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 / 3 CREDITS / 3 PERIODS

Investments I

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

GER – German

GER101 / 4 CREDITS / 4 PERIODS

Elementary German I

Basic grammar, pronunciation and vocabulary of the German language. Includes the study of German culture, practice of listening, speaking, reading and writing skills. Prerequisites: None.

GER102 / 4 CREDITS / 4 PERIODS

Elementary German II

Continued study of grammar and vocabulary of the German language along with the study of German culture. Emphasis on German language skills. Prerequisites: GER101, or GER101AA, or permission of Department or Division. Completion of prerequisites within the last three years is required

GLG – Geology

GLG101 / 3 CREDITS / 3 PERIODS

SUN GLG 1101

Introduction to Geology I – Physical Lecture

Introduction to Earth's materials, surface and internal geologic processes, plate tectonics and geologic time. Prerequisites: None.

GLG102 / 3 CREDITS / 3 PERIODS

Introduction to Geology II – Historical Lecture

The origin and history of the Earth, its dynamic geographic and climatic changes. Evolution and sequence of life recorded in the fossil record; tectonic evolution of major continents through time. Prerequisites: None.

GLG103 / 1 CREDIT / 3 PERIODS

SUN GLG 1101

Introduction to Geology I – Physical Lab

May accompany GLG101. Includes practical experience in rock and mineral identification, topographic maps, and applied problems in geology. Prerequisites: None.

GLG104 / 1 CREDIT / 3 PERIODS

Introduction to Geology II – Historical Lab

May accompany GLG102. The study of minerals, rocks, fossils, geologic maps and structures. Prerequisites: None.

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GLG110 / 3 CREDITS / 3 PERIODS

Geologic Disasters and the Environment

Acquaints students with the use and importance of geological studies as they apply to the interactions between people and the earth. Includes geological processes and hazards such as earthquakes, volcanoes, floods and landslides. Examines environmental impact and use of mineral and energy resources. Prerequisites: None.

GLG110IN / 4 CREDITS / 6 PERIODS

Geologic Disasters and the Environment

Acquaints students with the use and importance of geological studies as they apply to the interactions between people and the Earth. Includes geological processes and hazards such as earthquakes, volcanoes, floods and landslides. Examines environmental impact and use of mineral and energy resources. Prerequisites: None. Course Notes: Enrollment in both a GLG110IN lecture section and a GLG110IN laboratory section is required.

GLG111 / 1 CREDIT / 3 PERIODS

Geological Disasters and the Environment Lab

Introduction to geological processes and concepts. Application of basic geologic knowledge to evaluate, interpret and propose solutions for a variety of current and past geology-related environmental disasters and hazards. Prerequisites: None. Course Notes: May accompany GLG110.

GLG229AA / 1 CREDIT / 5 PERIODS

Field Studies for Educators

Field trips to selected geological areas in Arizona in order to collect and/or observe geological phenomena. Designed for pre-college teachers. Prerequisites: None.

GLG230AA / 1 CREDIT / 5 PERIODS

Field Geology of the Southwest

Field trips to selected areas in the Southwest, such as Arizona, Utah, California, and Sonora to observe and interpret various geological features and phenomena. Prerequisites: None. GLG103 suggested but not required. Course Notes: GLG230AA may be repeated for a total of four (4) credit hours.

GLG298AA / 1 CREDIT / 1 PERIOD

Special Projects

Service-learning field experience within human service organizations, government offices, public schools, or hospitals. Requisites: Prerequisites: Permission of Program Director or Instructor. Course Notes: May be repeated for a total of six (6) GLG282 credit hours; may not repeat specific agency assignment for more than three (3) credit hours. Standard grading available according to procedures outlined in catalog

GPH – Physical Geography

GPH111 / 4 CREDITS / 6 PERIODS

Introduction To Physical Geography Lecture

Earth`s physical processes and impacts on human environments via the atmosphere, biosphere, lithosphere and hydrosphere. Topics include severe weather, climate change, biomes and ecosystems, landform processes; mountain building and erosion by rivers, glaciers, waves and wind. Prerequisites: None..

GPH112 / 1 CREDIT / 3 PERIODS

Introduction to Physical Geography LAB

Laboratory experience in support of GPH111. Prerequisites or Corequisites: GPH111.

GPH212 / 3 CREDITS / 3 PERIODS

Introduction to Meteorology I

Earth`s physical processes and impacts on the human environment via the atmosphere, biosphere, lithosphere and hydrosphere. Practical experiences include earth-sun relationships, weather, climate, biomes, landform processes; mountain building and erosion by rivers, glaciers, waves and wind, topographic maps. Prerequisites: A grade of C or better in GPH111 or Corequisites: GPH111.

For the most current information regarding course descriptions, log on to curriculum.maricopa.edu.

GPH214 / 1 CREDIT / 3 PERIODS

Introduction to Meteorology Laboratory I

Basic meteorological and climatological measurements. Prerequisites: None. Corequisites: GPH212.

HCC – Health Core Curriculum

HCC130 / 3 CREDITS / 3 PERIODS

Fundamentals in Health Care Delivery

Overview of current and recent development of health care professions, including career and labor market information, health care delivery systems, third party payers, and facility ownership. Health organization structure, patient rights and quality care. Health care and life values. Definition and importance of values, ethics, and essential behaviors in the workplace. Worker rights and responsibilities. Healthful living practices to include nutrition, stress management and exercise. Occupational Safety and Health Administration (OSHA) standard precautions and facility safety. Use of principles of body mechanics in daily living activities. Basic communication skills which facilitate inter-professional teamwork in the health care setting. Focus on development of personal communication skills and an understanding of how effective communication skills promote teamwork. Focus on intercultural communication strategies. Prerequisites: None.

HCC145AA / 1 CREDIT / 1 PERIOD

Medical Terminology for Health Care Professionals I

Introduction to medical terms used in health care. Body systems approach to selected terms related to structures, functions, diseases, procedures, and diagnostic tests. Building and analyzing selected terms using basic word parts. Selected medical abbreviations and symbols and term spelling.

HCC145AB / 1 CREDIT / 1 PERIOD

Medical Terminology for Health Care Professionals II

Selected medical terms used in health care. Body systems approach to more detailed terms related to structures, functions, diseases, procedures, and diagnostic tests. Building and analyzing selected terms using standard word parts. Selected abbreviations and symbols and term spelling.

HCR – Health Care Related

HCR210 / 3 CREDITS / 3 PERIODS

Clinical Health Care Ethics

An introduction to health care ethics with emphasis on analysis and ethical decision making at both the clinical and health policy levels for health care professionals. Theoretical foundation of bioethics reviewed within historical and contemporary contexts. Prerequisites: ENG102 or ENG108 or permission of Instructor.

HCR220 / 3 CREDITS / 3 PERIODS

Introduction to Nursing and Health Care Systems

Introduction to the social, political, and economic contexts of the nursing profession and health care systems in the United States. Prerequisites: Grade of "C" or better in ENG102 or ENG108.

HCR230 / 3 CREDITS / 3 PERIODS

Culture and Health

Relation between cultures of diverse groups and health/illness. Emphasis on cross-cultural communication, including awareness of own cultural influences and indigenous and complementary healing practices. Prerequisites: None.

HCR240 / 4 CREDITS / 4 PERIODS

Human Pathophysiology

Chemical, biological, biochemical, and psychological processes as a foundation for the understanding of

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alterations in health. The structural and functional pathophysiology of alterations in health; selected therapeutics considered. Prerequisites: BIO202 or BIO205, or permission of Instructor.

HES – Health Science

HES100 / 3 CREDITS / 3 PERIODS

Healthful Living

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.

HES210 / 3 CREDITS / 3 PERIODS

Cultural Aspects of Health and Illness

Examines how culture influences health and illness, health care practices, barriers to health care, interactions with health care professionals, and health disparities in the U.S. Prerequisites: None.

HES271 / 3 CREDITS / 3 PERIODS

Sports Medicine Foundations

Introduction to sports medicine knowledge, techniques, and careers. Exploration of current trends in athletic injury prevention, management and rehabilitation including wound care, taping, wrapping, bracing, splinting and protective equipment. Prerequisites: None.

HIS – History

HIS102 / 3 CREDITS / 3 PERIODS

History of Western Civilization 1789 to Present

Survey of origin and development of Western civilization and its institutions from French Revolution through the present. Prerequisites: None.

HIS103 / 3 CREDITS / 3 PERIODS

SUN HIS 1131

United States History to 1865

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 / 3 CREDITS / 3 PERIODS

SUN HIS 1132

United States History 1865 to Present

The political, economic, and social development of the United States from 1865 to the present time. Prerequisites: None.

HIS106 / 3 CREDITS / 3 PERIODS

Southwest History

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 / 3 CREDITS / 3 PERIODS

United States History 1945 to the Present

Survey of American history from 1945 to the present. Focuses on the political, social, economic and cultural history of the United States from the end of World War II to the present time. Includes domestic developments and foreign policy. Prerequisites: None.

HIS109 / 3 CREDITS / 3 PERIODS

Mexican-American History and Culture

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.

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HIS110 / 3 CREDITS / 3 PERIODS

World History to 1500

Survey of the economic, social, cultural, and political elements of world history from the beginning of human civilization to 1500. Prerequisites: None.

HIS111 / 3 CREDITS / 3 PERIODS

World History 1500 to the Present

Survey of the economic, social, cultural, and political elements of world history from 1500 to the present. Prerequisites: None.

HIS113 / 3 CREDITS / 3 PERIODS

History of Eastern Civilizations to 1850

An examination of the characteristics and development of civilizations, religions and philosophies of the Middle East, India, Far East, and Southeast Asia. From ancient times to the mid-nineteenth century. Prerequisites: None.

HIS140 / 3 CREDITS / 3 PERIODS

American Indian History

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.

HIS201 / 3 CREDITS / 3 PERIODS

History of Women in America

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 / 3 CREDITS / 3 PERIODS

African-American History to 1865

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 / 3 CREDITS / 3 PERIODS

African-American History 1865 to Present

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: None.

HUM – Humanities

HUM107 / 3 CREDITS / 3 PERIODS

Humanities Through the Arts

Introduction to humanities including film, drama, music, literature, painting, sculpture, and architecture. Prerequisites: None.

HUM108 / 3 CREDITS / 3 PERIODS

Contemporary Humanities

An exploration of human expression in contemporary arts and sciences. Prerequisites: None.

HUM201 / 3 CREDITS / 3 PERIODS

Humanities: Universal Themes

Study of worldviews in a variety of historical and contemporary world cultures, including analysis of origin and creation myths, artistic expression, spirituality, and the natural environment. Prerequisites: None.

HUM205 / 3 CREDITS / 3 PERIODS

Introduction to Cinema

Survey of the history and development of the art of

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motion pictures, including criticism of aesthetic and technical elements. Prerequisites: None.

HUM209 / 3 CREDITS / 3 PERIODS

Women and Films

Analysis of images of women in films from both historical and contemporary perspectives. Prerequisites: None

HUM213 / 3 CREDITS / 3 PERIODS

Hispanic Film

Analysis of Hispanic film as art form and as social commentary. Prerequisites: None.

HUM245 / 3 CREDITS / 3 PERIODS

Introduction to Holocaust Studies

Introduction to essential information about the Holocaust. Provides theological, social and political background to establish contexts of anti-Semitism, especially in 19th and 20th centuries, with particular attention to National Socialist ideologies. Ghetto and camp life, including resistance, are explored. Emphasis is on texts of the Holocaust, including historical documents, participant testimonies, fiction, creative non-fiction, and poetry, much of which involves theological and moral debate. Includes analysis of supplementary visual material and some performing arts. Prerequisites: None. CRE101, or equivalent as indicated by appropriate reading placement test score recommended but not required.

HUM250 / 3 CREDITS / 3 PERIODS

Ideas and Values in the Humanities

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 / 3 CREDITS / 3 PERIODS

Ideas and Values in the Humanities

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.

IBS – International Business

IBS101 / 3 CREDITS / 3 PERIODS

Introduction to International Business

A basic overview of international business to introduce students to international trade concepts. Focus of the course is on international business environment issues that influence global business practices, decisions and applications. Prerequisites: None.

IFS – Information Studies

IFS201 / 3 CREDITS / 3 PERIODS

Information in a Post-Truth World

Development of critical thinking skills in using information. Exploration of how information can be used as a tool or a weapon. Explanation of the role of information as a consumer and creator. Recognition of the impact of culture and worldview on how information is understood, created, and disseminated. Prerequisites: A grade of "C" or better in ENG101 or ENG107.

IFS210 / 3 CREDITS / 3 PERIODS

Information Without Borders: Research in a Global Society

A comparative study focused on access to digital information in a global environment. Explore the global culture developing around the Internet and the impact of local, national and global cultures as well as economic and social factors related to the flow of information in a global society. Examine emerging technologies to produce and distribute information across cultures in a global society in an ethical manner. Prerequisites: None. Course Notes: IFS210 may be repeated for a total of six (6) credit hours.

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ITS – Information Technology Security

ITS100 / 1 CREDIT / 2 PERIODS

Information Security Awareness

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 / 3 CREDITS / 4 PERIODS

Information Security Fundamentals

Fundamental concepts of information technology security. Topics include authentication methods, access control, cryptography, Public Key Infrastructure (PKI), network attack and defense methods, hardening of operating systems and network devices, securing remote access and wireless technologies and securing infrastructures and topologies. Emphasis on hands-on labs in both the Windows and Linux environments. Builds on thorough understanding of Transmission Control Protocol/Internet Protocol (TCP/IP) and security concepts and Microsoft (MS) Windows and Linux Administration. Prerequisites: A grade of C or better in CIS126DL, or CIS126RH, or permission of Program Director. Corequisites: BPC270 or MST150++.

ITS120 / 3 CREDITS / 3 PERIODS

Legal, Ethical and Regulatory Issues

Exploration of legal and ethical issues unique to information security. Analysis of professional ethical codes and their application to information security practitioners. Federal and state laws as they relate to information security. Prerequisites: ITS110 or permission of instructor.

ITS130 / 3 CREDITS / 4 PERIODS

Operating System Security

In-depth examination of operating system security including Transmission Control Protocol/Data Encryption Standard (DES), Triple Data Encryption Standard (3DES), Advanced Encryption Standard (AES), Pretty Good Privacy (PGP), and other encryption technologies (TCP/IP), Internet Protocol Security (IPSec) and Cisco Internetwork Operating System (IOS), Microsoft Windows, Linux and Mac OSX Security. Procedures to defend networks against attacks and recovery from network disasters. Web server security. Emphasis on hands-on labs in both the Windows and Linux environments. Builds on thorough understanding of Transmission Control Protocol/Internet Protocol (TCP/IP) and security concepts and MS Windows and Linux Administration. Prerequisites: ITS110 or permission of instructor.

ITS140 / 3 CREDITS / 4 PERIODS

Network Security

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 / 3 CREDITS / 4 PERIODS

Building Trusted Networks in the Enterprise

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.

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JRN – Journalism

JRN201 / 3 CREDITS / 3 PERIODS

SUN JRN 2201

News Writing

Writing and producing news for the media. Associated Press (AP) editing style, writing skills, and organizational structure for news. Prerequisites: A grade of C or better in ENG101 or ENG107.

MAT – Mathematics

MAT051 / 1 CREDIT / 1 PERIOD

Number Sense I

Primary emphasis on conceptual understanding of whole numbers, integers and mathematical operations. Use systems of measure and Pythagorean Theorem. Focus on mathematical language, connections, patterns and reasoning. Prerequisites: None.

MAT051 / 1 CREDIT / 1 PERIOD

Number Sense II

Primary emphasis on conceptual understanding of decimals and fractions, and decimal and fraction addition and subtraction. Solving problems involving decimals and fractions. Focus on mathematical language, connections, patterns and reasoning. Prerequisites: A grade of C or better in MAT051, or an appropriate district placement.

MAT053 / 1 CREDIT / 1 PERIOD

Multiplicative and Proportional Reasoning

Primary emphasis on conceptual understanding of decimals and fractions, and decimal and fraction multiplication and division. Solving problems involving decimals, fractions, and percentages. Focus on additive and multiplicative reasoning including proportionality and similarity. Prerequisites: A grade of C or better in each of the following courses: (MAT051 and MAT052), or an appropriate district placement.

MAT054 / 1 CREDIT / 1 PERIOD

Geometry

Primary emphasis on conceptual understanding of and solving problems involving angles and geometric figures. Use of systems of measure, similarity, proportionality and the Pythagorean theorem. Prerequisites: A grade of "C" or better, or satisfactory Math Diagnostic Assessment Score for MAT051, MAT052 and MAT053. Corequisites: MAT055, or MAT056, or MAT057.

MAT055 / 1 CREDIT / 1 PERIOD

Algebraic Structures

Emphasis on meanings related to variable, equality, inequality, equivalence. The use of additive and multiplicative reasoning in solving linear equations and inequalities in one variable. Validation of solution(s) through a reasonable mathematical defense. Transfer and apply knowledge through a process of sense making and reasonableness in mathematical problems and practical application situations. Prerequisites: A grade of C or better in each of the following courses: (MAT051, MAT052, and MAT053), or a grade of C or better for MAT08+, or an appropriate district placement.

MAT056 / 1 CREDIT / 1 PERIOD

Functions I

Recognize patterns and organize data to represent situations where output is related to input. Understand the concept of function and be able to represent functions in multiple ways, including tables, algebraic rules, graphs and contextual situations, and make connections among these representations. Prerequisites: A grade of C or better in each of the following courses: (MAT051, MAT052, MAT053, and MAT055), OR a grade of C or better in (MAT055 and MAT08+), OR an appropriate district placement.

MAT057 / 1 CREDIT / 1 PERIOD

Functions II

Read, represent, and interpret linear function relationships numerically, analytically, graphically and verbally and connect the different representations. Model and solve real world problems involving constant

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rate of change. Prerequisites: A grade of C or better in each of the following courses: (MAT051, MAT052, MAT053, MAT055, and MAT056), OR a grade of C or better in (MAT055, MAT056, and MAT08+), OR an appropriate district placement.

MAT108AA / 1 CREDIT / 1 PERIOD

Tutored Mathematics

Structured tutorial assistance and math study skills to help students achieve success in a mathematics course in which they are concurrently enrolled. Mathematics study skills emphasized. Prerequisites: None. Corequisites: MAT072, or MAT081, or MAT082, or MAT083, or MAT090, or MAT091, or MAT092, or MAT093, or MAT120, or MAT121, or MAT122, or MAT140, or MAT141, or MAT142, or MAT150, or MAT151, or MAT152, or permission of Department Chair. Course Notes: MAT108AA may be repeated for a total of ten (10) credit hours.

MAT112 / 3 CREDITS / 3 PERIODS

Mathematical Concepts and Applications

A problem solving approach to mathematics as it applies to real-life situations. Development, use and communication of mathematical concepts and applications that relate to measurement, percentage, practical geometry, statistics, finance, and unit conversions. Prerequisites: An appropriate mathematics placement score, OR a grade of "C" or better for MAT090, or MAT091, or MAT092, OR (an appropriate diagnostic score, or a grade of "C" or better in each of the following courses: MAT055, MAT056, and MAT057).

MAT121 / 4 CREDITS / 4 PERIODS

Intermediate Algebra

Analysis of rational, radical, quadratic and exponential equations, functions and applications; graphs of radical, quadratic and exponential functions; operations on polynomial, rational, and radical expressions. An appropriate mathematics placement score, OR a grade of "C" or better for MAT090, or MAT091, or MAT092, OR (an appropriate diagnostic score, or a grade of "C" or better in each of the following courses: MAT055, MAT056, and MAT057). Course Notes: Students may receive credit for only one of the following: MAT120, MAT121, or MAT122.

MAT122 / 3 CREDITS / 3 PERIODS

Intermediate Algebra

Analysis of rational, radical, quadratic and exponential equations, functions and applications; graphs of radical, quadratic and exponential functions; operations on polynomial, rational, and radical expressions. Prerequisites: An appropriate mathematics placement score, OR a grade of "B" or better for MAT090, or MAT091, or MAT092, OR (an appropriate diagnostic score, or a grade of "B" or better in each of the following courses: MAT055, MAT056, and MAT057). Course Notes: Students may receive credit for only one of the following: MAT120, MAT121, or MAT122.

MAT141 / 4 CREDITS / 4 PERIODS

College Mathematics

Working knowledge of college-level mathematics and its applications to real-life problems. Emphasis on understanding mathematical concepts and their applications. Topics include proportional reasoning, modeling, finance, probability, and statistics. Prerequisites: An appropriate District placement, or a grade of C or better in (MAT052, MAT053, and MAT055), or (MAT055, MAT056, and MAT057), or MAT085, or MAT09+, or MAT103 or MAT114 or MAT115. Course Notes: MAT141 students may receive credit for only one of the following: MAT140, MAT141, MAT142, MAT145, or MAT146.

MAT142 / 3 CREDITS / 3 PERIODS

SUN MAT 1142

College Mathematics

Working knowledge of college-level mathematics and its applications to real-life problems. Emphasis on understanding mathematical concepts and their applications. Topics include proportional reasoning, modeling, finance, probability, and statistics. Prerequisites: An appropriate District placement, or a grade of C or better in (MAT052, MAT053, and MAT055), or (MAT055, MAT056, and MAT057), or MAT085, or MAT09+, or MAT103 or MAT114 or MAT115. Course Notes:

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MAT142 students may receive credit for only one of the following: MAT140, MAT141, MAT142, MAT145, or MAT146.

MAT151 / 4 CREDITS / 4 PERIODS

SUN MAT 1151

College Algebra/Functions

Analysis and interpretation of the behavior and nature of functions including linear, quadratic, higher-order polynomials, rational, exponential, logarithmic, power, absolute value, and piecewise-defined functions; systems of equations, using multiple methods including matrices, and modeling and solving real world problems. Prerequisites: A grade of C or better in MAT095, or MAT096, or MAT114, or MAT115, or MAT12+, OR an appropriate district placement for MAT15+, OR permission of Department or Division Chair. Course Notes: MAT151 students may receive credit for only one of the following: MAT150, OR MAT151, OR MAT152, OR MAT155, OR MAT156, OR MAT187.

MAT152 / 3 CREDITS / 3 PERIODS

College Algebra/Functions

Analysis and interpretation of the behavior and nature of functions including linear, quadratic, higher-order polynomials, rational, exponential, logarithmic, power, absolute value, and piecewise-defined functions; systems of equations, using multiple methods including matrices, and modeling and solving real world problems. Prerequisites: A grade of C or better in MAT095, or MAT096, or MAT114, or MAT115, or MAT12+, OR an appropriate district placement for MAT15+, OR permission of Department or Division Chair. Course Notes: MAT152 students may receive credit for only one of the following: MAT150, OR MAT151, OR MAT152, OR MAT155, OR MAT156, OR MAT187.

MAT182 / 3 CREDITS / 3 PERIODS

Plane Trigonometry

A study of measures of angles, properties of graphs of trigonometric functions, fundamental identities, addition and half-angle formulas, inverse trigonometric functions, solutions of trigonometric equations, complex numbers and properties of triangle solution. May receive credit for only one of the following: MAT182 or MAT187. Prerequisites: Grade of "C" or better in MAT150, or MAT151, or MAT152, or equivalent, or concurrent registration in MAT150, or MAT151, MAT152, or satisfactory score on District placement exam.

MAT187 / 5 CREDITS / 5 PERIODS

SUN MAT 1187

Precalculus

A precalculus course combining topics from college algebra and trigonometry. Preparation for analytic geometry and calculus. May receive credit for only one of the following: MAT150, MAT151, MAT152, or MAT187. Prerequisites: Grade of "B" or better in MAT120, MAT121, or MAT122, or equivalent, or satisfactory score on a placement test. Course Notes: Strongly recommended that students have some knowledge of trigonometry.

MAT206 / 3 CREDITS / 3 PERIODS

SUN MAT 1160

Elements of Statistics

Basic concepts and applications of statistics, including data description, estimation and hypothesis tests. Prerequisites: A grade of C or better in MAT14+, or MAT15+, or MAT187, or equivalent, or satisfactory District placement, or permission of Department or Division Chair.

MAT212 / 3 CREDITS / 3 PERIODS

SUN MAT 2212

Brief Calculus

Introduction to the theory, techniques and applications of the differential and integral calculus of functions with problems related to business, life, and the social sciences. Prerequisites: Grade of "C" or better in MAT150, or MAT151, or MAT152, or MAT187, or appropriate Math placement test score. Course Notes: Students may receive credit for only one of the following: MAT212 or MAT213.

MAT213 / 4 CREDITS / 4 PERIODS

Brief Calculus

Introduction to the theory, techniques, and applications of the differential and integral calculus of functions with problems related to business, life, and the social

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sciences. Prerequisites: Grade of "C" or better in MAT150, or MAT151, or MAT152, or MAT187, or appropriate Math placement test score. Course Notes: Students may receive credit for only one of the following: MAT212 or MAT213.

MAT217 / 3 CREDITS / 3 PERIODS

Mathematical Analysis for Business

An introduction to the mathematics required for the study of business. Includes multivariable optimization, Lagrange multipliers, linear programming, linear algebra, probability, random variables, discrete and continuous distributions. Prerequisites: A grade of C or better in MAT212, or MAT213, or MAT220, or MAT221. Course Notes: Students may receive credit for only one of the following: MAT217 or MAT218.

MAT220 / 5 CREDITS / 5 PERIODS

SUN MAT 2220

Calculus with Analytic Geometry I

Limits, continuity, differential and integral calculus of functions of one variable. Prerequisites: Grade of "C" or better in [MAT182 and (MAT150, MAT151 or MAT152)], or MAT187, or appropriate Math placement test score. Course Notes: Students may receive credit for only one of the following: MAT220 or MAT221.

MAT221 / 4 CREDITS / 4 PERIODS

Calculus with Analytic Geometry I

Limits, continuity, differential and integral calculus of functions of one variable. Prerequisites: Grade of "C" or better in [MAT182 and (MAT150, MAT151 or MAT152)], or MAT187, or appropriate Math placement test score. Course Notes: Student may receive credit for only one of the following: MAT220 or MAT221.

MAT225 / 3 CREDITS / 3 PERIODS

Elementary Linear Algebra

Introduction to matrices, systems of linear equations, determinants, vector spaces, linear transformations and eigenvalues. Emphasizes the development of computational skills. Prerequisites: Grade of "C" or better in MAT212 or MAT220, or MAT221, or equivalent.

MAT227 / 3 CREDITS / 3 PERIODS

SUN MAT 2227

Discrete Mathematical Structures

Introduction to lattices, graphs, Boolean algebras, and groups. Emphasis on topics relevant to computer science. Prerequisites: A grade of "C" or better in (CSC100 or CSC110) and (MAT220 or MAT221) or permission of Instructor.

MAT230 / 5 CREDITS / 5 PERIODS

SUN MAT 2230

Calculus with Analytic Geometry II

Techniques of integration for both proper and improper integrals with applications to the physical and social sciences, elements of analytic geometry, and the analysis of sequences and series. Prerequisites: Grade of "C" or better in MAT220 or MAT221 or equivalent. Course Note: Student may receive credit for only one of the following: MAT230 or MAT231.

MAT231 / 4 CREDITS / 4 PERIODS

Calculus with Analytic Geometry II

Techniques of integration for both proper and improper integrals with applications to the physical and social sciences, elements of analytic geometry, and the analysis of sequences and series. Prerequisites: Grade of "C" or better in MAT220, or MAT221, or equivalent. Course Notes: MAT231 students may receive credit for only one of the following: MAT230 or MAT231.

MAT240 / 5 CREDITS / 5 PERIODS

Calculus with Analytic Geometry III

Multivariate calculus including vectors, vector- valued functions, partial differentiation, multiple integration, and an introduction to vector fields. Prerequisites: Grade of "C" or better in MAT230 or MAT231. Course Note: Student may receive credit for only one of the following: MAT240 or MAT241.

MAT241 / 4 CREDITS / 4 PERIODS

SUN MAT 2241

Calculus with Analytic Geometry III

Multivariate calculus including vectors, vector- valued

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functions, partial differentiation, multiple integration and an introduction to vector fields. Prerequisites: Grade of "C" or better in MAT230 or MAT231. Course Note: Student may receive credit for only one of the following: MAT240 or MAT241.

MAT256 / 3 CREDITS / 3 PERIODS

Investigating Quantity: Number, Operations and Numeration Systems

Explore number, numeration systems and operations on numbers. Techniques of problem solving with an emphasis on exploring a variety of strategies. Use a variety of visualization techniques to develop a conceptual understanding of these topics. Prerequisites: A grade of "C" or better in (MAT150 or MAT151 or MAT152 or higher), or a grade of "C" or better in [(MAT120 or MAT121 or MAT122) and (MAT140 or MAT141 or MAT142 or higher)], or [a grade of "C" or better in (MAT140 or MAT141 or MAT142) and satisfactory score on District placement exam to permit enrollment in (MAT150 or MAT151 or MAT152 or higher)]. Course Notes: MAT256 is designed to meet requirements for prospective elementary education teachers.

MAT257 / 3 CREDITS / 3 PERIODS

Investigating Geometry, Probability and Statistics

Explores geometry, measurement, probability and statistics. Uses visualization, technologies, problem solving, reasoning and proof to develop a conceptual understanding of these topics. Prerequisites: MAT256 or permission of Instructor. Course Notes: MAT257 is designed to meet the requirements for prospective elementary education teachers.

MAT276 / 4 CREDITS / 4 PERIODS

Modern Differential Equations

Introduces differential equations, theoretical and practical solution techniques with applications. Problem solving using MATLAB. Prerequisites: Grade of "C" or better in MAT230, or MAT231, or permission of Department or Division. Course Notes: Students may receive credit for only one of the following: MAT276 or MAT277.

MAT277 / 3 CREDITS / 3 PERIODS

Modern Differential Equations

Introduces differential equations, theoretical and practical solution techniques with applications. Problem solving using MATLAB. Prerequisites: Grade of C or better in MAT230 or MAT231 or permission of Department or Division.

MAT282AA / 1 CREDIT / 1 PERIOD

Service-Learning Experience in Mathematics

Unpaid Service-Learning (SL) experience, completed with approved community partner. Prerequisites: Permission of Instructor. Course Notes: MAT282AA may be repeated for a total of six (6) credit hours. Standard grading available according to procedures outlined in catalog.

MAT290 / 1 CREDIT / 1 PERIOD

Mathematics Professional Development

Expand subject matter content knowledge and pedagogical content knowledge of the mathematics taught at the community college and beyond through an in-depth study of at least one mathematical concept; e.g. positional numeration system or mathematical properties, and the progression of the selected concept(s) through the courses offered at the community college level and beyond. Use of a variety of instructional strategies including student-centered lesson design, inquiry-based learning, problem-based learning, review of relevant literature and so forth as well as classroom observations during which the concept is taught. Prerequisites: None. Course Notes: MAT290 may be repeated for credit.

MAT295 / 1 CREDIT / 1 PERIOD

Special Topics in Mathematics

Conceptual and computational aspects of a special topic in modern mathematics. Prerequisites: Permission of Instructor.

For the most current information regarding course descriptions, log on to curriculum.maricopa.edu.

MCO – Mass Communications

MCO120 / 3 CREDITS / 3 PERIODS

Media and Society

Study of historical and contemporary roles of media and its pervasiveness in society as it relates to culture, politics and education. Prerequisites: ENG101 or ENG107.

MGT – Management

MGT101 / 3 CREDITS / 3 PERIODS

Techniques of Supervision

Overview of the foundations of supervision and how to get things done within an organization through other people. The functions of planning, organizing, staffing, motivating and controlling presented. Prerequisites: None.

MGT175 / 3 CREDITS / 3 PERIODS

Business Organization and Management

Covers basic principles of managing quality and performance in organizations. Covers management functions: planning, organizing, leading, and controlling. Emphasizes continual improvement, ethics, and social responsibility. Prerequisites: None.

MGT229 / 3 CREDITS / 3 PERIODS

Management and Leadership I

Covers management concepts and applications for business, industry, and government organizations. Prerequisites: None.

MGT251 / 3 CREDITS / 3 PERIODS

Human Relations in Business

Analysis of motivation, leadership, communications, and other human factors. Cultural differences that may create conflict and affect morale individually and within organizations. Prerequisites: None. MGT101 or MGT175 or MGT229 suggested, but not required.

MGT253 / 3 CREDITS / 3 PERIODS

Owning and Operating a Small Business

Starting, organizing, and operating a small business, including location, finance management processes, advertisement and promotion, credit, inventory control and ethics. Prerequisites: None.

MGT276 / 3 CREDITS / 3 PERIODS

Personnel/Human Resources Management

Human resource planning, staffing, training, compensating, and appraising employees in labor management relationships. Prerequisites: None. MGT101, or MGT175, or MGT229 suggested but not required.

MHL – Music: History/ Literature

MHL140 / 3 CREDITS / 3 PERIODS

Survey of Music History

Study of composers, compositions, styles, and periods in music history. Prerequisites: None.

MHL143 / 3 CREDITS / 3 PERIODS

Music in World Cultures

Non-European musical traditions including the study of music in rituals, musical instruments and the impact of cultures on musical styles. Prerequisites: None.

MHL145 / 3 CREDITS / 3 PERIODS

American Jazz and Popular Music

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.

For the most current information regarding course descriptions, log on to curriculum.maricopa.edu.

MHL146 / 3 CREDITS / 3 PERIODS

Survey of Broadway Musicals

Survey of Broadway musicals traced from their origins to the present viewed in their cultural, political, and socio-economic contexts. Emphasis on stylistic periods, composers, lyricists, directors, and choreographers. Prerequisites: None.

MHL153 / 3 CREDITS / 3 PERIODS

Rock Music and Culture

History of Rock music and how cultural, social, political, and economic conditions have shaped its evolution. Prerequisites: None.

MHL155 / 3 CREDITS / 3 PERIODS

Survey of American Music

History of the music of North America from the earliest American Indian music to the present. Introduction to the musical trends, composers, socioeconomic developments and trends, musical forms and styles that influence our modern American musical sense. Prerequisites: None.

MHL241 / 3 CREDITS / 3 PERIODS

Music History and Literature to 1750

In-depth study of music history from the primitive era through the Baroque period. Prerequisites or Corequisites: MTC155 and MTC156, or permission of Instructor.

MHL242 / 3 CREDITS / 3 PERIODS

Music History and Literature 1750 to Present

In-depth study of music history from the Classical period through the Contemporary period. Prerequisites: MHL241 or permission of instructor.

MKT – Marketing

MKT101 / 3 CREDITS / 3 PERIODS

Introduction to Public Relations

Emphasizes public relations techniques used both within and outside the business organization, including operation of a PR counseling firm. Prerequisites: None

MKT110 / 3 CREDITS / 3 PERIODS

Marketing and Social Networking

Theory and practice in the use of social media in marketing. Topics may include a history of social media, preparation for social marketing, the power of collective influence, and how to engage with social media. Reviews social mediums, social networks, platforms and other marketing tools used to create a social media campaigns. Prerequisites: None.

MKT111 / 3 CREDITS / 3 PERIODS

Applied Marketing and Social Networking

Examination of the strategic use of digital and social media marketing platforms and tools for global communication and networking, including analysis of various digital and social media platforms and tools for developing brands, creating professional networks and creating engaging content. Hands-on use of social media platforms and tools to conduct research, develop strategies for creating, integrating, and evaluating social media marketing campaigns, and development of metrics to measure effectiveness. Prerequisites: MKT110.

MKT263 / 3 CREDITS / 3 PERIODS

Advertising Principles

Introduces the advertising function within business, including media study, creative strategies, and advertising campaigns. Prerequisites: None. MKT271 suggested, but not required.

MKT268 / 3 CREDITS / 3 PERIODS

Merchandising

Surveys structure and operation of retail organizations. Emphasizes merchandising to include price, location, time promotion and quantity. Prerequisites: None. MKT271 suggested but not required.

For the most current information regarding course descriptions, log on to curriculum.maricopa.edu.

MKT271 / 3 CREDITS / 3 PERIODS

Principles of Marketing

An analysis of the marketing process and environment with regard to the product, pricing, distribution, and communication in order to satisfy buyer needs. Prerequisites: None.

MSP – Mortuary Science

MSP101 / 1 CREDIT / 1 PERIOD

Orientation to Funeral Service

Designed to orient prospective students to funeral service and its history, philosophy, educational requirements, apprenticeship, licensure examination, job descriptions for funeral directors and embalmers, employment outlook. Prerequisites: None.

MSP201 / 3 CREDITS / 3 PERIODS

History and Sociology of Funeral Service

Survey of history of funeral service from ancient to modern times. Sociological aspects of how various cultures deal with death. Prerequisites: Admission to the Mortuary Science Program.

MSP202 / 4 CREDITS / 5 PERIODS

Embalming

Study of the disinfection, preservation and restoration of the deceased human body by chemical means for the specific purpose of funeralization. Prerequisites: Admission to the Mortuary Science Program.

MSP203 / 3 CREDITS / 3 PERIODS

Microbiology for Funeral Service

Survey of the microbiological world as it pertains to the funeral service profession. Knowledge of those organisms that can cause death and safety precautions. Prerequisites: Admission to the Mortuary Science Program.

MSP204 / 3 CREDITS / 3 PERIODS

Chemistry for Funeral Service

Basic principles of chemistry related to funeral service. Chemical principles of embalming, disinfection and public health. Sanitation practices regarding potentially harmful chemicals. Prerequisites: Admission to the Mortuary Science Program.

MSP205 / 3 CREDITS / 3 PERIODS

Mortuary Administration I

Funeral directing and professional relationships with members of the clergy. Introductory information about the establishment of a funeral home. Prerequisites: Admission to the Mortuary Science Program.

MSP206 / 3 CREDITS / 3 PERIODS

Mortuary Administration II

Operation of the established funeral home and product knowledge in the area of funeral service merchandising. Prerequisites: MSP205.

MSP207 / 4 CREDITS / 5 PERIODS

Restorative Art

Care and restoration of the deceased human body to create natural form and appearance. Includes anatomical aspects and color theory. Prerequisites: Admission to the Mortuary Science Program.

MSP208 / 3 CREDITS / 3 PERIODS

Legal, Regulatory, and Ethical Issues in Funeral Service

Mortuary law regulation by the Federal Trade Commission, and ethical issues in funeral service. Individual State Laws as they pertain to the regulation of funeral establishments and funeral service personnel. Prerequisites: Admission to the Mortuary Science Program.

MSP209 / 3 CREDITS / 3 PERIODS

Pathology for Funeral Service

Pathologic conditions which require special treatment and terminology associated with the causes of death.

For the most current information regarding course descriptions, log on to curriculum.maricopa.edu.

Prerequisites: Admission to the Mortuary Science Program.

MSP210 / 2 CREDITS / 2 PERIODS

Counseling for Funeral Service

Knowledge for facilitating the mourning process after the death of a loved one and for referring bereaved persons to other sources of professional assistance. Prerequisites: Admission to the Mortuary Science Program.

MSP211 / 2 CREDITS / 2 PERIODS

Compendium for Funeral Service

Analysis of tasks performed on a more-or-less day-to-day basis by funeral service personnel. Capstone experience based on all previous course work. Prerequisites: Admission to the Mortuary Science Program.

MST – Microsoft Technology

MST141 / 3 CREDITS / 4 PERIODS

Enterprise Desktop Support Technician

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. Prerequisites: (CIS102 or any CIS102++ course) and CIS105, or permission of Instructor. Prerequisites or Corequisites: MST150, or any MST150++ course, or permission of Instructor. Course Notes: Preparation for Microsoft Certified IT Professional: Enterprise Desktop Support Technician 7 (MCITP) certification examination, 70-685.

MST150WT / 3 CREDITS / 4 PERIODS

Installing and Configuring Microsoft Windows 10

In-depth exploration of how to effectively install and configure Windows 10. Includes features of Windows 10, virtualization improvements, network connectivity, access to resources, monitor and maintain Windows clients and backup and recovery. Designed to prepare students for the Microsoft Windows 10 certification examination. Prerequisites: None. CIS190 or CNT140AB suggested but not required.

MST155 / 3 CREDITS / 4 PERIODS

Implementing Windows Network Infrastructure

Knowledge and skills to install, configure, maintain, and support a Microsoft Windows network infrastructure. Prerequisites: or Corequisites: MST150, or any MST150++ course, or permission of Instructor. Course Notes: Preparation for Microsoft certification examination.

MST155DB / 4 CREDITS / 5 PERIODS

Configuring Advanced Windows Server Services

In-depth exploration of how to effectively install and configure Windows Server. Designed to prepare students for the Microsoft Configuring Advanced Windows Server Services examination (70-412). Prerequisites: MST158++ or permission of Instructor. Course Notes: Recommend that prerequisite course completed was for the same version of Windows server as will be taught in this course.

MST157 / 3 CREDITS / 4 PERIODS

Implementing Windows Directory Services

Knowledge and skills to install, configure, and administer Microsoft Windows Active Directory directory services. Prerequisites: Any MST+++ or any MST+++++ Microsoft Technology course, or permission of Instructor. Course Notes: Preparation for Microsoft certification examination.

MST157DB / 4 CREDITS / 5 PERIODS

Administering Windows Server

In-depth exploration of how to effectively manage Windows Server. Designed to prepare students for the Administering Microsoft Windows Server examination (70-411). Prerequisite: MST158++ or permission of Instructor. Course Notes: Recommend that prerequisite course completed was for the same version of Windows server as will be taught in this course.

For the most current information regarding course descriptions, log on to curriculum.maricopa.edu.

MST158DB / 4 CREDITS / 5 PERIODS

Installing and Configuring Windows Server

In-depth exploration of how to effectively install and configure Windows Server. Includes roles and features of Server, virtualization with Hyper-V, core network services, Active Directory, and Group Policy. Designed to prepare students for the corresponding Microsoft Windows Server Installation and Configuration examination (70-410). Prerequisites: (MST140 or CNT140++) and MST150++, or permission of Instructor.

MTC – Music: Theory/ Composition

MTC101 / 3 CREDITS / 3 PERIODS

Introduction to Music Theory

Designed to develop written and aural skills necessary for advanced study of music theory and skills. Recommended for music majors. Prerequisites: None.

MTC103 / 1 CREDIT / 2 PERIODS

Introduction to Aural Perception

An introduction to the aural skills necessary to hear relationships of intervals, rhythms, melody, and harmony in music. Prerequisites: None. Course Notes: MTC103 may be repeated for a total of two (2) credit hours.

MTC105 / 3 CREDITS / 3 PERIODS

Music Theory I

The chronological study of music theory including: harmony, melody, texture, structure and timbre through analysis, original compositions and basic exercises to demonstrate musical concepts. Prerequisites: MTC100, or MTC101, or permission of instructor. Corequisites: MTC106.

MTC106 / 1 CREDIT / 2 PERIODS

Aural Perception I

The development of listening and performing skills through dictation, sight singing and keyboard harmony. Prerequisites: None. Corequisites: MTC105.

MTC130 / 3 CREDITS / 3 PERIODS

Jazz Theory

Develop written and aural theory skills necessary in the jazz idiom. Prerequisites: (MTC101 and MTC103), or permission of Instructor. Course Notes: MTC130 is recommended for students taking jazz improvisation, jazz composition and jazz combo.

MTC155 / 3 CREDITS / 3 PERIODS

Music Theory II

A continuation of Music Theory I with emphasis on harmony and part-writing procedures. Prerequisites: MTC105. Corequisites: MTC156.

MTC156 / 1 CREDIT / 2 PERIODS

Aural Perception II

A continuation of Aural Perception I, including harmonic practices. Prerequisites: None. Corequisites: MTC155.

MTC205 / 3 CREDITS / 3 PERIODS

SUN MUS 2222

Music Theory III

The study of chromatic harmony and melody, modulation techniques and expanded chords. The analysis of formal structure. Prerequisites: MTC155. Corequisites: MTC206.

MTC206 / 1 CREDIT / 2 PERIODS

SUN MUS 2222

Aural Perception III

A development of listening and performing skills, including an introduction of chromatic harmonic techniques and concepts of style. Prerequisites: None. Corequisites: MTC205.

MTC240 / 3 CREDITS / .6 PERIODS

Composition

Introduction to the basics of music composition, stressing techniques and procedures for developing

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original ideas. May be repeated for total of twelve (12) credit hours. Prerequisites: (MTC105 and MTC106, or equivalent), and permission of instructor.

MTC255 / 3 CREDITS / 3 PERIODS

SUN MUS 2223

Music Theory IV

A continuation of Music Theory III, including 20th century theories and techniques. Prerequisites: MTC205. Corequisites: MTC256.

MTC256 / 1 CREDIT / 2 PERIODS

SUN MUS 2223

Aural Perception IV

A continuation of Aural Perception III, including extended chords. Prerequisites: None. Corequisites: MTC255.

MUC – Music: Commercial/Business

MUC109 / 3 CREDITS / 3 PERIODS

Music Business: Content Creation and Copyright

Designed to provide an overview of content creation and copyright considerations within the Music Industry. Topics include songwriting and music creation, copyright, publishing and licensing, studio production, media applications of music, business ownership and operations, and emerging technologies. Prerequisites: None..

MUC110 / 3 CREDITS / 3 PERIODS

Music Business: Marketing and Monetization

Designed to provide an overview of the marketing and monetization of music. Topics include music label operations; contracts; marketing, promotion, and merchandising; agents, managers, and attorneys; concert promotion and touring; and unions and guilds. Prerequisites: None.

MUC111 / 3 CREDITS / 5 PERIODS

Digital Audio Workstation I (DAW I)

Use of digital mixing and automation software in conjunction with editing and recording. Includes computer operation, troubleshooting, and file management. Prerequisites: MUC195, or MUC195AA, or TCM/VPT105, or permission of Instructor.

MUC112 / 3 CREDITS / 5 PERIODS

Digital Audio Workstation II (DAW II)

Use of digital mixing and automation software in conjunction with editing and recording. Includes computer operation, troubleshooting, and file management. Prerequisites: MUC111, and (MUC195 or MUC195AA).

MUC195 / 3 CREDITS / 5 PERIODS

Studio Music Recording I

Basic principles of studio sound recording. Emphasis on musical acoustics, operation of recording equipment, studio setups, and multitrack recording. Includes studio session process and musical production decisions. Prerequisites: None.

MUC196 / 3 CREDITS / 5 PERIODS

Studio Music Recording II

Emphasis on signal-processing equipment, mixing consoles, and advanced musical recording session procedures, production, and engineering. Includes mix-down and resultant master tape of a musical recording session. Prerequisites: MUC195 or MUC195AA.

MUC290AA / 1 CREDIT / 1 PERIOD

Music Business Internship

Music Business Internship work experience. Perform a variety of activities, to fulfill the routines and responsibilities of the department or business where the internship is served. Eighty (80) hours of designated work per credit. Prerequisites: Permission of Department or Division. Course Notes: MUC290AA may be repeated for a total of twelve (12) credit hours.

For the most current information regarding course descriptions, log on to curriculum.maricopa.edu.

MUC293 / 1 CREDIT / 1 PERIOD

Self Promotion for Music

Designed to provide the skills and knowledge required for effective self-promotion. Focus on career goal development, market analysis, communication and networking skills, and the development of a self-promotional campaign. Prerequisites: None.

MUC297AB / 2 CREDITS / 2 PERIODS

Audio Production Internship

Music Internship work experience in a business or industry eighty (80) hours of designated work per credit. Prerequisites: A grade of C or better in MUC110. Course Notes: MUC297AB may be repeated for a total of twelve (12) credit hours.

MUE – Music: Education

MUE108 / 1 CREDIT / 3 PERIODS

Percussion Methods I

Practical class with emphasis on techniques of playing and teaching percussion instruments including hand position, rudiments, stick control, and elements of reading rhythms. Prerequisites: None.

MUP – Music: Performance

MUP101 / 1 CREDIT / .6 PERIOD

MUP151 / 1 CREDIT / .6 PERIOD

MUP201 / 1 CREDIT / .6 PERIOD

MUP251 / 1 CREDIT / .6 PERIOD

Private Instruction: Euphonium

Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar, percussion, and harp. May be repeated for credit. Prerequisites: None.

MUP102 / 2 CREDITS / 1.2 PERIODS

MUP152 / 2 CREDITS / 1.2 PERIODS

MUP202 / 2 CREDITS / 1.2 PERIODS

MUP252 / 2 CREDITS / 1.2 PERIODS

Private Instruction

Private Instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar, percussion, and harp. May be repeated for credit. Prerequisites: None.

MUP127 / 1 CREDIT / 3 PERIODS

Class Guitar I

Emphasis on note-reading and folk-style harmonic accompaniment. Includes finger-style playing. Stresses development of efficient practice techniques and proper sitting and hand positions. Prerequisites: None.

MUP128 / 1 CREDIT / 3 PERIODS

Class Guitar II

Note-reading range including second position and parts of higher positions. Classical, popular, Latin, and other styles of music. Theory including scales, keys, and chord construction. Technical exercises of both hands. Prerequisites: A grade of C or better in MUP127 or permission of Instructor.

MUP131 / 1 CREDIT / 3 PERIODS

Class Piano I

Development of beginning piano techniques and the fundamentals of music including basic hand position, music reading skills of melodic and harmonic material,

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major scales, transposition, and harmonizations including the I, IV, V7 chords. Prerequisites: None.

MUP132 / 1 CREDIT / 3 PERIODS

Class Piano II

Continuation of Piano I with emphasis on elementary piano techniques including major and minor scales, transposition, improvisation, and sight reading. Prerequisites: MUP131 or permission of instructor.

MUP133 / 1 CREDIT / 3 PERIODS

Class Voice I

Introduction to the fundamentals of vocal production. Emphasis on breathing techniques, tone production and performances in class of solo vocal literature. Prerequisites: None.

MUP134 / 1 CREDIT / 3 PERIODS

Class Voice II

Continuation of Class Voice I including the elements of stage presence and diction. Prerequisites: MUP133 or permission of instructor.

MUP150 / 1 CREDIT / 3 PERIODS

Community Chorus

A mixed chorus with emphasis on college/community participation and preparation of a variety of choral literature for public performance. Auditions may be required. May be repeated for credit. Prerequisites: None.

MUP153 / 1 CREDIT / 5 PERIODS

Concert Choir

A mixed choir designed to emphasize choral techniques and performance of all styles of choral literature. Public performances are scheduled each semester. Prerequisites: None. Course Notes: Auditions may be required. MUP153 may be repeated for credit.

MUP154AA / 1 CREDIT/3 PERIODS

Jazz Vocal Ensemble

Practical and performing experience in vocal jazz. Includes music from the 1920's through the present. Prerequisites: Auditions required or permission of instructor. Course Note: May be repeated for up to three (3) credits.

MUP159 / 1 CREDIT / 3 PERIODS

Community Orchestra

Emphasis on college/community participation and the preparation of orchestral literature for public performance. Auditions may be required. May be repeated for credit. Prerequisites: None.

MUP161 / 1 CREDIT / 3 PERIODS

Community Band

Emphasis on college/community participation and the preparation of band literature for public performance. Auditions may be required. May be repeated for credit. Prerequisites: None.

MUP162 / 1 CREDIT / 5 PERIODS

Band

A class designed to emphasize instrumental techniques and the preparation of all styles of band literature. Public performances are scheduled during the year. Auditions may be required. Prerequisites: None. Course Notes: MUP162 may be repeated for credit.

MUP163 / 1 CREDIT / 3 PERIODS

Jazz Ensemble

Practical and performance experience in various jazz styles. Open to all students on the basis of auditions. May be repeated for credit. Prerequisites: None.

MUP164 / 2 CREDITS / 3 PERIODS

Jazz Improvisation I

Theoretical and performance skills in many styles of jazz improvisation. May be repeated for a total of six (6) credit hours. Prerequisites: None.

MUP181 / 1 CREDIT / 2 PERIODS

Chamber Music Ensembles

Practical and performance experience in instrumental, vocal, and mixed ensembles. May be repeated for credit. Prerequisites: None.

For the most current information regarding course descriptions, log on to curriculum.maricopa.edu.

MUP182 / 1 CREDIT / 3 PERIODS

Chamber Singers

Practical and performance experience in various styles of vocal music. Open to all students on the basis of auditions. May be repeated for credit. Prerequisites: None.

MUP209 / 2 CREDITS / 2 PERIODS

Elements of Conducting

Essentials of conducting techniques used in choral and instrumental ensembles including terminology, interpretation, and styles. Prerequisites: None.

MUP217 / 2 CREDITS / 3 PERIODS

Music Theatre: Broadway Solos

Study and in-class performance of scenes and solos from Broadway musical literature. Prerequisites: None. Course Notes: MUP217 may be repeated for credit.

MUP227 / 1 CREDIT / 3 PERIODS

Class Guitar III

Additional fingerboard positions. Ensemble techniques and performance. Prerequisites: A grade of C or better in MUP128 or permission of Instructor.

MUP228 / 1 CREDIT / 3 PERIODS

Class Guitar IV

Advanced fingerboard positions. Duet and trio performances. Advanced ensemble techniques. Prerequisites: MUP227 or permission of instructor.

MUP231 / 1 CREDIT / 3 PERIODS

Class Piano III

Development of intermediate piano techniques including selected solo literature, transposition of harmonic patterns, and secondary dominants. Prerequisites: MUP132 or permission of instructor.

MUP232 / 1 CREDIT / 3 PERIODS

Class Piano IV

Continuation of Piano III including modulation techniques, improvisation of piano accompaniments, advanced chromatic harmony, and sight reading of advanced literature. Prerequisites: A grade of C or better in MUP231 or permission of Instructor. Course Notes: MUP232 may be repeated for credit.

MUP233 / 1 CREDIT / 3 PERIODS

Class Voice III

Interpretive singing through a closer examination of coloring, tone production, dynamics, and tempo indications. Prerequisites: MUP134.

MUP234 / 1 CREDIT / 3 PERIODS

Class Voice IV

Emphasis on the preparation of solo vocal literature for the purpose of evaluation and the integration of the music with the drama of the music. Prerequisites: MUP233 or permission of instructor.

MUP270 / 2 CREDITS / 5 PERIODS

Musical Theatre Workshop

Workshop in the study and performance of Musical Theatre repertoire. Includes audition techniques, stage directions, character role development, rehearsal techniques, vocal acting styles and vocal technique, stage movement, crew roles, and performance. Prerequisites: None. Course Notes: MUP/THP270 may be repeated for credit. Cross-References: THP270.

NAV – Navajo

NAV115 / 3 CREDITS / 3 PERIODS

Beginning Navajo Conversation I

Beginning conversational Navajo with emphasis on basic listening and speaking skills, including basic pronunciation, vocabulary, sentence structure, and cultural awareness. Prerequisites: None.

For the most current information regarding course descriptions, log on to curriculum.maricopa.edu.

NCE – Nursing Continuing Education

NCE214MI / .5 CREDITS / .5 PERIODS

Math and Medications for Intermediate Nursing Students

Focus on basic mathematical concepts to calculate metric- apothecary conversion, dosage problems, intravenous flow rates using the ratio/proportion and dimensional analysis methods. These calculations will focus application to acute care, long-term care, and pediatric specialty areas. Prerequisites: Current student in Nursing program or permission of Department or Division.

NUR – Nursing Science: Basic

NUR104AB / 1 CREDIT / 1 PERIOD

Structured Nursing Review

Structured nursing tutorial assistance and nursing study skills to help students achieve success in their respective block of nursing courses. Nursing process and critical thinking application skills emphasized. Prerequisites: None. Corequisites: Concurrent enrollment in the Nursing program or permission of Department Chair. Course Notes: Course offered as Credit (P) No credit (Z) basis. NUR104AB may be repeated for a total of eight (8) credits.

NUR152 / 9 CREDITS / 19 PERIODS

Nursing Theory and Science I

Introduction of Nurse of the Future competencies as a foundational framework for development of the professional nurse. Basic care concepts and the nursing process are utilized to meet the needs of adult and older adult patients. Prerequisites: Admission into the Nursing Program.

NUR172 / 9 CREDITS / 16 PERIODS

Nursing Theory and Science II

Utilization of Nurse of the Future competencies to develop knowledge, skills, and attitudes to provide safe, quality patient care across the wellness-illness continuum in selected medical-surgical and mental health patients. Prerequisites: (BIO202 and NUR152) or permission of Nursing Department Chair.

NUR252 / 9 CREDITS / 16 PERIODS

Nursing Theory and Science III

Application of critical thinking strategies related to holistic care of the newborn and childbearing patients. Integration of concepts related to holistic care of adults and older adult patients with selected acute and chronic alterations in health. Integration of professional nursing standards in role development. Utilization of previous knowledge of physical, biologic, psycho-social sciences, and the cultural, spiritual aspects of nursing care. Integration of concepts of nutrition, pharmacology, communication, health promotion, and pathophysiology into nursing care. Prerequisites: (CRE101 and NUR172 and PSY101) or permission of Nursing Department Chair.

NUR283 / 9 CREDITS / 16 PERIODS

Nursing Theory and Science IV

Applies Nurse of the Future competencies to practice and manage care for the child/family unit and adults requiring complex care throughout the wellness/illness continuum, and prepare for transition from student to professional nurse. Prerequisites: (BIO205 and NUR252) or permission of Nursing Department Chair.

OAS – Office Automation Systems

OAS108 / 3 CREDITS / 3 PERIODS

Business English

Comprehensive coverage of correct use of English grammar including spelling, punctuation, capitalization, and number style mechanics in a business context. Prerequisites: None.

For the most current information regarding course descriptions, log on to curriculum.maricopa.edu.

PAD – Public Administration

PAD100 / 3 CREDIT / 3 PERIODS

21st Century Public Policy and Service

Introduction to topics pertaining to public policy and public service in the 21st century. Includes formation, implementation, and evaluation procedures for public policy, as well as roles and agendas of policy makers and public administrators. Also covers careers in public service/administration and an evaluation of essential skills necessary for a career in public service. Prerequisites: None.

PED – Physical Education

PED101 / 1 CREDIT / 2 PERIODS

Physical Activities: Basic

Individual, dual, or team sports activities at the basic level. Prerequisites: None. Course Notes: PED101 may be repeated for credit.

PED102 / 1 CREDIT / 2 PERIODS

Physical Activities: Intermediate

Individual, dual, or team sports activities at the intermediate level. Prerequisites: None. Prior experience recommended.

PED103 / .5 CREDITS / 1 PERIOD

Physical Activities: Basic

Individual, dual, or team sports activities at the basic level. Prerequisites: None. Course Notes: PED103 may be repeated for credit.

PED115 / 2 CREDITS / 4 PERIODS

Lifetime Fitness

Increase personal fitness, strength, and vitality. Current principles of cardiovascular exercise, weight training, flexibility, and balance exercises applicable to lifetime fitness goals. Personalized fitness plans developed and implemented with support of highly trained fitness professionals. Techniques to make sessions more effective and enjoyable. Prerequisites: None. Course Note: PED115 may be repeated for a total of eight (8) credit hours.

PED117 / 2 CREDITS / 4 PERIODS

Weight Training for Wellness

Strength training and muscular fitness activity to help develop a lifetime of regular exercise and muscular strength maintenance. Development of full body strength and stability of the body's core musculature, translating to increased power, balance, and functional movement ability including assessment of current strength and goal-specific program design to increase strength and muscular fitness. Prerequisites: None. Course Notes: PED117 may be repeated for a maximum of eight (8) credits.

PED120AF / 2 CREDITS / 4 PERIODS

Special Emphasis Activities: Weight Training

Intensive experience in weight training. May be repeated for a total of 8 credits. Prerequisites: None.

PED121 / 1 CREDIT / 2 PERIODS

Physical Conditioning for Massage Therapists

Physical fitness necessary for current and prospective massage therapists. Includes physical fitness and workout techniques as related to performing massage therapy; individual conditioning strategies, and basic nutritional guidelines. Prerequisites: None.

PED124 / 2 CREDITS / 4 PERIODS

Strength and Conditioning for Sport Performance: Basic

Introduction to the principles and training techniques of strength and conditioning for sport performance. Emphasis is placed on beginning instructional techniques and safety of Olympic lifts; plyometrics; muscular endurance, strength and power development; anaerobic and aerobic capacity. Prerequisites: None. Course Notes: PED124 may be repeated for a total of eight (8) credit hours.

For the most current information regarding course descriptions, log on to curriculum.maricopa.edu.

PED125 / 2 CREDITS / 4 PERIODS

Strength and Conditioning for Sport Performance: Intermediate

Principles and training techniques of strength and conditioning for sport performance. Emphasis is placed on instructional techniques and safety of Olympic lifts; plyometrics; muscular endurance, strength and power development; anaerobic and aerobic capacity. Prerequisites: PED124. Course Notes: PED125 may be repeated for a total of eight (8) credit hours.

PED133 / 2 CREDITS / 4 PERIODS

Olympic Style Weight Lifting

Advanced study of the science, strategy, and techniques of Olympic Style Weightlifting. For the fitness professional who is interested in competing, or is seeking to incorporate advanced strength and conditioning modalities. Addresses current topics, theories and techniques. Prerequisites: None.

PED201 / 1 CREDIT / 2 PERIODS

Physical Activities: Advanced

Individual, dual, or team sports activities at the advanced level. Prerequisites: None. Prior experience at competitive level recommended. Course Notes: PED201 may be repeated for credit.

PED224 / 2 CREDITS / 4 PERIODS

Strength and Conditioning for Sport Performance: Advanced

Principles and training techniques of strength and conditioning for sport performance. Emphasis placed on instructional techniques and safety of Olympic lifts; plyometrics; muscular endurance, strength and power development; anaerobic and aerobic capacity; and injury prevention. Prerequisites: PED124 and PED125. Course Notes: PED224 may be repeated for a total of eight (8) credit hours.

PED225 / 2 CREDITS / 4 PERIODS

Strength and Conditioning for Sport Performance: Elite

Principles and training techniques of strength and conditioning for sport performance. Emphasis placed on instructional techniques and safety of Olympic lifts; plyometrics; muscular endurance, strength and power development; anaerobic and aerobic capacity; injury prevention; and assessment techniques. Prerequisites: PED124, PED125, and PED224. Course Notes: PED225 may be repeated for a total of eight (8) credit hours.

PHI– Philosophy

PHI101 / 3 CREDITS / 3 PERIODS

SUN PHI 1101

Introduction to Philosophy

General consideration of human nature and the nature of the universe. Knowledge, perception, freedom and determinism, and the existence of God. Prerequisites: None.

PHI103 / 3 CREDITS / 3 PERIODS

SUN PHI 1103

Introduction to Logic

Informal logic, logical fallacies, elementary symbolic logic, analysis of argument forms, and construction of proofs for validity. Prerequisites: ENG101 or ENG107 or equivalent.

PHI104 / 3 CREDITS / 3 PERIODS

World Philosophy

Examination of questions such as the meaning of life and death, social justice, appearance and reality, human nature, the identity of the self freedom and destiny, the ethical life, and the relationship of science and religion. Comparative analysis of diverse Eastern and Western viewpoints. Prerequisites: None.

PHI105 / 3 CREDITS / 3 PERIODS

SUN PHI 1105

Introduction to Ethics

A survey of ethical theory in Western Philosophy, including the major normative theories and selected metaethical theories. Prerequisites: None.

For the most current information regarding course descriptions, log on to curriculum.maricopa.edu.

PHI214 / 3 CREDITS / 3 PERIODS

Business Ethics

Philosophical consideration of moral problems arising in business practice, including corporate responsibility, government regulation, hiring practices, and advertising. Application to both the United States and other countries. Prerequisites: ENG101, or ENG107, or equivalent.

PHI216 / 3 CREDITS / 3 PERIODS

Environmental Ethics

Philosophical consideration of diverse theories and perspectives on the environment, and application of these theories to global moral issues such as animal rights, preservation of wilderness and species, population, world hunger and poverty, and air and water pollution. Prerequisites: None.

PHI218 / 3 CREDITS / 3 PERIODS

Philosophy of Sexuality

Philosophical examination of sexuality in human life. Historical and critical survey of philosophical and theological views. Comparison and evaluation of contemporary theories about the nature of sexual desire and sexual acts. Implications of theories for contemporary moral problems. Prerequisites: ENG101, or ENG107, or permission of Instructor Student must be 18 years or older.

PHY– Physics

PHY101 / 4 CREDITS / 6 PERIODS

Introduction to Physics

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.

PHY111 / 4 CREDITS / 6 PERIODS

SUN PHY 1111

General Physics I

Includes motion, energy, and properties of matter. Prerequisites: MAT182 or MAT187 or one year high school Trigonometry with a grade of C or better or permission of Department or Division Course Notes: PHY111 is recommended for pre-professional and suggested for certain other majors. Students may receive credit for only one of the following: PHY111 or PHY111AA.

PHY112 / 4 CREDITS / 6 PERIODS

SUN PHY 1112

General Physics II

Includes electricity, electromagnetism, and modern physics. Prerequisites: PHY105 or PHY111.

PHY121 / 4 CREDITS / 6 PERIODS

SUN PHY 1121

University Physics I: Mechanics

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 / 4 CREDITS / 6 PERIODS

SUN PHY 1131

University Physics II: Electricity and Magnetism

Electric charge and current, electric and magnetic fields in vacuum and in materials, and induction. AC circuits, displacement current, and electromagnetic waves. Prerequisites: MAT230 or MAT231 or permission of Department or Division and PHY121 Corequisites: MAT241 or permission of Department or Division.

PHY294 / 3 CREDIT / 3 PERIODS

Special Topics in Physics

Conceptual, experimental, and computational aspects of a special topic in physics. Prerequisites: Permission of Department or Division. Course Notes: PHY294 may be repeated for credit.

PHY294AA / 2 CREDIT / 2 PERIODS

Special Topics in Physics

Conceptual, experimental, and computational aspects

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of a special topic in physics. Prerequisites: Permission of Department or Division. Course Notes: PHY294AA may be repeated for credit.

PHY294AB / 1 CREDIT / 1 PERIOD

Special Topics in Physics

Conceptual, experimental, and computational aspects of a special topic in physics. Prerequisites: Permission of Department or Division. Course Notes: PHY294AB may be repeated for credit.

PHY294AC / 0.5 CREDIT / 0.5 PERIODS

Special Topics in Physics

Conceptual, experimental, and computational aspects of a special topic in physics. Prerequisites: Permission of Department or Division. Course Notes: PHY294AC may be repeated for credit

POS – Political Science

POS100 / 3 CREDITS / 3 PERIODS

Introduction to Political Science

Introduction to the discipline of political science and its relation to other disciplines with emphasis on the major philosophies and institutions of government. Prerequisites: None.

POS110 / 3 CREDITS / 3 PERIODS

SUN POS 1110

American National Government

Study of the historical backgrounds, governing principles, and institutions, of the national government of the United States. Prerequisites: None.

POS120 / 3 CREDITS / 3 PERIODS

SUN POS 1120

World Politics

Introduction to the principles and issues relating to the study of international relations. Evaluation of the political, economic, national, and transnational rationale for international interactions. Prerequisites: None.

POS180 / 3 CREDITS / 3 PERIODS

United Nations Studies

Historical origins, structural makeup, political and operational characteristics, and legal activities of the United Nations. Analysis of the overall institution's ongoing utility, productivity and creativity. Prerequisites: None.

POS210 / 3 CREDITS / 3 PERIODS

Political Ideologies

Leading political ideas and belief systems, e.g., Marxism, liberalism, conservatism, theories of democracy, and alternative futures. Prerequisites: None.

POS220 / 3 CREDITS / 3 PERIODS

U.S. and Arizona Constitution

Examination of the United States Constitution and the constitution and government of the state of Arizona. Prerequisites: None.

POS221 / 1 CREDIT / 1 PERIOD

Arizona Constitution

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 / 2 CREDITS / 2 PERIODS

U.S. Constitution

Examination of the United States Constitution. Equivalent to the first part of POS220. May not enroll in POS220 and POS222 concurrently. Prerequisites: None.

POS223 / 3 CREDITS / 3 PERIODS

Civil Rights

The historic background and current status of major civil rights and civil liberties issues in the United States. Prerequisites: None.

For the most current information regarding course descriptions, log on to curriculum.maricopa.edu.

POS285 / 3 CREDITS / 3 PERIODS

Political Issues and Public Policy

Introduction to public policy, how policy is made, and how public policy decisions are affected. Prerequisites: None.

PPT – Power Plant Technology

PPT120 / 3 CREDITS / 3 PERIODS

Energy Industry Fundamentals

Various types of energy and their conversion to usable energy such as electrical power. How generated electrical power is transmitted and distributed to the point of use. Prerequisites: None.

PSY – Psychology

PSY101 / 3 CREDITS / 3 PERIODS

SUN PSY 1101

Introduction to Psychology

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 / 3 CREDITS / 3 PERIODS

Psychology of Parenting

The demonstration and application of psychological principles to the development and guidance of children and adolescents. Prerequisites: None.

PSY132 / 3 CREDITS / 3 PERIODS

Psychology and Culture

Presents current knowledge about human diversity in behavior and culture using examples from a variety of contexts within western and global societies. Highlights topics in cross-cultural psychology, such as intergroup relations, diverse cognitive styles, ethnocentrism, gender, personality, emotion, language, communication, work and health. The role of enculturation throughout the lifespan will be explored to increase awareness of how behavioral and cognitive principles affect interactions in a multicultural world. Prerequisites: None.

PSY210 / 3 CREDITS / 3 PERIODS

Educational Psychology

Scientific research and psychological principles as they apply to teaching and learning. The role of psychology in educational settings, human diversity, theories of learning, intelligence, memory, creativity, assessment, and factors influencing effective instruction and learning. Prerequisites: PSY101 with a grade of "C" or better or permission of instructor.

PSY215 / 3 CREDITS / 3 PERIODS

Introduction to Sport Psychology

Application of the physiological, behavioral, social, cognitive, and humanistic perspectives in psychology to sport. Includes topics such as optimal performance, correlation, motivation, co-action effect, self-actualization, psycho-behavioral techniques, self-efficacy, and the general health benefits of sport participation. Prerequisites: PSY101 with a grade of "C" or better or permission of instructor.

PSY230 / 3 CREDITS / 3 PERIODS

Introduction to Statistics

An introduction to basic concepts in descriptive and inferential statistics, with emphasis upon application to psychology. Consideration given to the methods of data collection, sampling techniques, graphing of data, and the statistical evaluation of data collected through experimentation. Required of psychology majors. Prerequisites: (A grade of "C" or better in PSY101 and MAT092 or higher MAT course) or (a grade of "C" or better in PSY101 and eligibility for MAT112 or higher as indicated by appropriate mathematics placement test score) or permission of Instructor.

PSY231 / 1 CREDIT / 2 PERIODS

Laboratory for Statistics

Applications of inferential and descriptive statistics to

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computers in the field of psychology. Prerequisites: None. Corequisites: PSY230.

PSY235 / 3 CREDITS / 3 PERIODS

Psychology of Gender

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 / 3 CREDITS / 3 PERIODS

Developmental Psychology

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.

PSY241 / 3 CREDITS / 3 PERIODS

Understanding and Changing Behavior

Theory and methods for observing, analyzing, and modifying behavior. Prerequisite or Corequisites: PSY101 or permission of Instructor. Course Note: Taking PSY101 as a prerequisite is recommended.

PSY242 / 3 CREDITS / 4 PERIODS

Understanding and Changing Behavior Lab

Advanced course designed to enable students to apply the principles of applied behavior analysis (ABA) in a supervised lab setting. Incorporates case studies and hands-on employment of best practices. Also includes practice with behavioral research design and implementation. Reviews current research in areas including, but not limited to, schedules of reinforcement, functional behavior assessment, stimulus discrimination and generalization. Course should be taken if applying for certification as a Registered Behavior Technician (RBT). Prerequisites: PSY241. Course Notes: Supervision hours by a Board Certified Behavior Analyst required for certification will be available in this course.

PSY266 / 3 CREDITS / 3 PERIODS

Abnormal Psychology

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.

PSY267 / 3 CREDITS / 3 PERIODS

Introduction to Forensic Psychology

Overview of the practice of psychology in the law, by the law, and of the law. Focuses on the complementary functions and distinctions between psychology and the legal justice system. Topics include, but are not limited to, criminal investigations, risk and level of danger, competency, interrogations, confessions, assessment, eyewitness testimony, child custody, and domestic violence. Prerequisites: PSY101.

PSY270 / 3 CREDITS / 3 PERIODS

Personal & Social Adjustment

Surveys the basic mental health principles as they relate to coping with stress, interpersonal relationships, sex, marriage, and working. Emphasis on learning to become a more competent and effective person. Prerequisites: PSY101 with a grade of "C" or better or permission of the instructor.

PSY290AB / 4 CREDITS / 3 PERIODS

Research Methods

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: A grade of "C" or better required in all Prerequisites. Prerequisites: ENG101 or ENG107. Prerequisites or Corequisites: PSY230 or permission of Instructor.

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PSY290AC / 3 CREDITS / 3 PERIODS

Research Methods

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: A grade of "C" or better required in all Prerequisites. Prerequisites: ENG101 or ENG107. Prerequisites or Corequisites: PSY230 or permission of Instructor.

RDG – Reading

RDG100 / 3 CREDITS / 3 PERIODS

Successful College Reading

Emphasis on reading study strategies for any introductory class in any subject area. Introduction to Learning Management System (LMS), how to successfully read course textbooks and assessments, how to navigate information technology and development of academic vocabulary. Prerequisites: A grade of C or better in RDG081 or appropriate reading placement score or permission of Instructor. Corequisites: Any 100-level course in another content area or permission of Instructor. Course Notes: RDG100 satisfies RDG091 requirement. RDG100 may be repeated for a total of twelve (12) credit hours. Also See Critical Reading (CRE).

RDG100LL / 1 CREDIT / 3 PERIODS

Disciplinary Literacy Lab

Supplemental instruction for college-level discipline courses. Focus on developing effective reading processes to address a range of literacy needs including reading, writing, digital, numerical, financial and informational literacies. Prerequisites: None. Corequisites: Any 100-level course in another content area or permission of Instructor.

REC – Recreation

REC120 / 3 CREDITS / 3 PERIODS

Leisure and the Quality of Life

Overview of the historical, psychological, social, and cultural aspects of play, leisure, and recreation and their role in contemporary society. Nature of play and leisure behavior in human development within different cultures and the contribution play, recreation, and leisure make to the quality of life for individuals in today's society. Prerequisites: None.

REC150AA / 1 CREDIT / 2 PERIODS

Outdoor Living Skills Field Experience

Practical application of camping and outdoor skills including camping, equipment selection and use, cooking, fire building, camp programs, backpacking, and safety. Prerequisites: None. Course Note: Course may be repeated for a total of four (4) credits.

REC150AB / 3 CREDITS / 3 PERIODS

Outdoor Adventure Skills

Camping and outdoor skills including types of camping, equipment selection and use, cooking and fire building, camp programs, backpacking, and safety. Prerequisites: None.

REC250 / 3 CREDITS / 3 PERIODS

Recreation Leadership

An examination of roles and methods of leadership in leisure services settings. Overview of theories and models of leadership, group dynamics, participant motivation, communication, and face-to-face leadership. Exploration of leadership contexts, including coaching and officiating sports, leading community groups and volunteers, working with persons in various life stages and with varying abilities, and leading different recreation activity areas. Prerequisites: None.

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REL – Religious Studies

REL100 / 3 CREDITS / 3 PERIODS

World Religions

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.

REL203 / 3 CREDITS / 3 PERIODS

American Indian Religions

An examination of the historical and cultural background of diverse lifeways and worldviews belonging to the peoples indigenous to the North American continent over time, including a study of modern day American Indian beliefs and practices. Prerequisites: ENG101 or ENG107 or equivalent.

REL205 / 3 CREDITS / 3 PERIODS

Religion and the Modern World

Introduction to the nature and role of religious beliefs and practices in shaping the lives of individuals and societies, with particular attention to the modern world. Prerequisites: ENG101, or ENG107, or equivalent.

REL206 / 3 CREDITS / 3 PERIODS

Religion in America

Introduction of the rich tapestry of religious traditions and movements that have helped to shape the United States of America. Investigate how religion has impacted American culture and institutions, and how the United States has in turn transformed long-standing religious traditions. Prerequisites: None.

REL207 / 3 CREDITS / 3 PERIODS

Ritual, Symbol, and Myth

Introduction to the academic study of religion through the study of myths, symbols, and rituals. Includes methods and theories used by scholars to study the complex subject of religion. Attention to literate and nonliterate cultures. Prerequisites: Grade of C or better in ENG101, or ENG107, or permission of Department or Division.

REL270 / 3 CREDITS / 3 PERIODS

Introduction to Christianity

The nature and content of the Christian tradition developed over time, with overview of the New Testament, major historical trends and figures, major Christian ideas and practices, and survey of denominations. Prerequisites: None.

REL290 / 3 CREDITS / 3 PERIODS

Women and World Religion

Focus on the role of women in several organized religions and/or religious sects. Study of myth and symbols as they are used to establish, maintain, and enforce sex-roles within specific cultural contexts around the world. Prerequisites: None.

SBS – Small Business Management

SBS213 / 1 CREDITS / 1 PERIODS

Hiring and Managing Employees

Methods and techniques for managing employees in a small business. Includes supervisor's role, leadership styles, interpersonal communications, staff planning, employee work styles, techniques for handling problem employees, and employee motivation. Focuses on real life situations to enable the business owner to gain high performance from their employee team. Includes segment on hiring, new employee orientation, training, benefits, and developing future staffing needs assessment. Prerequisites: None.

SBS214 / 1 CREDITS / 1 PERIODS

Small Business Customer Relations

Developing and improving customer relations for the small business. Planning and delivering quality customer service. Includes topics on attitude of employees, customer perceptions and motivations, handling customer dissatisfaction, and developing customer, supplier, vendor, and distributor loyalty. Prerequisites: None.

For the most current information regarding course descriptions, log on to curriculum.maricopa.edu.

SBS220 / 2 CREDITS / 2 PERIODS

Internet Marketing for Small Business

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.

SBS230 / 2 CREDITS / 2 PERIODS

Financial and Tax Management for Small Business

An overview of accounting and record-keeping for the successful management of a small business. Develops an understanding of the accounting cycle and preparation of financial statements. Includes section on tax consequences and the choice of legal entity choice based on taxation. Prerequisites: None.

SBU – Society and Business

SBU200 / 3 CREDITS / 3 PERIODS

Society and Business

The study and scientific inquiry of issues and demands placed on business enterprise by owners, customers, government, employees and society. Included are social, ethical and public issues and analysis of the social impact of business responses. Prerequisites: None.

SOC – Sociology

SOC101 / 3 CREDITS / 3 PERIODS

SUN SOC 1101

Introduction to Sociology

The systematic study of social behavior and human groups, particularly the influence of culture, socialization, social structure, stratification, social institutions, differentiation by region, race, ethnicity, sex/gender, age, class, and socio/cultural change upon people's attitudes and behaviors. Prerequisites: None.

SOC130 / 3 CREDITS / 3 PERIODS

Human Sexuality

Examination of the physical, social, cultural, and institutional contributions to human sexuality. Examination of facts and myths, literature, and changing mores regarding human sexuality to acquire knowledge about cultural and social events and processes. Explores the sexuality of males and females in contemporary society. Prerequisites: Student must be 18 years or older.

SOC157 / 3 CREDITS / 3 PERIODS

Sociology of Families and Relationships

Systemic analysis of socio-cultural and historical origins of modern families in the U.S. and their importance, major challenges and changing trends. Explores being single, dating and attraction, love, cohabitation and marriage, family planning and parenthood, conflict and crisis within the family, and divorce. Prerequisites: None.

SOC180 / 3 CREDITS / 3 PERIODS

Social Implications of Technology

Effects of development and implementation of technology on society. Historical and multi-cultural comparisons of this process, current concerns addressed, and prospects for the future analyzed. Prerequisites: None.

SOC212 / 3 CREDITS / 3 PERIODS

Gender and Society

A sociological analysis of the way culture shapes and defines the positions and roles of both men and women in society. Major emphasis on social conditions which may lead to a broadening of gender roles and a reduction of gender role stereotypes and the implications of these changes. Prerequisites: None.

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SOC220 / 3 CREDITS / 3 PERIODS

Sport and Society

Applies the sociological perspective to the study of sport. Emphasizes how hierarchies of race, class, and gender in the United States impact the sport experience of fans, athletes, and athletic administrators, as well as how professional, collegiate, and amateur sports have at times played a transformative role in society. Prerequisites: None.

SOC 241 / 3 CREDITS / 3 PERIODS

SUN SOC 2215

Race and Ethnic Relations

Examines how the social construction of race shapes social interaction and social institutions. Explores the consequences of power, privilege and oppression among major ethnic and racial groups in the United States. Prerequisites: None.

SOC266 / 3 CREDITS / 3 PERIODS

Sociology Through Film

Examines movie-going and the experience of spectatorship. Studies how motion pictures reflect, influence, and are influenced by American culture and societal institutions. Explores the role of the movie industry as a vehicle for social commentary, analysis, and criticism. Prerequisites: None.

SPA – Spanish

SPA101 / 4 CREDITS / 4 PERIODS

SUN SPA 1101

Elementary Spanish I

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 / 4 CREDITS / 4 PERIODS

SUN SPA 1102

Elementary Spanish II

Continued study of grammar and vocabulary of the Spanish language and study of the Spanish-speaking cultures. Emphasis on speaking, reading, and writing skills. Prerequisites: (A grade of "C" or better in SPA101 or SPA101AA), or permission of Department or Division. Completion of prerequisites within the last three years is required.

SPA109 / 3 CREDITS / 3 PERIODS

Law Enforcement Spanish I

Conversational and written Spanish for law enforcement personnel. Emphasis on basic sentence structure, pronunciation and vocabulary used in common job-related situations. Prerequisites: None.

SPA115 / 3 CREDITS / 3 PERIODS

Beginning Spanish Conversation I

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 / 3 CREDITS / 3 PERIODS

Beginning Spanish Conversation II

Continued study of basic pronunciation, vocabulary, sentence structures, and a cultural awareness necessary to develop speaking and listening skills in Spanish. Prerequisites: SPA115, or SPA115AA, or permission of Department or Division. Completion of prerequisites within the last three years is required.

SPA117 / 3 CREDITS / 3 PERIODS

Health Care Spanish I

Basic conversational Spanish for health care workers or students. Emphasis on basic sentence structure, pronunciation and vocabulary used in health care settings. Prerequisites: None.

SPA201 / 4 CREDITS / 4 PERIODS

SUN SPA 2201

Intermediate Spanish I

Continued study of essential Spanish grammar and Spanish-speaking cultures. Continued practice and development of reading, writing, and speaking skills in Spanish. Emphasis on fluency and accuracy in spoken

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Spanish. Prerequisites: A grade of "C" or better in SPA102, or SPA102AA, or SPA111, or permission of Department or Division. Completion of prerequisites within the last three years is required.

SPA202 / 4 CREDITS / 4 PERIODS

SUN SPA 2202

Intermediate Spanish II

Review of grammar, continued development of Spanish language skills with continued study of the Spanish-speaking cultures. Prerequisites: A grade of "C" or better in SPA201, or permission of Department or Division. Completion of prerequisites within the last three years is required.

SPH – Spanish Humanities

SPH245 / 3 CREDITS / 3 PERIODS

Hispanic Heritage in the Southwest

A survey of Hispanic heritage in the Southwest. Cultural and social institutions and their contribution to the development of the region and its heritage. Prerequisites: None

SSH – Sustainability/ Social Sciences and Humanities

SSH111 / 3 CREDITS / 3 PERIODS

Sustainable Cities

Introduction to the field of sustainability and exploration of the practices leading to the development of sustainable cities. Explores the concept of sustainable development of cities within local, regional, and global contexts. Prerequisites: None.

STO – Storytelling

STO292 / 3 CREDITS / 3 PERIODS

The Art of Storytelling

Explore the art and origin of storytelling. Provide a variety of storytelling techniques, styles and exercises to enhance the delivery of telling stories. Assist in the integration and application of storytelling to the learning environment in the classroom. Prerequisites: None. Cross-References: EDU292, HUM292.

SUS – Sustainability/ Natural Sciences

SUS110 / 3 CREDITS / 3 PERIODS

Sustainable World

Introduction to the field of sustainability and exploration of the interaction between human and natural global systems. Framework for analyzing and investigating the global challenges such as land use change, competition for water and other natural resources, and renewable energy concerns and crises. Prerequisites: None.

THE – Theatre

THE111 / 3 CREDITS / 3 PERIODS

Introduction to Theatre

A survey of theatre, including basic elements and principles of production, styles, and/or historical perspectives of theatre, dramatic literature, and criticism. Prerequisites: None.

THE118 / 3 CREDITS / 3 PERIODS

Playwriting

Practice and study of theories and techniques of writing for the stage; creating characters, dialogue, and plot for monodramas, scenes, and plays. Prerequisites: None.

THE220 / 3 CREDITS / 3 PERIODS

SUN THE 2220

Modern Drama

Analysis of dramatic literature studied within political, historical, and cultural contexts and examined from the perspective of the playwright's structure and style. Prerequisites: ENG101 or ENG107 or equivalent.

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THE260 / 3 CREDITS / 3 PERIODS

Film Analysis

Understanding and enjoyment of film and its correlation to literature, art, music, and other disciplines. Prerequisites: None.

THF – Theatre and Film

THF115 / 3 CREDITS / 4 PERIODS

Makeup for Stage and Screen

Purposes, materials, and techniques of makeup for stage and screen. Prerequisites: None.

THF205 / 3 CREDITS / 3 PERIODS

Introduction to Cinema

Survey of the history and development of the art of motion pictures, including criticism of aesthetic and technical elements. Prerequisites: None.

THF209 / 3 CREDITS / 4 PERIODS

Acting for the Camera

Special technical aspects of acting before a camera. Prerequisites: THP112 or permission of Instructor.

THF210 / 3 CREDITS / 3 PERIODS

Contemporary Cinema

A study of contemporary films, directors and critics with emphasis on evaluating film as an art form. Prerequisites: None.

THF219 / 3 CREDITS / 4 PERIODS

Advanced Acting for the Camera

Focuses on special technical aspects of advanced acting before a camera. Prerequisites: THF209 or permission of Instructor.

THP – Theatre Performance/Production

THP112 / 3 CREDITS / 4 PERIODS

Acting I

Fundamental techniques and terminology of acting through physical and vocal expression, improvisation, and monologue and scene work. Emphasis on characterization. Prerequisites: None.

THP201AA / 1 CREDIT / 2 PERIODS

Theatre Production I

Designed to give college credit to the cast and technical production crews of college theatre productions. May be repeated for up to a maximum of four (4) credits. Prerequisites: None.

THP201AB / 2 CREDITS / 4 PERIODS

Theatre Production II

Designed to give college credit to the cast and technical production crews of college theatre productions. May be repeated for up to a maximum of four (4) credits. Prerequisites: None.

THP212 / 3 CREDITS / 4 PERIODS

Acting II

Fundamental techniques of acting through script analysis, rehearsal, and performance. Prerequisites: THP112 or departmental approval.

THP213 / 4 CREDITS / 6 PERIODS

Introduction to Technical Theatre

Procedures of technical theatre production and demonstration. Topics include design and construction of scenery; lighting and properties. Prerequisites: None.

THP217 / 3 CREDITS / 4 PERIODS

Introduction to Design Scenography

The role of the theatre designer in creating scenic, lighting, costume, sound, and multimedia effects for stage productions. Elements of the design process and

For the most current information regarding course descriptions, log on to curriculum.maricopa.edu.

communication of dramatic themes and visions to the audience. Prerequisites: None.

THP250 / 3 CREDITS / 4 PERIODS

Stage Properties

Introduction to stage properties including design, construction and maintenance features. Provides skills in property design and construction using an assortment of standard materials. Prerequisites: None.

THP267 / 3 CREDITS / 4 PERIODS

Painting Techniques for Film, TV and Theatre

Theory and skills in scenic artistry. Techniques of painting two-dimensional and three-dimensional scenery, tools, and the use of color. Prerequisites: THP213.

THP270 / 2 CREDITS / 5 PERIODS

Musical Theatre Workshop

Workshop in the study and performance of Musical Theatre repertoire. Includes audition techniques, stage directions, character role development, rehearsal techniques, vocal acting styles and vocal technique, stage movement, crew roles, and performance. Prerequisites: None. Course Notes: MUP/THP270 may be repeated for credit. Cross-References: MUP270.

UAS – Unmanned Aircraft Systems

UAS101 / 3 CREDITS / 3 PERIODS

Introduction to Unmanned Aircraft Systems Operation

Introduction to Unmanned Aircraft Systems (UAS) history, flight, avionics, sensors, communication systems, and an introduction to data analysis and applications, such as first responders, Geographic Information Systems, and Precision Agriculture. Prerequisites: None.

UAS107 / 3 CREDITS / 3 PERIODS

Unmanned Aircraft Systems Operator Certification

Develop knowledge and skills needed to manage and operate small Unmanned Aircraft Systems (sUAS). Includes Federal Aviation Regulations, radio communications, weather, airspace and airport authorization criteria, loading and performance, aeronautical decision making, sUAS flight operations, and maintenance. Operational skills acquired through both classroom and hands-on flight activities. Prerequisites: None. Course Notes: Students must complete the appropriate flight lessons to satisfactorily complete the course.

WAC – Writing Across Curriculum

WAC101 / 3 CREDITS / 3 PERIODS

Writing Across the Curriculum

Expressive, expository, and academic writing experiences to develop students` rhetoric and composition foundation. Experience planning and drafting multi-paragraph essays through a writing process with emphasis on essay and paragraph structure and the elements of sentence structure. Participation in writing workshop, group work, reading to support writing tasks, and writing from sources. A minimum of three multi-paragraph essays and a final reflection paper. Prerequisites: None..

WED – Wellness Education

WED151 / 3 CREDITS / 3 PERIODS

Introduction to Alternative Medicine

Definition of health; exploration of mind-body-spirit connection in health; various therapeutic modalities; identification of strengths and limitations of alternative therapies. Also includes development of ability to critically review written material in the alternative therapy area. Prerequisites: None.

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WED165 / 2 CREDITS / 2 PERIODS

Overview of Massage Therapy

History of massage; overview of bodywork systems; benefits and indications of massage; legal requirements for practice in Arizona. Prerequisites: None.

WED210 / 2 CREDITS / 3 PERIODS

Sports Massage

Purpose, benefits, and contraindications of sports massage; principles of sports physiology; massage techniques, applications, and procedures; treatment of injuries. Prerequisites: WED165 and WED230, or permission of Program Director.

WED215 / 2 CREDITS / 5 PERIODS

Self-Care for Health Care Providers

Emphasis on mind-body methods for personal wellness through integration of physical, emotional, social, and spiritual dimensions of being. Development of a personal practice to achieve and sustain a balanced program to support personal health and well being. Prerequisites: None.

WED218 / 1 CREDIT / 1 PERIOD

Aromatherapy

Physiology of aromatherapy; methods of use; preparation of oils; uses in sports, beauty care, massage, child care, health care, at work, and in the home. Prerequisites: None.

WST– Women's Studies

WST100 / 3 CREDITS / 3 PERIODS

Introduction to Women's and Gender Studies

Introduction to critical issues in women's studies. Prerequisites: None.

WST200 / 3 CREDITS / 3 PERIODS

Essential Feminist Writing

Literary tracing of feminism from 18th century to present. Explores major issues related to women in the 20th century. Prerequisites: A grade of "C" or better in ENG101 or permission of instructor.

WST209 / 3 CREDITS / 3 PERIODS

Women and Films

Analysis of images of women in films from both historical and contemporary perspectives. Prerequisites: None.

*Cross reference with HUM209

WST285 / 3 CREDITS / 3 PERIODS

Contemporary Women Writers

Explores twentieth century literature (short stories, essays, plays, and poetry) written by women and about women. Focus on themes relevant to women's lives regardless of age, creed, or ethnic background. Prerequisites: None.

Information regarding special courses not listed in the college catalog

Cooperative Education (courses numbered 296)

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: Permission of Program Director or instructor. Corequisites: Must be concurrently enrolled in at least one class related to job/co-op subject area; must maintain an enrollment ratio of two (2) hours of credit in other courses for every one (1) hour of Cooperative Education credit (excluding radio and television); a maximum of sixteen (16) hours of Cooperative Education credit is allowable in a college program.

Special Projects (courses numbered 298)

Organized and tailored around the interests and needs of the individual student. Structured to provide an

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atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment are made available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: Permission of Program Director or instructor.

Shared Unique Number (SUN) System

The Shared Unique Number (SUN) System helps students identify courses that will directly transfer among Arizona's community colleges and three public universities. Using the SUN System, students can easily search for and enroll in courses that offer direct equivalency at other Arizona colleges and universities. SUN courses have their own unique course number and prefix listed alongside each college's course number.

Additional information about SUN System can be found at www.aztransfer.com/sun/

ADMINISTRATION & FACULTY INDEX

Maricopa County Community College District Governing Board

Maricopa County Community College District, District Support Services Center
2411 West 14th Street, Tempe, Arizona 85281-6942 | 480-731-8889

MS. MARIE SULLIVAN
President District 3
Current term expires December 31, 2022

MR. LAURIN HENDRIX
Secretary District 1
Current term expires December 31, 2020

MR. DANA G. SAAR
Member District 2
Current term expires December 31, 2020

MS. JEAN MCGRATH
Member District 4
Current term expires December 31, 2022

DR. TOM NERINI
Member District 5
Current term expires December 31, 2020

DR. LINDA THOR
Member At-Large
Current term expires December 31, 2020

MS. KATHLEEN WINN
Member At-Large
Current term expires December 31, 2022

MS. ALEJANDRA MAYA
Student Member
Current term expires June 30, 2020

District Administration

480-731-8000

DR. STEVEN GONZALES
Interim Chancellor

DR. KARLA FISHER
Provost

DR. JAMES MOORE
Interim Chief Operating Officer

GEORGETTA KELLY
Chief Human Resources Officer

DARCY RENFRO
Chief Workforce & Economic Development Officer

BRIAN SPICKER
President and Chief Executive Officer
Maricopa Community Colleges Foundation

LESLIE COOPER
General Counsel

DR. MARK KOAN
Chief Information Officer (Interim)

Chandler-Gilbert Community College

2626 E. Pecos Road, Chandler, Arizona 85225 | 480-732-7000

Administration

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- B.A., Brigham Young University
- M.Ed., Portland State University
- Ed.D., University of Texas at Austin

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- B.A., Aquinas College
- M.S., Central Michigan University
- Ed.D., Northern Arizona University

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- B.S., M.A., Northern Arizona University

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- M.Ed., Arizona State University

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- B.S., M.P.A., Arizona State University

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- B.A., George Mason University
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- MAOM, PHR, SHRM-CP
- Ed.D., Grand Canyon University

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- B.S., University of Puerto Rico-Mayaguez Campus
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- M.Ed., Ed.D., Northern Arizona University

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- M.S., Duquesne University

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- B.A., B.S., University of Arizona
- M.S., University of San Francisco
- Ed.D., Arizona State University

Faculty

ADAMS, RYAN
Counseling
- B.S., University of Illinois
- M.Ed., Ph.D., Arizona State University

ADAMSON, SCOTT
Mathematics
- A.A., Itasca Community College
- B.S., M.Ed., Northern Arizona University
- Ph.D., Arizona State University

ANDERSON, JILL
Clinical Nursing
- A.S., A.A., Portland Community College
- B.S.N., Oregon Health Sciences University
- M.S.N., M.B.A., University of Phoenix
- Ph.D., University of Arizona

BACKHAUS, DONNA
Mortuary Science
- A.A.S., Mesa Community College
- B.S., University of Phoenix
- M.A., University of Phoenix

BADER, SHERRICK
Emergency Medical Technology
- G.S., Mesa Community College
- Certified Emergency Paramedic, Mesa Community College

BAKER, PATRICIA
Computer Science &
Computer Information Systems
- B.S., University of Michigan
- M.C.S., Arizona State University

BARRIOS, RENÉ
Counseling
- A.A., Arizona Western College
- B.A., M.Ed., University of Arizona
- Ed.D., Arizona State University

BATES, BRADFORD J.
Chemistry
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Psychology
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- M.A., Ph.D., University of Kansas

BILKA, MONIKA
History
- B.S., University of Oregon
- M.S., University of Montana
- Ph.D., Arizona State University

BISHOP, SHANNON
Mathematics
- B.A., M.A., Arizona State University

BOURKE, KATRINA
Massage Therapy
- A.A.S,. Royal Melbourne Institute of Technology
- A.A.S., Mesa Community College
- B.S., M.Ed., Northern Arizona University
- M.S., California University of Pennsylvania

BOWLES, JOACHIM
Chemistry
- B.S., Oregon State
- M.S., University of Oregon

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Communication
- B.S., M.Ed., Northern Arizona University

BURGOYNE, MARY BETH
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- B.A., Arizona State University
- M.L.S., University of Arizona

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Education
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- B.S., University of Arizona
- M.S., Arizona State University

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- B.F.A., Columbus College of Art and Design
- M.F.A., University of New Mexico

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- M.L.S., University of Arizona
- Ed.D., Northern Arizona University

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Clinical Nursing
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CORREA, FABIO
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Mathematics
- B.A., M.S., Concordia University Wisconsin
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DEAN, JOHN
English
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- M.F.A., Texas State University

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- B.A., Herbert H. Lehman College of the City
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- M.D., Albert Einstein College of Medicine

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SILVESTRI, FANNY
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- B.A., Ecole Supérieure des Techniques Aéronautiques et de Construction Automobile
- M.A., University of Montreal

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STAGGAR, WILLIAM
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- M.S.N., University of Texas
- Ph.D., New Mexico State University

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- M.S., Arizona State University

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- Ph.D., Arizona State University

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- B.S., M.Acc., Arizona State University
- Ed.D., Northern Arizona University
- CPA, MCP, CDP

THOMPSON, DONNA
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- B.A., Yale University
- M.A., Duke University

TINKLE-WILLIAMS, KEZIAH
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- A.A., Spokane Community College
- B.A., M.A., Eastern Washington University

TOMS, MALIK
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- B.A., M.A., Iowa State University

TOVAR-BLANK, ZOILA
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- B.A., Stanford University
- M.Ed., Ph.D., Arizona State University

TRONE, GREGORY
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- B.A., University of North Carolina at Wilmington
- M.S., Appalachian State University
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- B.A., Universidad Autonoma De Ciudad Juarez, Mexico
- M.S., University of Texas

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- B.S., M.S., Oregon State University

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Electric Utility Technology
- JEL, ELE, Prof EUT

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Biology
- B.S., State University of New York at Oneonta
- M.S., Ph. D., Arizona State University
- M.A., Ph.D., University of Iowa

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- M.A., Northern Arizona University

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English
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- Ed.D., Northern Arizona University

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- B.S., M.C., Arizona State University

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- M.S., Lehigh University

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- M.A., University of Phoenix

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Communication
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ZILCH, JOHN
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- M.S., Embry Riddle Aeronautical University

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Mathematics
- A.A., Phoenix College
- B.S., M.S., Northern Arizona University

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Vice President, Student Affairs
- A.A., Phoenix College
- B.S., Arizona State University
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- B.A., Brigham Young University
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CONKRIGHT, ALICE (1981-2003)
English and Humanities
- B.A., M.A., Syracuse University
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DAVENPORT, PAMELA G. (1987-2012)
English
- B.A., M.A., Arizona State University

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Music
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- B.S., M.B.A., Arizona State University
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- M.A., Arizona State University
- M.S., Nova University
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- A.A., Edward Waters Junior College
- B.S., Florida Agricultural and Mechanical University
- M.A., Arizona State University

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WRIGHT, RANDALL (2000-2018)
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Biology
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GLOSSARY OF COLLEGE TERMINOLOGY

Academic Load

The total number of credit hours taken in a term. Twelve credit hours is considered a full-time load.

Academic Advisor

A designated staff member who has received training to provide students with academic information that will direct them to the appropriate classes to achieve their educational goals and enhance their academic success.

Admission

Acceptance into a college after the student has filed a completed Student Information Form with the Admissions, Records and Registration Office and has been admitted according to admissions criteria. Students who have been admitted are eligible to register for courses.

AGEC

The Arizona General Education Curriculum (AGEC) is a general education certificate that fulfills lower-division general education requirements for students planning to transfer to any Arizona public community college or university. Generally, the MCCCD AGEC transfers as a block without loss of credit. The AGEC-A and AGEC-B require a minimum of 35 credit hours, and the AGEC-S requires a minimum of 36 credit hours.

Alumnus/Alumna

A graduate of a college or university. (Plural: alumni/alumnae)

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 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.

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).

Class Number

A unique, five-digit code used to identify each class section of each course offered. Class Numbers are listed in the Class Schedule.

Class Period

Time spent in class and/or lab each week. One period is equivalent to 50 minutes per week.

Class Schedule

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.

Co-curricular Activities

Also known as extracurricular. Activities, clubs, or organizations students may participate in above and beyond their academic courses.

Commencement

Also known as graduation. A ceremony during which colleges award certificates of completion and degrees to graduating students.

Continued Probation

A student on academic probation is placed on continued probation if they do not raise their cumulative grade point average (GPA) to the required minimum standard. Enrollment is limited to six (6) credit hours for a period of one semester.

Continuous Enrollment

The process of registering for and completing courses during consecutive semesters, excluding 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 person professionally trained in counseling who helps students with educational, career, or personal concerns as well as goal setting and decision making.

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 fees.

Course Number

A three-digit code that identifies a specific course and indicates its level and sequence (e.g., 101 in ENG101).

Course Placement Testing

Evaluation of students' present skills in English, reading, and mathematics using course placement tests. Scores are used as a guide for proper course placement so students can choose courses that match their skills. Such matches lead to greater success.

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., First-Year Composition, 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 for an academic or occupational goal. Also referred to as a program of study.

Division

A group of faculty who teach classes in related subjects, such as accounting, management, and marketing in the Business and Computing Studies Division.

Drop/Add Period

A specified period of time at the beginning of a term when schedule changes (i.e., adding or dropping one or more classes) are allowed without a refund penalty. Courses dropped during the Drop/Add Period do not appear on students' transcripts.

Electives

Non-required courses that students may select to complete their program of study.

Faculty

Instructors, teachers. Counselors and librarians are also faculty.

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 Class Schedule.

Financial Aid

Financial assistance in the form of grants, scholarships, work study, and loans to assist students in paying for college. Sources are varied with funds coming from federal and state governments, colleges, private donors, and local agencies and organizations.

Student Financial Services

Also known as the Cashier's Office where students may pay tuition and fees, course fees, and other fees owed the college.

Grade Point

The numerical value of a 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.

Learning Communities

Learning communities are two or more classes connected through content, ideas, and activities. Using a variety of learning methods, learning communities can be comprised of linked activities between courses, linked and clustered courses, and completely integrated single- or team-taught courses.

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 also offer 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 journalism, nursing, or aircraft maintenance.

New Student Orientation

A session during which new students are introduced to academic programs, facilities, and student support services provided by a college.

Official Absence

Absence from class approved by the Vice President of Student Affairs for students who are participants in an official college activity. Approved absence documentation must be presented by students to their instructors before the official absence. Students 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.

Placement Test

See Course Placement Testing.

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.

Required Course

A course that a student must complete to meet certain goals or to complete a certain curriculum.

Scholastic Suspension

Students on suspension from any accredited institution of higher education may appeal to the Admissions and Standards Committee or campus designee for permission to register. The student will be limited to twelve (12) credit hour unless approved by Admissions and Standards Committee.

Semester

Traditionally half an academic year, about 16 weeks in length. Fall semester begins in August and spring semester begins in January.

Service-Learning

Service-Learning combines community service with academic instruction focusing on critical-thinking and problem-solving, values clarification, social and personal development, and civic responsibility. CGCC students have been performing meaningful service at community agencies to learn experientially during one-day events, class projects, and individual placements for over 10 years.

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.

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.

Tutoring

Additional learning assistance provided by tutors to students in individual or group sessions. Tutoring is centralized in the Learning Center.

Withdrawal

Officially dropping any or all courses during a semester.

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ECN Economics 240
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EED Early Education 241
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ELE Electronics 242
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EUT Electric Utility Technology 249
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FON Food and Nutrition 252
GBS General Business 255
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HCC Health Core Curriculum 258
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Chandler, AZ 85225-2499
480-732-7000

Estrella Mountain Community College

3000 North Dysart Road
Avondale, AZ 85323-1000
(623) 935-8000

Gateway Community College

108 North 40th Street
Phoenix, AZ 85034-1795
(602) 286-8000

Glendale Community College

6000 West Olive Avenue
Glendale, AZ 85302-3090
(623) 845-3000

Mesa Community College

1833 West Southern Avenue
Mesa, AZ 85202-4868
480-461-7000

Paradise Valley Community College

18401 North 32nd Street
Phoenix, AZ 85032-1200
(602) 787-6500

Phoenix College

1202 West Thomas Road
Phoenix, AZ 85013-4234
(602) 285-7800

Rio Salado College

2323 West 14th Street
Tempe, AZ 85281-6950
480-517-8000

Scottsdale Community College

9000 East Chaparral Road
Scottsdale, AZ 85256-2626
480-423-6000

South Mountain Community College

7050 South 24th Street
Phoenix, AZ 85042-5806
(602) 243-8000

District Support Services Center

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cgc.edu
cgc.edu/registration
cgc.edu/schedule
cgc.edu/catalog

CHANDLER-GILBERT COMMUNITY COLLEGE
A **MARICOPA** COMMUNITY COLLEGE

MARICOPA
COMMUNITY COLLEGES

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The Maricopa County Community College District does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs or activities. For Title IX/504 concerns, call the following number to reach the appointed coordinator: 480-731-8499. For additional information, as well as a listing of all coordinators within the Maricopa College system, visit **www.maricopa.edu/non-discrimination.**